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of the Army
Office, Assistant Secretary
of the Army (Civil Works)

Fiscal Year 2014 Civil Works Budget Details for the U.S. Army Corps of Engineers

May 2013

Civil Works

FY 2014

Budget

Justification

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GREAT LAKES AND OHIO RIVER DIVISION

**GREAT LAKES AND OHIO RIVER DIVISION
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JUSTIFICATION OF ESTIMATE

INVESTIGATION

Kentucky

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Total Estimated Federal Cost	Allocation Prior to FY 2011	Allocation FY 2011	Allocation FY 2012	Allocation FY 2013	Budget Amount FY 2014	Additional to Complete After FY 2014
\$	\$	\$	\$	\$	\$	\$
1,105,000	955,000	0	0	0	150,000 ^{1/}	0

Green and Barren Disposition, KY (Resumption)

Louisville District

The Green River, a tributary to the Ohio River, has a total drainage area of approximately 9,230 square miles in central and western Kentucky. Seven locks and dams were constructed between 1835 and 1905 to maintain a 9-foot deep navigation channel in the lower 103 miles of the Green River and a 5.5 foot depth in the rest of the Green River and the lower 20 miles of its Barren River tributary. Since the 1965 failure of Dam 4 and resulting loss of pool, commercial navigation has been ongoing only in the reach of the Green River serviced by Locks and Dams 1 and 2. The locks and dams on the Green River and Barren River above Locks and Dam 2 are in a caretaker status. However, the pools associated with locks and dams in the upper portion of the basin still provide opportunities for recreation and serve as a water supply source for a number of communities, utilities, and industries. Lock and Dam 6 on the Green River has impacts on the Mammoth Cave National Park. A feasibility report completed by the Corps in 1993 concluded that modernization and improvement of the upper locks and dams on the Green and Barren Rivers system is not economically viable. Portions of this 1993 document serve as the initial appraisal report for this study. This study evaluates the status of Green River Locks and Dams 3 through 6 and Barren River Lock and Dam 1. Impacts of the system on associated water resource uses such as water supply and recreation were evaluated. The disposition study is focused on the outstanding real estate, engineering and environmental issues associated with a disposal recommendation and included the final National Environmental Policy Act (NEPA) documentation. The report will also address the issues and concerns of potential users/non-federal sponsors involved in any disposal recommendation. The recommendation is to deauthorize and dispose of all of the facilities, subject to deauthorization.

FY 2014 funds will be used to complete the feasibility study with a recommendation for the removal of the dam at Green River Lock 6 and permanent closure of all of the locks. Feasibility costs are 100 percent Federal since the project purpose is to dispose of Federal project facilities. The Feasibility Study would be completed in September 2014.

Study Authority: Section 216 of the Flood Control Act of 1970 (P.L. 91-611)

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

\$0 reprogrammed to (from) the study.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Great Lakes and Ohio River Division

Louisville District

Green and Barren Disposition, KY

Illinois

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	GLRI Allocations Through FY 2013	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
\$	\$	\$	\$	\$	\$	\$	\$
25,500,000	556,000	748,000	3,000,000	9,795,000 ^{3/}	3,000,000 ^{2/}	3,000,000 ^{1/}	5,401,000

Interbasin Control of Great Lakes-Mississippi River Aquatic Nuisance Species, IL, IN, OH, & WI

Chicago District

The Great Lakes & Mississippi River Interbasin Study (GLMRIS) evaluates the full range of options and technologies available to prevent the spread of aquatic nuisance species (ANS) between the Great Lakes and Mississippi River basins through the Chicago Sanitary and Ship Canal (CSSC), and other aquatic pathways. The Chicago Area Waterway System (CAWS), which includes the CSSC, is considered to be a primary aquatic pathway that ANS may utilize to spread between the basins. Specific tasks of GLMRIS include: i) the identification of other aquatic pathways that may exist between the two watersheds; ii) the inventory of current and future potential ANS; iii) the evaluation of possible ANS controls to prevent ANS transfer; and iv) the analysis of the impacts that each ANS control may have on existing waterway uses and significant natural resources. GLMRIS is currently being conducted in two Focus Areas (FA1 & FA2). In FA1, feasibility study efforts are concentrated on evaluating prevention measures for the potential threat of ANS transfer via the CAWS. In FA2, a screening-level investigation of potential surface-water connections is being conducted along the remainder of the border between the two basins in order to evaluate the relative probability of ANS transfer via these pathways. The study teams coordinate regularly with other Federal, state, and local agencies, as well as regional stakeholders.

In FA1, FY2013 funds are being used to complete assessment of future without project conditions and to continue Plan Formulation, including the screening of ANS controls, assessment of species transfer risk with and without ANS controls, and beginning the engineering analysis of alternatives, including planning-level cost estimates of alternatives. The study team will utilize baseline analyses, including previously developed interim products, to develop the GLMRIS Report. The GLMRIS Report will undergo Agency Technical Review in late FY 2013. Proposed FY 2014 funds will be used to finalize the GLMRIS Report, which will undergo vertical team legal, policy and OMB review prior to submission to Congress in accordance with the Moving Ahead for Progress in the 21st Century (MAP-21), Section 1538(b)(5) (\$200,000). The study team will continue NEPA compliance analysis associated with the study including preparation of a draft Environmental Impact Statement (\$2,800,000).

Year 3 Great Lakes Restoration Initiative (GLRI) funds are being used to continue work on the Focus Area II. Subject to further policy guidance, a draft feasibility study and Environmental Impact Statement is anticipated to be finalized in FY 2015. This study was authorized by WRDA 2007, P. L. 110-114, Section 3061(d), 121 Stat. 1121.

Great Lakes and Ohio River Division

Chicago District

Interbasin Control of Great Lakes-Mississippi River Aquatic Nuisance Species, IL, IN, OH, & WI

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/} Great Lakes Restoration Initiative funding from FY 2010, FY 2011, and FY 2012 through 30 September 2012.

\$0 reprogrammed to (from) the study.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Great Lakes and Ohio River Division

Chicago District

Interbasin Control of Great Lakes-Mississippi River
Aquatic Nuisance Species, IL, IN, OH, & WI

1 May 2013

LRD-7

CONSTRUCTION

Kentucky

APPROPRIATION TITLE: Construction – Dam Safety Seepage Correction, Major Rehabilitation

PROJECT: Rough River Lake, KY Major Rehabilitation (Continuing)

LOCATION: The dam site is located on Rough River, 89.3 miles east of the confluence with the Green River, and about 60 air miles southwest of Louisville, KY.

DESCRIPTION: The Rough River Dam is part of a system of dams providing flood protection to the Green River Basin of Kentucky. Construction began in 1955 and the dam began full operation in 1960. The project is a 1,590 foot long earth filled embankment with a maximum height of 130 feet. It includes a gate-controlled outlet works on the right abutment and a 65-foot wide uncontrolled spillway near the left abutment.

The dam is rated as a Dam Safety Action Classification (DSAC) II based on the Screening Portfolio Risk Assessment and the Dam Safety Modification Report (DSMR). The risk assessment cited the potential for seepage and piping failure modes and recommended action to remedy these potential risks. Well-developed karstic features and solution cavities throughout the region support the overall assessment. The DSMR was approved by the Dam Safety Officers within the District, the Great Lakes and Ohio River Division, and Headquarters, USACE on 17 September 2012. The annual probability of failure is estimated to be nearly 2 orders of magnitude above the acceptable risk. Major rehabilitation of the dam is necessary to lower the risk to meet tolerable risk guidelines and to maintain the safety of the project and safeguard the public.

AUTHORIZATION: Flood Control Act (Public Law 761, 75th Congress, 28 June 1938)

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

INITIAL BENEFIT-COST RATIO: 0.016 to 1 at 7 percent

BASIS OF BENEFIT-COST RATIO: Dam Safety Modification Report approved by ASA(CW) on March 7, 2013.

Division: Great Lakes and Ohio River

District: Louisville

Rough River Lake, KY (Dam Safety)

1 May 2013

LRD-10

SUMMARIZED FINANCIAL DATA

		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Original Project		Entire Project	0	TBD
Actual Federal Cost	\$10,620,000			
Actual Non-Federal Cost	\$23,000			
Total Original Project Cost	\$10,643,000			
Project Modification			ACCUM PCT OF EST FED COST	
Estimated Federal Cost	\$147,000,000			
Total Estimated Modification Cost	\$147,000,000			
Total Estimated Project Cost	\$157,643,000			
Allocations to 30 September 2010	\$1,000,000			
Allocations for FY 2011	\$561,000			
Allocations for FY 2012	\$1,030,000			
Conference Allowance for FY 2013	\$1,000,000	^{4/6/}	2%	
Allocations through FY 2013	\$3,591,000	^{1/2/3/}		
Estimated Unobligated Carry-in Funds	\$0	^{5/}		
President's Budget for FY 2014	\$5,800,000		6%	
Programmed Balance to Complete after FY 2014	\$137,609,000	^{7/}		
Unprogrammed Balance to Complete after FY 2014	\$0			

^{1/} \$0 reprogrammed to (from) the project.

^{2/} \$0 rescinded from the project.

Division: Great Lakes and Ohio River

District: Louisville

Rough River Lake, KY (Dam Safety)

^{3/} \$0.00 transferred to the Flood Control and Coastal Emergencies account.

^{4/} "Dam Safety and Seepage/Stability Correction Program" Funds.

^{5/} Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

^{6/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{7/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

Dam: Earth core with rock fill, 1,590 ft in length.

Spillway: In a natural saddle, approx 900 ft southwest of the left abutment of the embankment, 65 ft wide, with design discharge capacity of 22,000 cfs.

Outlet Works: Intake structure with 3 slide gates, two 24 inch low flow bypass pipes, 12' x 12' semi-elliptical concrete conduit, and discharge bucket.

JUSTIFICATION: Unacceptable foundation conditions and associated seepage requires rehabilitation to remove uncertainty and lower project risk. Failure of dam from seepage/piping would result in catastrophic effects downstream including loss of life, property, agriculture, flood control, water supply, recreation, and significant economic losses in Breckinridge, Hardin, and Grayson Counties, KY. Average annual benefits at 7 percent are \$157,120.

FISCAL YEAR 2013: Funds received from the Fiscal Year 2013 CG "Dam Safety and Seepage/Stability Correction Program" account are being as follows:

Continue development of the final design of the recommended plan	\$ 800,000
Total	\$ 800,000

FISCAL YEAR 2014: The requested amount of \$5,800,000 for this project will be applied as follows:

Continue final design of the recommended plan (grout curtain and full depth concrete cutoff wall) and completion of plans and specs for the first construction contract	\$ 800,000
Initiate Construction Contract: Highway Relocation and Work Platform	\$5,000,000
Total	\$5,800,000

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATE: First year project has been submitted to Congress.

Division: Great Lakes and Ohio River

District: Louisville

Rough River Lake, KY (Dam Safety)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment was prepared in conjunction with the Dam Safety Modification Report and a Finding of No Significant Impact (FONSI) was signed by the District Commander in July 2012.

OTHER INFORMATION: Construction funds were first appropriated in FY 2008 utilizing "Dam Safety and Seepage/Stability Correction Program" funds.

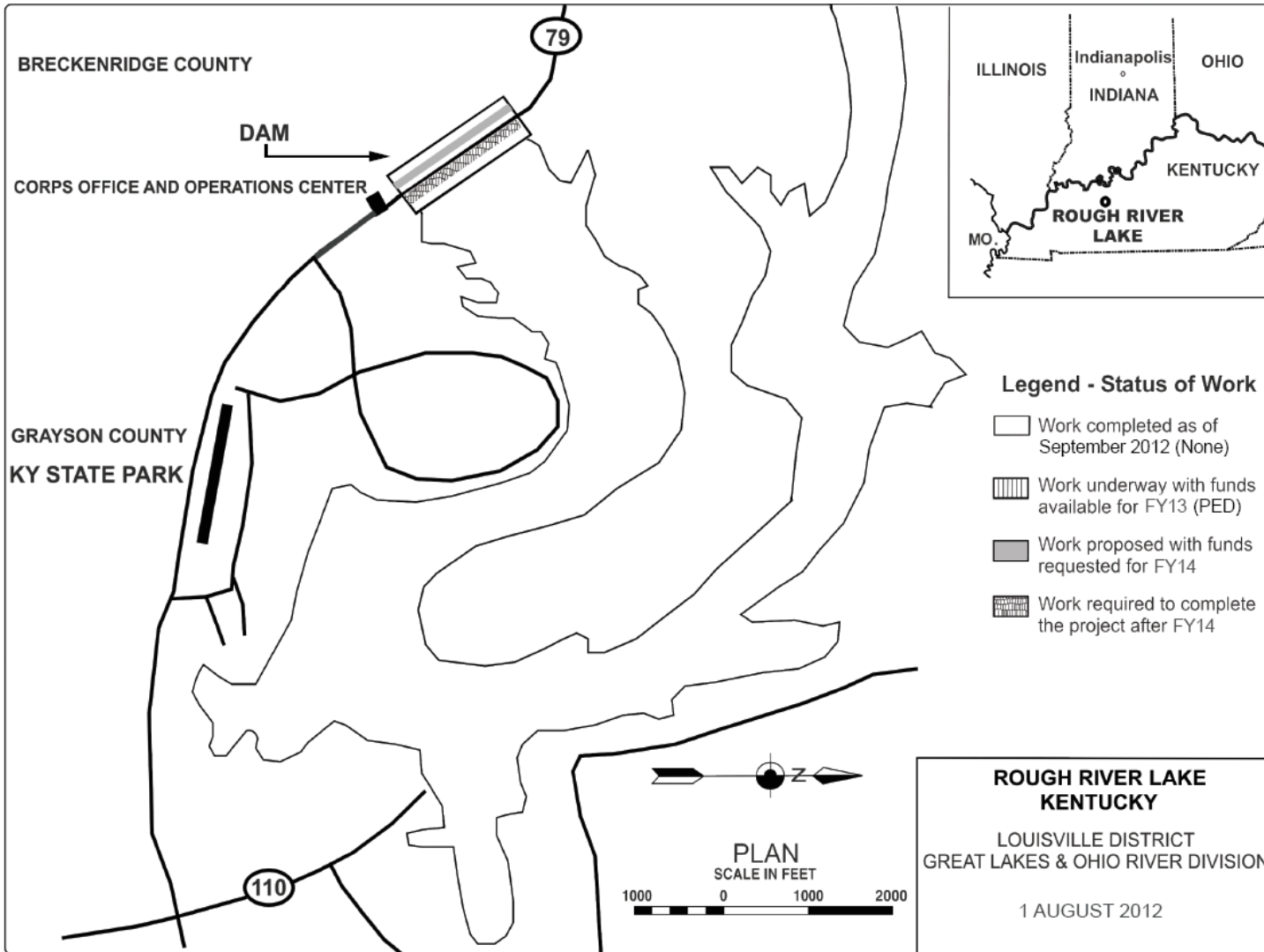
Division: Great Lakes and Ohio River

District: Louisville

Rough River Lake, KY (Dam Safety)

1 May 2013

LRD-13



Division: Great Lakes and Ohio River

District: Louisville

Rough River Lake, KY (Dam Safety)

1 May 2013

LRD-14

Illinois

APPROPRIATION TITLE: Construction – Environmental

PROJECT: Chicago Sanitary and Ship Canal Dispersal Barriers, Illinois (Continuing)

LOCATION: The Dispersal Barriers are near River Mile 296.5 in Romeoville, IL in Cook County.

DESCRIPTION: The Chicago Sanitary and Ship Canal (CSSC) is a man-made waterway that connects the Chicago and Des Plaines Rivers, creating the only continuous waterway connection between the Great Lakes and Mississippi River basins. The dispersal barrier system was developed to prevent the spread of invasive fish species between these watersheds. It includes the construction and operation of three electrical barriers, known as Barriers I, IIA, and IIB. A Demonstration Dispersal Barrier (Barrier I) was constructed and has been operating in the CSSC since 2002. A permanent electric barrier (Barrier II), with a design life of 20 years, was implemented in two independent stages (A & B). Barrier IIA has been operational since April 2009. Barrier IIB has been operational since April 2011. Currently Barrier I and either Barrier IIA or Barrier IIB are operated simultaneously. When Barrier IIA or Barrier IIB are inactive, they are kept in a standby status and will automatically turn on if the other suffers an unscheduled outage. Design of a permanent Barrier I facility was initiated in FY 2011, with construction scheduled to begin in late FY 2012. Barrier I and Barrier II were authorized as separate projects. Section 3061 of WRDA 2007 reauthorized the barriers as a single project at full Federal expense. WRDA 2007 also authorized USACE to upgrade and make permanent Barrier I; complete Barrier II; operate and maintain both barriers as a system; conduct a study of a range of options and technologies for reducing impacts of hazards that may reduce the efficacy of the barriers (Efficacy Study); and provide to each state a credit in an amount equal to the amount of funds the state contributed toward Barrier II. Section 126 of the Energy & Water Appropriations Act of 2010 and Section 105 of the Consolidated Appropriations Act of 2012 provided authority for the implementation of recommendations from the Efficacy Study. Four Interim Efficacy Study reports have been completed. The Interim I report showed that during flood events, flows from the neighboring Des Plaines River and Illinois & Michigan Canal could provide fish a bypass route around the barriers. Construction of measures to reduce the risk of these bypasses was completed in October 2010 with funding from the Great Lakes Restoration Initiative. The Interim IIA report summarized laboratory research and safety tests completed to identify and recommend Barrier II's optimum operating parameters. These operating parameters were implemented at Barrier IIB in October 2011. The Interim III report recommended installation of screens on sluice gates at the O'Brien Lock & Dam. These screens were installed in January 2011. The Interim IIIA report recommended a demonstration acoustic bubble strobe dispersal barrier (ABS) as another possible tool for preventing Asian carp from establishing in the Great Lakes. No action has been taken on ABS Barrier. A Comprehensive Efficacy Study report, summarizing actions completed to date and documenting results of analyses completed on pathways within the Chicago Area Waterways System, is scheduled for completion in FY 2013.

AUTHORIZATION: Section 105, Consolidated Appropriations Act of 2012 (P.L. 112-74), Section 126, Energy & Water Development Appropriations Act of 2010 (P.L. 111-85), Section 3061, Water Resources Development Act 2007 (P.L. 110-114). Barrier I: Section 1202, Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990 (P.L. 101-646), as amended, Section 2309, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery 2006 (P.L. 109-234). Barrier II: Section 1135, Water Resources Development Act 1986 (P.L. 99-662), as amended, (Continuing Authority Program), Section 345, FY 2005 DC Appropriations Act (P.L. 108-335).

Division: Great Lakes and Ohio River

District: Chicago

Chicago Sanitary and Ship Canal Dispersal Barrier, IL

REMAINING BENEFIT - REMAINING COST RATIO:

The remaining benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT - COST RATIO:

The total benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT - COST RATIO:

The initial benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT - COST RATIO:

The benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
	<u>Demo Barrier I</u>	<u>Other Barriers</u> ^{1/}			
Estimated Federal Cost	\$5,808,000	\$200,917,000	Barrier II	100	February 2011
Estimated Non-Federal Cost	0	0	ABS Barrier	0	TBD
Cash Contributions		2,275,000 ^{2/}	Permanent Barrier I	0	TBD
Other Costs		0			
Project Cost Subtotals	\$5,808,000	203,192,000			
Total Estimated Project Cost		\$209,000,000			

^{1/} Includes Barrier II, Permanent Barrier I, and risk reduction measures recommended in the Efficacy Study.

^{2/} Non-federal cash contributions for which a credit is to be provided.

	<u>Demo Barrier I</u>	<u>Barrier II & Perm. Barrier I</u>	<u>Total</u>	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 2010	\$5,808,000	\$47,373,000 ^{6/}	\$53,181,000 ^{6/}	
Allocations for FY 2011	0	12,624,000	12,624,000	
Allocation for FY 2012	0	24,065,000	24,065,000	
Great Lakes Restoration Initiative Allocation through FY 2012	0	15,349,000 ^{7/}	15,349,000 ^{7/}	
Conference Allowance for FY 2013	0	24,500,000 ^{8/}	24,500,000 ^{8/}	
Allocations thru FY 2013	5,808,000 ^{3/4/5/10/}	123,911,000 ^{3/4/5/10/}	129,719,000 ^{3/4/5/}	62
Estimated Unobligated Carry-in Funds	0 ^{9/}	0 ^{9/}	0 ^{9/}	
President's Budget for FY 2014	0	27,600,000	27,600,000	75
Programmed Balance to Complete after FY 2014	0	51,681,000 ^{11/}	51,681,000 ^{11/}	
Unprogrammed Balance to Complete after FY 2014	\$ 0	\$ 0	\$ 0	

^{3/} \$0 reprogrammed to (from) the project.

^{4/} \$0 rescinded from the project.

^{5/} \$0 transferred to the Flood Control and Coastal Emergencies account.

^{6/} Includes CAP Section 1135 allocations of \$3,702,000.

^{7/} Includes \$9,000,000 in FY 2010, \$391,326 in FY 2011, and \$5,957,896 in FY 2012 Great Lakes Restoration Initiative funding.

^{8/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{9/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{10/} PED costs of \$0 are included in this amount.

^{11/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

Demo Barrier I: 12 160-ft steel cable electrodes over 54 ft of the CSSC + control building. Barrier II: 84 160-ft steel billet electrodes over 480 ft of the CSSC + 2 control buildings.

ABS Barrier: 400-ft barrier across river channel + control trailer.

Permanent Barrier I: Not yet designed.

Division: Great Lakes and Ohio River

District: Chicago

Chicago Sanitary and Ship Canal Dispersal Barrier, IL

1 May 2013

LRD-18

JUSTIFICATION: The Chicago Sanitary and Ship Canal is the only continuous waterway link between the Great Lakes and Mississippi River watersheds. Therefore, it is the primary potential hydraulic corridor for transfer of aquatic nuisance species between these two major basins. The adverse economic and ecological effects of invasive species can be highly significant, as evidenced by the Zebra Mussel and Sea Lamprey infestations of the Great Lakes. At this time, Asian carp—which are present downstream of the barriers—are the primary invasive species threat to the Great Lakes. Ongoing laboratory research and field monitoring indicate that the barriers provide an effective deterrent to Asian carp movement.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete improvements at Barrier IIA	\$ 3,600,000
Complete Efficacy Study	500,000
Continue design & construction of Permanent Barrier I	3,039,000
Operation of Barriers	7,000,000
Maintenance of Barriers	5,000,000
Continue Construction of Permanent Barrier I	12,500,000
Total	\$ 31,639,000 ^{1/}

^{1/} Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: The requested amount of \$27,600,000, which includes both construction and operation and maintenance of the barrier system, will be applied as follows:

Operation of Barriers	\$ 7,000,000
Maintenance of Barriers	5,000,000
Continue Construction of Permanent Barrier I	10,000,000
Real Estate Acquisition	3,000,000
Design Acoustic Bubble Strobe Barrier	1,600,000
Implement Efficacy Study	1,000,000
Total	\$ 27,600,000

NON-FEDERAL COST: The non-Federal contribution to the project through FY07 was \$2,275,000. WRDA 2007 made the remainder of the project, including future operation and maintenance, a full Federal responsibility and authorized a credit to each state in the amount the state contributed toward Barrier II.

Division: Great Lakes and Ohio River

District: Chicago

Chicago Sanitary and Ship Canal Dispersal Barrier, IL

STATUS OF LOCAL COOPERATION: The State of Illinois was the local sponsor for the Barrier II project. The Project Cooperation Agreement was executed on 21 November 2003 and amended on 14 July 2005. Illinois received contribution from other states to complete their required cost share amount. As a result of WRDA 2007, the barrier project is 100% Federal.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$209,000,000 is an increase of \$29,000,000 from the latest estimate (\$180,000,000) presented to Congress (FY 2013). The cost increase is due to inclusion in the estimate of the estimated costs to complete upgrades at Barriers IIA and IIB to improve electrical power quality and reliability; an increase in the estimated cost of Permanent Barrier I resulting from incorporation of new technologies to increase power capacity, quality, and reliability; and price escalation.

Complete Upgrades at Barriers IIA and IIB	\$10,000,000
Cost Increase on Permanent Barrier I	15,000,000
Price Escalation on Construction Features	4,000,000
Total	\$29,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment was issued in August 1999. A Finding of No Significant Impact was signed 28 December 1999.

OTHER INFORMATION: Funds to initiate construction for Barrier I were first appropriated in FY 1998. Barrier II was initiated under Section 1135, WRDA 1986. After Section 345 of the FY 2005 DC Appropriation Act was enacted, funds specifically for Barrier II were appropriated in FY 2005. Authorization to implement temporary solutions to the potential bypasses was contained in Section 126 of the FY 2010 Energy & Water Appropriations Act and in Section 105 of the FY 2012 Consolidated Appropriations Act.

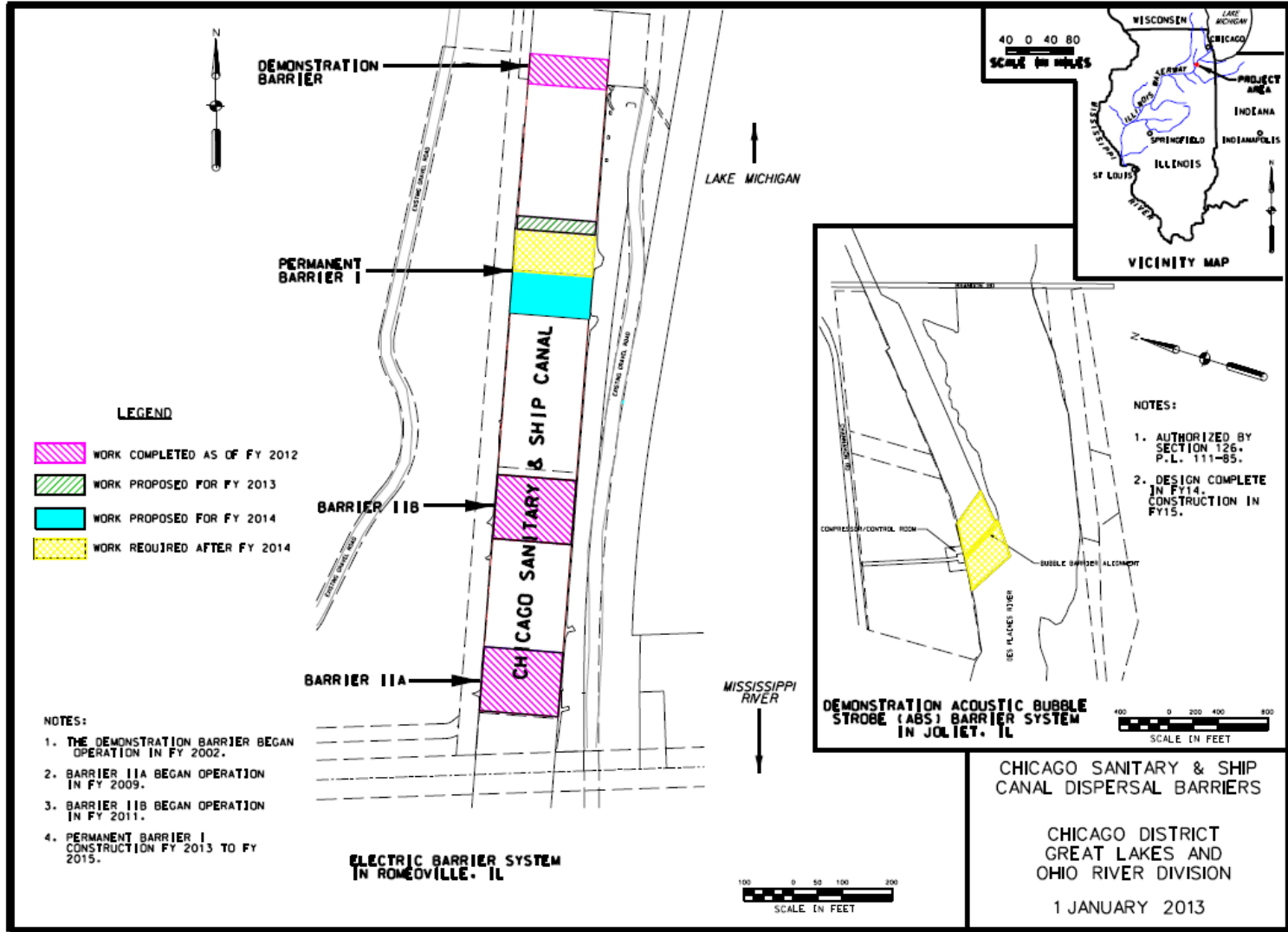
Division: Great Lakes and Ohio River

District: Chicago

Chicago Sanitary and Ship Canal Dispersal Barrier, IL

1 May 2013

LRD-20



Division: Great Lakes and Ohio River

District: Chicago

Chicago Sanitary and Ship Canal Dispersal Barrier, IL

1 May 2013

LRD-21

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: McCook and Thornton Reservoirs, Illinois (Continuing)

LOCATION: The project area covers 341 square miles of the combined sewer area in Chicago and 50 adjacent suburban communities in Cook County.

DESCRIPTION: The authorized project consists of constructing two reservoirs from stone quarries located in McCook and Thornton, Cook County, Illinois, with floodwater storage capacities of 32,000 acre-feet (10 billion gallons) and 14,600 acre-feet (4.8 billion gallons), respectively. The Thornton Reservoir project authorization was modified to evaluate inclusion of the storage associated with the National Resource Conservation Service's Thorn Creek Reservoir. The composite reservoir at Thornton, determined feasible in a 2003 Limited Re-evaluation Report, has a combined capacity of 24,200 acre-feet (7.8 billion gallons). Both McCook and Thornton will serve as the termini of the Metropolitan Water Reclamation District of Greater Chicago's Tunnel and Reservoir Plan (TARP) tunnels. TARP was developed by federal, state, and local governments as a regional plan for reducing flood damages and improving water quality in area waterways. The two reservoirs will capture and store combined sewer overflows (CSO) from the tunnel systems for treatment after storm events. Currently, when the tunnels reach their capacity, CSO backs up through the sewer system into basements of homes and businesses and onto roadways and is discharged directly into area waterways. When storm events are severe, the navigation locks on the Chicago River must be opened to release the CSO into Lake Michigan – the source of drinking water for millions of people. Reservoir features include pumps, a grout curtain and overburden cutoff wall, main and distribution tunnels, gates and valves, hydraulic structures, wall stabilization, and an aeration system.

AUTHORIZATION: Water Resources Development Act of 1988, (P. L. No. 100-676, Section 3, 102 Stat. 4013); Water Resources Development Act of 1999, (P. L. No. 106-53, Section 501, 113 Stat. 334); Water Resources Development Act of 2007, (P. L. No. 110-114, Section 5157, 121 Stat. 1257).

REMAINING BENEFIT – REMAINING COST RATIO: 4.68 to 1 at 7 percent (McCook and Thornton combined).
12.96 to 1 at 7 percent (McCook only).

TOTAL BENEFIT – COST RATIO: 1.98 to 1 at 7 percent (McCook and Thornton combined).
2.96 to 1 at 7 percent (McCook only).

INITIAL BENEFIT – COST RATIO: 2.0 to 1 at 8 percent.

BASIS OF BENEFIT – COST RATIO: McCook Reservoir benefits are based on the Final Special Reevaluation Report dated February 1999 at October 1997 price levels. Thornton Reservoir benefits are based on the economic evaluation completed for the Limited Reevaluation Report dated July 2003 at October 2001 price levels. McCook and Thornton benefits and costs were re-evaluated in an economic update performed in 2011.

Division: Great Lakes and Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 702,000,000	McCook Reservoir	45	TBD
Estimated Non-Federal Cost	234,000,000		Thornton Reservoir	40	TBD
Cash Contributions	149,419,000		Entire Project	43	TBD
Other Costs	84,581,000				
Total Estimated Project Cost		\$ 936,000,000			
				ACCUM PCT OF EST FED COST	
		McCook	Thornton		
Allocations to 30 September 2010		\$ 248,431,000	6,278,000		
Allocations for FY 2011		70,005,000	0		
Allocation for FY 2012		11,760,000	0		
Conference Allowance for FY 2013		12,000,000 ^{5/}	0		
Allocations through FY 2013		342,196,000 ^{1/2/3/6/}	6,278,000	73(M);3(T)	
Estimated Unobligated Carry-in Funds		0 ^{4/}	0		
President's Budget for FY 2014		25,500,000	0	79(M);3(T)	
Programmed Balance to Complete After FY 2014		90,304,000 ^{7/}	237,722,000		
Unprogrammed Balance to Complete after FY 2014		\$ 0	0		

^{1/} \$0 reprogrammed to (from) the project.

^{2/} \$0 rescinded from the project.

^{3/} \$0 transferred to the Flood Control and Coastal Emergencies account.

^{4/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{5/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{6/} PED costs of \$9,374,000 are included in this amount.

^{7/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

Division: Great Lakes and Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

PHYSICAL DATA:

McCook Reservoir Storage Capacity	32,000 acre-feet
Thornton Reservoir Storage Capacity	24,200 acre-feet

JUSTIFICATION: The McCook and Thornton Reservoirs will serve 341 square miles of combined sewer service area in Chicago and multiple suburban communities. Within this region, nearly 1,200,000 structures suffer flooding attributable to combined storm sewer outfall submergence caused by the inadequate capacity of area waterways. The McCook Reservoir will provide additional storage capacity 10 times the billion gallon capacity of its connecting tunnel system and will provide flood damage reduction benefits to Chicago and 37 suburban communities where 146,000 homes and businesses flood annually. The Thornton Reservoir will provide additional storage capacity almost 5 times the half-billion gallon capacity of its connecting tunnel system and will provide flood damage reduction to Chicago and 13 suburban communities where nearly 200,000 homes and businesses flood annually. The project will also improve water quality in area waterways, reduce untreated sewage backflow into Lake Michigan and reduce beach closures. The project benefits over 3 million people. The sponsor, the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), recently negotiated a new consent decree with the Department of Justice in conjunction with the USEPA. The Corps is not party to the agreement but the consent decree did include a deadline for Stage 1 of the McCook Reservoir to be on line and functioning by 2017. The terms of the decree have been agreed by the parties and it is currently under required public review before final execution. Risks to human health are high due to continued contaminated floodwaters. One of the intended purposes of this project is to prevent sewage backflow to Lake Michigan which not only impacts the primary drinking water source for the Chicago metropolitan area but also damages the aquatic ecosystem, including fish tainting, contaminant uptake by aquatic organisms, and degradation of spawning areas. The elimination of backflows of raw sewage to Lake Michigan is a priority issue of the Great Lakes Governors and Mayors organization and the Great Lakes Restoration Initiative. Historically, the storm of 1987 flooded 10,000 basements, flooded streets and viaducts, and caused 4 deaths due to electrocution. In July 2010, areas of Cook County were ravaged by floods that once again caused substantial damage and presented major health and safety issues for residents. Additionally, significant residential and commercial structure flood damages were sustained by the communities of Stone Park, Melrose Park, Maywood, Hillside, Bellwood, Berwyn, Cicero, Westchester, Broadview, Forest Park and Maine Township. News media reported that this storm caused impacts to Interstate 290 and other primary traffic routes resulting in \$750,000,000 in damages. In this very large metropolitan area, the risks associated with overland flooding, basement backup flooding and combined sewer overflow pose a significant threat to residents' health and life safety. Basements flooded by combined sewer overflows pose not only a safety threat (from electrocution), but also a major public health threat due to the presence of water-borne illnesses in the untreated waters.

Average annual benefits for McCook and Thornton Reservoirs are as follows:

Annual Benefits	Amount
Flood Damage Prevention	\$ 89,848,000
Water Quality	15,560,000
Water Supply	10,110,000
Recreation	1,088,000
Total	\$ 116,606,000

FISCAL YEAR 2013: The requested amount will be applied as follows:

Continue construction of Main Tunnel – McCook Reservoir	\$ 10,000,000
Engineering and Design – McCook Reservoir	1,000,000
Construction Management - McCook Reservoir	1,000,000
Total	\$ 12,000,000

FISCAL YEAR 2014: The allocated amount will be applied as follows:

Continue construction of Main Tunnel – McCook Reservoir	\$ 23,450,000
Engineering and Design – McCook Reservoir	825,000
Construction Management – McCook Reservoir	1,225,000
Total	\$ 25,500,000

Division: Great Lakes and Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

1 May 2013

LRD-25

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Maintenance, Repair, Rehabilitation, and Replacement Costs
<p>McCook Reservoir: Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.</p>	\$ 5,920,000	
<p>Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.</p>	14,588,000	
<p>Pay 17 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.</p>	132,492,000	\$4,300,000
<p>Total McCook Reservoir</p>	\$153,000,000	\$4,300,000

Division: Great Lakes and Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

NON-FEDERAL COST: (Continued)

	Payment during Construction and Reimbursements	Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Thornton Reservoir: Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 26,617,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary, for the construction of the project, and less credits allowed for prior work per Section 501 of Water Resources Development Act.	37,456,000	
Pay approximately 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	16,927,000	\$ 2,800,000
Total Thornton Reservoir	81,000,000	2,800,000
Total Non-Federal	\$ 234,000,000	\$ 7,100,000

STATUS OF LOCAL COOPERATION: The Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) is the local sponsor for the project. The Project Cooperation Agreement for McCook Reservoir was executed on 10 May 1999, and amended on 10 July 2003. Project Cooperation Agreement for Thornton Reservoir was executed on 18 September 2003 and amended on 30 July 2009. The non-Federal sponsor is expected to make all required payments concurrently with project construction. The current non-Federal cost estimate for the McCook Reservoir is \$153,000,000, which includes a cash contribution of \$132,492,000 and is an increase of \$23,950,000 from the non-Federal cost estimate of \$129,050,000 noted in the Project Cooperation Agreement, which cited a cash contribution of \$99,978,000. The current non-Federal cost estimate for the Thornton Reservoir is \$81,000,000. WRDA 2007, Section 5157 authorized reimbursement to the sponsor for Thornton Reservoir. The sponsor has already completed design, awarded three major reservoir construction contracts and is continuing construction. A fourth contract for installation of an aeration system is currently being designed.

Division: Great Lakes and Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$702,000,000 is an increase of \$25,000,000 from the latest estimate (\$677,000,000) presented to Congress (FY 2013).

Price Escalation on Construction Features	\$ 5,665,000
Post Contract Award and Other Estimating adjustments	19,335,000
Total	\$25,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Public and Agency review of final Environmental Impact Statement and the Special Reevaluation Report (EIS / SRR) for the McCook Reservoir project was completed in December 1998 and the Record of Decision (ROD) was signed on May 5, 1999. The Thornton Reservoir Environmental Assessment and Finding of No Significant Impact were signed in June 2001 and December 2001 respectively. The Thornton Reservoir Limited Reevaluation Report was completed in July 2003.

OTHER INFORMATION: Funds to initiate PED were appropriated in FY 1988. Funds to initiate construction were appropriated in FY 1994.

SEPARABLE ELEMENT: McCook Reservoir, Illinois

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost	\$ 458,000,000
Non-Federal Cost	153,000,000
Cash Contributions	132,492,000
Other Costs	20,508,000
Total Estimated Project Cost	\$ 611,000,000

REMAINING BENEFIT – REMAINING COST RATIO: 12.96 to 1 at 7 percent

TOTAL BENEFIT – COST RATIO: 2.96 to 1 at 7 percent

SEPARABLE ELEMENT: Thornton Reservoir, Illinois

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost	\$ 244,000,000
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Division: Great Lakes and Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

Non-Federal Cost		81,000,000
Cash Contributions	16,927,000	
Other Costs	64,073,000	
Total Estimated Project Cost		\$ 325,000,000

REMAINING BENEFIT – REMAINING COST RATIO: 1.6 to 1 at 7 percent

TOTAL BENEFIT – COST RATIO: 1.1 to 1 at 7 percent

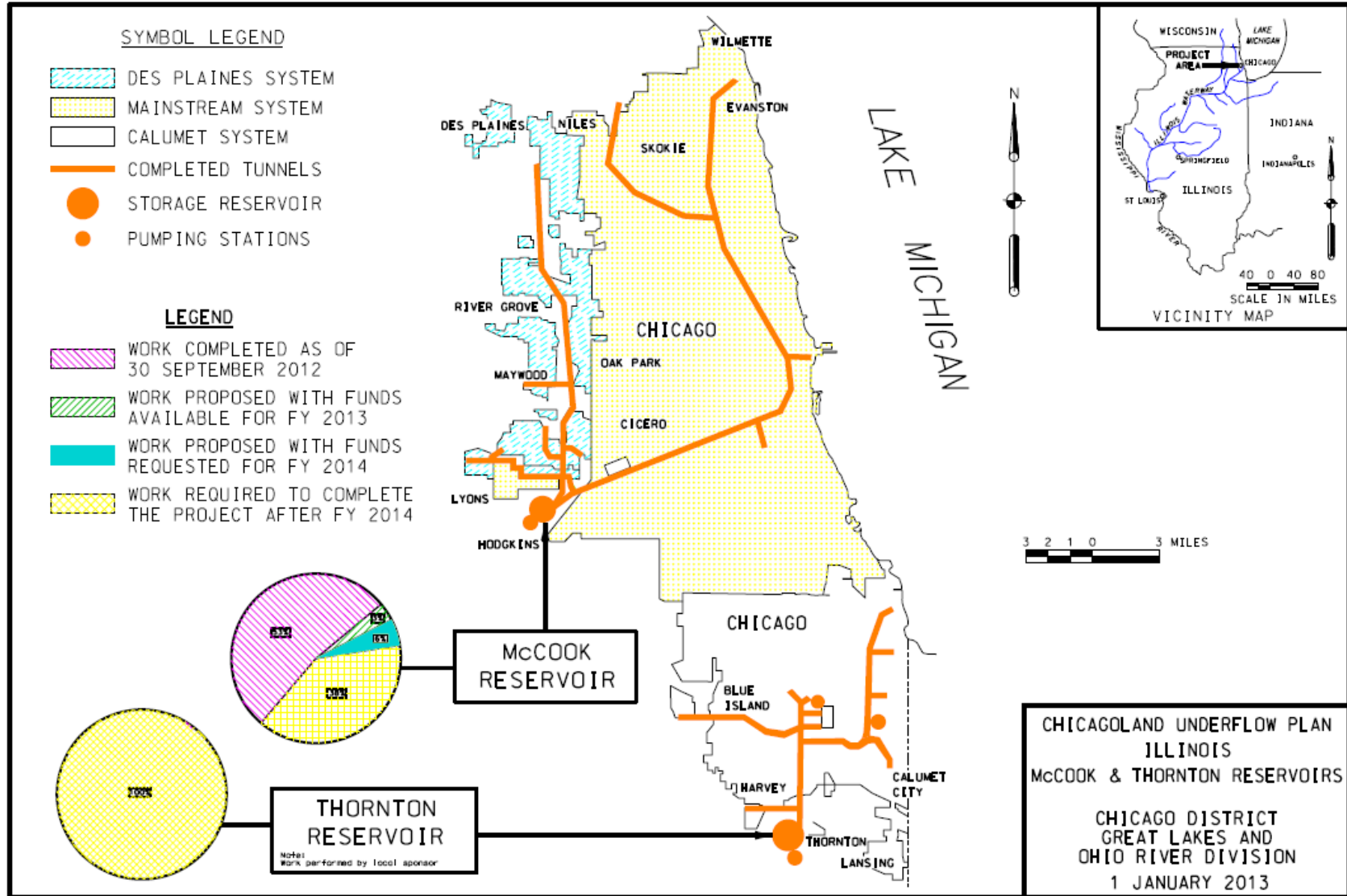
Division: Great Lakes and Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

1 May 2013

LRD-29



Division: Great Lakes and Ohio River

District: Chicago

McCook and Thornton Reservoirs, IL

APPROPRIATION TITLE: Construction – Locks and Dams (Navigation)

PROJECT: Olmsted Locks and Dam, Illinois and Kentucky (Continuing)

LOCATION: The project is located in Pulaski County, Illinois, and Ballard County, Kentucky, on the Ohio River near Olmsted, Illinois, approximately 964 miles downstream from Pittsburgh, Pennsylvania.

DESCRIPTION: The project will replace Ohio River Locks and Dams 52 and 53. The new structure will consist of two 110' by 1200' locks adjacent to the Illinois shore and a dam comprised of tainter gates, navigable pass, and a fixed weir. All work is programmed.

AUTHORIZATION: Section 3(a) (6) of WRDA 1988 (P.L. 100-676)

REMAINING BENEFIT – REMAINING COST RATIO: 9.0 to 1 at 7 percent.

TOTAL BENEFIT – COST RATIO: 3.6 to 1 at 7 percent.

INITIAL BENEFIT – COST RATIO: 3.8 at 8 3/4 percent (FY 1991).

BASIS OF BENEFIT – COST RATIO: Benefits are based on the Olmsted Locks and Dam Post Authorization Change Report, dated Nov 2011 and revised April 2012.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$3,104,000,000	Entire Project	49	TBD
General Appropriations	\$1,566,758,000			
Inland Waterways Trust Fund	\$1,537,242,000			
Estimated Non – Federal Cost	0			
Total Estimated Project Cost	\$ 3,104,000,000			

Division: Great Lakes and Ohio River

District: Louisville

Olmsted Locks and Dam, IL & KY

SUMMARIZED FINANCIAL DATA (Continued):

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 2010	\$631,092,000	\$601,781,000	
Allocation for FY 2011	71,657,000	71,451,594	
Allocation for FY 2012	75,000,000	75,000,000	
Conference Allowance for FY 2013	68,400,000 ^{5/}	68,400,000 ^{5/}	
Allocations through FY 2013	846,149,000 ^{1/2/3/6/}	816,632,594 ^{1/2/3/6/}	54
Estimated Unobligated Carry-in Funds	0 ^{4/}	0 ^{4/}	
President's Budget for FY 2014	81,500,000	81,500,000	59
Programmed Balance to Complete after FY 2014	639,109,000 ^{7/}	639,109,406 ^{7/}	
Unprogrammed Balance to Complete after FY 2014	\$ 0	\$ 0	

^{1/} \$0 reprogrammed to (from) the project.

^{2/} \$0 rescinded from the project.

^{3/} \$0 transferred to the Flood Control and Coastal Emergencies account.

^{4/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{5/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{6/} PED costs of \$13,023,000 are included in this amount.

^{7/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

Lock – 110 by 1,200 foot Chambers	2
Dam – Navigable Pass	1,400 feet
Fixed Weir	561 feet
Tainter Gates	744 feet
Acres – Dam	123 acres
Road	21 acres
Disposal Area	114 acres

Division: Great Lakes and Ohio River

District: Louisville

Olmsted Locks and Dam, IL & KY

JUSTIFICATION: The project is in a strategic location on the inland waterway system. Virtually all waterway traffic moving between the Ohio River and tributaries and the Mississippi River and tributaries passes through the project area. Olmsted Locks and Dam will replace existing Ohio River Locks and Dams 52 and 53, which are over 83 years old. Both projects have temporary lock chambers that are inefficient and neither project conforms to current design criteria for structural stability. Commercial navigation in 2011 was 91 million tons through Lock 52 and 81 million tons through Lock 53. Over the last five years, tonnage has been relatively constant, with the 5 year average of 88 million tons through Lock 52 and 77 million tons through Lock 53. Coal comprises approximately 39% of the total tonnage, petroleum 4%, crude materials 31%, farm products 13%, chemicals 10% and 3%. The projected increases in waterway traffic demands in combination with the limited capacity of the existing locks will result in increased lockage delays. The Net Annual Project Benefits are \$742 million.

The following counties qualify as areas of "substantial and persistent" unemployment: Illinois – Alexander, Johnson, Massac, Pope, Pulaski, and Union; Kentucky – Ballard, Carlisle, Graves, Livingston, and Marshall.

Net annual benefits at 7 percent in 2012 price levels are as follows:

Annual Benefits	Amount
Navigation	\$741,680,000
Total	\$741,680,000

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue Dam Construction Contract	\$128,790,000
Mussel Monitoring	430,000
Planning, Engineering, and Design	1,760,000
Construction Management	6,380,000
Lock O&M during Construction (Hired Labor)	504,000
Total	\$137,864,000 ^{1/}

^{1/} Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: The requested amount will be applied as follows:

Continue Dam Construction Contract	\$152,970,000
Mussel Monitoring	430,000
Planning, Engineering, and Design	1,800,000
Construction Management	6,400,000
Lock O&M during Construction (Hired Labor)	1,400,000
Total	\$163,000,000

Division: Great Lakes and Ohio River

District: Louisville

Olmsted Locks and Dam, IL & KY

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act (WRDA) of 1986, 50% of the total cost of construction will be derived from the Inland Waterways Trust Fund. Funds, allocated under the American Reinvestment and Recovery Act, are not subject to the cost sharing provisions of WRDA 1986.

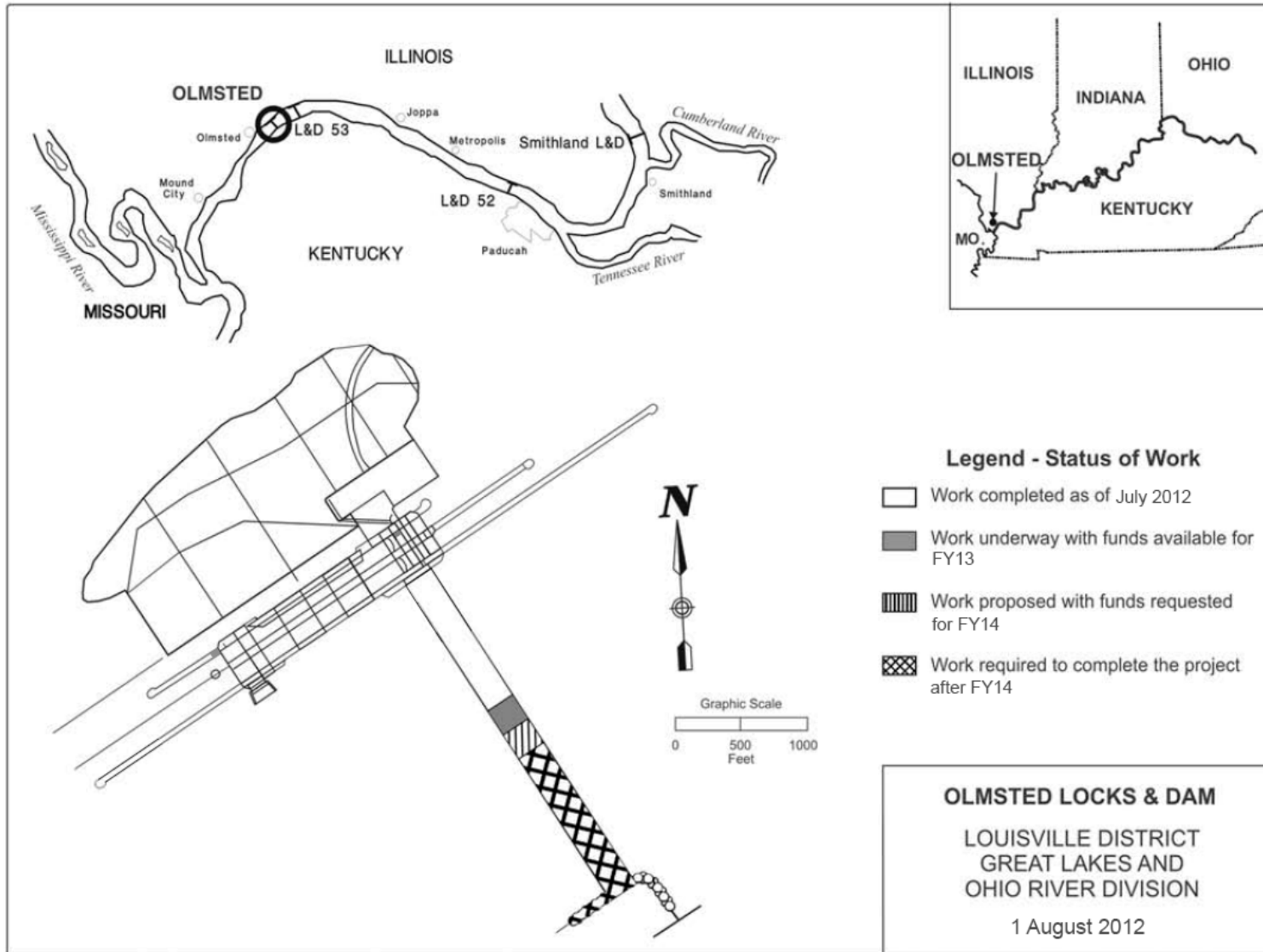
STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$3,104,000,000 is an increase of \$5,000,000 from the latest estimate (\$3,099,000,000) presented to Congress (FY 2013). The change includes the following items.

Items	Amount
Price Escalation on Construction Features	\$5,000,000
Total	\$5,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on April 4, 1986. Due to project changes, a Draft Supplemental EIS was filed in November 1991. The Final Supplement to the EIS was filed on March 26, 1993, and the Record of Decision was signed on May 5, 1993.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction were appropriated in FY 1991. The twin 110 x 1200-foot locks were substantially completed in 2005. Construction on the dam was initiated in Jan 2004. Demolition of Locks and Dams 52 and 53 will follow completion of dam construction. A Post Authorization Change Report was approved and submitted to Congress in April 2012. A proposed change to the authorized limit was included in the Fiscal Year 2013 Budget Appendix in April 2012.



Division: Great Lakes and Ohio River

District: Louisville

Olmsted Locks and Dam, IL & KY

1 May 2013

LRD-35

Indiana

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Little Calumet River, Indiana (Continuing)

LOCATION: Little Calumet River Basin, Northwest Indiana, Lake County.

DESCRIPTION: This project for flood risk management and recreation includes constructing 22 miles of levees and floodwalls, installing a control structure at Hart Ditch, building almost 17 miles of hiking trails and over 385 acres of wetland mitigation. The project also involves relocating seven miles of river channel to allow better water flow, modifying highway bridges to permit unobstructed flow of water and installing a flood warning system. The project will protect more than 8,000 homes and businesses in Gary, Griffith, Hammond, Highland and Munster, preventing nearly \$62 million in average annual flood damages. The project is divided into two sections. The East Reach, which is mainly in Gary, Indiana, extends from Cline Avenue to I-65. The west reach extends from the Illinois/Indiana state line to Cline Avenue. The project is divided into eight geographical stages, totaling over 27 construction contracts. To date, 22 of the contracts have been completed, including four contracts for structure demolition, sixteen levee contracts, a recreation contract on the East Reach and one landscaping contract. East Reach levee construction and pump stations are complete. West Reach levee and floodwall construction and pump stations are substantially complete.

AUTHORIZATION: Section 401 of the Water Resources Development Act of 1986 (Public Law 99-662). Section 127 of the Energy and Water Development Appropriations of 2006 (Public Law 109-103).

REMAINING BENEFIT – REMAINING COST RATIO: 1.86 to 1 at 7 percent.

TOTAL BENEFIT – COST RATIO: 3.2 to 1 at 7 percent.

INITIAL BENEFIT – COST RATIO: 2.1 to 1 at 8.875 percent

BASIS OF BENEFIT – COST RATIO: Benefits are from the latest approved Post Authorization Change Report dated 19 March 2012 at 1 October 2011 price levels.

Division: Great Lakes and Ohio River

District: Chicago

Little Calumet River, IN

1 May 2013

LRD-37

SUMMARIZED FINANCIAL DATA

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$203,000,000		Entire Project	90	TBD
Estimated Non-Federal Cost	67,000,000				
Cash Contributions	22,912,000				
Other Costs	44,088,000				
Total Estimated Project Cost	\$270,000,000				
Allocations to 30 September 2010	\$179,761,000				
Allocations for FY 2011	10,179,000				
Allocation for FY 2012	7,100,000				
Conference Allowance for FY 2013	0				
Allocations through FY 2013	197,040,000	^{1/2/3/6/}		97	
Estimated Unobligated Carry-in Funds	0	^{4/}			
President's Budget for FY 2014	5,000,000	^{5/}		99	
Programmed Balance to Complete After FY 2014	960,000	^{7/}			
Unprogrammed Balance to Complete after FY 2014	\$ 0				

^{1/} \$0 reprogrammed to (from) the project.

^{2/} \$0 rescinded from the project.

^{3/} \$0 transferred to the Flood Control and Coastal Emergencies account.

^{4/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{5/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{6/} PED costs of \$2,012,000 are included in this amount.

^{7/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

Division: Great Lakes and Ohio River

District: Chicago

Little Calumet River, IN

PHYSICAL DATA:

Levees and Floodwalls	21.8 miles
Pumping Plant Modifications	17
Structures Removed	37
Structures Flood-proofed	53
Channel Modification	7 miles
Hiking Trails	16.8 miles

JUSTIFICATION: This project benefits 1,200,000 people and 10,000 structures, primarily residential, along the Little Calumet River in Indiana within the communities of Hammond, Highland, Munster, Griffith and Gary. The total value of these structures exceeds \$1B. The major East/West highway transportation link in the Chicago metropolitan area, Interstate 80/94, is also susceptible to flooding from the Little Calumet River. Interstate 80/94 is heavily traveled, with annual average daily traffic of 160,000 vehicles, of which 40% are trucks. Completion of the project will reduce damages from flood events up to the 200-year flood event. Annual benefits are estimated at \$109,225,000. The State of Indiana continues to rate the flood damage potential along the Little Calumet River as the most severe in the state. An estimated \$35,000,000 in flood damages was incurred and one life lost in the November 1990 flood. The communities of Hammond and Munster, IN were inundated. The President declared the area inundated by the November 1990 flood a National Disaster Area on December 6, 1990. The project avoids the short and long-term adverse impacts associated with the destruction or modification of wetlands by designating the existing wetland areas in the Gary reach for overbank flood storage, a vital requirement of the hydraulic operation and design of the project, and hence required project lands. Environmental attributes are being mitigated along the river corridor. Construction of the Hart Ditch Control structure is required to meet statutory requirements to minimize flow impacts (for all events up to the 100 year) to the State of Illinois communities, resultant from changes to the floodplain / floodway in Indiana as part of the project. Additionally, the Control Structure minimizes impact to the flow volume attributable to the State of Illinois' Lake Michigan Diversion, which is regulated by Supreme Court Decree. Also critical is rehabilitation of existing pump stations to eliminate risks from interior flooding that could result since the existing system is insufficient to provide significant protection from interior runoff during major storm events along the West Reach of the project. An intense localized rainfall event occurred on September 13, 2006 that was centered over the communities of Highland and Griffith, Indiana resulting in widespread flooding and damage to approximately 1,500 homes. The precipitation event was estimated to be a 600 year event rainfall over these communities. An August 2007 flood breached an existing spoil bank levee resulting in significant flooding. I-80 / 94 was shut down for 3 days due to high river stages and intense rainfall. August 2007 flooding was a 25 year event causing damages and economic impacts of \$27,600,000. There was severe flooding in September 2008 causing significant damages including breach of existing spoilbank levee, inundating densely populated areas risking life and safety. September 2008 breach occurred without warning, resulting in emergency evacuation of residents. Flooding caused a natural gas explosion and fire, destroying one home & causing significant damage to gas distribution system. September 2008 flooding caused \$87M in flood damages. FEMA declared Northwest Indiana Federal disaster area in October 2008. The FY 2013 Budget included funding for this project primarily to address risk to human safety. The Corps made this determination based on many factors such as the likelihood and magnitude of the potential flooding, the number of people living in the flood plain, the likely warning time, the availability of evacuation routes, and site-specific engineering factors. Lake County, Indiana qualifies as an area of persistent and chronic unemployment.

Division: Great Lakes and Ohio River

District: Chicago

Little Calumet River, IN

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention	61,700,000
Recreation	530,000
Land Enhancement	2,222,000
Total	64,452,000

FISCAL YEAR 2013: The carryover funds from FY 2012 into FY 2013 are being applied as follows:

Initiate construction of tiebacks	\$ 4,000,000
Initiate construction of Southmoor	\$ 2,300,000
Initiate Mitigation Work	\$ 940,000
Award Recreation work	\$ 600,000
Engineering and Design	\$ 845,000
Construction Management	\$ 815,000
Total	\$ 9,500,000

FISCAL YEAR 2014: The FY 2014 amount will be applied as follows:

Continue Mitigation work	\$ 3,600,000
Engineering and Design	\$ 300,000
Construction Management	\$ 1,100,000
Total	\$ 5,000,000

Division: Great Lakes and Ohio River

District: Chicago

Little Calumet River, IN

NON-FEDERAL COST: In accordance with the cost sharing and financing requirements contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$27,901,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project, reduced for credit allowed based on prior work (Section 104 of the Water Resources Development Act of 1986; \$1,667,200) after reductions for such credit have been made in the required cash payments.	16,187,000	
Pay one-half separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities;	1,974,500	

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Pay approximately 5 percent of the costs allocated to flood control (other than non-structural measures) to bring the non-Federal share of flood control costs to 25 percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended; to reflect credit allowed for prior work (Section 104 of the Water Resource Development Act of 1986; \$1,667,200); and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	18,810,500	\$3,236,000

Division: Great Lakes and Ohio River

District: Chicago

Little Calumet River, IN

Requirements of Local Cooperation (cont'd)

Pay 25 percent of the first cost allocated to non-structural flood control measures. 2,127,000

Total Non-Federal Costs \$67,000,000 \$3,236,000

STATUS OF LOCAL COOPERATION: The Little Calumet River Basin Development Commission is the local sponsor for the project. The Local Cooperation Agreement (LCA) was executed on August 16, 1990. The LCA was supplemented twice to include the East Reach Remediation, 30 July 1999 and Burr Street Betterment, 26 April 2000. The current non-Federal cost estimate of \$67,000,000, which includes a cash contribution of \$22,912,000, is an increase of \$43,400,000 from the non-Federal cost estimate of \$23,600,000 noted in the Local Cooperation Agreement. The local sponsor has received approval for Section 104 credits in the amount of \$1,667,200.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$203,000,000 is an increase of \$12,000,000 from the latest estimate (\$191,000,000) presented to Congress (FY 2013). The cost increases are due to design changes and construction modifications. There are no changes in project location, purpose or scope. The changes include following items.

Items:	Amount
Price Escalation on Construction Features	\$ 4,500,000
Post Contract Award & Other Estimated Adjustments	\$ 7,500,000
Total	\$12,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the United States Environmental Protection Agency on February 3, 1984. The Record of Decision was signed on July 13, 1990. Environmental Assessments (EA) were subsequently prepared addressing potential borrow and disposal sites which were not covered in the EIS and the three Findings of No Significant Impact were signed on May 9, 1990, July 11, 1991 and April 21, 1992. A supplemental Environmental Impact Statement was completed for the levee re-alignment, excavated ponding areas and new borrow sites. The Record of Decision was signed on June 23, 1995.

Division: Great Lakes and Ohio River

District: Chicago

Little Calumet River, IN

OTHER INFORMATION: Funds to initiate PED were appropriated in FY 1984 and funds to initiate construction were appropriated in FY 1990. A Post Authorization Change Report (PACR) was approved on 19 March 2012. The OMB approval / concurrence memo was signed on 11 Apr 2012. ASA (CW) transmitted PACR to Congress on 13 Apr 2012. The FY 2013 Senate Appropriation Bill includes the language to increase the project cost authorization to \$270,000,000. The current remaining work that can be executed within the current authorization is \$2,897,977. Within this limit, the design of the tiebacks, the Type II IEPR, close-out Stage VII and VIII construction projects, and award the Tiebacks contract can be completed. Matching non-federal sponsor funds are required to balance the cost share. As of June 2012, flood risk management features of the project are substantially complete. Remaining features are necessary to achieve the authorized 200-year level of flood protection for the affected communities and to complete a positive levee evaluation to support a request to remove the "Special Flood Hazard Area" designation from the protected area, which will provide communities and their residential relief on flood insurance rates.

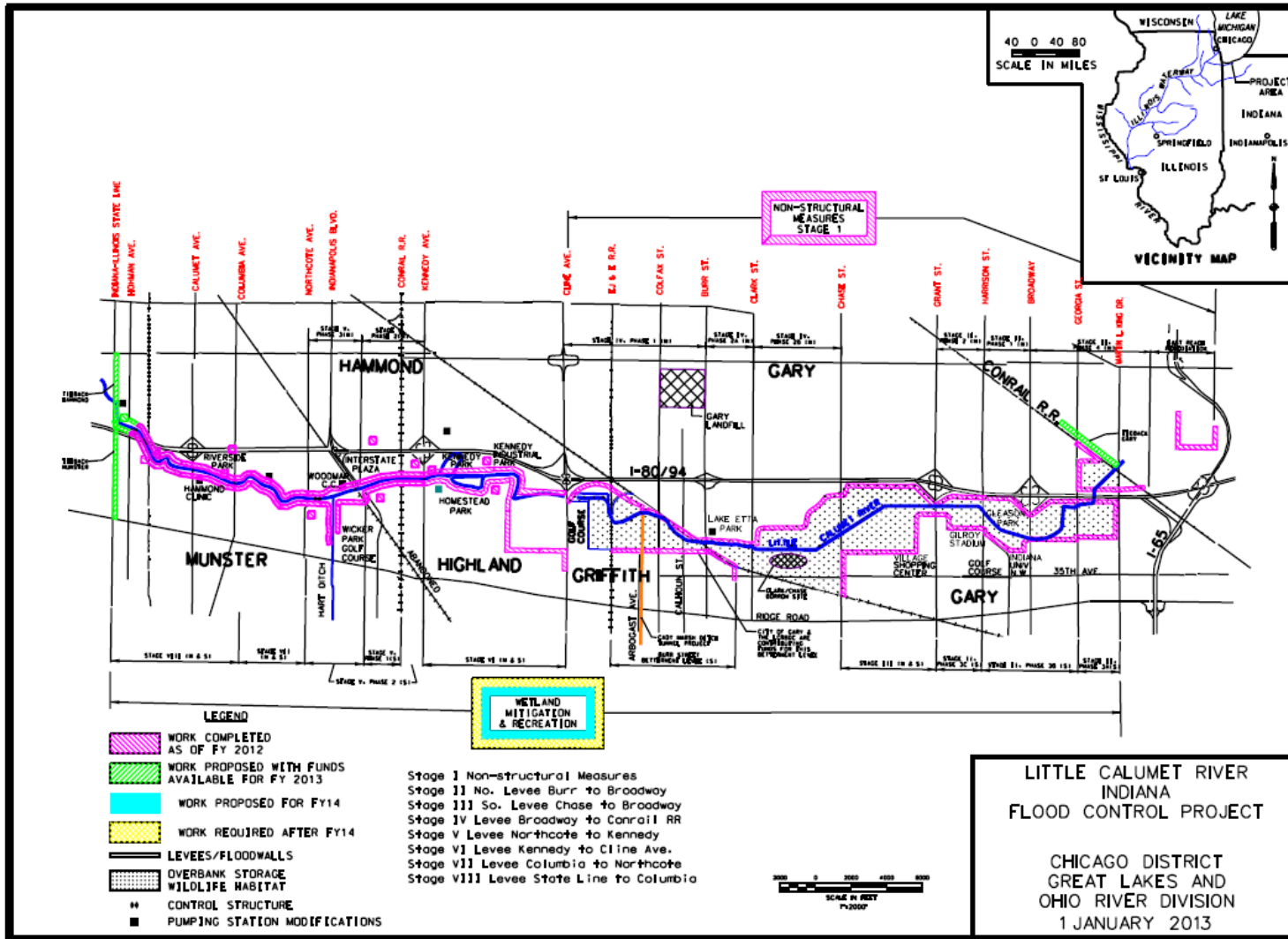
Division: Great Lakes and Ohio River

District: Chicago

Little Calumet River, IN

1 May 2013

LRD-43



Division: Great Lakes and Ohio River

District: Chicago

Little Calumet River, IN

1 May 2013

LRD-44

Ohio

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Bolivar Dam, Muskingum River Lakes, Ohio (Major Rehabilitation – Seepage Control) (Continuing)

LOCATION: The Bolivar Dam is located on Sandy Creek of the Tuscarawas River, a tributary of the Muskingum River, in Stark and Tuscarawas Counties, Ohio. The dam is located 183.4 miles above the mouth of the Muskingum River.

DESCRIPTION: Project construction was completed in September 1938 as one of a system of dams designed to provide flood risk management and water conservation in the Muskingum Watershed in Ohio. This dry dam is a rolled, earthfill dam with an impervious core founded on glacial outwash material. The maximum height of the dam is 87 feet, with a crest length of 6,300 feet and a crest elevation of 982.5'. The project has an uncontrolled saddle type spillway at the left abutment with a crest length of 270 feet and a crest elevation of 962.0'. The project has an intake structure containing six 7' by 15' sluice gates discharging through two 16' by 16' horseshoe tunnels. The project also consists of the Magnolia Levee to protect the residents of the Town of Magnolia and two industrial levees. The drainage area upstream of the dam is 504 square miles.

Bolivar Dam has a history of excessive seepage with a potential of underseepage instability at higher pools. The project experienced significant seepage during the Jan 2005 flood event and emergency repairs were made to the project during that period. To maintain the safety of the project and safeguard the public, major rehabilitation of the dam is necessary, and will include construction of a concrete seepage barrier, rehabilitation of 6 roller gates and one bulkhead, sluice gate repairs, electrical / mechanical repairs, abutment grouting, and instrumentation. Dam Safety Wedge funds received in FY 2011 enabled initial construction activities that included construction of a resident engineer office, full extension of a seepage blanket, and rehabilitation of one roller gate.

AUTHORIZATION: Flood Control Act (FCA) of 1939 (P.L. 76-396), Section 4

REMAINING BENEFIT – REMAINING COST RATIO: Not applicable

TOTAL BENEFIT – COST RATIO: Not applicable

INITIAL BENEFIT – COST RATIO: 1.6 to 1 at 4 7/8 percent

BASIS OF BENEFIT – COST RATIO: Major Rehabilitation Report, dated July 2009

Division: Great Lakes and Ohio River

District: Huntington

Bolivar Dam, Muskingum River Lakes, OH

SUMMARIZED FINANCIAL DATA		STATUS	PCT CMPL	PHYS COMPL
ORIGINAL PROJECT		(1 JAN 2013)	10	TBD
Actual Federal Cost	26,590,000			
Actual Non-Federal Cost	8,000,000			
Cash Contributions	8,000,000			
Total Original Project Cost	34,590,000	^{1/}		
PROJECT MODIFICATION				
Estimated Federal Cost	133,368,000			
Estimated Non-Federal Cost	39,835,000			
Cash Contributions	39,835,000			
Total Estimated Modification Cost	173,203,000			
TOTAL ESTIMATED PROJECT COST	207,793,000			
		ACCUM PCT OF EST FED COST		
Allocations to 30 September 2010	\$ 3,219,000			
Allocation for FY 2011	8,500,000			
Allocation for FY 2012	4,685,000			
Conference Allowance for FY 2013	13,800,000	^{6/}		
Allocations through FY 2013	30,204,000	^{2/3/4/7}	26	
Estimated Unobligated Carry-In Funds	0	^{5/}		
Budget Amount for FY 2014	32,500,000		49	
Programmed Balance to Complete after FY 2014	\$70,664,000	^{8/}		
Unprogrammed Balance to Complete after FY 2014	0			

^{1/} Muskingum Basin Lakes is a system. No costs allocations are available for individual elements.

^{2/} \$1,770,000 reprogrammed to the project.

Division: Great Lakes and Ohio River

District: Huntington

Bolivar Dam, Muskingum River Lakes, OH

^{3/} \$0 rescinded from the project.

^{4/} \$0 transferred to the Flood Control and Coastal Emergencies account.

^{5/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A.

^{6/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{7/} PED costs of \$0 are included in this amount.

^{8/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Concrete seepage barrier; rehabilitation of roller gates and a bulkhead; sluice gate repairs; electrical and mechanical repairs; abutment grouting; and instrumentation.

JUSTIFICATION: Bolivar Dam was classified as a Dam Safety Action Classification (DSAC) II in the Corps' screening portfolio risk analysis (SPRA). The Bolivar Dam has a history of excessive seepage and a potential for underseepage instability at high pools. Several areas of the embankment and foundation could become unstable due to piping at pool levels below the spillway crest. Emergency repairs were done in 2005 and large boils were observed in 2008. The interim maximum flood control pool is elevation 949, a 65-year event. If a failure were to occur, the estimated population at risk is 50,000 and the potential economic damages are \$690,000,000. Failure of Bolivar Dam would close Interstate 77 and could cause failure of Dover Dam. Average annual benefits, all flood risk management, are \$12,699,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Initiate base contract for the rehabilitation construction	\$11,800,000
Continue Engineering and Design	1,524,000
Continue Construction Management	500,000
Total	\$13,824,000 ^{1/}

^{1/} Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: The budget amount will be applied as follows:

Continue Rehab Construction	\$27,000,000
Continue Engineering and Design During Construction	3,000,000
Continue Construction Management	2,500,000
Total	\$32,500,000

Division: Great Lakes and Ohio River

District: Huntington

Bolivar Dam, Muskingum River Lakes, OH

NON-FEDERAL COST: In accordance with Army policy and Section 4 of the Flood Control Act of 1938, the non-Federal sponsor must comply with the requirements listed below. The Muskingum Water Conservancy District is serving as the non-Federal sponsor for the project.

Requirements of Local Cooperation	Payments During Construction and Reimbursements
Pay 23 percent of the costs of the Major Rehabilitation measures that are allocated to project purposes	\$ 39,835,000
Total Non-Federal Costs	\$ 39,835,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: A Project Partnership Agreement for the Bolivar Dam Safety project was executed 5 July 2011 with the Muskingum Water Conservancy District.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$ 133,368,000 is an increase of \$6,318,000 from the latest estimate presented to Congress (FY 2013). The \$133,368,000 estimate is the fully funded estimate of the 2009 baseline costs price leveled to Oct 2012. This change includes the following items:

Price Escalation on Construction Features	\$ 6,318,000
Total	\$6,318,000

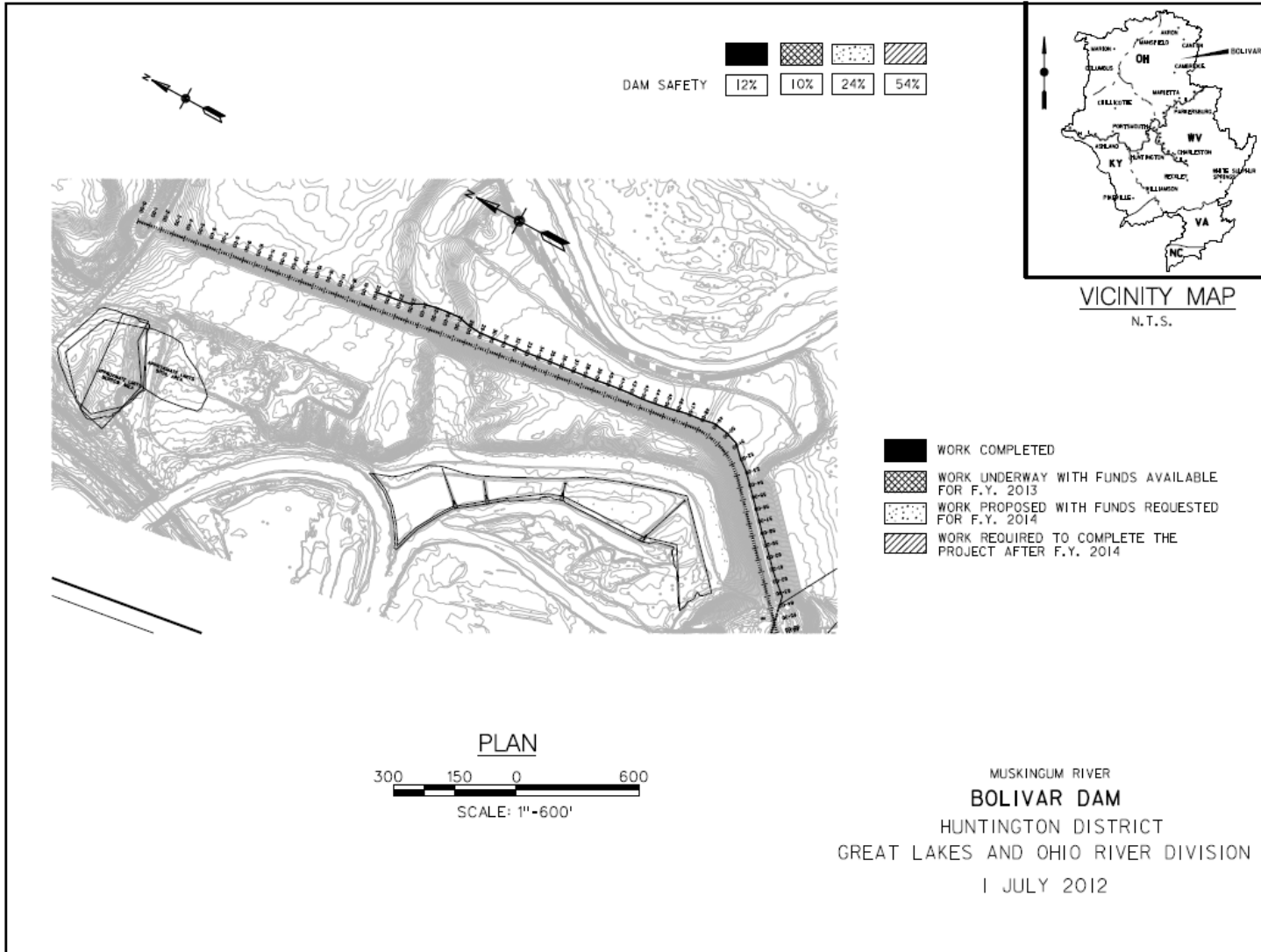
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment was prepared in conjunction with the Major Rehabilitation Report and a Finding of No Significant Impacts was signed by the District Commander on 25 August 2008. The Major Rehabilitation Report was approved 12 June 2009.

OTHER INFORMATION: Funds to initiate essential dam safety report(s), along with funds to initiate construction were appropriated in FY 2008.

Division: Great Lakes and Ohio River

District: Huntington

Bolivar Dam, Muskingum River Lakes, OH



Division: Great Lakes and Ohio River

District: Huntington

Bolivar Dam, Muskingum River Lakes, OH

1 May 2013

LRD-50

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Dover Dam, Muskingum River, OH Dam Safety Assurance (DSA) (Continuing)

LOCATION: The Dover Dam is located on the Tuscarawas River, a tributary of the Muskingum River, in Tuscarawas County, OH. The dam is located 173.6 miles above the mouth of the Muskingum River.

DESCRIPTION: The Dover Dam is a concrete gravity dam. The dam was constructed by the Corps of Engineers and completed in 1937. The dam is 820 feet long and 69 feet high with a drainage area of 1,397 square miles. Dover Dam is a dry dam allowing the Tuscarawas River to flow freely through the dam for a significant portion of time and only retains water when necessary for flood risk management. The pool of record occurred in January 2005. Dover Dam was categorized as a Dam Safety Action Classification (DSAC) II project in the Corps' Screening Portfolio Risk Assessment (SPRA), which is an "Urgent" safety classification. The recommended plan of improvement for the Dover Dam consists of adding parapet walls on top of the non-overflow sections, anchoring the dam and stilling basin, installing a stop-log closure at the left abutment, and providing bank protection immediately downstream of the dam. Also, the existing operations building will be flood proofed since it sits on top of the non-overflow section of the dam. The bottom of the building is at elevation 931' and a Probable Maximum Flood (PMF) event of approximately 937' elevation would inundate the operations control building and flood the gallery of the dam. Phase I construction included installation of 36 anchors within the dam, while Phase II includes all remaining activities.

AUTHORIZATION: Section 4 of the Flood Control Act (FCA) of 1938 (P.L. 75-761) as amended by Section 4 of FCA 1939 (P.L. 76-398) as amended by Title XII of the Water Resources Development Act of 1986 (P.L. 99-662) for DSA.

REMAINING BENEFIT – REMAINING COST RATIO: Not applicable

TOTAL BENEFIT – COST RATIO: Not applicable

INITIAL BENEFIT – COST RATIO: 2.8 to 1, at 4 7/8 percent

BASIS OF BENEFIT – COST RATIO: Dam Safety Assurance Program Evaluation Report, dated June 2007.

Division: Great Lakes and Ohio River

District: Huntington

Dover Dam, OH (Dam Safety Assurance)

1 May 2013

LRD-51

SUMMARIZED FINANCIAL DATA:			STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYS COMPL SCHEDULE
ORIGINAL PROJECT			Entire Project	39	TBD
Actual Federal Cost		\$ 26 590,000			
Actual Non-Federal Cost		8,000,000			
Cash Contributions	8,000,000				
Other Costs	0				
Total Original Project Cost		34,590,000	^{1/}		
PROJECT MODIFICATION					
Estimated Federal Cost		59,653,000			
Estimated Non-Federal Cost		2,132,000			
Cash Contributions	2,132,000				
Other Costs	0				
Total Estimated Modification Cost		61,785,000			
Total Estimated Project Cost		\$96,375,000			
			ACCUM PCT OF EST FED COST		
Allocations to 30 September 2010		\$26,693,000			
Allocation for FY 2011		19,460,000			
Allocation for FY 2012		6,900,000			
Conference Allowance for FY 2013		1,750,000	^{6/}		
Allocations through FY 2013		54,803,000	^{2/3/4/7/}	92	
Estimated Unobligated Carry-In Funds		0	^{5/}		
President's Budget for FY 2014		3,750,000		98	
Programmed Balance to Complete after FY 2014		1,100,000	^{8/}		
Unprogrammed Balance to Complete after FY 2014		\$ 0			

^{1/} Muskingum Basin Lakes is a system. No costs allocations are available for individual elements.

^{2/} \$2,244,000 reprogrammed from the project.

^{3/} \$40,418 rescinded from the project.

Division: Great Lakes and Ohio River

District: Huntington

Dover Dam, OH (Dam Safety Assurance)

^{4/} \$0 transferred to the Flood Control and Coastal Emergencies account.

^{5/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{6/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{7/} PED costs of \$0 are included in this amount.

^{8/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Corrective measures to be undertaken include parapet walls on top of the non-overflow sections; anchoring the dam and stilling basin; a stop-log closure at the left abutment; and bank protection immediately downstream of the dam. Phase I construction includes installation of 36 anchors within the dam; Phase II includes all remaining activities.

JUSTIFICATION: Dover Dam was classified as a DSAC II in the Corps' SPRA. The Dover Dam is hydrologically deficient – it will not safely pass the spillway design flood. The imminent failure flood is below the spillway crest. Periodic inspections of the Dover Dam by the Corps have revealed significant dam safety concerns which have grown over the life of the dam. The Corps has determined the dam cannot safely accommodate the Probable Maximum Flood (PMF) event. The dam is also believed to be unstable against sliding under conditions below the PMF due to known faulting and uncertain foundation bedrock quality. The imminent failure flood is below the spillway crest. If a failure were to occur, the estimated population at risk is 41,000 and the potential economic damages are \$658,000,000. Average annual benefits, all flood risk management, are \$15,874,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Exercise Option 2B for DSA Construction	\$ 3,200,000
Complete drilling/stilling basin anchor modification	2,500,000
Complete Real Estate Acquisitions	390,000
Continue Engineering and Design During Construction	750,000
Continue Construction Management	1,000,000

Total \$ 7,840,000 ^{1/}

^{1/} Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: The budget amount will be applied as follows:

Initiate Flood proofing of Existing Operations Building	\$ 2,000,000
Continue Engineering and Design During Construction	750,000
Continue Construction Management	1,000,000

Total \$ 3,750,000

Division: Great Lakes and Ohio River

District: Huntington

Dover Dam, OH (Dam Safety Assurance)

NON-FEDERAL COST: In accordance with Section 1203 of the Water Resources Development Act of 1986 (P.L. 99-662), as amended, the non-Federal sponsor must comply with the requirements listed below.

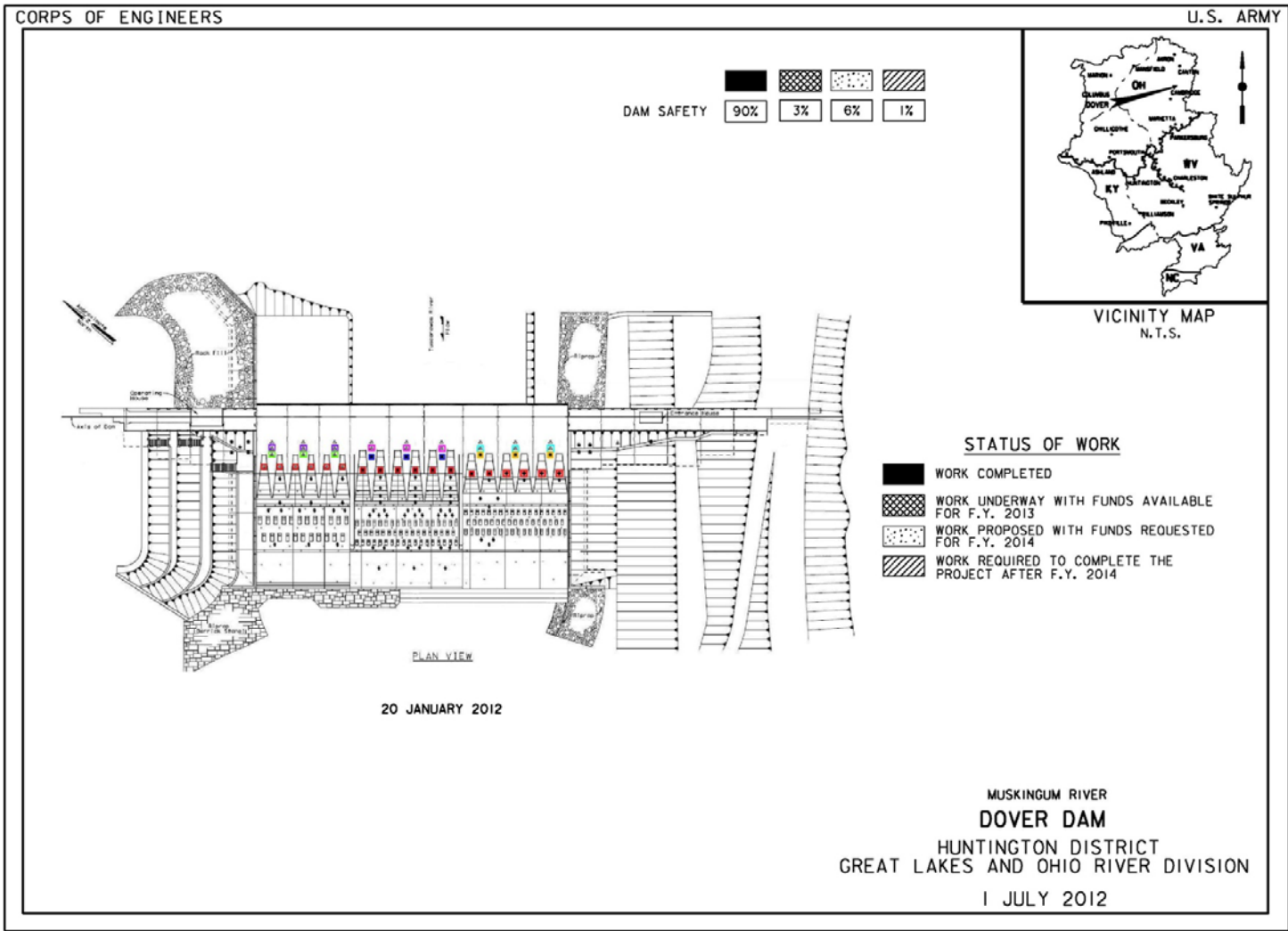
Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual OMRR&R Costs
Pay 3.45 percent of the costs of the DSA corrective measures that are allocated to project purposes (3.45 percent of total project costs).	\$ 2,132,000	\$ 0
Total Non-Federal Costs	\$ 2,132,000	\$ 0

STATUS OF LOCAL COOPERATION: A Project Partnership Agreement (PPA) was executed with the non-Federal partner, the Muskingum Watershed Conservancy District (MWCD) on 24 July 2009. The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$59,653,000 is unchanged from latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: The Environmental Impact Statement was prepared in conjunction with the Evaluation Report. The Evaluation Report was approved July 2007 and a concurrence memorandum from the ASA(CW) is dated 30 January 2008.

OTHER INFORMATION: Construction funds to initiate the Dover DSA, OH project implementation were appropriated in FY 2006.



Division: Great Lakes and Ohio River

District: Huntington

Dover Dam, OH (Dam Safety Assurance)

1 May 2013

LRD-55

Pennsylvania

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: East Branch Clarion River Lake, PA (Dam Safety) (Continuing)

LOCATION: The dam is on the East Branch of the Clarion River, 7.5 miles upstream from the junction with the West Branch of the Clarion River at Johnsonburg, PA, and 14 miles upstream of Ridgeway, PA. The reservoir is located entirely in Elk County, PA. The dam was constructed between 1947 and 1952 and has been in continuous operation since December 1952, with one notable exception. During 1957, an episode of internal erosion and piping resulted in emergency drawdown of the reservoir and loss of operating capability while repairs were made. The dam consists of a 184-foot high earth embankment with a 10-foot diameter concrete lined discharge tunnel, control tower, and an uncontrolled concrete lined side-channel spillway.

DESCRIPTION: The project consists of constructing a full length, full depth cut-off wall preceded by a phase of site development. The components of the cut-off consist of grouting of the bedrock, deep soil mixing around the 1957 void repair, and a lean concrete hydro-mill panel wall approximately 2,145 feet long with an approximate maximum width of 39 inches and approximate maximum depth of 250 feet.

AUTHORIZATION: Flood Control Acts of 28 June 1938 (P.L. 75-761) and 1944 (P.L. 78-534)

REMAINING BENEFIT – COST RATIO: Not applicable

TOTAL BENEFIT – COST RATIO: Not applicable

INITIAL BENEFIT – COST RATIO: 0.94 at 4 5/8 percent

BASIS OF BENEFIT – COST RATIO: East Branch Dam, Clarion River, Final Dam Safety Evaluation Report, dated August 2010

Division: Great Lakes and Ohio River

District: Pittsburgh

East Branch Dam, Clarion River Lake, PA
(Dam Safety)

1 May 2013

LRD-57

SUMMARIZED FINANCIAL DATA:

		ACCUM PCT OF EST FED COST	STATUS (1 OCT 2012)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$285,403,000			
Programmed Construction	\$285,403,000		Entire project	5	TBD
Total Estimated Project Cost		\$285,403,000			
Allocations to 30 September 2010		\$ 5,403,000			
Allocation for FY 2011		8,470,000			
Allocation for FY 2012		4,111,000			
Conference Allowance for FY 2013		15,000,000			
Allocations through FY 2013		32,984,000	1/2/3/7/	12	
Estimated Unobligated Carry-In Funds		0		5/	
President's Budget for FY 2014		21,500,000		19	
Programmed Balance to Complete after FY 2014		230,919,000		8/	
Unprogrammed Balance to Complete after FY 2014		\$ 0			

^{1/} \$0 reprogrammed to (from) the project.

^{2/} \$0 rescinded from the project.

^{3/} \$0 transferred to the Flood Control and Coastal Emergencies account.

^{4/} Allocations of \$5,403,100 for FY09 & FY10 were from the Dam Safety Wedge account for seepage/stability studies.

^{5/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{6/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{7/} PED costs of \$0 are included in this amount.

^{8/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

Division: Great Lakes and Ohio River

District: Pittsburgh

East Branch Dam, Clarion River Lake, PA
(Dam Safety)

JUSTIFICATION: In 1957, an episode of internal erosion of the dam embankment material and piping resulted in emergency drawdown of the reservoir and loss of operating capability. During this time a rapidly growing void in the embankment was located and filled by grouting to control internal seepage. Although a catastrophic failure was narrowly prevented in 1957, the design and construction criteria and practices used to build this dam do not meet present-day safety standards. Consequently, the conditions that led to the development of seepage and piping in 1957 remain unchanged across the embankment and there remains significant potential for similar seepage and piping to redevelop in the future. In 2006, East Branch Dam was classified as Dam Safety Action Class II (Urgent, unsafe or potentially unsafe). If a failure of the dam were to occur the estimated loss of life is 227 and economic damages are \$1.04 billion. The average annual benefits are \$81,874,000.

PHYSICAL DATA: Develop the site. Construct full-length, full-depth cut-off wall, components of which include a lean concrete hydro-mill panel wall 2,145 feet long, with a maximum width of 39 inches and a maximum depth of 250 feet; grouting of the bedrock; and deep soil mixing around the 1957 void repair.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Description	Amount
EDC and S&A for continuation of resident office contract	\$200,000
EDC and S&A for continuation of site development contract	\$100,000
Complete P&S for continuing contract for the full length of the cutoff wall	\$3,761,000
Award and initiate continuing contract for cutoff wall construction	\$9,200,000
Award and complete instrumentation automation contract	2,000,000
Total	\$15,261,000 ^{1/}

^{1/} Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: The requested amount of \$21,500,000 will be applied as follows:

Description	Amount
Continue cutoff wall construction contract	\$17,000,000
EDC and S&A for continuation of cutoff wall construction	4,500,000
Total	\$21,500,000

NON-FEDERAL COSTS: Not applicable.

Division: Great Lakes and Ohio River

District: Pittsburgh

East Branch Dam, Clarion River Lake, PA
(Dam Safety)

STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$285,403,000 is the same as last presented to Congress (FY2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment was prepared in conjunction with the Dam Safety Modification Report and a Finding of No Significant Impacts was signed by the District Commander on 1 July 2010. The Dam Safety Modification Report was approved on 22 October 2010.

OTHER INFORMATION: Construction funds were first appropriated in FY 2009.

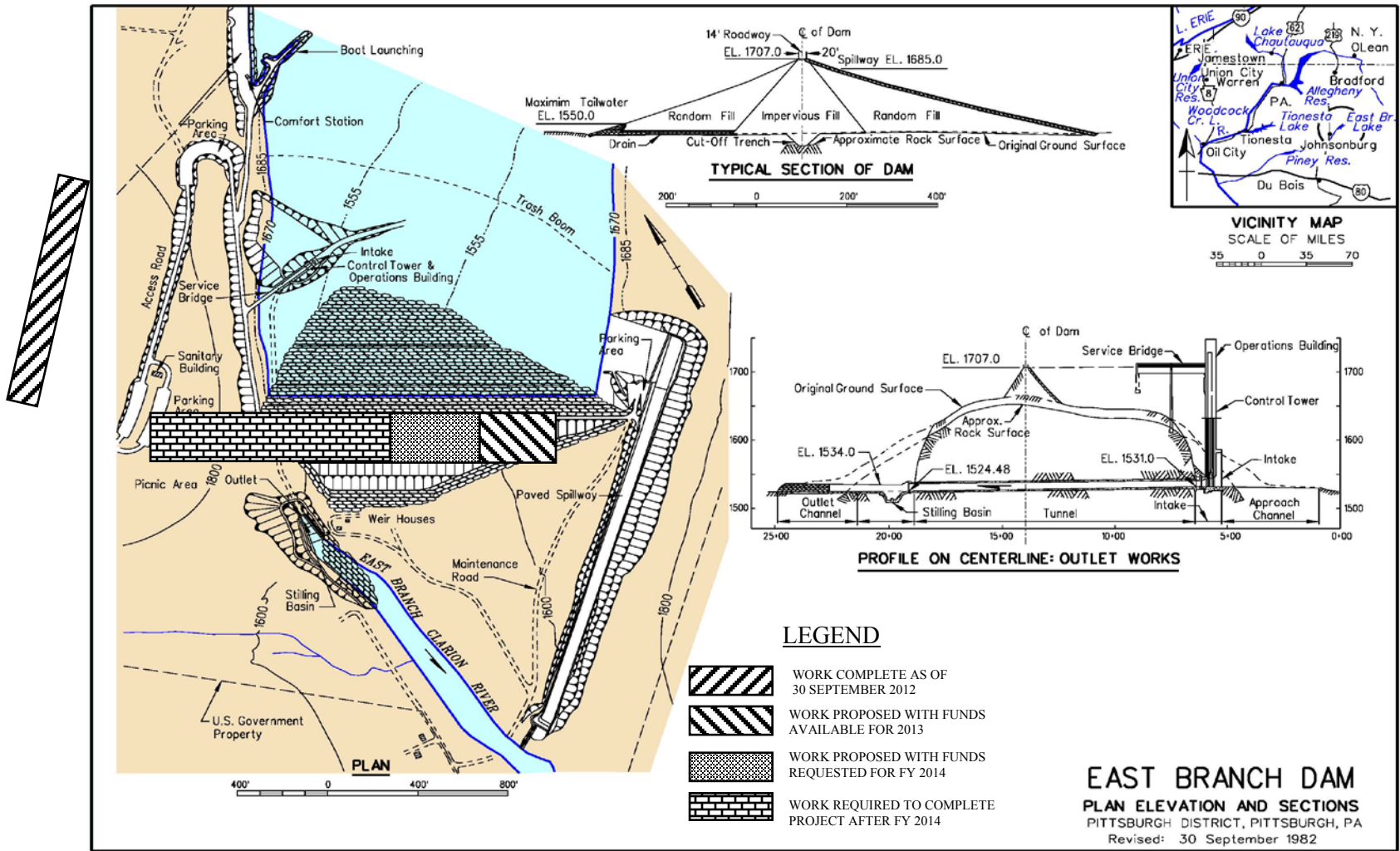
Division: Great Lakes and Ohio River

District: Pittsburgh

East Branch Dam, Clarion River Lake, PA
(Dam Safety)

1 May 2013

LRD-60



Division: Great Lakes and Ohio River

District: Pittsburgh

East Branch Dam, Clarion River Lake, PA
(Dam Safety)

1 May 2013

LRD-61

APPROPRIATION TITLE: Construction – Locks and Dams (Navigation)

PROJECT: Locks and Dams 2, 3, and 4, Monongahela River, Pennsylvania (Continuing)

LOCATION: These three Navigation facilities are located on the lower portion of the Monongahela River near the city of Pittsburgh, Pennsylvania. They are part of the Allegheny – Monongahela system and are located in Allegheny, Washington, and Westmoreland Counties. Measured from the Point in Pittsburgh, Locks and Dam 2 (Braddock) is at river mile 11.2, Locks and Dam 3 (Elizabeth) is at river mile 23.8, and Locks and Dam 4 (Charleroi) is at river mile 41.5. Six other navigation facilities situated upstream of Locks and Dam 4 provide a navigable waterway extending to Fairmont, West Virginia. At the Point in Pittsburgh, the Monongahela and Allegheny Rivers join to form the Ohio River.

DESCRIPTION: The authorized projects consist of a new gated dam and a rehabilitated auxiliary chamber floodway bulkhead structure at Braddock; new twin 84 by 720 foot locks and below-dam scour protection at Charleroi; raising pool 2 by a nominal five feet and lowering pool 3 by a nominal 3.2 feet; removal of Locks and Dam 3; channel dredging; relocations; and bank stabilization. Construction began in FY 1995 with the upgrade of the Locks 2 auxiliary chamber floodway bulkhead and relocations. Replacement of the dam at Braddock began in 1999 and is complete. Only one operational lock remains at Charleroi L/D 4. Efforts are now focused on the new twin locks at Charleroi and remaining pool 2 relocations. All work is programmed. Existing Locks and Dams 2, 3, and 4 are the last of the old and undersized locks on the Monongahela River system and have components that have been in service for nearly 100 years. The existing Braddock facility consists of a main lock with chamber dimensions of 110 by 720 feet, an auxiliary lock with chamber dimensions of 56 by 360 feet, and a 748-foot fixed-crest dam. The existing Elizabeth facility consists of locks with chamber dimensions of 56 by 720 feet and 56 by 360 feet and a 670-foot fixed-crest dam. The existing Charleroi facility consists of locks with chamber dimensions of 56 by 720 feet and 56 by 360 feet and a gated dam consisting of five 84-foot gated sections and a 43-foot fixed weir section.

AUTHORIZATION: Section 101, Water Resources Development Act of 1992 (P.L. 102 – 580)

REMAINING BENEFIT – REMAINING COST RATIO: 1.4 to 1 at 7 percent

TOTAL BENEFIT – COST RATIO: 1.3 to 1 at 7 percent

INITIAL BENEFIT – COST RATIO: 6.7 to 1 at 7 3/4 percent (FY 1995)

BASIS OF BENEFIT – COST RATIO: The initial Benefit-Cost ratio is based upon the benefits and costs listed in the Feasibility Report dated December 1991. The initial rate is the FY 1995 rate when Construction funds were first expended. The Benefit-Cost ratio was recalculated in FY 2011 using both updated Benefits as well as updated Costs.

Division: Great Lakes and Ohio River

District: Pittsburgh

Locks and Dams 2, 3, & 4, Monongahela River, PA

1 May 2013

LRD-62

SUMMARIZED FINANCIAL DATA

		STATUS (1 OCT 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
		Renovation and extension of Locks 2 Upper Guard wall	100	Jan 98
Estimated Federal Cost	\$1,729,374,000	Bulkhead Structure L/D 2	100	Mar 96
General Appropriations	\$898,133,000	Braddock Dam	100	Jul 04
Inland Waterway Trust Fund	\$831,241,000	Remove L/D 3	0	TBD
		Raise and Lower Pool	0	TBD
Estimated Non-Federal Cost	0	Public Relocations	55	TBD
Total Estimated Programmed Construction Cost	\$1,729,374,000	Charleroi River Chamber Lock	30	TBD
Total Estimated Unprogrammed Construction Cost	0	Charleroi Scour Protection	0	TBD
Total Estimated Project Cost	\$1,729,374,000	Charleroi Land Chamber Lock	0	TBD
		Entire project	31.9	TBD

	GENERAL APPNS	INLAND WATERWAYS TRUST FUNDS	ACCUM PCT OF EST FED COST
Allocations to 30 September 2010	\$292,916,000	\$229,193,000	
Allocation for FY 2011	5,261,000	4,053,000	
Allocation for FY 2012	2,461,000	500,000	
Conference Allowance for FY 2013	18,325,000 ^{5/}	18,325,000 ^{5/}	
Allocations through FY 2013	318,963,000 ^{1/2/3/6/}	252,071,000 ^{1/2/3/6/}	33
Estimated Unobligated Carry-In Funds	0 ^{4/}	0 ^{4/}	
President's Budget for FY 2014	980,000	980,000	33
Programmed Balance to Complete after FY 2014	578,190,000 ^{7/}	578,190,000 ^{7/}	
Unprogrammed Balance to Complete after FY 2014	\$ 0	\$ 0	

^{1/} \$0 reprogrammed to (from) the project.

^{2/} \$0 rescinded from the project.

^{3/} \$27,336,000 transferred to the Flood Control and Coastal Emergencies account.

Division: Great Lakes and Ohio River

District: Pittsburgh

Locks and Dams 2, 3, & 4, Monongahela River, PA

^{4/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{5/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{6/} PED costs of \$12,542,294 are included in this amount.

^{7/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The continued viability of the Lower Monongahela River navigation system is vital to the economic well being of southwestern Pennsylvania, northeastern West Virginia, and the nation. Locks and Dam 2, 3, and 4 cumulatively provide over 14,000 direct jobs in the region. Between 2000 and 2009, an average of 15 Million tons of cargo per year was shipped thru the Lower Monongahela River at a transportation rate savings of approximately \$13 per ton (\$195 Million per year). The primary commodity shipped was coal. Loss of transportation on this river would have an extremely detrimental effect to the regional and local economy. These impacts include the shipments of steam coal from the Bailey Enlow Coal Mine, the largest underground coal mine in the Nation and potential impacts to the Clariton Coke Works, the largest steel coking plant in the Nation. Average annual benefits at 7 percent are as follows:

Annual Benefits	Amount
Commercial Navigation	\$ 39,729,000
Advanced replacement of shore side facilities	2,000,000
Eliminated cost of help boats	100,000
Flood damage reduction	500,000
Normal O&M reduction	1,000,000
Maintenance Savings	176,703,000
Total	\$ 220,032,000

The major risks associated with these facilities are their deteriorated structural condition and lock capacity. The risk to navigation is becoming increasingly severe as the facilities age and continues to deteriorate. There is a significant probability of structural failure and loss of navigation on the Monongahela River, causing major cost impacts to the production of electricity due to its dependency on coal from the Monongahela River corridor. The extreme structural deterioration of Locks and Dam 3 and Locks 4 is of paramount concern. Replacement of Lock 4 and removal of Dam 3 are necessary because major repairs and rehabilitation will not prevent structural failure. The highest risks are at Elizabeth L/D 3 and at Charleroi L/D 4.

Locks 3 (Elizabeth) are highly unreliable. Dam 3 has been classified as a Dam Safety Action Class (DSAC) I navigation dam and has previously shown signs of active failure. Operation and Maintenance (O&M) funds were used in FY 2007 and FY 2008 to perform emergency stabilization work to the most critical portions of this nearly 110 year old dam. These emergency repairs appear to be functioning adequately. Monitoring and observation of the dam have not indicated a need to perform more rigorous monitoring, investigation, or apply additional risk reduction measures at this time. Failure of Dam 3 would result in loss of navigation in pool 3, adverse impacts to multiple water intakes, and a potential failure of the only operational lock at the upstream Lock 4, Charleroi.

Division: Great Lakes and Ohio River

District: Pittsburgh

Locks and Dams 2, 3, & 4, Monongahela River, PA

Lock 4 (Charleroi) is highly unreliable, approaching 80 years old, and in poor condition. The Charleroi Dam was classified as a DSAC II dam in 2009. The District is focusing resources on completing the new Charleroi River Chamber as quickly as possible. Loss of downstream pool due to failure of Dam 3 would seriously affect the stability of the existing Lock 4 and potentially compromise the integrity of the dam. Lock 4 has a 56 foot wide chamber that is a safety hazard to the navigation industry as well as a significant bottleneck to efficient navigation on the lower Monongahela River. Upon completion of a new 84 foot wide lock chamber at Lock 4 and removal of Locks and Dam 3, the significant bottlenecks to navigation will have been removed improving transportation benefits.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Project management	\$ 520,000	
Engineering and Supervision and Administration for Contract #3 (River Chamber Preparatory Contract)	2,010,000	
Cultural Resource Mitigation	160,000	
Charleroi River Chamber Design	2,010,000	
Charleroi Emptying and Stilling Basin Contract	46,000,000	
Total	\$50,700,000	^{1/}

^{1/} Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: The requested amount will be used as follows:

Project Management of the project	\$ 500,000
Engineering and Supervision and Administration for Contract #4	1,200,000
Cultural Resource Mitigation	260,000
Total	\$1,960,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Section 102, Water Resource Development Act of 1986, 50% of the total cost of construction will be derived from the Inland Waterways Trust Fund. Funds received thru the ARRA are not required to have a matching cost share from the IWTF.

Construction of this project requires modification to privately owned shore side facilities and submarine utility crossings, which were all constructed under Department of the Army permits pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899. The estimated cost to owners for adapting these facilities to new project conditions was \$111,000,000 in October 1992 dollars.

STATUS OF LOCAL COOPERATION: None required.

Division: Great Lakes and Ohio River

District: Pittsburgh

Locks and Dams 2, 3, & 4, Monongahela River, PA

COMPARISON OF FEDERAL COST ESTIMATES: The original fully funded project cost estimate was \$750,000,000 (October 1992). The total project cost was updated in 2012 in conjunction with reestimating the 902(b) cost ceiling. The new fully funded project estimate is \$1,729,000,000 (October 2012). The current Federal cost estimate is an increase of \$884,000,000 over the latest estimate (\$845,000,000) presented to Congress (FY2013). Approximately 32% or \$283,000,000 of the \$884,000,000 increase is attributed to escalation, funding uncertainty, and extended construction duration due to the depleted balance in the Inland Waterways Trust Fund. The remaining \$601,000,000 is attributed to lessons learned on prior contracts, differing site conditions, and design, construction, and sequencing changes.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND CLEAN WATER ACT COMPLIANCE: Final Environmental Impact Statement was filed with the Environmental Protection Agency on January 28, 1992. Director of Civil Works signed the Record of Decision on December 17, 1992. A Supplemental Environmental Impact Statement on Project Disposal and various other Environmental Assessments, all resulting in Findings of No Significant Impact has been completed pursuant to the National Environmental Policy Act. Changes since the last supplemental have been captured through the issuance of Public Notices under the Clean Water Act.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were first appropriated in FY 1992. Funds to initiate construction were first appropriated in FY 1995. The Project costs have increased significantly, primarily due to inefficient construction funding associated with prior year appropriations and most recently insufficient revenues in the IWTF. Other cost increases are associated with assumptions made during the development of the Feasibility Study that proved to be invalid and design modifications. The project cost was updated to \$1.73 Billion in FY12 in concert with the computation of the 902 limit. The revised cost estimate includes lessons learned from past and ongoing construction activities associated with this project, risks associated with funding constraints, as well as cost and schedule risks. The updated cost estimate includes sunk costs as well as the estimated cost to construct remaining project features. The updated cost estimate is unable to be certified without a realistic project schedule or funding profile. The primary assumption associated with the current cost estimate relates to the Olmsted project completing in the year 2024, at which time efficient funding could be made available for Locks and Dams 2, 3, and 4. However, several unknowns remain, including: resolution of the IWTF insolvency and the status of the Olmsted project. A disposal facility has been secured for the overall project. This project will require a Post Authorization Change Report when the allocated amount approaches the current estimated 902 Authorization Limit of \$1,275,762,000. However, the vast majority of the project benefits will be realized within the 902 limit. Through 30 September 2012, the project has been allocated \$534,383,726, which is \$741,378,274 below the 902 Authorization Limit.

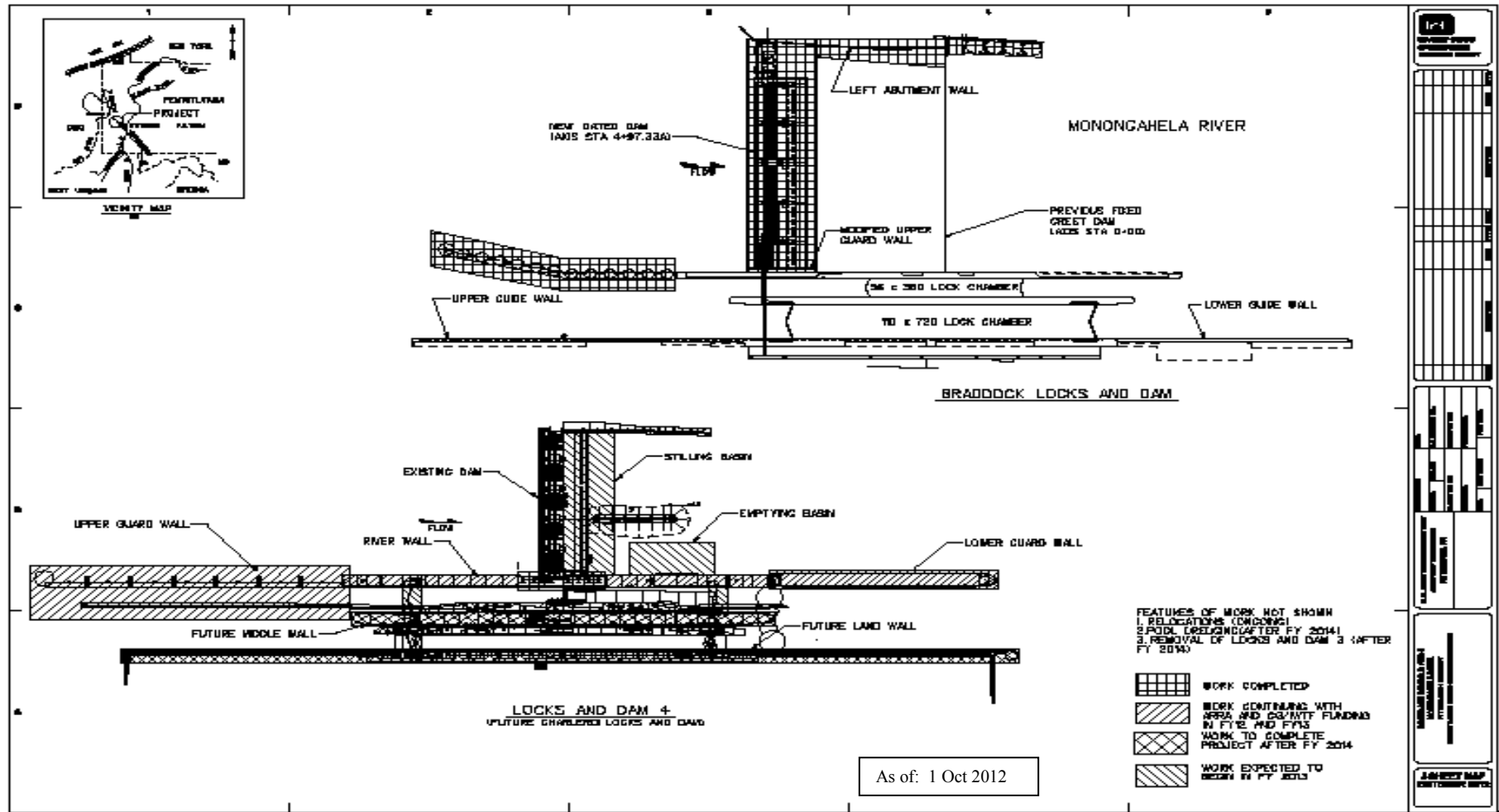
Division: Great Lakes and Ohio River

District: Pittsburgh

Locks and Dams 2, 3, & 4, Monongahela River, PA

1 May 2013

LRD-66



Division: Great Lakes and Ohio River

District: Pittsburgh

Locks and Dams 2, 3, & 4, Monongahela River, PA

1 May 2013

LRD-67

Tennessee

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Center Hill Dam Safety Major Rehabilitation, Caney Fork River, Tennessee (Continuing)

LOCATION: Center Hill Dam is located at Mile 26.6 on the Caney Fork River in DeKalb County, Tennessee, 55 miles east of Nashville, Tennessee.

DESCRIPTION: Center Hill Dam has been in service for 60 years providing flood risk management, hydropower, recreation, water supply and water quality benefits. The dam has a maximum height of 250 feet and consists of a 1,382 feet long concrete section, a 778 feet long compacted clay embankment and a 125 feet high by 770 feet long earthen saddle dam in the right rim. The dam impounds 2,092,000 acre-feet at its maximum flood control pool elevation. Since construction, seepage problems through the karst limestone dam foundation have cost millions of dollars in monitoring, subsurface investigation and grouting. In recent years, seepage has increased. Foundation conditions are deteriorating due to erosion along open and clay-filled joints and solution features in the rock within the rims and dam foundation. Erosion jeopardizes the two earthen embankments, the left abutment and the integrity of the left rim. The 2006 Major Rehabilitation Evaluation Report evaluated several alternatives to improve the long term reliability of the dam. The approved plan includes: 1) a grout curtain approximately 4,000 feet long into the main embankment foundation, left groin and left rim; 2) a concrete barrier wall into foundation of main dam embankment; 3) a grout curtain and barrier wall OR a Roller Compacted Concrete (RCC) Stability berm downstream of the Saddle Dam Embankment; and 4) rehabilitation of Station Service Power House hydropower unit required to mitigate downstream flow loss resulting from the remedial work.

AUTHORIZATION: Flood Control Act of 1938 and the River and Harbor Act of 1946

REMAINING BENEFIT – REMAINING COST RATIO: Not Applicable

TOTAL BENEFIT – COST RATIO: Not Applicable

INITIAL BENEFIT – COST RATIO: 3.4 at 5 1/8 percent (FY 2006)

BASIS OF BENEFIT – COST RATIO: Benefits are from the latest available evaluation, dated July 2006, at January 2006 price levels. Benefits were updated based on FY 2011 Level 1 Affirmation Report of the Methodology for Conducting Economic Updates.

Division: Great Lakes & Ohio River

District: Nashville

Center Hill Dam Safety Major Rehab, TN

1 May 2013

LRD-69

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$299,600,000			
Programmed Construction	\$299,600,000		Entire Project	47	TBD
Total Estimated Project Cost		\$299,600,000			
Allocations to 30 September 2010		127,597,000			
Allocation for FY 2011		989,600			
Allocation for FY 2012		48,500,000			
Conference Allowance for FY 2013		50,000,000	^{4/}		
Allocations through FY 2013		227,087,000	^{1/2/3/6/}		
Estimated Unobligated Carry-in Funds		0	^{5/}		
Budget Amount for FY 2014		36,500,000			
Programmed Balance to Complete after FY 2014		36,013,000	^{7/}		
Unprogrammed Balance to Complete after FY 2014		\$ 0			

^{1/} \$16,500,000 reprogrammed from the project.

^{2/} \$0 rescinded from the project.

^{3/} \$4,000,000 transferred to the Flood Control and Coastal Emergencies (FCCE).

^{4/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{5/} As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{6/} PED costs of \$0 are included in this amount.

^{7/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

Cut-off Wall 900 feet long
Grout Curtain 3,000 feet long

Division: Great Lakes & Ohio River

District: Nashville

Center Hill Dam Safety Major Rehab, TN

1 May 2013

LRD-70

JUSTIFICATION: The 2005 Corps-wide Screening Portfolio Risk Assessment for Dam Safety ranked Center Hill Dam as a Dam Safety Action Class (DSAC) I category for Corps dams nationwide. Structures in this class are critically near failure or extremely high risk under normal operations without intervention. Continued, uncontrolled seepage creates the potential for dam failure or partial loss of the lake. Progression of seepage through the karst foundation is difficult to accurately predict; however, in the event of dam failure, downstream damages would likely exceed one billion dollars. Only 6 hours warning time is estimated for Metro Nashville. The estimated loss of life is 357. If complete dam failure occurs, the potential depth is 47 feet in Nashville. Failure would also cause damage to interstate bridges over the main east-west route of Interstate 40, and loss of water, wastewater facilities, and electrical services. Average Annual Damages without the project are \$86,694,000; the Population at Risk is 350,000. The Average Annual Benefits are \$51,809,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue Main Dam Barrier Wall	\$44,000,000
Planning, Engineering and Design	3,500,000
Construction Management	3,091,000
Total	\$50,591,000 ^{1/}

^{1/} Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: Funds will be used to continue construction of the main dam barrier wall and the saddle dam seepage rehabilitation. The requested amount plus carry-in funds will be applied as follows:

Complete Main Dam Barrier Wall	\$25,500,000
Planning, Engineering and Design	2,500,000
Construction Management	5,000,000
Initiate Construction of Saddle Dam Seepage Rehab	3,500,000
Total	\$36,500,000

STATUS OF LOCAL COOPERATION: There are two classes of users that will be required to share in the final cost of this project: the water supply and hydropower customers. Three water supply users currently have signed agreements with USACE, Nashville District. The users are the Cities of Cookeville and Smithville, and DeKalb County. Hydropower from the project is marketed through the Southeastern Power Administration (SEPA). SEPA will repay their share of the costs after construction by periodic direct payment to the U.S. Treasury.

Division: Great Lakes & Ohio River

District: Nashville

Center Hill Dam Safety Major Rehab, TN

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$299,600,000 is an increase of \$4,600,000 from the latest estimate (\$295,000,000) presented to Congress (FY 2013).

Price Escalation on Construction Features	\$4,600,000
Total	\$4,600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: An environmental assessment (EA) was completed early in the study process and a finding of no significant impact (FONSI) was signed in July 2005. An EA Supplement was completed to address additional alternatives and the FONSI was signed in May 2006. A second supplemental EA was completed in December 2007 to address specific grouting methods proposed by potential construction contractors. An EIS evaluating lower lake level alternatives during construction was completed in November 2007 and a Record of Decision (ROD) was signed in February 2008. Another EA Supplement will be completed in FY2012 to evaluate the Roller Compacted Concrete (RCC) reinforcing berm alternative for seepage for the Saddle Dam rehab portion of the project.

OTHER INFORMATION: Probable loss of life with dam failure is 357, with a range from 184 to 533. The 2005 Corps-wide Screening Portfolio Risk Assessment for Dam Safety ranked Center Hill Dam in Class I category for Corps dams nationwide. Design for construction began in FY 2007 utilizing Dam Safety and Seepage/Stability Correction Program funds.

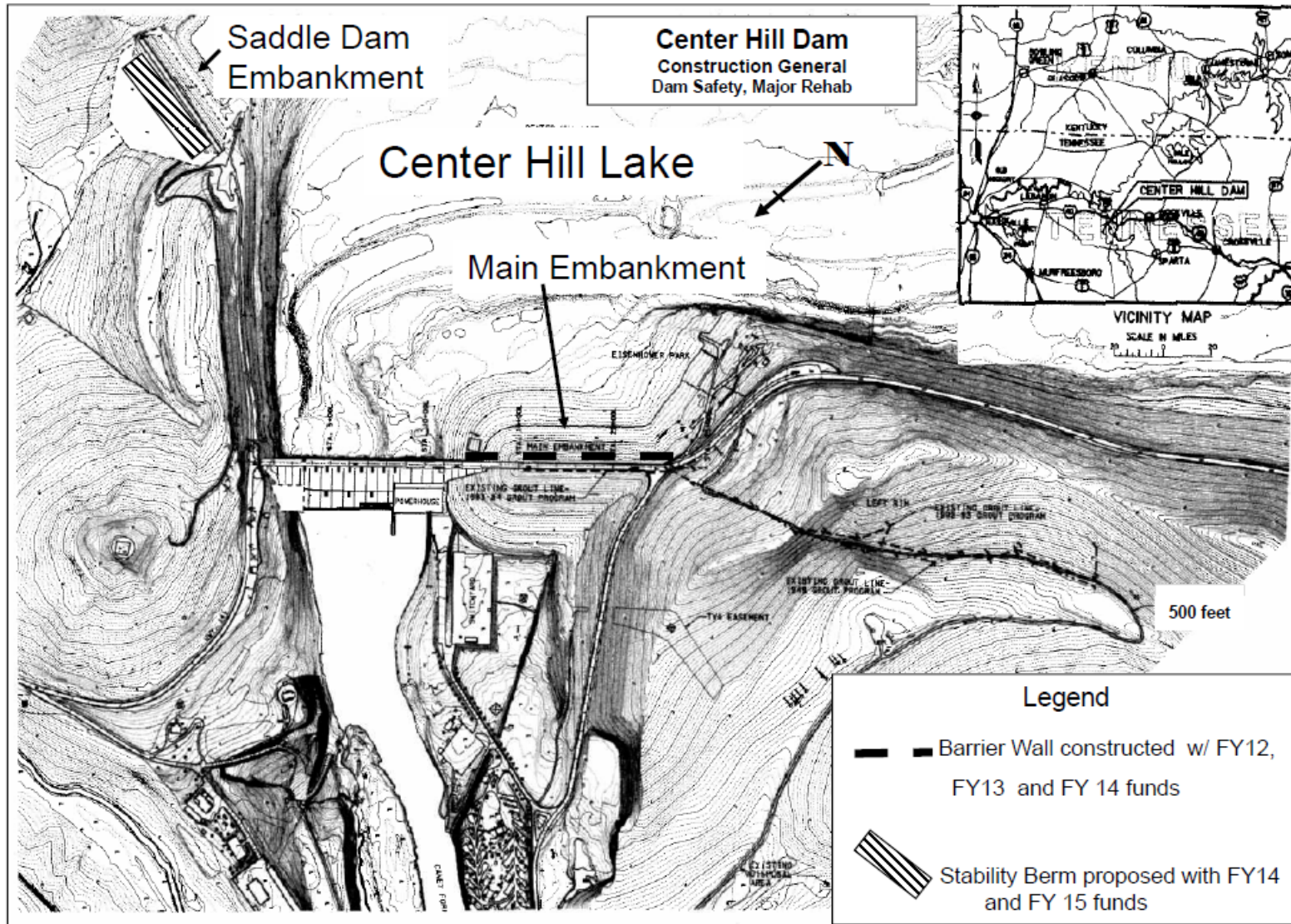
Division: Great Lakes & Ohio River

District: Nashville

Center Hill Dam Safety Major Rehab, TN

1 May 2013

LRD-72



Division: Great Lakes & Ohio River

District: Nashville

Center Hill Dam Safety Major Rehab, TN

1 May 2013

LRD-73

West Virginia

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Bluestone Lake, WV Dam Safety Assurance (Continuing)

LOCATION: The dam is located in southern WV, in Summers County, on the New River two miles south of Hinton, WV. It is situated 2.5 miles downstream from the confluence of the New and Bluestone Rivers, and 0.8 miles upstream from the confluence of the New and Greenbrier Rivers.

DESCRIPTION: Under the Dam Safety Assurance (DSA) program, the plan to correct the deficiencies includes stability improvements such as installation of high strength steel anchors and construction of mass concrete thrust blocks. Dam height will be raised by 8 feet and an additional monolith constructed. A floodgate closure will be constructed across a state highway. Existing hydropower penstocks will be extended and retrofitted with gates to supplement the discharge capacity of the spillway and outlet works. As a result of the Issue Evaluation Study (IES), project actions have been prioritized and accelerated to most effectively reduce risk. An issue of significance is scour potential in the discharge areas of the penstocks and the stilling basin which could lead to dam failure. Scour protection is being accelerated and this issue impacting the dam's spillway capacity will be addressed in future phases.

AUTHORIZATION: Section 5 of the Flood Control Act (FCA) of 1936 (P.L. 74-738) as amended by Section 4 of the FCA 1938 (P.L. 75-761) incorporating the Executive Order of the President 7183A, September 12, 1935.

REMAINING BENEFIT – REMAINING COST RATIO: Not applicable

TOTAL BENEFIT – COST RATIO: Not applicable

INITIAL BENEFIT – COST RATIO: 4.1 to 1 at 7 1/8 percent

BASIS OF BENEFIT – COST RATIO: Dam Safety Evaluation Report, dated May 1998

Division: Great Lakes and Ohio River

District: Huntington

Bluestone Lake Dam Safety Assurance, WV

1 May 2013

LRD-75

SUMMARIZED FINANCIAL DATA:		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYS COMPL SCHEDULE
ORIGINAL PROJECT		Project Modification	30	TBD
Actual Federal Cost	\$ 28,618,100			
Actual Non-Federal Cost	0			
Total Original Project Cost	28,618,100			
PROJECT MODIFICATION				
Estimated Federal Cost	475,160,000			
Estimated Non-Federal Cost	0			
Total Estimated Modification Cost	475,160,000			
Total Estimated Project Cost	\$ 503,778,100			

SUMMARIZED FINANCIAL DATA (continued):

			ACCUM PCT OF EST FED COST
Allocations to 30 September 2010	\$248,124,000		
Allocation for FY 2011	(16,437,000)	^{3/}	
Allocation for FY 2012	70,680,000		
Conference Allowance for FY 2013	10,000,000	^{5/}	
Allocations through FY 2013	312,367,000	^{1/2/3/6/}	62
Estimated Unobligated Carry-In Funds	0	^{4/}	
President's Budget for FY 2014	30,000,000		68
Programmed Balance to Complete after FY 2014	132,793,000	^{7/}	
Unprogrammed Balance to Complete after FY 2014	\$ 0		

^{1/} \$28,103,000 reprogrammed from the project.

^{2/} \$442,000 rescinded from the project.

^{3/} \$12,490,000 transferred to the Flood Control and Coastal Emergencies account; \$3,947,000 revocation of ARRA funds.

^{4/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{5/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{6/} PED costs of \$0 are included in this amount.

^{7/} For programmed work only; remaining work is un-programmed pending a decision to construct these features.

Division: Great Lakes and Ohio River

District: Huntington

Bluestone Lake Dam Safety Assurance, WV

PHYSICAL DATA: Increase height of dam 8 feet; install anchors and thrust blocks; construct gate closure across State Route 20; modify penstocks to supplement discharge capacity and provide adequate scour protection; address scour potential in spillway to meet necessary discharge capacity; relocate electrical lines.

JUSTIFICATION: Project categorized as Dam Safety Action Classification (DSAC) II project in the Corps' Screening Portfolio Risk Assessment (SPRA) in 2005, which is an "Urgent" safety classification. The DSA Program provides for modification of completed Corps dam projects which are potential safety hazards in light of present-day engineering standards. An Issue Evaluation Study (IES) risk assessment done by Bureau of Reclamation and Corps personnel identified an unacceptable level of risk and life safety issues at the project. The Project Delivery Team, with international experts and experts from academia, is addressing several issues related to scour and rock strengths in an effort to strategically reduce risk levels at the project. The Interim Risk Reduction Measures Plan is being updated accordingly. Congressional / state / local briefings were held in November 2008 and emergency exercises were performed in December 2008 and January 2009, with state and local entities participating. A similar emergency exercise was conducted July 2011 with Federal, state, and local entities, and the Huntington District serving as the central command center. Local leadership briefings and public meetings were held in all counties. Based on a downstream hazard assessment, there is sufficient justification to modify the project to accommodate 100% of the Probable Maximum Flood. It has been determined that there is a 1.6% annual probability that Bluestone Dam will reach a pool that threatens the dam's stability, the Imminent Failure Flood (IFF) elevation. The Mapping, modeling and Consequence Center provided updated inundation data in late FY 2102. This revised data indicated a failure would cause catastrophic flooding along the Greenbrier, New, Gauley, Kanawha, and Elk Rivers and at the heavily industrialized state capital of Charleston, WV, putting 175,000 (104,000 last reported to Congress - FY 2013) people at risk with property damages in excess of \$21,000,000,000 (\$12,000,000 last reported to Congress – FY 2013). Average annual benefits, all flood risk management, are \$84,973,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Finalize Phase 3 Contract Modification	\$ 2,703,000
Complete Base Condition Risk Assessment	1,200,000
Continue Phase 3 E&D and Construction Management	4,850,000
Continue Phase 4 E&D and Construction Management	2,400,000
Continue Auto Data ACQ System Instrumentation/Monitoring	325,000
Continue Phase 5 Engineering & Design	1,925,000
Continue General Risk Com/Mgmt Efforts	500,000
Total	\$ 13,903,000 ^{1/}

^{1/} Includes unobligated carry-in from FY 2012

Division: Great Lakes and Ohio River

District: Huntington

Bluestone Lake Dam Safety Assurance, WV

FISCAL YEAR 2014: The budget amount will be applied as follows:

Award Remaining Options for Phase 4 Construction	\$ 20,000,000
Continue Phase 3 E&D and Construction Management	\$ 4,850,000
Continue Phase 4 E&D and Construction Management	2,400,000
Continue Auto Data ACQ System Instrumentation/Monitoring	325,000
Continue Dam Safety Modification Report – Phase 5	1,925,000
Continue General Risk Communication / Management Efforts	500,000
Total	\$ 30,000,000

NON-FEDERAL COST: None. The DSA modification is being performed at full Federal expense.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$ 475,160,000 is unchanged from the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: The final Environmental Impact Statement was filed with EPA on August 31, 1998.

OTHER INFORMATION: The Bluestone Dam, WV, Final DSA Evaluation Report and Environmental Impact Statement were approved August 13, 1998. Funds to initiate construction were appropriated in FY 2000. An amendment to the Evaluation Report in the form of a Letter Report was completed in 2004 to address project cost estimate changes due to differing site conditions. An Issue Evaluation Study (IES) risk assessment done in FY 2008 by Bureau of Reclamation and Corps personnel identified an unacceptable level of risk and life safety issues at the project. As a result, Congressional / state / local briefings were held in November 2008 and emergency exercises were performed in December 2008 and January 2009, with state and local entities participating. Local leadership briefings and public meetings were held in all counties. A functional emergency exercise was conducted July 2011 with Federal, state, and local entities, and the Huntington District serving as the central command center. The state of West Virginia continues to develop statewide emergency exercise initiatives. A Dam Safety Modification Report Supplement is underway which will address all items identified in the IES and will result in an updated baseline cost. This updated cost is expected to significantly raise the total project cost estimate. The report will incorporate the need for any subsequent phase development and will address spillway deficiencies.

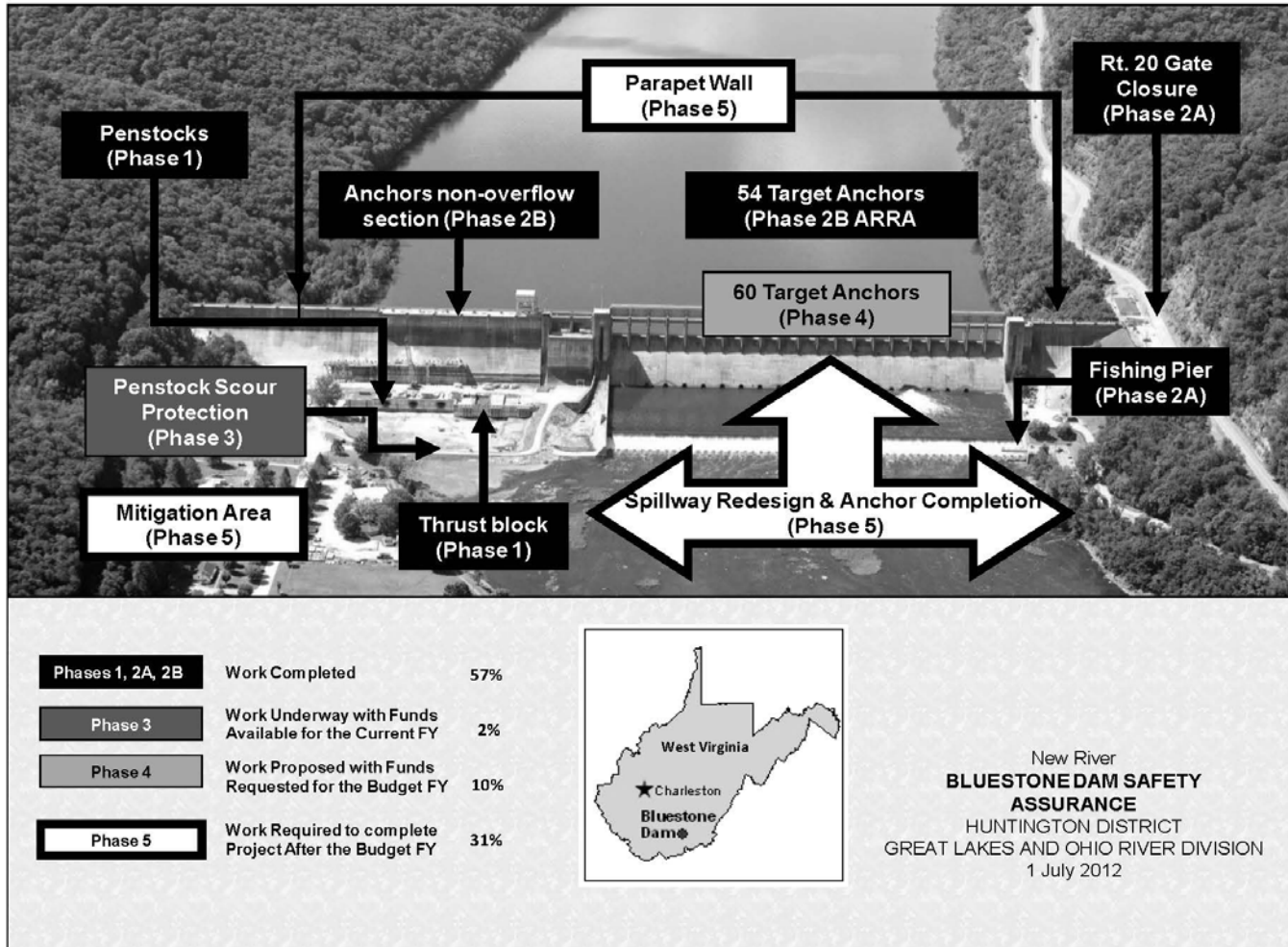
Division: Great Lakes and Ohio River

District: Huntington

Bluestone Lake Dam Safety Assurance, WV

1 May 2013

LRD-78



Wisconsin

APPROPRIATION TITLE: Construction – Dredged Material Disposal Facility (Navigation)

PROJECT: Green Bay Harbor, Wisconsin (Continuing)

LOCATION: The proposed project is located in Green Bay, on the western shore of Lake Michigan, adjacent to the City of Green Bay in Brown County, Wisconsin. Green Bay is designated as an Area of Concern by the International Joint Commission.

DESCRIPTION: The Green Bay Harbor Dredged Material Disposal Facility (DMDF) at the Cat Islands Chain would hold dredged material from the outer harbor of the Green Bay Harbor Federal Navigation Channel. The project would provide sufficient capacity for 20 years of maintenance dredging. The project is documented in the Green Bay Harbor Dredged Material Management Plan (DMMP).

AUTHORIZATION: Rivers and Harbors Act of 1866, as amended.

REMAINING BENEFIT – REMAINING COST RATIO: 2.9 at 7.0 percent.

TOTAL BENEFIT – COST RATIO: 2.9 at 7.0 percent.

INITIAL BENEFIT – COST RATIO: 2.9 at 4.0 percent.

BASIS OF BENEFIT – COST RATIO: The benefit-cost ratios are derived from the Dredge Material Management Plan approved by the Chief, Operations, Directorate of Civil Works, in October 2011, expressed in FY2012 price levels.

Division: Great Lakes and Ohio River

District: Detroit

Green Bay Harbor DMDF, WI

1 May 2013

LRD-81

SUMMARIZED FINANCIAL DATA:		STATUS (1 JAN 13)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (COE)	9,243,000	Entire Project	15	TBD
Estimated Appropriation Requirement (EPA)	9,161,000 ^{1/}			
Estimated Total Appropriation Requirement	18,404,000			
Future Non-Federal Reimbursement	(2,454,000) ^{2/}			
Estimated Federal Cost (Ultimate)	15,950,000			
Estimated Non-Federal Cost	8,589,000			
Cash Contribution	0			
Other Costs	6,135,000 ^{2/}			
Reimbursements	2,454,000 ^{3/}			
Total Estimated Project Cost	24,539,000			

^{1/} FY 2012 allocations of \$9,160,700 were provided through the Great Lakes Restoration Initiative program as appropriated in FY 2011 to the U.S. EPA.

^{2/} 25 percent of the costs allocated to general navigation features during construction.

^{3/} Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as reduced by a credit allowed for the value of lands, easements, rights of way, and relocations provided for commercial navigation.

		ACCUM PCT OF EST FED COST	
Allocations to 30 September 2010	0		
Allocation for FY 2011	0		
Allocation for FY 2012	0		
Conference Allowance for FY 2013	7,000,000 ^{5/}		
Allocations through FY 2013	7,000,000 ^{1/2/3/6/}	76	
Estimated Unobligated Carry-in Funds	0 ^{4/}		
President's Budget for FY 2014	1,900,000	96	
Programmed Balance to Complete after FY 2014	343,500 ^{7/}		
Division: Great Lakes and Ohio River		District: Detroit	Green Bay Harbor D MDF, WI

^{1/} \$0 reprogrammed to (from) the project.

^{2/} \$0 rescinded from the project.

^{3/} \$0 transferred to the Flood Control and Coastal Emergencies account.

^{4/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{5/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{6/} PED costs of \$0 are included in this amount. PED costs of \$258,700 were provided as part of the USEPA GLRI funds allocated in FY 2012.

^{7/} Programmed balance to complete after FY 2014 reflects estimated out-year Supervision & Administration (S&A) costs through to project completion.

PHYSICAL DATA: Construction of a Dredged Material Disposal Facility (DMDF) for existing Federal navigation channel maintenance needs that will provide 20 years of material capacity. The DMDF will consist of three individual cells, called Disposal Islands, placed in shallow water and will also engender environmental benefits by restoring aquatic habitat.

JUSTIFICATION: Green Bay harbor handles approximately 2.5 million tons of commerce annually consisting primarily of coal, limestone, cement and concrete and other non-metallic minerals. Benefits attributable to continued maintenance of the Harbor are vessel transportation cost increases avoided. The increase in Transportation Cost Avoided is a proxy for the value of continuing to maintain the harbor. The recommended dredge material management plan provides the necessary capacity for the next 20 years while providing the greatest net benefits and some environmental restoration benefits. The average annual benefits are estimated to be \$30,429,549.

FISCAL YEAR 2013: The current budget amount is being applied as follows:

Construction of the primary rubblemound structure and two Disposal Islands	\$7,000,000
Total	\$7,000,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue construction of the final Disposal Island	\$1,900,000
Total	\$1,900,000

Division: Great Lakes and Ohio River

District: Detroit

Green Bay Harbor DMDF, WI

1 May 2013

LRD-83

NON-FEDERAL COST: The current non-Federal cost estimate is \$8,588,600, which includes a cash reimbursement of \$2,453,900

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way after reductions for such credit have been made in the required cash payments.	0	
Participate in Project Coordination Team, conduct audits of non-Federal costs, and perform investigations of hazardous substances.	75,000	
Pay 25 percent of the costs allocated to general navigation features during construction.	6,059,700	0
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as reduced by a credit allowed for the value of lands, easements, rights of way, and relocations provided for commercial navigation.	2,453,900	
Total Non-Federal Costs	8,588,600	0

STATUS OF LOCAL COOPERATION: A Project Partnering Agreement, dated July 2012, has been executed with the County of Brown, Wisconsin acting as the non-Federal Sponsor. The County of Brown, Wisconsin has agreed to make all required payments and provide all work-in-kind totaling 25% of total project costs during construction and provide an additional 10% of total project costs over a period of 30 years. This reimbursement payment will begin within 90 days of the final accounting of project costs upon completion of the period of construction. The Non-Federal Sponsor has indicated a desire to prepay the 10% cash requirement upon notification by the Government of the final accounting.

COMPARISON OF FEDERAL COST ESTIMATE: The current initial Federal cost estimate of \$18,404,000 is a reduction of \$2,496,000 from the initial cost estimate presented to Congress of \$20,900,000. This reduction is a result of favorable bids.

Division: Great Lakes and Ohio River

District: Detroit

Green Bay Harbor D MDF, WI

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Environmental Assessment was completed as part of preparation of Dredged Material Management Plan, which was approved in October 2011.

OTHER INFORMATION: Initial construction funds were appropriated in FY 2013. No additional funding from the U.S. Environmental Protection Agency (USEPA) under the Great Lakes Restoration Initiative (GLRI) is anticipated beyond those allocations identified in the Summarized Financial Data. Prior construction funds appropriated to the Green Bay Harbor project in FY2008 were for closure activities of the Renard Island CDF at Green Bay Harbor, WI.

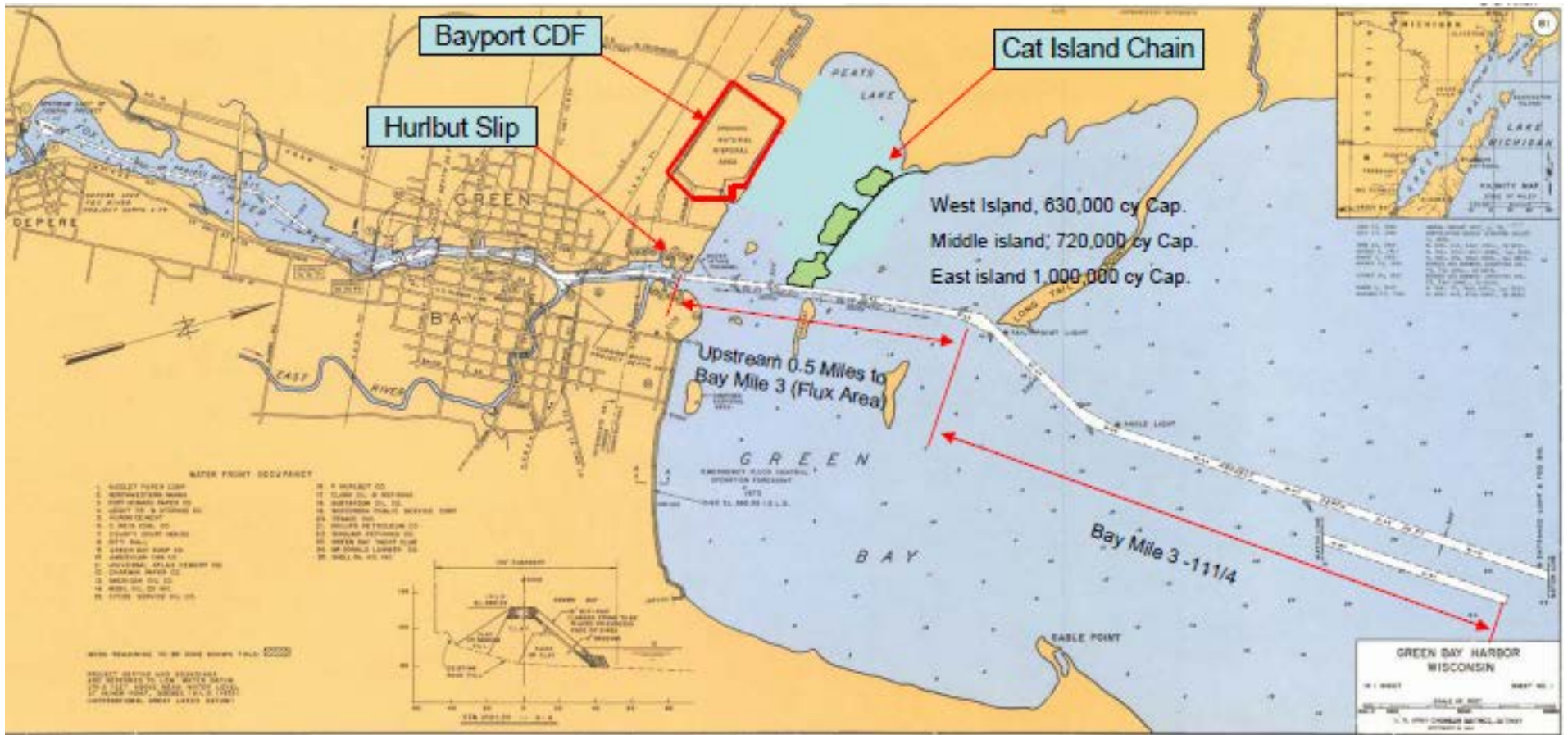
Division: Great Lakes and Ohio River

District: Detroit

Green Bay Harbor DMDF, WI

1 May 2013

LRD-85



Division: Great Lakes and Ohio River

District: Detroit

Green Bay Harbor DMDf, WI

1 May 2013

LRD-86

OPERATION AND MAINTENANCE

Illinois

O&M JUSTIFICATION SHEET

PROJECT NAME: Calumet Harbor and River, IL & IN

AUTHORIZATION: Rivers and Harbors Acts of 1899, 1902, 1935, 1960, 1962, and 1965 (P.L. 89-209)

LOCATION AND DESCRIPTION: Calumet Harbor and River is in northeastern Illinois, on the southwest shore of Lake Michigan in Cook County, 15 miles south of Chicago Harbor, within the corporate limits of the City of Chicago, except for breakwaters, approach channel and an anchorage area which are in Indiana. The project consists of two miles of breakwater (6,714 feet concrete capped timber crib structures, 5,007 feet of stone-filled sheetpile cell structures), an approach channel (3,200 feet wide, 1.8 miles long and 29 feet deep); a harbor channel (3,000 feet wide, two miles long and 28 feet deep); a river navigation channel (8 miles long and 27 feet deep); three turning basins; a confined disposal facility (CDF) with a design storage capacity of 1,600,000 cubic yards; a boat shed facility; and a stone dock.

CONFERENCE AMOUNT FOR FY 2013: \$3,709,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$4,555,000 O: \$357,000 T: \$4,912,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,912,000 – \$357,000 funds critical minimum routine operation, navigation channel and structures' inspections, safety signs, annual safety inspections, and responsiveness to customers. \$635,000 funds DMDF site: Funds sediment management (grading, drying & moving/piling) within the CDF, which will allow normal dredging/storage operations to continue and development of site closure plan. \$2,200,000 funds primary dredging of 2-3' of shoaling in high use commercial deep draft river channel to restore port to fully functional width and authorized depth. \$1,720,000 funds repairs to 600-ft section of failed timber crib shorearm breakwater that protects harbor entrance channel and commercial traffic from unsafe wave climate.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The harbor breakwaters require annual maintenance to prevent segment failures and the propagation of further breaches. The repairs to the navigation structures is critical for the safe towing of river barges between Calumet Harbor and the three Indiana ports: Burns Harbor, Gary Harbor, and Indiana Harbor.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Chicago

Calumet Harbor and River, IL & IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Chicago Harbor, IL

AUTHORIZATION: The Rivers and Harbors Acts of 1870, 1880, 1912, 1919, and 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: Chicago Harbor is in Northeastern Illinois on the southwest shore of Lake Michigan in Cook County, within the corporate limits of the City of Chicago. The project consists of Chicago Lock facilities, four outer breakwater reaches (2,250 feet of uncapped timber crib structures, 5,321 feet of concrete capped timber crib structures, 3,759 feet of laid-up stone structures, and 1,185 feet of concrete caisson structures) and two inner breakwater reaches (6,882 feet of concrete capped timber crib structures) that protect Navy Pier, Chicago Lock, Chicago Water Filtration Plant, Monroe St. Harbor, Grant Park and other facilities from damage due to storms. It includes an entrance channel (800 ft. wide and 29 feet deep), and an outer harbor area (28 feet deep). The channel to the mouth of the Chicago River is at a depth of 21 feet.

CONFERENCE AMOUNT FOR FY 2013: \$2,000,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,264,000 T: \$2,264,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,264,000 - Bare bones operation and maintenance of Chicago Lock, 24/7 with 100% availability to commercial towboat & deep draft barges; government, passenger and recreational vessels.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: FY 2013 budget allocation deferred nearly all Chicago Lock maintenance into subsequent years. Minimal operation costs are \$1,900,000 annually. Postponement of maintenance threatens operational reliability.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Chicago

Chicago Harbor, IL

O&M JUSTIFICATION SHEET

PROJECT NAME: Chicago River, IL

AUTHORIZATION: Rivers and Harbors Acts of 1899, 1902, 1907, and 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: Chicago River is in Northeastern Illinois, in Cook County within the corporate limits of the City of Chicago. The project consists of a river navigation channel that is 2.97 miles long and 21 feet deep from Michigan Avenue to North Avenue. A navigation channel approximately 3.7 miles long and 9 feet deep from North Avenue to Addison Street has also been authorized, but not constructed. The project also includes a perpetual responsibility for water control, and routine and emergency monitoring of the waterways within the Chicago District.

CONFERENCE AMOUNT FOR FY 2013: \$528,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$680,000 T: \$680,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$680,000 – \$544,000 will be used for critical minimum routine operation in a major urban area. Collect precipitation and streamgauge data for flood surveillance for City of Chicago, Emergency Management and NWS River Forecast Center. \$136,000 will be used to update the Water Control Manual, as per USACE operational guidance.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Chicago

Chicago River, IL

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Michigan Diversion, IL

AUTHORIZATION: Water Resources Development Act 1986 (P.L. 99-662)

LOCATION AND DESCRIPTION: Lake Michigan Diversion is in Illinois on the southwest shore of Lake Michigan in Cook County, within the corporate limits of the City of Chicago. Concern by Great Lakes States about the diversions of Lake Michigan water out of the basin led to several U.S. Supreme Court Decrees. The latest, modified in 1980, specifies the allowable diversion at 3,200 cubic feet per second. The work on this project involves flow measurement near Lemont, hydrologic modeling of the basin, hydraulic modeling of the combined sewer and Tunnel and Reservoir Plan systems and diversion accounting computations.

ALLOCATION AMOUNT FOR FY 2013: \$1,025,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$739,000 T: \$739,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$739,000 - \$153,000 funds Lake Michigan water diversion data analysis, reporting efforts, and diversion accounting modeling activities. \$586,000 funds Lake Michigan water diversion data collection and flow measurements.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Beginning with the State of Illinois' reversal of the flow of the Chicago River in 1900, the other Great Lakes states (Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin) have been concerned about the diversions of Lake Michigan water out of the basin. Their concern has led to litigation and a series of U.S. Supreme Court Decrees, which have regulated the diversion since 1925. The 1967 Decree, modified in 1980, specifies the allowable diversion at 3,200 cubic feet per second. The Corps of Engineers measures the actual diversion amount. Measurements are presently taken on the Chicago Sanitary and Ship Canal near Lemont. In accordance with the U.S. Supreme Court Decree and WRDA 1986, the District maintains the responsibilities to complete diversion accounting computations and certification.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Chicago

Lake Michigan Diversion, IL

O&M JUSTIFICATION SHEET

PROJECT NAME: Waukegan Harbor, IL

AUTHORIZATION: Rivers and Harbors Act of 1902, 1930, 1945, Sec 201 of Rivers and Harbor s Act , 1970.

LOCATION AND DESCRIPTION: Waukegan Harbor is located on the western shore of Lake Michigan in Waukegan, Illinois. The project consists of about 1,900-ft of protective breakwater, 4,225-ft of protective piers, a deep draft navigation channel, and a 13-acre inner basin.

CONFERENCE AMOUNT FOR FY 2013: \$0^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$472,000 O: \$0 T: \$472,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$472,000 – Funds dredging of 7' deep shoal to reopen minimal functional portion of approach channel. Port closes to commercial traffic without annual dredging of this area.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: During the 31 October 2012 Hurricane Sandy storm on Lake Michigan, the Waukegan Harbor approach channel sustained massive shoaling - approximately nine to ten feet deep in line with the end of the north breakwater, adding to the previously existing seven to ten feet of shoaling within the Outer Harbor. The harbor closed to all deep draft navigation on Nov. 5, 2012. Continued commercial viability of three bulk cargo terminals in port is completely dependent on annual dredging of 70.K yards within the harbor approach channel. The FY14 funds provided will only remove approximately 20.K yards.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Chicago

Waukegan Harbor, IL

Indiana

O&M JUSTIFICATION SHEET

PROJECT NAME: Brookville Lake, IN

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Brookville Lake is located in Franklin and Union counties on the East Fork of the Whitewater River. The dam is about ½ mile above Brookville, Indiana. The dam is earthfill, 181 ft high and 2,800 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,109,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$598,000 O: \$1,193,000 T: \$1,791,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,673,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$71,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$41,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$6,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$5,830,000, FY 2011 recreation visits were 636,000, and FY 2011 visitor expenditures were \$13,990,000.

^{1/} Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Brookville Lake, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Burns Waterway Harbor, IN

AUTHORIZATION: Rivers and Harbors Act of 1965 (P.L. 89 -298); Sec 121 of Energy and Water Development Appropriations Act, 2005 (P.L. 108-447)

LOCATION AND DESCRIPTION: Burns Waterway Harbor is in northwestern Indiana on the southern shore of Lake Michigan in Porter County, 28 miles southeast of Chicago Harbor. The project consists of a north breakwater (4,630 feet of rubblemound structure); a west breakwater (1,200 feet of rubblemound structure); an approach channel (400 feet wide and 30 feet deep); Outer Harbor Basin (28 feet deep); and East and West Harbor Arms (each 27 feet deep and 620 feet wide).

CONFERENCE AMOUNT FOR FY 2013: \$176,000 ^{2/}

BUDGET FOR FY 2014: M: \$1,900,000 O: \$179,000 T: \$2,079,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,079,000 – \$179,000 funds critical minimum routine operation, navigation channel and structures' inspections and condition reporting, safety signage, and responsiveness to customers. \$1,900,000 funds primary dredging of the approach channel of a medium use commercial deep draft port, to restore full functional length, width and depth. No FY 2013 funding for dredging.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The American Integrity motor vessel ran aground when approaching Burns Waterway Harbor on 15 April 2012. The 1,000' vessel was loaded with taconite for ArcelorMittal and operated 26'4". The harbor approach area has sand accumulated and channel conditions are being regularly monitored to assure safe vessel passage through the affected area.

The impact of the 31 October 2012 Hurricane Sandy storm on Lake Michigan further degraded the harbor approach channel conditions since the grounding incident. Severe shoaling has accumulated at two locations, and the full project depth (-30 feet LWD) is only available over the northern 150 feet of the 400' wide approach channel in both areas. The approach channel is now impacted for a length of over 2,000 feet (both shoal areas). As additional winter shoal accumulation extends closer to the harbor mouth, the vessels' ability to make the turn into the harbor is further affected. It will also be much more difficult to enter the harbor during adverse wind conditions.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Chicago

Burns Waterway Harbor, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Cagles Mill Lake, IN

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Cagles Mill Lake lies in Owen and Putnam Counties in south-central Indiana near Poland, Indiana, approximately midway between Indianapolis and Terre Haute. The dam is located on Mill Creek, 2.8 miles above its confluence with Big Walnut Creek, forming the Eel River. The dam is earth and rockfill with gate controlled outlet works and uncontrolled open spillway and is 150 ft high and 900 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,125,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,175,000 T: \$1,175,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,081,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$50,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$44,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$22,460,000, FY 2011 recreation visits were 498,000, and FY 2011 visitor expenditures were \$11,310,000.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Cagles Mill Lake, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Cecil M. Harden Lake, IN

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Cecil M. Harden Lake lies in Parke and Putnam Counties near Ferndale, Indiana. It is located in west-central Indiana about 50 miles west of Indianapolis. The dam is located on Big Raccoon Creek approximately 33 miles upstream of its confluence with the Wabash River. The dam is rolled earth with gate controlled outlet works and uncontrolled open spillway and is 119 ft high and 1,860 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,250,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$530,000 O: \$1,268,000 T: \$1,798,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,703,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$50,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$45,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$4,100,000, FY 2011 recreation visits were 1,040,000, and FY 2011 visitor expenditures were \$21,810,000.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Cecil M. Harden Lake, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Indiana Harbor, IN

AUTHORIZATION: Rivers and Harbors Act of 1910, 1913, 1919, 1922, 1930, 1935, 1937 and 1960 (P.L. 86-645)

LOCATION AND DESCRIPTION: Indiana Harbor is in northwestern Indiana, on the southwest shore of Lake Michigan in Lake County, 19 miles southeast of Chicago Harbor. The project consists of a north breakwater (1,120 feet of rubblemound structure); an easterly breakwater (2,524 feet rubblemound structure); an approach channel (29 feet deep and 800 feet wide); an anchorage and maneuver basin (28 feet deep); a harbor entrance (27 feet deep and 280 feet wide); and a main canal (22 feet deep).

CONFERENCE AMOUNT FOR FY 2013: \$10,915,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$6,118,000 O: \$4,855,000 T: \$10,973,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$10,973,000 – \$178,000 funds critical minimum routine harbor operations, navigation channel and structures' inspections, safety signage, and responsiveness to customers. \$778,000 funds repairing of north navigation structure, which has lost 30% of its crown and its cross section on the lake side. \$5,340,000 funds primary dredging to restore 4-5' of depth loss in Reach 2 - harbor entrance, and removal of TSCA sediment - Reaches 6,7, & 13. TSCA sediment removal is the purpose for which the CDF was constructed. \$4,677,000 funds continual air-quality monitoring, analysis, and public reporting; CDF site O&M and security, and groundwater pumping and treatment.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Chicago

Indiana Harbor, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: J. Edward Roush Lake, IN

AUTHORIZATION: Flood Control Act of 1958 (P.L. 85-500)

LOCATION AND DESCRIPTION: J. Edward Roush Lake is located on the Wabash River in northeastern Indiana about 20 miles southwest of Ft. Wayne and 80 miles northeast of Indianapolis. The dam site is at mile 411.4 of the Wabash River and lies in Huntington and Wells counties. The dam is rolled earth fill with a concrete center section containing the emergency spillway with three crest gates and has a Corps operated and maintained levee and pump plant that protects the town of Markle, approximately seven miles upstream from the dam. The dam is 91 ft high and 6,500 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,126,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$1,280,000 T: \$1,310,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,204,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$50,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$56,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$16,740,000, FY 2011 recreation visits were 313,000, and FY 2011 visitor expenditures were \$6,100,000.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

J. Edward Roush Lake, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississinewa Lake, IN

AUTHORIZATION: Flood Control Act of 1958 (P.L. 85-500)

LOCATION AND DESCRIPTION: Mississinewa Lake is located in north central Indiana about seven miles southeast of Peru and 65 miles northeast of Indianapolis. The dam site is at mile 7.1 on the Mississinewa River, a tributary of the Wabash River. The project lies in Miami, Wabash and Grant counties. The dam is earthfill with gate controlled outlet works and uncontrolled open spillway and is 140 ft high and 8,000 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,780,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$1,436,000 T: \$1,466,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,343,000 – Funding provides for critical minimum routine operation and daily maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$52,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$71,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$19,000,000, FY 2011 recreation visits were 664,000, and FY 2011 visitor expenditures were \$14,740,000.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Mississinewa Lake, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Monroe Lake, IN

AUTHORIZATION: Flood Control Act of 1958 (P.L. 85-500)

LOCATION AND DESCRIPTION: Monroe Lake lies mostly in Monroe County with portions in Brown and Jackson Counties and combines the North, Middle, and South Forks of Salt Creek in south central Indiana. The dam is located about 26 miles from Salt Creek's confluence with the East Fork of the White River and is about 10 miles south of Bloomington, Indiana. The dam is earth core and rock shell with gate-controlled outlet works and uncontrolled open spillway and is 93 ft high and 1,350 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,194,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,148,000 T: \$1,148,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,004,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$50,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$88,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$6,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$4,650,000, FY 2011 recreation visits were 972,000, and FY 2011 visitor expenditures were \$21,610,000.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Monroe Lake, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Patoka Lake, IN

AUTHORIZATION: Flood Control Act of 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: Patoka Lake is located in southern Indiana about 13 miles northeast of Jasper, Indiana and 118.3 miles above the mouth of the Patoka River. It is located about 95 miles south of Indianapolis, Indiana. The lake lies in portions of Dubois, Orange, and Crawford counties in Indiana. The dam is earth and rock fill with gate controlled outlet works and uncontrolled open spillway and is 84 ft high and 1,550 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality. The lake is managed as a P.L. 89-72 project.

CONFERENCE AMOUNT FOR FY 2013: \$1,089,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$1,110,000 T: \$1,140,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,024,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$50,000 – Funding provides for minimal health and safety needs at day-use recreation areas and overlook facilities. These funds support public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$60,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$6,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$23,460,000, FY 2011 recreation visits were 607,000, and FY 2011 visitor expenditures were \$13,000,000.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Patoka Lake, IN

O&M JUSTIFICATION SHEET

PROJECT NAME: Salamonie Lake, IN

AUTHORIZATION: Flood Control Act of 1958 (P.L. 85-500)

LOCATION AND DESCRIPTION: Salamonie Lake is located in north central Indiana about 34 miles southwest of Ft. Wayne. The dam site is at mile 3.1 on the Salamonie River, a tributary of the Wabash River. The project lies in Wabash and Huntington counties. The dam is earthfill with gate controlled outlet works and uncontrolled open spillway and is 133 ft high and 6,100 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,091,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,241,000 T: \$1,241,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,131,000 – Funding provides for critical minimum routine operation and daily maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$50,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$60,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$15,760,000, FY 2011 recreation visits were 534,000, and FY 2011 visitor expenditures were \$12,020,000.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Salamonie Lake, IN

Kentucky

O&M JUSTIFICATION SHEET

PROJECT NAME: Barkley Dam & Lake Barkley, KY & TN

AUTHORIZATION: River and Harbor Act 1946 (P.L. 79-525), River and Harbor Act 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: Barkley Dam and Lake Barkley is located in southwestern Kentucky near Paducah, KY. Project consists of a 110' x 800' lock, earth and concrete gravity-type dam, hydropower plant and a flood storage reservoir with recreation and stewardship areas.

CONFERENCE AMOUNT FOR FY 2013: \$9,594,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$489,000 O: \$9,339,000 T: \$9,828,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,049,000- Funding provides for critical minimum routine operation and maintenance for navigation; critical fleet maintenance; navigation costs for data acquisition for dam safety, flood risk management operations and Real Estate to resolve encroachments. Funds would improve navigation performance by providing maintenance of locks and channels, thus reducing industry delays.

FRM: \$505,000 - Funding provides for critical minimum routine operation and maintenance at minimum levels.

RC: \$1,225,000 - Funding provides for critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, day use areas and campgrounds.

H: \$3,403,000 - Funding provides for routine operation and maintenance for hydroelectric power plant and hydropower joint costs for operation and maintenance of the dam, as well as engineering and design for the excitation system. Funds would allow power plant to accomplish assigned missions of providing low cost reliable electric power by maintaining optimum availability and peak availability and maintain control of the river.

EN: \$621,000 - Funding provides for sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevents loss and degradation of more than 108,000 acres of project lands and water.

WS: \$25,000 - Funding provides for processing any new intake requests and/or increases to existing withdrawals at this Lock and Dam project. It also provides for the required coordination in order to process the real estate easements and other regulatory permits.

OTHER INFORMATION: Steady and reliable movement of coal and aggregate is vital to the Tennessee Valley Authority due to limited storage at their fossil fuel power plants. Shippers relying on Barkley Lock realize average annual transportation cost savings of more than \$49,000,000. Hydropower plant generates 690,000 MWH of energy annually, enough supply for 58,000 homes. Ranks #17 of 422 among the Corps for recreation with 3,448,647 project visits in FY 11 with \$73,690,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Barkley Dam & Lake Barkley, KY & TN

O&M JUSTIFICATION SHEET

PROJECT NAME: Barren River Lake, KY

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Barren River Lake is located in south-central Kentucky approx 95 miles south of Louisville and about 16 miles southwest of Glasgow, Kentucky. The dam site is at mile 79.2 on Barren River. The dam is rolled earth and rockfill, 146 ft high and 3,970 ft long. The lake area lies in Allen and Barren Counties with a small portion located in Monroe County. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$2,454,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$60,000 O: \$2,611,000 T: \$2,671,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,830,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$616,000 – Funding provides for routine operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$213,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$12,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$7,360,000, FY 2011 recreation visits were 1,260,000, and FY 2011 visitor expenditures were \$24,930,000.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Barren River Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Big Sandy Harbor, KY

AUTHORIZATION: River and Harbor Act of 1910 (P.L. 61-264)

LOCATION AND DESCRIPTION: Big Sandy Harbor consists of the lower 9.0 miles of the Big Sandy River, starting at its confluence with the Ohio River. The Big Sandy Harbor requires dredging for portions of the lower 9.0 miles of the Big Sandy River annually.

CONFERENCE AMOUNT FOR FY 2013: \$1,741,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,829,000 O: \$0 T: \$1,829,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,829,000 – Funding provides for critical minimum routine operation and maintenance dredging for navigation to maintain the minimum project dimensions to provide safe, reliable, efficient, effective, and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: If the harbor is not dredged annually, it will silt in and commercial traffic would be drastically impacted. This would have a detrimental impact on the commercial and navigation industry. The 5 year average tonnage of commodities transported on this waterway exceeds 15,300,000 tons. This is a critical waterway for the region, primarily supporting energy related cargo.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Big Sandy Harbor, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Buckhorn Lake, KY

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Buckhorn Lake is located in southeastern Kentucky, 43.3 river miles upstream from Beattyville, KY, where the Middle Fork and the North Fork of the Kentucky River converge. The dam site is 0.5 miles upstream from the community of Buckhorn. The dam is earth and rockfill with gate controlled outlet works as well as a gate controlled spillway and is 160 ft high and 1,020 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,763,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$4,000 O: \$1,708,000 T: \$1,712,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,126,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$413,000 – Funding provides for routine operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$173,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$4,820,000, FY 2011 recreation visits were 271,000, and FY 2011 visitor expenditures were \$5,360,000.

^{1/} Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Buckhorn Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Carr Creek Lake, KY

AUTHORIZATION: Flood Control Act of 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: Carr Creek Lake is located in the mountainous region of southeastern Kentucky, about 12 miles south of Hazard, Kentucky. The dam is located on Carr Fork, 8.8 miles above the confluence with the North Fork of the Kentucky River, approximately 16 miles upstream from Hazard. The entire project lies in Knott County. The dam is rock and earthfill, 130 ft high and 720 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,849,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$70,000 O: \$1,791,000 T: \$1,861,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,192,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$534,000 – Funding provides for routine operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$123,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$12,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY2011 flood damages prevented were \$3,050,000, FY2011 recreation visits were 900,000, and FY2011 visitor expenditures were \$17,510,000.

^{1/} Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Carr Creek Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Cave Run Lake, KY

AUTHORIZATION: Flood Control Act of 1936 & 1938 (P.L. 74-738 & 75-761)

LOCATION AND DESCRIPTION: Cave Run Lake is located in northeastern Kentucky, about 12 miles south of Morehead, Kentucky. The dam site is at mile 173.6 of the Licking River. The dam is rolled earth and rockfill with gate controlled outlet works and is 148 ft high and 2,700 ft long. The lake is confined within Bath, Menifee, Morgan and Rowan Counties and within the proclamation boundary of the Daniel Boone National Forest. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$947,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$995,000 T: \$1,025,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$789,000 – Funding provides for critical minimum routine operation and daily maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$146,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$78,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$12,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$17,910,000, FY 2011 recreation visits were 314,000, and FY 2011 visitor expenditures were \$5,750,000.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Cave Run Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Dewey Lake, KY

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Dewey Lake is located in Floyd County, KY, on Johns Creek of the Levisa Fork, a tributary of the Big Sandy River. It is 5.4 miles above the mouth of Johns Creek and 79.4 miles above the mouth of the Big Sandy River. The project includes operation and maintenance of Dewey Lake. The lake is impounded by a rolled earth fill dam with an uncontrolled spillway. The crest length of the dam is 913 feet. The dam was completed in July 1949.

CONFERENCE AMOUNT FOR FY 2013: \$2,279,000^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$40,000 O: \$1,714,000 T: \$1,754,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,110,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$548,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$96,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Dewey Lake has prevented over \$97,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 978,265 and average annual visitation over the past five years was 1,271,895.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Dewey Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Falls of the Ohio National Wildlife Conservation Area, KY & IN

AUTHORIZATION: Act of December 29, 1981, established the 1,000-acre Falls of the Ohio National Wildlife Conservation Area, at a cost not to exceed \$300,000. (H.R. 2241, PL 97-137, Title II, 95 Stat 1710). Act of November 28, 1990, modified PL 97-137 by authorizing an interpretive center at Falls of the Ohio National Wildlife Conservation Area, at an estimated total cost of \$3,200,000. (P.L. 101-640, 101st Cong., 2nd Session.)

LOCATION AND DESCRIPTION: Falls of the Ohio National Wildlife Conservation Area is located in Clark and Floyd Counties in Indiana and Jefferson County (Louisville) in Kentucky. It consists of the land area in and along the Ohio River in the states of Indiana and Kentucky. Lands lie along the shoreline of the Ohio River, as well as within the river in areas known as Sand and Shippingport Islands. Existing within the area is part of the Ohio River and the Falls of the Ohio. The "Falls" is in fact not a falls but a series of rapids. The area contains exposed limestone fossil beds during normal and low river flows. These fossil beds are the only location in the entire 981 mile length of the Ohio River where bedrock is exposed.

CONFERENCE AMOUNT FOR FY 2013: \$16,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$19,000 T: \$19,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: \$19,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Falls of the Ohio National Wildlife
Conservation Area, IN & KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Fishtrap Lake, KY

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Fishtrap Lake is located in Pike County, KY, on the Levisa Fork of the Big Sandy River. It is 103.3 miles above the mouth of the Levisa Fork. The project includes operation and maintenance of Fishtrap Lake. The lake is impounded by a rolled rock dam with impervious core and a controlled spillway. The top length of the dam is 1,100 feet. The dam was completed in February 1969.

CONFERENCE AMOUNT FOR FY 2013: \$2,023,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$6,000 O: \$2,013,000 T: \$2,019,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,530,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$444,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$45,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Fishtrap Lake has prevented over \$613,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 486,404 and average annual visitation over the past five years was 496,875.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Fishtrap Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Grayson Lake, KY

AUTHORIZATION: Section 203 of Flood Control Act of 1960 (P.L. 86-645)

LOCATION AND DESCRIPTION: Grayson Lake is located in Carter County KY, on the Little Sandy River, 51.2 miles above the mouth of the stream. The project includes operation and maintenance of Grayson Lake. The lake is impounded by an earthen dam with a central impervious core, with a maximum height of 120 feet, and a top length of 1,460 feet. The spillway is an uncontrolled, broad crested, saddle spillway at the left abutment. The dam was completed in 1968.

CONFERENCE AMOUNT FOR FY 2013: \$1,554,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,498,000 T: \$1,498,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,005,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$429,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$23,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: \$41,000 – Funding provides for routine operation and maintenance for water supply to provide an estimated 1.5 million gallons per day of water supply for the health, safety and economy of approximately 10,000 citizens in Carter and Elliott Counties, KY.

OTHER INFORMATION: Grayson Lake has prevented over \$121,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 554,171 and average annual visitation over the past five years was 996,293.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Grayson Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Green & Barren Rivers, KY

AUTHORIZATION: Rivers & Harbors Appropriation Act of 1888; 1909 Act (P.L. 60-317)

LOCATION AND DESCRIPTION: Six lock and dams on the Green River and one on the Barren River were constructed under the project authority, however only two remain operational for navigation. Green River Lock and Dam No. 1 is located on the Green River at river mile 9.1, at Spotsville, Kentucky. The project consists of a fixed crest dam, which is navigable at high river stages, and a single 84' x 600' lock chamber. Green River Lock and Dam No. 2 is located on the Green River at river mile 63.1, at Calhoun, Kentucky. The project consists of a fixed crest dam, which is navigable at high river stages, and a single 84' x 600' lock chamber.

CONFERENCE AMOUNT FOR FY 2013: \$2,104,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$3,000 O: \$2,052,000 T: \$2,055,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,030,000 – Funding provides for critical minimum routine operation and daily maintenance of the two Green River projects.

FRM: N/A

RC: N/A

H: N/A

EN: \$25,000 – Funding provides for the performance of the water quality analysis and endangered species studies required for navigable waters.

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Green River Lake, KY

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Green River Lake lies in Taylor and Adair counties. The lake is located in south central Kentucky. It is approximately 90 miles south-southeast of Louisville and about 8 miles south of Campbellsville. The dam site is at mile 305.7 on Green River. The dam is earth and rockfill with gate controlled outlet works and uncontrolled open spillway and is 143 ft high and 2,350 ft long. The project also includes an earth filled dike, 105 ft high and 1,952 ft long. It is the site of a class "B" visitor center. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$2,334,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$330,000 O: \$2,403,000 T: \$2,733,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,953,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$616,000 – Funding provides for routine operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$152,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$12,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$9,030,000, FY 2011 recreation visits were 1,020,000, and FY 2011 visitor expenditures were \$20,780,000.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Green River Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Kentucky River, KY

AUTHORIZATION: Rivers and Harbors Act of 1879.

LOCATION AND DESCRIPTION: Located in east central Kentucky, the authorization provided for 14 locks and fixed dams on the Kentucky River for navigation from the confluence with the Ohio River at Carrollton, Kentucky to Beattyville, Kentucky. Kentucky Locks 5-14 have been transferred from the Corps to the Commonwealth of Kentucky. Kentucky Locks 1-4 are leased to the Commonwealth of Kentucky for Public Park and Recreation.

CONFERENCE AMOUNT FOR FY 2013: \$10,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$10,000 T: \$10,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$10,000 – Funding provides for annual review of the Commonwealth's lease and to respond to requests and questions from the Commonwealth. The Navigation line item covers the cost for Real Estate Division to process the transfer of the property to the Commonwealth of Kentucky.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Since the locks are no longer operated by the Corps they are considered excess property. A disposition study is planned to initiate transfer of the 4 remaining locks if and when funding is made available.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Kentucky River, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Laurel River Lake, KY

AUTHORIZATION: Section 203, Flood Control Act of 1960 (P.L. 86-645)

LOCATION AND DESCRIPTION: Laurel River Lake is located in southeastern Kentucky, near Corbin, KY. Project consists of a rock fill dam, hydropower plant and a reservoir with recreation and stewardship areas.

CONFERENCE AMOUNT FOR FY 2013: \$1,999,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$54,000: O: \$1,886,000 T: \$1,940,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: \$586,000 - Funding provides critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, and day use areas. Funding provides for joint costs associated with operation of the dam structure, spillway gates, intake and outlet works for reservoir regulation; removal and disposal of trash and debris on or in vicinity of dam structures; dam safety/failure training and contingency plans, etc.

H: \$1,264,000 - Funding provides for routine operation and maintenance for hydroelectric power plant and hydropower's part of joint costs for operation and maintenance of the dam. Funds would allow power plant and dam to accomplish assigned missions of providing low cost reliable electric power by maintaining high availability and peak availability and to maintain control of the river.

EN: \$45,000 - Funding provides for the management of natural resources including operation, safety, environmental compliance, maintenance of the project boundary line, and cultural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevent loss and degradation of more than 1,200 acres of project lands and water.

WS: \$45,000 - Existing water supply agreements require determining the O&M costs each fiscal year and coordinating with users for payment. One of the users is not in compliance with the 1958 Water Supply Act and requires extensive coordination with not only District elements but other agencies as well. Revenue returned to the U.S. Treasury under Water Supply Agreements collections in FY12 was \$125,000.

OTHER INFORMATION: Hydropower plant generates 66,000 MWH of energy annually, which is enough supply for 5,500 homes. Laurel River Lake had 349,518 project visits in FY11 with an associated \$6,650,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Laurel River Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Martins Fork Lake, KY

AUTHORIZATION: Section 201 (a), Flood Control Act of 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: Martins Fork Lake is located in southeastern Kentucky, Harlan County, near the City of Harlan. The project consists of a concrete gravity dam and a flood storage reservoir with recreation and stewardship areas.

CONFERENCE AMOUNT FOR FY 2013: \$1,194,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,089,000 T: \$1,089,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,009,000 – Funding provides for critical minimum routine operation and maintenance of the dam.

RC: \$16,000 - Funding provides for the minimum oversight of existing recreation out-grants and fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$59,000 - Funding provides for the management of natural resources including operation, safety, environmental compliance, maintenance of the project boundary line, and cultural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevent loss and degradation of more than 1,300 acres to project lands and water. Failure to fund will result in immediate degradation and loss of natural resources, including forests, water quality, shoreline habitat, and aesthetic value.

WS: \$5,000 - Funding provides for evaluating impacts of all new intake requests.

OTHER INFORMATION: Project prevents a major portion of average annual flood losses at Harlan and results in significant stage reductions with related benefits along rural reaches and to other urban areas downstream. Martins Fork Lake had 185,748 project visits in FY11 with an associated \$3,740,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Martins Fork Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Middlesboro Cumberland River, KY

AUTHORIZATION: Section 5, Flood Control Act of 1936 (P.L. 74-738)

LOCATION AND DESCRIPTION: Middlesboro Cumberland River, KY is a federal flood risk management project composed of a canal and levee system located at Middlesboro, KY.

CONFERENCE AMOUNT FOR FY 2013: \$244,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$250,000 T: \$250,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$250,000 - funding provides for critical minimum routine costs to meet policy requirements for environmental compliance and safety, routine mowing and vegetation control of levee, annual costs for necessary operations of project facilities and equipment.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Located at Middlesboro, KY, on Yellow Creek, a tributary entering the Cumberland River about 660 miles above its mouth. Project consists of a canal and levee system about 4 miles in length which diverts the headwaters of Yellow Creek around the city.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Middlesboro Cumberland River, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Nolin Lake, KY

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Nolin Lake is located in Edmonson, Grayson and Hart Counties in south central Kentucky. It is located approximately 12 miles south of Leitchfield, Kentucky and 70 miles south of Louisville, Kentucky. The dam site is 7.8 miles above the mouth of the Nolin River and 9.6 miles upstream from Lock 6 on the Green River. The dam is rockfill and earth core type with gate controlled outlet works and uncontrolled open spillway and is 166 ft high and 980 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$2,675,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$2,751,000 T: \$2,781,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A

FRM: \$1,898,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$590,000 – Funding provides for routine operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$287,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$6,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$7,420,000, FY 2011 recreation visits were 1,270,000, and FY 2011 visitor expenditures were \$26,700,000.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Nolin Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Ohio River Locks & Dams, KY, IL, IN & OH

AUTHORIZATION: 1909 Act (P.L. 60-317), Rivers & Harbor Appropriation Action of 1910
(P.L. 61-264)

LOCATION AND DESCRIPTION: The Louisville District is responsible for eight locks and dams in the Ohio River System starting with Markland at river mile 531.5 and ending with Locks and Dam 53 at river mile 962.6. Locks and Dams 52 and 53 are low-lift wicket dams. Markland, McAlpine, Cannelton, Newburgh, John T. Myers and Smithland locks and dams are modern high lift projects between forty and fifty years old.

CONFERENCE AMOUNT FOR FY 2013: \$34,665,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$21,865,000 O: \$21,570,000 T: 43,435,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$43,294,000 - The Navigation line item contains the funding for critical minimum routine operation and maintenance for the locks and dams; critical maintenance performed by the Louisville Repair Station. These funds maintain our navigation project availability and reliability. This level of funding covers bare-bones operation. The Repair Station is scheduled to perform maintenance at L/D 52 and Cannelton Locks and Dams in FY2013 with LRL O&M funds. The Nashville District Fleet is scheduled to perform maintenance at L/D 52, Cannelton and John T. Myers Locks and Dams with LRL O&M funds.

FRM: N/A

RC: \$44,000 - The Recreation line item funds the mowing and maintenance of the visitor areas and boat ramps at the locks and dams referenced above.

H: N/A

EN: \$97,000 - The Environmental Stewardship line item funds the water quality, endangered species, and cultural resources activities on the Ohio River for the above referenced locks and dams. These activities are mandated by USACE regulations and policies.

WS: N/A

OTHER INFORMATION: Some of the highest tonnage on the inland waterways passes through the Louisville District locks with Locks and Dam 52 averaging over 90 million tons per year. The Olmsted Locks and Dams construction project will replace Locks and Dams 52 and 53. In the meantime, L/D 52 and 53 must remain operational to keep commodities moving on the Ohio River.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Ohio River Locks and Dams, KY,
IL, IN & OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Ohio River Open Channel Work, WV, KY & OH

AUTHORIZATION: River and Harbor Acts of 1909 (P.L. 60-317) and 1935 (P.L. 74-409)

LOCATION AND DESCRIPTION: Ohio River Open Channel Work, WV, KY and OH begins 127 miles downstream from Pittsburgh, PA (mile 127) and continues to mile 438 on the Ohio River. The project requires dredging annually to maintain its authorized depth of nine feet.

CONFERENCE AMOUNT FOR FY 2013: \$3,053,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$3,113,000 O: \$0 T: \$3,113,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,113,000 – Funding provides for critical minimum routine operation and maintenance for navigation to maintain the minimum project dimensions to provide safe, reliable, efficient, effective, and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation. 60% of the funding is used to dredge the main approach channels to navigation projects.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: If the mainstem channel is not dredged annually, it will silt in and commercial traffic would be drastically impacted. This would have a detrimental impact on the commercial and navigation industry. The 5 year average tonnage of commodities transported on this waterway exceeds 97,300,000 tons.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Ohio River Open Channel Work, WV
KY & OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Paintsville Lake, KY

AUTHORIZATION: Section 204 of Flood Control Act of 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: Paintsville Lake is located in Johnson County, KY, 7.8 miles above the mouth of Paint Creek, and about 4 miles west of Paintsville. The project includes operation and maintenance of Paintsville Lake. The lake is impounded by a rock fill dam with a central impervious core. Its maximum height is 160 feet above the streambed, and the crest length is approximately 1,600 feet with a crest elevation of 757 feet, mean sea level. The dam was completed in May 1984.

CONFERENCE AMOUNT FOR FY 2013: \$1,224,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$14,000 O: \$1,165,000 T: \$1,179,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$909,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and to replace the existing HVAC unit to produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

RC: \$177,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$43,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: \$50,000 – Funding provides for routine operation and maintenance for water supply to provide an estimated 6 million gallons per day of water supply for the health, safety and economy of Johnson County, KY and large portions of adjacent counties.

OTHER INFORMATION: Paintsville Lake has prevented over \$22,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 949,864 and average annual visitation over the past five years was 983,494.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Paintsville Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Rough River Lake, KY

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Rough River Lake is located in Breckinridge, Hardin and Grayson counties in south central Kentucky. The dam is located on the Rough River, 89.3 miles above its confluence with the Green River, near the community of Falls of Rough, approximately 20 miles from Leitchfield and 95 miles southwest of Louisville. The dam is rolled earth and rockfill type, with gate-controlled outlet works and is 130 ft high and 1,590 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$2,723,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$2,663,000 T: \$2,693,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,806,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$586,000 – Funding provides for routine operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$283,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$18,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$19,770,000, FY 2011 recreation visits were 699,000, and FY 2011 visitor expenditures were \$14,570,000.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Rough River Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Taylorsville Lake, KY

AUTHORIZATION: Flood Control Act of 1966 (P.L. 89-789)

LOCATION AND DESCRIPTION: The dam is located at mile 60.0 of the Salt River, a tributary of the Ohio River, approximately 40 miles southeast of Louisville, and 4 miles upstream from Taylorsville. All fee and easement property is located in Spencer, Nelson, and Anderson counties. The dam is earth and rockfilled, with gate controlled outlet works and uncontrolled open spillway and is 163 ft high and 1,280 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality. The lake is managed as a P.L. 89-72 project.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,198,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,344,000 T: \$1.344,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,126,000 – Funding provides for critical minimum routine operation and daily maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$76,000 – Funding provides for minimal health and safety needs at day-use recreation areas and overlook facilities. These funds support public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$142,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$11,120,000, FY 2011 recreation visits were 746,000, and FY 2011 visitor expenditures were \$15,670,000.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Taylorsville Lake, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Wolf Creek Dam, Lake Cumberland, KY

AUTHORIZATION: Section 1, River and Harbor Act of 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: Wolf Creek Dam is located on the Cumberland River at mile 460 in Russell County, KY. The project consists of an earth and concrete gravity dam, hydropower plant and a flood storage reservoir with recreation and stewardship areas.

CONFERENCE AMOUNT FOR FY 2013: \$7,987,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$54,000 O: \$8,413,000 T: \$8,467,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,343,000 - Funding provides for critical minimum routine operation and maintenance.

RC: \$1,382,000 - Funding provides for critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, day use areas and campgrounds

H: \$5,298,000 - Funding provides for routine operation and maintenance for hydroelectric power plant and hydropower joint costs for operation and maintenance of dam. Funds would allow power plant and dam to accomplish missions of providing low cost reliable electric power by maintaining high availability and peak availability and to maintain control of the river.

EN: \$444,000 - Funding provides for the management of natural resources including operation, safety, environmental compliance, maintenance of the project boundary line, shoreline management, and cultural resources. Funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevent loss and degradation of more than 89,000 acres to project lands and water. Failure to fund will result in immediate degradation and loss of natural resources, including forests, water quality, shoreline habitat, and aesthetic value.

WS: N/A

OTHER INFORMATION: Dam Safety Assurance Classification I 55-year old dam with MSC mandated lowered pool. Worsening, chronic seepage problems originating from 1940's foundation construction methods currently threaten the stability of Wolf Creek Dam. Dam failure would result in loss of life in excess of one-hundred lives and inundation damages in the Nashville area alone could exceed two billion dollars. Hydropower plant generates 965,000 MWH of energy annually, enough supply for 80,000 homes. Lake Cumberland ranks #15 of 422 among the Corps for recreation with 3,870,302 project visits in FY11 with associated \$77,800,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Wolf Creek Dam, Lake Cumberland, KY

O&M JUSTIFICATION SHEET

PROJECT NAME: Yatesville Lake, KY

AUTHORIZATION: Section 204 of Flood Control Act of 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: Yatesville Lake is located in Lawrence County, KY, on Blaine Creek, about 18 miles above the mouth. It is about 4 miles south of Yatesville and 5 miles west of Louisa. The project includes operation and maintenance of Yatesville Lake. The dam is rockfill with a central impervious core, founded on in situ overburden. The maximum height is 105 feet above the streambed with a crest length of 760 feet. The uncontrolled broad crested spillway is located approximately one-half mile southeast of the dam. The dam was completed in 1991.

CONFERENCE AMOUNT FOR FY 2013: \$1,528,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$1,105,000 T: \$1,135,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$888,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and to insulate the attics of the Visitor Information Office and Maintenance Shop to produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

RC: \$204,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$43,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Yatesville Lake has prevented over \$25,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 326,389 and average annual visitation over the past five years was 249,853.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Yatesville Lake, KY

Michigan

O&M JUSTIFICATION SHEET

PROJECT NAME: Channels in Lake St. Clair, MI

AUTHORIZATION: River and Harbor Act of 1886, as amended

LOCATION AND DESCRIPTION: Lake St. Clair is located in southeast Michigan with the northwest portion of the lake lying within the United States and the southeast portion of the lake lying within Canada. Lake St. Clair is an expansive shallow basin containing one of the Great Lakes connecting channels running from the mouth of the St. Clair River to the head of the Detroit River. The channels in Lake St. Clair provide for an improved channel 800 feet wide and 14.5 miles long to a depth of 27.5 feet. Maintenance dredging is required in the upper end of the channels on a five to ten year cycle and was last completed in 2012. Dredged material is placed in the Dickinson Island Disposal Facility.

CONFERENCE AMOUNT FOR FY 2013: \$170,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$173,000 T: \$173,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$173,000 – Funding provides for critical minimum routine operation for navigation which includes completion of project condition surveys at critical locations throughout the 14.5 miles of navigation channels, and notification of navigation interests of any critical shoals within the channels.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Channels in Lake St. Clair, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: Detroit River, MI

AUTHORIZATION: River and Harbor Act of 1902 (PL57-154), as amended

LOCATION AND DESCRIPTION: The Detroit River is one of the Great Lakes connecting channels, flowing south from Lake St. Clair to Lake Erie. A total of 76 miles of Federal channels are maintained, including up-bound and down-bound lanes. It also contains various water level and compensating dikes and structures. This river requires maintenance dredging on a one to two year cycle and is scheduled to be dredged in 2013. The project also requires obstruction removal in the hard bottom channels on a yearly basis.

CONFERENCE AMOUNT FOR FY 2013: \$5,814,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$4,774,000 O: \$1,040,000 T: \$5,814,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,784,000 – Funding provides for critical minimum routine operation and maintenance for navigation, including project condition surveys, strike removal by Government floating plant, and maintenance dredging by contract to provide minimum functional depth at the most critical portions of this Federal channel. Annual shoaling can result in a loss of available channel depth between one and two feet which results in increased transportation costs of between \$7 million and \$25 million. Commercial vessel operations and/or wave and ice action annually result in movement of adjacent stone or dislodging of rock from channel bottoms that result in unsafe channel conditions for vessel movements.

FRM: N/A

RC: N/A

H: N/A

EN: \$30,000 – Funding provides for maintaining compliance with the National Historic Preservation Act and with the Historic Management Plan.

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Detroit River, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: Grand Haven Harbor and Grand River, MI

AUTHORIZATION: River and Harbor Act of 1866, as amended

LOCATION AND DESCRIPTION: The harbor is located on the east shore of Lake Michigan, 108 miles northeast of Chicago, IL, and 23 miles north of Holland, MI at the mouth of the Grand River. Grand Haven Harbor is a deep draft commercial port with the primary commodities being coal and aggregates. Approximately 40,000 cubic yards are dredged from the outer channel each year while the inner channel requires dredging on a two to four year cycle, and is scheduled to be dredged in 2013.

CONFERENCE AMOUNT FOR FY 2013: \$1,358,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$650,000 O: \$8,000 T: \$658,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$650,000 – Funding provides for critical minimum routine operation and maintenance for navigation including project condition surveys and maintenance dredging of both the outer and inner harbors by contract to provide minimum function at the most critical portions of this Federal channel. Loss of available channel depth due to annual shoaling typically averages between four and five feet which results in increased transportation costs of between \$3.6 million and \$5.1 million.

FRM: N/A

RC: N/A

H: N/A

EN: \$8,000 – Funding provides for maintaining compliance with the National Historic Preservation Act and with the Historic Management Plan.

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Grand Haven Harbor and Grand
River, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: Holland Harbor, MI

AUTHORIZATION: River and Harbor Act of 1852, as amended

LOCATION AND DESCRIPTION: Holland Harbor is located on the east shore of Lake Michigan 95 miles northeast of Chicago, IL and 23 miles south of Grand Haven, MI. It is a deep draft commercial harbor with project depths of 23 feet in the entrance and 21 feet in the inner channel and Lake Macatawa. There are approximately 5,500 feet of structures including breakwaters, piers, and revetments and approximately six miles of maintained channel. Maintenance dredging is required on an annual basis, with the harbor scheduled to be dredged in 2013. Outer harbor dredged material is used for shoreline nourishment.

CONFERENCE AMOUNT FOR FY 2013: \$668,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,800,000 O: \$0 T: \$1,800,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,800,000 - Funding provides for critical minimum routine operation and maintenance for navigation, including project condition surveys and maintenance dredging of both the outer and inner harbors by contract to provide minimum function at the most critical portions of this Federal channel. Loss of available channel depth due to annual shoaling typically averages between four and five feet at the harbor mouth which results in increased transportation costs of approximately \$1 million.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Holland Harbor, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: Keweenaw Waterway, MI

AUTHORIZATION: River and Harbor Act of 1865, as amended

LOCATION AND DESCRIPTION: The Keweenaw Waterway is located in the Keweenaw Peninsula of the upper peninsula of Michigan, between Keweenaw Bay and Lake Superior. The west, upper entrance is 169 miles east of Duluth, MN and the east, lower entrance is approximately 60 miles west of Marquette, MI. It is a deep draft commercial waterway with a project depth of 32 feet in the upper entrance channel, 28 feet in the lower entrance channel, and 25 feet in the interior channel. There are approximately 24,300 feet of structures including breakwaters, piers, and revetments and over 18 miles of maintained channels. Portions of the project are leased to State and local entities for recreational uses, including small boat access to the channels.

CONFERENCE AMOUNT FOR FY 2013: \$37,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$50,000 T: \$50,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: \$21,000 – Funding provides for operational maintenance of recreational features of this project, thereby ensuring access to the channel, including parking and picnic areas.

H: N/A

EN: \$29,000 – Funding provides for annual activities that are associated with compliance with State and Federal historic preservation requirements, including investigation and coordination of operation and maintenance activities and document preservation.

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Keweenaw Waterway, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: Monroe Harbor, MI

AUTHORIZATION: River and Harbor Act of 1886, as amended

LOCATION AND DESCRIPTION: Monroe Harbor is located on the lower reach of the Raisin River, which empties into Lake Erie, 36 miles south of Detroit, MI. It is a deep draft commercial harbor with authorized depths of 21 feet in Lake Erie to the turning basin, which has an 18 foot depth. It has approximately 28,000 feet of maintained Federal channel. Maintenance dredging is required on a two to three year cycle, with dredging last completed in 2011. Dredged material is placed in Sterling State Park Confined Disposal Facility, located just north of the harbor.

CONFERENCE AMOUNT FOR FY 2013: \$0^{2/}

BUDGET FOR FY 2014: M: \$1,000,000 O: \$0 T: \$1,000,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,000,000 – Funding provides critical minimum routine operation and maintenance for navigation, including project condition surveys, and maintenance dredging by contract to provide minimum functional depth at the most critical points of the functional channel. Annual shoaling can result in a loss of available channel depth between two and three feet which results in increased transportation costs of between \$1.5 million and \$2.4 million. The presence of large cobble stones within the turning basin has prohibited maintaining the turning basin to the functional depth. As a result, commercial vessels have to routinely back out of the harbor posing additional safety concerns. Removal of the obstructions will allow for safer and more efficient vessel operations.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Monroe Harbor, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: Saginaw River, MI

AUTHORIZATION: River and Harbor Act of 1910 (PL 60-317), as amended

LOCATION AND DESCRIPTION: Saginaw River is a deep draft commercial harbor formed by the union of the Tittabawassee and Shiawassee Rivers, is 22 miles long, and flows north into the south end of Saginaw Bay in Lake Huron. The cities of Saginaw and Bay City are located on the river. Project depths vary from 27 feet in the Saginaw Bay entrance channel to 22 to 26 feet in the Saginaw River channel. There are a total of 26 miles of Federal channels and 5 turning basins. The project requires maintenance dredging on an annual basis, with dredged material from the bay channels placed in the Saginaw Bay confined disposal facility (CDF) which has a remaining capacity of approximately five to ten years. Material removed from the upper river channel is placed in the Upper Saginaw dredged material disposal facility (DMDF) which has sufficient capacity for the next 25 years.

CONFERENCE AMOUNT FOR FY 2013: \$4,091,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$3,000,000 O: \$837,000 T: \$3,837,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,837,000 – Funding provides for critical minimum routine operation and maintenance for navigation, including project condition surveys, maintenance dredging by contract to provide minimum functional depth at the most critical portions of this Federal channel, ground water well sampling & testing at the Upper Saginaw dredged material disposal facility, and continuation of dredged material management plan activities. Annual shoaling can result in a loss of available channel depth between one and two feet which results in increased transportation costs of between approximately \$2 million and \$4 million. The Saginaw Bay CDF is used for disposal of material dredged from the navigation channels located in the Lower River and Saginaw Bay, and less than five years of capacity remains at the facility.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Saginaw River, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: Sebewaing River, MI

AUTHORIZATION: River and Harbor Act of 1896, as amended; and Flood Control Act of 1941 (PL 77-228), as amended

LOCATION AND DESCRIPTION: Sebewaing River is a shallow draft recreational navigation project and a flood and coastal storm damage reduction project located on Saginaw Bay in the thumb of Michigan on the west shore of Lake Huron, about 20 miles northeast of the mouth of the Saginaw River. The navigation project has a depth of eight feet with approximately 15,000 feet of maintained Federal channel. The dredged material has been placed in the Sebewaing Confined Disposal Facility, but that facility is currently very close to capacity. The flood and coastal storm damage reduction project includes approximately 11,000 feet of levees and 1,900 feet of floodwalls. The Operations and Maintenance of both the navigation portion and the flood control portion is a Federal responsibility.

CONFERENCE AMOUNT FOR FY 2013: \$25,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$25,000 T: \$25,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$25,000 – Funding provides for support to annual Spring ice breaking activities required to alleviate ice jam related flooding.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Sebewaing River, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: St. Clair River, MI

AUTHORIZATION: River and Harbor Act of 1892, as amended

LOCATION AND DESCRIPTION: St. Clair River is one of the Great Lakes connecting channels that flows south from Lake Huron and discharges into Lake St. Clair. It is a deep draft commercial project with project depths ranging from 27 to 30 feet. St. Clair River serves the ports of Marysville, Marine City and St. Clair, MI, and includes approximately 44 miles of Federal channels. Maintenance dredging is required on a two to three year cycle, with the project last dredged in 2011. Dickinson Island confined disposal facility has provided a suitable placement site for all material dredged from the St. Clair River since 1980 and is anticipated to have sufficient capacity for at least 25 more years.

CONFERENCE AMOUNT FOR FY 2013: \$618,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$455,000 O: \$194,000 T: \$649,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$649,000 – Funding provides for critical minimum routine operation and maintenance for navigation including project condition surveys and strike removal by Government floating plant. Commercial vessel operations and/or wave and ice action annually result in the dislodging of rock from channel bottoms, resulting in unsafe channel conditions for vessel movements. A loss of available channel depth between one and two feet will result in increased transportation costs of between \$15 million and \$35 million.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

St. Clair River, MI

O&M JUSTIFICATION SHEET

PROJECT NAME: St. Mary's River, MI

AUTHORIZATION: River and Harbor Act of 1870, as amended

LOCATION AND DESCRIPTION: St. Mary's River is one of the Great Lakes connecting channels and is 63 miles long. The river flows southeast from the eastern end of Lake Superior into the northern end of Lake Huron along the border between the State of Michigan and the Province of Ontario, Canada. This deep draft commercial channel includes a total of 75 miles of maintained channels with depths varying from 27 to 29 feet in the St. Mary's River, Lake Superior and Lake Huron approaches. This project also includes two active locks (one 110x1200ft chamber and one 80x800ft chamber, both with a 21 foot lift), two approach canals, a hydropower plant and a Visitor Center.

CONFERENCE AMOUNT FOR FY 2013: \$26,766,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$10,744,000 O: \$18,659,000 T: \$29,403,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$24,770,000 - Funding provides for critical minimum routine operation and maintenance of two active navigation locks, critical maintenance repairs to navigation channel guide walls by Government floating plant, project condition surveys, critical channel strike removal by Government floating plant, completion of purchase & installation of a new compressed air system for the facility, and a portion of joint facility security/grounds maintenance. Funds ensure safe and reliable operation of the navigation locks and connecting channels located in the St. Mary's River, which historically accommodate over 80 million tons of cargo annually. A one to two foot reduction in available draft due to any channel restrictions results in increased transportation costs of between \$5 million and \$14 million annually, and a thirty day closure of the Soo Locks can result in up to \$150 million in increased transportation costs.

FRM: N/A

RC: \$318,000 – Funding provides for routine operation and maintenance of project visitor center and a portion of joint facility security/grounds maintenance. The visitor center and park accommodate an annual visitation in excess of 400,000 people and provides educational opportunities related to the locks.

H: \$4,266,000 – Funding provides for critical minimum routine operation and maintenance of two hydropower facilities that house five generating units and a portion of joint facility security/grounds maintenance. The total includes \$1.72M maintenance funds that provide design and construction for the replacement of the Unit 10 transformer and related station service switchgear, protective relays, and approach apron. These funds ensure the safe and reliable operation of the Federal hydropower plant with a 20 megawatt capacity that provides all of the power for operation of the Soo Locks complex and supports the base load for the area grid, meeting up to 20 percent of regional power demand.

EN: \$49,000 – Funding provides for annual activities associated with compliance with State and Federal historic preservation requirements.

WS: N/A

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

St. Mary's River, MI

Minnesota

O&M JUSTIFICATION SHEET

PROJECT NAME: Duluth-Superior Harbor, MN, WI

AUTHORIZATION: River and Harbor Act of 1896, as amended

LOCATION AND DESCRIPTION: Located on the western end of Lake Superior. Duluth-Superior Harbor is a deep draft commercial harbor with over 18 miles of maintained channel. Maintenance dredging is required on an annual basis, with the project scheduled to be dredged in 2013. Dredged material is currently placed in the Erie Pier Confined Disposal Facility (CDF). The project also includes over 10,000 feet of structures including breakwaters, piers and revetments. Project also includes the Lake Superior Maritime Museum and Visitor Center.

CONFERENCE AMOUNT FY 2013: \$5,494,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$4,772,000 O: \$1,215,000 T: \$5,987,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,431,000 - Funding provides for critical minimum routine operation and maintenance for navigation, including project condition surveys, navigation structure repairs by Government floating plant, maintenance dredging by contract to provide minimum functional depth at the most critical portions of this Federal channel, critical fill management activities at the Erie Pier CDF, and continuing efforts on development of dredged material management plans. Funding ensures fully functional channels are maintained within the harbor, and that adequate capacity will be available at Erie Pier CDF for annual dredged material disposal. Duluth-Superior Harbor ships and receives over 45 million tons annually, and a loss of two feet of channel depth due to annual shoaling or deteriorated wave climate can result in increased transportation costs up to \$6.9 million.

FRM: N/A

RC: \$526,000 - Funding provides for routine operation and maintenance of the project's Class A visitor center and Lake Superior maritime museum. These funds provide for operation of the visitor center and park that has annual visitation in excess of 600,000 people and provides educational opportunities related to commercial navigation and overall Corps of Engineers missions.

H: N/A

EN: \$30,000 - Funding provides for annual activities associated with compliance with State and Federal historic preservation requirements, including investigation and coordination of operation and maintenance activities and document preservation.

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Duluth-Superior Harbor, MN, WI

New York

O&M JUSTIFICATION SHEET

PROJECT NAME: Black Rock Channel and Tonawanda Harbor, NY

AUTHORIZATION: River and Harbor Acts of 1888, 1916 (P.L. 63-291), 1919 (P.L. 65-200), 1922 (P.L. 67-362), 1925 (P.L. 68-585), 1935 (P.L. 74-409), 1945 (P.L. 79-14) and the Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: Black Rock Channel and Tonawanda Harbor is located on Niagara River in the city of Buffalo, Erie County, NY. It provides for vessels of all types a protected waterway around the reefs, and swift currents that exist in the upstream portions of the Niagara River. The lock and channel permit commercial vessels and pleasure craft to travel between Buffalo Harbor and Tonawanda Harbor and enables further transit to the Hudson River and Atlantic Ocean through the New York State Canal. Major stakeholders include U.S. Coast Guard, Marathon Ashland Petroleum, NOCO Energy Corp., United Refining Co., and NRG Huntley Power Plant.

CONFERENCE AMOUNT FOR FY 2013: \$1,335,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,770,000 T: \$1,770,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,765,000 - Funding will be used for critical minimum routine operation and maintenance for navigation, including lock functions and water control. These funds would improve navigation performance by providing for continued operation and maintenance of the lock to ensure availability for commercial and recreational users.

FRM: N/A

RC: N/A

H: N/A

EN: \$5,000 - Funding will be used for preparation of a Historic Properties Management Plan.

WS: N/A

OTHER INFORMATION: The channel and lock provides the only means for deep draft commercial vessels to reach delivery ports on the upper Niagara River (including a major coal power generation plant and fuel storage facilities), and is a critical link in the only inland navigation route between the Atlantic Ocean and Great Lakes. With 1,132 lockages in 2011, the lock provided safe passage for 1,752 vessels (283 commercial and 1,469 recreational).

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$50 (x1000). This amount will be used to perform work on the project as follows: Supervisory and administration of lock service contracts proceeding into the fall..

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Black Rock Channel and
Tonawanda Harbor, NY

O&M JUSTIFICATION SHEET

PROJECT NAME: Buffalo Harbor, NY

AUTHORIZATION: River and Harbor Acts of 1826, 1866, 1874, 1900, 1910 (P.L. 60-317), 1912 (P.L. 61-425), 1919 (P.L. 65-200), 1930 (P.L. 71-520), 1935 (P.L. 74-409), 1945 (P.L. 79-14), 1960 (P.L. 86-645) and 1962 (P.L. 87-874). WRDA of 1986 (P.L. 99-662), 1988 (P.L. 100-676) and 2007 (P.L. 110-114)

LOCATION AND DESCRIPTION: Buffalo Harbor is a deep draft commercial harbor, located on Lake Erie in the city of Buffalo, Erie County, NY whose authorized depths are 23-30 feet in the outer harbor and 22 feet in the river.

CONFERENCE AMOUNT FOR FY 2013: \$0 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,420,000 O: \$0 T: \$1,420,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,420,000 - Funding will be used for critical minimum routine maintenance dredging for navigation. These funds will improve navigation performance by reducing unsafe navigation conditions within the harbor, vessel delays, transportation costs and potential damage to shoreline structures. The dredging will remove approximately 100,000 cubic yards of sediment from the harbor thereby improving the availability and reliability of the navigation channels.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Buffalo Harbor is the 127th leading U.S. port with 1,298,000 tons of material shipped or received in 2010 and is ranked 29th among the Great Lakes Ports. The project provides maintained deep draft navigation channels that facilitate the movement of goods and materials to and from commercial docks. Major stakeholders include the Port of Buffalo, U.S. Coast Guard, General Mills, Exxon-Mobil, Lafarge Cement and Founders Supplies, Incorporated. Bulk commodities that pass through Buffalo Harbor generate approximately \$44,000,000 annually in direct revenue.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/}At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Buffalo Harbor, NY

O&M JUSTIFICATION SHEET

PROJECT NAME: Mount Morris Dam, NY

AUTHORIZATION: Flood Control Act of 1944 (P.L. 78-534) and Sec 5110 WRDA 2007 (P.L. 110-114), as amended

LOCATION AND DESCRIPTION: Mount Morris Dam is a dry-bed dam that provides flood damage reduction for the metropolitan area of Rochester, NY, other residential areas, farmlands, and industrial developments in the lower Genesee River Valley. This project includes a dry-bed dam, visitor center and service facilities, supporting recreation and natural resource management activities.

CONFERENCE AMOUNT FOR FY 2013: \$3,926,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,388,000 O: \$2,626,000 T: \$4,014,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$3,715,000 - Funding will provide for critical minimum routine operation and maintenance activities necessary to operate the dam and service facilities. These funds would ensure continued operation of the project and improve the condition of critical features thereby ensuring continued availability to mitigate the risk of damages from flooding in the lower Genesee River Valley.

RC: \$230,000 - Funding will be used for routine operation and maintenance of visitor center and supporting recreation activities. An interpretive program through the Visitor Information Center exists to educate the public about the importance and history of the Corps and the project. These funds would ensure continued operation of the visitor center and interpretive program and provide visitors with a safe, healthy experience.

H: N/A

EN: \$69,000 - Funding will be used for wildlife management, continuation of the Historic Properties Management Plan and pest management activities. These funds are required to perform preservation and improvement activities for fish and wildlife that are essential to the proper environmental management of the project and reservoir.

WS: N/A

OTHER INFORMATION: The Dam serves 161,000 people who reside and work within the Genesee River 100-year flood plain. In 2011 the dam prevented an estimated \$182,500,000 in flood damages. Since its completion in 1952, the dam has prevented an estimated \$2,050,000,000 in flood damages.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$50 (X1000). This amount will be used to perform work on the project as follows: Supervisory and administration for dam service contracts proceeding into fall.

^{2/}At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Mount Morris Dam, NY

Ohio

O&M JUSTIFICATION SHEET

PROJECT NAME: Alum Creek Lake, OH

AUTHORIZATION: Section 203 of Flood Control Act of 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: Alum Creek Lake is located in Delaware County, OH, on Alum Creek of the Big Walnut Creek, a tributary of the Scioto River. It is 26 miles above the mouth of Alum Creek and 157 miles above the mouth of the Scioto River. The project includes operation and maintenance of Alum Creek Lake, which is impounded by a rolled earth fill dam with a gated concrete spillway. The crest length of the dam is 10,200 feet. The dam was completed in August 1974.

CONFERENCE AMOUNT FOR FY 2013: \$1,424,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,508,000 T: \$1,508,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$1,009,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$242,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: \$0 – N/A

EN: \$79,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: \$178,000 – Funding provides for routine operation and maintenance for water supply to provide an estimated 35 million gallons per day of water supply for the health, safety and economy of approximately 100,000 citizens in the Columbus, OH metro area.

OTHER INFORMATION: Alum Creek Lake has prevented over \$154,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 3,159,193 and average annual visitation over the past five years was 3,230,583.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Alum Creek Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Ashtabula Harbor, OH

AUTHORIZATION: River and Harbor Acts of 1910 (P.L. 60-317), 1919 (P.L. 65-200), 1935 (P.L. 74-409), 1945 (P.L. 79-14), 1960 (P.L. 86-645) and 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: Ashtabula Harbor is a deep draft commercial harbor, located on the southern shore of Lake Erie at the mouth of the Ashtabula River, 55 miles east of Cleveland, in Ashtabula County, OH, with authorized depths of 22-30 feet in the outer harbor and 16-18 feet in the river.

CONFERENCE AMOUNT FOR FY 2013: \$1,810,000 ^{2/}
BUDGETED AMOUNT FOR FY 2014: M: \$1,030,000 O: \$0 T: \$1,030,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,030,000 - Funding will be used for critical maintenance of coastal navigation structures and obstruction removal. Repair includes approximately 200 linear feet on the East Arrowhead breakwater. Funds will improve navigation performance by reducing unsafe navigation conditions within the harbor, vessel delays, transportation costs and potential damage to shoreline structures.

FRM: - N/A

RC: - N/A

H: - N/A

EN: - N/A

WS: - N/A

OTHER INFORMATION: Ashtabula Harbor is the 66th leading U.S. port with 6,346,000 tons of material shipped or received in 2010 and is ranked 12th among the Great Lakes Ports. The project provides maintained deep draft navigation channels that facilitate the movement of goods and materials to and from commercial docks. Major stakeholders include the U.S. Coast Guard, the Ashtabula Port Authority, Norfolk Southern Ashtabula Coal Dock, Pinney Dock and Transport Company and Sidley Stone Products. Bulk commodities that pass through Ashtabula Harbor generate approximately \$269,000,000 annually in direct revenue.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$50 (X1000). This amount will be used to perform work on the project as follows: Supervisory and administration for maintenance dredging contractual work proceeding into the fall.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Ashtabula Harbor, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Berlin Lake, OH

AUTHORIZATION: Flood Control Act of 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Berlin Lake Dam is located on the Mahoning River in Mahoning and Portage Counties, OH, about 10 miles upstream from Milton Dam (Non-Federal Project) and about 35 miles upstream from Warren, OH. The lake is located in Mahoning, Portage and Stark Counties, OH. Berlin Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,084,000 ^{2/}

BUDGET FOR FY 2014: M: \$ 10,000 O: \$ 1,915,000 T: \$ 1,925,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,236,000 – Accomplish flood reduction mission performing critical minimum routine operation and maintenance of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$589,000 – Operate and maintain recreation facilities, including four boat launch ramps and the largest campground in the District with 348 campsites. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$64,000 – Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure the sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: \$36,000 – Negotiate and implement a water supply contract with the Mahoning Valley Sanitary District.

OTHER INFORMATION: This project supports approximately 210 jobs and has prevented more than \$1,685,295,000 in damage since its completion in 1943. Additionally, the lake has historically served as a water supply for the Mahoning Valley Sanitary District, and there is interest in renewing a water supply contract. The average annual recreational visits from 2006 through 2011 was 581,247.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Berlin Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Caesar Creek Lake, OH

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Caesar Creek Lake is located in Warren, Clinton and Greene Counties in Ohio. The dam is earth and rockfill with four saddle dams, outlet works and spillway. The dam is 165 ft high and 2,650 ft long. It is the site of a class "A" visitor center and world renowned for its 450 million year old Ordovician fossil beds exposed by the projects emergency spillway. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,698,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$35,000 O: \$1,746,000 T: \$1,781,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,416,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$281,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$78,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$6,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$18,010,000, FY 2011 recreation visits were 999,000, and FY 2011 visitor expenditures were \$20,090,000.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Caesar Creek Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Clarence J. Brown Dam & Reservoir, OH

AUTHORIZATION: Flood Control Act of 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: Clarence J. Brown Dam & Reservoir is located in the northeastern corner of Clark County near Springfield, Ohio. The project is on Buck Creek, about 7 miles above the confluence with the Mad River, a tributary of the Great Miami River. The dam is earthfill with gated controlled outlet works and uncontrolled open spillway and is 72 ft high and 6,620 ft long. It is the site of a class "B" visitor center. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,286,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$485,000 O: \$1,362,000 T: \$1,847,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,630,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$154,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$63,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$2,500,000, FY 2011 recreation visits were 1,070,000, and FY 2011 visitor expenditures were \$21,220,000.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Clarence J. Brown Dam &
Reservoir, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Cleveland Harbor, OH

AUTHORIZATION: River and Harbor Acts of 1875 (18 Stat 456), 1888 (25 Stat 400), 1903 (P.L. 57-154), 1910 (P.L. 60-317), 1917 (P.L. 64-108), 1935 (P.L. 74-409), 1945 (P.L. 79-14), 1958 (P.L. 85-500), 1960 (P.L. 86-645) and 1962 (P.L. 87-874). Flood Control Acts of 1937 (P.L. 75-406), 1946 (P.L. 79-526) and 1962 (P.L. 87-874). WRDA 1976 (P.L. 94-587) and 1986 (P.L. 99-662)

LOCATION AND DESCRIPTION: Cleveland Harbor is a deep draft commercial harbor located on Lake Erie in the city of Cleveland, OH, with maintained depths of 28 feet in the outer harbor and 23 feet in 6.8 miles of the Cuyahoga and Old Rivers and more than 5.5 miles of protective breakwater structures.

CONFERENCE AMOUNT FOR FY 2013: \$8,959,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$6,215,000 O: \$1,130,000 \$ T: \$7,345,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,345,000 - Funding provides for routine operation and maintenance for navigation including maintenance of the channels, protective structures, and disposal facilities, planning for management and acquisition of dredged material disposal, and regional economic data collection. These funds would improve navigation performance by reducing unsafe navigation conditions within the harbor, vessel delays, transportation costs and potential for damage to shoreline structure. Dredging will remove approximately 225,000 cubic yards of sediment, improving the availability and reliability of the navigation channels. Work will continue on cost shared engineering and construction of measures selected in the interim dredged material management plan for providing capacity through 2018. Approximately 100 linear feet of the severely deteriorated East Arrowhead breakwaters will be rehabilitated by in-house resources.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Cleveland is the 49th leading U.S. port with 10,791,000 tons of material shipped or received in 2010 and is ranked 6th among the Great Lakes Ports. Interim capacity must be approved and funded for implementation by 2015, and thus is expected to require the construction of improvements by 2014. Major stakeholders include the U.S. Coast Guard, Cleveland Cuyahoga County Port Authority, Burke Lakefront Airport, ArcelorMittal, Lake Carriers' Association and Cargill. Bulk commodities that pass through Cleveland Harbor generate approximately \$305,000,000 annually in direct revenue.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$5,485 (X1000). This amount will be used to perform work on the project as follows: USACE and the Cleveland-Cuyahoga County Port Authority are evaluating alternatives for increasing existing confined disposal facility capacity. The decision document for the selected alternative is expected to be approved in FY13 and fill management activities implemented in FY14.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Cleveland Harbor, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Conneaut Harbor, OH

AUTHORIZATION: River and Harbor Acts of 1910 (P.L. 60-317), 1917 (P.L. 64-108), 1935 (P.L. 74-409), and 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: Conneaut Harbor is a deep-draft commercial harbor, located on Lake Erie in the city of Conneaut, Ashtabula County, OH, with authorized depths of 22-28 feet in the outer harbor and 27 feet in the inner harbor.

CONFERENCE AMOUNT FOR FY 2013: \$1,001,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,030,000 O: \$0 T: \$1,030,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,030,000 - Funding will be used for critical minimum routine maintenance of coastal navigation structures and obstruction removal. Repair includes approximately 120 linear feet on the East Arrowhead breakwater. Funds will improve navigation performance by reducing unsafe navigation conditions within the harbor, vessel delays, transportation costs and potential damage to shoreline structures.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Conneaut Harbor is the 81st leading U.S. port with 3,558,000 tons of material shipped or received in 2010 and is ranked 19th among the Great Lakes Ports. The project provides maintained deep draft navigation channels that facilitate the movement of goods and materials to and from commercial docks. Bulk commodities that pass through Conneaut Harbor generate approximately \$152,000,000 annually in direct revenue. Commodities shipped or received include coal, iron ore, limestone, lime, ores and minerals. Major stakeholders include U.S. Steel, Conneaut Port Authority, U.S. Coast Guard, and the Pittsburgh and Conneaut Dock Company.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$50 (X1000). This amount will be used to perform work on the project as follows: Supervisory and administration for maintenance dredging contractual work proceeding into the fall.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Conneaut Harbor, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Deer Creek Lake, OH

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Deer Creek Lake is located in Pickaway County, OH, on Deer Creek which is a tributary of the Scioto River, 21 miles above the mouth of Deer Creek and 105.8 miles above the mouth of the Scioto River. The lake is approximately 7 miles south-southwest of the town of Mount Sterling. The project includes operation and maintenance of Deer Creek Lake, which is impounded by a rolled earthfill dam with concrete gravity channel section that has a maximum height of 93 feet and a total crest length of 3,800 feet. The dam was completed in 1968.

CONFERENCE AMOUNT FOR FY 2013: \$1,468,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$275,000 O: \$1,421,000 T: \$1,696,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,385,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; for the performance of an emergency exercise as an Interim Risk Reduction Measure; and for replacement of the current fuel oil boiler with a geothermal heating system to supplement energy requirements, produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

RC: \$260,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$51,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Deer Creek Lake has prevented over \$100,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 2,309,248 and average annual visitation over the past five years was 3,361,981.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Deer Creek Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Delaware Lake, OH

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Delaware Lake is located in central OH, situated along U.S. Route 23 and within Delaware, Marion, and Morrow Counties. Delaware Lake is located on the Olentangy River, a tributary of the Scioto River, 32 miles above the mouth of the Olentangy River, 164.4 miles above the mouth of the Scioto River, and 3 miles above Delaware city limits. The project includes operation and maintenance of Delaware Lake. The project was completed in July 1948, consists of an 18,600 foot long and 92 foot high embankment dam with a gated control concrete gravity spillway, including a 6,500 foot long embankment levee with two pump station works to protect the Village of Waldo and vicinity located 9 miles upstream from the dam. The outlet works consist of five gated tunnels which discharge into a concrete stilling basin. The spillway consists of six tainter gates and hoist machinery that operates to release excess storage to prevent overtopping and dam failure.

CONFERENCE AMOUNT FOR FY 2013: \$1,471,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,693,000 T: \$1,693,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,444,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and for accomplishment of Interim Risk Reduction Measures including performing an emergency exercise and updating the consequence study and developing an Environmental Assessment.

RC: \$219,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$30,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Delaware Lake has prevented over \$144,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 802,238 and average annual visitation over the past five years was 830,591.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Delaware Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Dillon Lake, OH

AUTHORIZATION: Section 4 of the Flood Control Act (FCA) of 1938 (P.L. 75-761) as amended by Section 4 of FCA 1939 (P.L. 76-396)

LOCATION AND DESCRIPTION: Dillon Lake is located in Muskingum County, OH on the Licking River, a tributary of the Muskingum River. It is 5.8 miles above the mouth of the Licking River and 83.4 miles above the mouth of the Muskingum River. The project includes operation and maintenance of Dillon Lake. The lake is impounded by a rolled earth fill dam with impervious core and an uncontrolled partially concrete lined spillway. The top length of the dam is 1,400 feet. The dam was completed in July 1959.

CONFERENCE AMOUNT FOR FY 2013: \$1,484,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$28,000 O: \$1,485,000 T: \$1,513,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,334,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management, including required inspections, to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and for installation of an outdoor or indoor wood boiler capable of burning drift and woody debris for heating purposes of maintenance areas currently heated with electric resistance to supplement energy requirements, produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

RC: \$147,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment; and to replace the existing 4WD diesel mule with an electric powered model recharged by the solar array at the project to produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

H: N/A

EN: \$32,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Dillon Lake has prevented over \$683,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 1,214,092 and average annual visitation over the past five years was 1,269,702.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Dillon Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Fairport Harbor, OH

AUTHORIZATION: River & Harbor Acts of 1825, 1896 (P.L. 20-202), 1905 (P.L. 33-1117), 1919 (P.L. 40-1275), 1927, 1930 (P.L. 46-918), 1935 (P.L. 74-409), 1937 and 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: Fairport Harbor is a deep draft commercial harbor located on Lake Erie in the city of Fairport, Lake County, OH, whose authorized depths are 25 feet in the Outer Harbor and 21-24 feet in the river.

CONFERENCE AMOUNT FOR FY 2013: \$0^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$2,000,000 O: \$0 T: \$2,000,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,000,000 - Funding will be used for critical minimum routine maintenance dredging for navigation. These funds will improve navigation performance by reducing unsafe navigation conditions within the harbor, vessel delays, transportation costs and potential damage to shoreline structures. The dredging will remove approximately 200,000 cubic yards of sediment from the harbor thereby improving the availability and reliability of the navigation channels.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Fairport Harbor is the 118th leading U.S. port with 1,498,000 tons of material shipped or received in 2010 and is ranked 27th among the Great Lakes Ports. The project provides maintained deep draft navigation channels that facilitate the movement of goods and materials to and from commercial docks. Major stakeholders include the Fairport Harbor Port Authority, U.S. Coast Guard, private marinas, Carmuse Lime, Morton International, Northeastern Road Improvement Company, Osborne Concrete & Stone, and Sidley Stone Products. Bulk commodities that pass through Fairport Harbor generate approximately \$56,000,000 annually in direct revenue.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Fairport Harbor, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Lorain Harbor, OH

AUTHORIZATION: River and Harbor Acts of 1910 (P.L.60-317), 1917 (P.L. 64-108), 1930 (P.L. 71-520), 1935 (P.L. 74-409), 1945 (P.L. 79-14), 1960 (P.L. 86-645) and 1965 (P.L. 89-298). WRDA 1986 (P.L. 99-662)

LOCATION AND DESCRIPTION: Lorain Harbor is a deep draft commercial harbor located in the city of Lorain, Lorain County, Ohio whose authorized depths are 28 feet in the outer harbor and 27 feet in the river. There are over 2.5 miles of breakwater structures, a 60 acre outer harbor, and 2.6 miles of Federal channel on the Black River.

CONFERENCE AMOUNT FOR FY 2013: \$0^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,350,000 O: \$0 T: \$1,350,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,350,000 - Funding will be used for critical minimum routine maintenance dredging for navigation. These funds will improve navigation performance by reducing unsafe navigation conditions within the harbor, vessel delays, transportation costs and potential damage to shoreline structures. The dredging will remove approximately 150,000 cubic yards of sediment from the harbor thereby improving the availability and reliability of the navigation channels.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Lorain Harbor is the 145th leading U.S. port with 853,000 tons of material shipped or received in 2010. It is ranked 33rd among the Great Lakes ports. The project provides maintained deep draft navigation channels that facilitate the movement of goods and materials to and from commercial docks. Major stakeholders include the Lorain Port Authority, U.S. Coast Guard, Amcor Marine, American Metal Chemical Corp., Gold Bond/U.S. Gypsum, Jonick Dock & Terminal, Lorain Tubular Co., National Gypsum Co., Republic Technologies Int., and terminal Ready Mix, Inc. Bulk commodities that pass through Lorain Harbor generate approximately \$61,000,000 annually in direct revenue.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Lorain Harbor, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Massillon Local Protection Project, OH

AUTHORIZATION: Section 4 of the Flood Control Act (FCA) of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Massillon Local Protection Project is located in Stark County, OH on the Tuscarawas River. The levee protects the city of Massillon from flooding along the Tuscarawas River. Maintenance of the levee is the joint responsibility of the City of Massillon and the U.S. Army Corps of Engineers. Annual mowing and dam inspections are required.

CONFERENCE AMOUNT FOR FY 2013: \$37,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$41,000 T: \$41,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$41,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to reduce the risk of failure and allow for a thorough inspection to be conducted.

RC: N/A

H: N/A

E: N/A

WS: \$0 – N/A

OTHER INFORMATION: Massillon Local Protection Project has prevented over \$5,000,000 in damages over the course of its operation.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Massillon Local Protection Project, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Michael J. Kirwan Dam and Reservoir, OH

AUTHORIZATION: Flood Control Act of 3 July 1958 (P.L. 85-500), with local cooperation requirements modified by the Flood Control Act of July 1960 (P.L. 86-645)

LOCATION AND DESCRIPTION: Michael J. Kirwan Dam is located on the West Branch of the Mahoning River about 12.0 miles above the junction of the branch and the Mahoning River at Newton Falls, OH. The reservoir is located entirely within Portage County, OH. MJ Kirwan Dam and Reservoir is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,096,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,000 O: \$ 1,125,000 T: \$ 1,127,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,039,000 - Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$50,000 - Operate and maintain recreation facilities that enable picnicking, boating, camping, fishing, and hiking. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$38,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 87 jobs and has prevented more than \$749,301,000 in damages since its completion in 1967. The average annual recreational visits from 2006 through 2011 was 194,162.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River District: Pittsburgh Michael J Kirwan Dam & Reservoir, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Mosquito Creek Lake, OH

AUTHORIZATION: Flood Control Act of 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Mosquito Dam is on Mosquito Creek, 12.6 miles upstream from its junction with the Mahoning River at Niles, OH. The reservoir is located entirely in Trumbull County, OH. Mosquito Creek Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,048,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,126,000 T: \$1,126,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$992,000 - Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$89,000 – Operate and maintain recreation facilities that support boating, camping, swimming, fishing, picnicking, and hiking. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$38,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: \$7,000 – Management and oversight of existing water supply contract with the city of Warren, OH.

OTHER INFORMATION: This project supports approximately 226 jobs and has prevented more than \$415,009,000 in damage since its completion in 1944. Mosquito Creek Lake also stores water and releases it downstream during dry periods to improve water quality and quantity for domestic and industrial use, recreation, aesthetics, and protection of aquatic life. Additionally, the lake serves as a water supply for the City of Warren, Ohio. The average annual recreational visits from 2006 through 2011 was 798,522.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Mosquito Creek Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Muskingum River Lakes, OH

AUTHORIZATION: Section 4 of the Flood Control Act (FCA) of 1938 (P.L. 75-761) as amended by Section 4 of the FCA of 1939 (P.L. 76-396)

LOCATION AND DESCRIPTION: The Muskingum River basin is the largest watershed within the state of Ohio. The river and its tributaries drain 8,051 square miles in all or parts of 24 counties in the southeastern portion of the state. The Muskingum River project includes operation and maintenance of the Muskingum River Lakes including Atwood Lake, Beach City Lake, Bolivar Dam, Charles Mill Lake, Clendening Lake, Dover Dam, Leesville Lake, Mohawk Dam, Mohicanville Dam, Piedmont Lake, Pleasant Hill Lake, Senecaville Lake, Tappan Lake, and Wills Creek Lake.

CONFERENCE AMOUNT FOR FY 2013: \$8,527,000^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$492,000 O: \$8,147,000 T: \$8,639,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$8,287,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management, including required inspections, to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; repair of the rails for the emergency bulkhead #6 at Beach City; replacement of the bulkhead guide rails at Senecaville; and the replacement of the current stoplogs with an aluminum bulkhead at Senecaville. Failure to repair the bulkheads could result in downstream inundation during a flooding event. Failure to replace the stoplogs could result in significant safety concern should the tainter gates fail.

RC: \$326,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$26,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Collectively, the Muskingum River Lake projects have prevented over \$4,204,000,000 in damages over the course of their operation. Project visitations for FY 2012 totaled 5,518,164 and average annual visitation over the past five years was 6,989,523.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Muskingum River Lakes, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: North Branch Kokosing River Lake, OH

AUTHORIZATION: Section 203 of the Flood Control Act of 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: North Branch Kokosing River Lake is located north of Mount Vernon and west of Fredericktown, OH. The project includes operation and maintenance of the North Branch of Kokosing River Lake. Kokosing Dam was built by the U.S. Army Corps of Engineers for flood control, recreation and wildlife management. The crest length of the dam is 1,400 feet. The dam was completed in May 1972. The majority of the property at Kokosing Lake is leased by the Ohio Division of Natural Resources for fish and wildlife management. The Ohio Division of Natural Resources manages the 154-acre lake and 959 acres of public hunting area for a variety of fish and wildlife. The Kokosing Lake Campground, located on the banks of Kokosing Lake, is leased by Muskingum Watershed Conservancy District (MWCD).

CONFERENCE AMOUNT FOR FY 2013: \$467,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$301,000 T: \$301,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$259,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$37,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$5,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Project visitation for FY 2012 totaled 108,997 and average annual visitation over the past five years was 190,038.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River District: Huntington North Branch Kokosing River Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Ohio-Mississippi Flood Control, Ohio

AUTHORIZATION: Section 7 of the FCA of 1944, P.L. 74-58 (58 Stat. 890; 33 U.S.C. 709)

LOCATION AND DESCRIPTION: This project funds the execution of Section 7 of the 1944 Flood Control Act which directs the Corps to conduct lower Ohio/Mississippi Rivers flood control for the primary purpose of protecting the Mississippi River levee system, including the direction of both Corps and Tennessee Valley Authority reservoirs.

CONFERENCE AMOUNT FOR FY 2013: \$1,856,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,849,000 T: \$1,849,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,849,000 - Funding will continue to provide coordinated regional water control management and maintain operational capabilities to perform Flood Risk Management mission and improve flood prediction forecasting, warning and reservoir management through development of new system-wide hydraulic and hydrologic models and technology and physical improvements to the Reservoir Control Center. Other measures includes all policy and technical activities employed in river and reservoir regulation including computer modeling, satellite data collection system, computer and hardware systems, reservoir system analysis, and policy interpretation and implementation and direction of lower Ohio and Mississippi River flood control operations. This project returns on average \$18 million of flood damage reduction benefits for every \$1 million spent. These capabilities were essential in preventing overtopping of the MR&T levee system during the record 2011 Greater Mississippi River Basin flood.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: A minimum of FY 2012 funding levels are needed to continue the regional lower Ohio/Mississippi River water control data system and improvements to the Ohio River HEC-RAS model, which is the primary tool used for making reservoir flood control decisions and issuing public warnings and forecasts and to address improvements identified in After Action Reviews of the 2010 Cumberland System Flood and the 2011 Greater Mississippi River Basin Flood.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: N/A

Ohio-Mississippi Flood Control, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Paint Creek Lake, OH

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Paint Creek Lake is located in Ross and Highland Counties, OH, a tributary of the Scioto River. It is 36.8 miles above the mouth of Paint Creek and 100 miles above the mouth of the Scioto River. The project includes operation and maintenance of Paint Creek Lake. The lake is impounded by an earth and rock fill dam with a central impervious core. Its maximum height is 118 feet with a top length of 700 feet with a gated spillway. The dam was completed in 1974.

CONFERENCE AMOUNT FOR FY 2013: \$1,357,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$15,000 O: \$1,431,000 T: \$1,446,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,118,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$253,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment; and to replace the existing 4WD diesel mule with an electric powered model recharged by the solar array at the project to produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

H: N/A

EN: \$34,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: \$41,000 – Funding provides for routine operation and maintenance for water supply to provide an estimated 4 million gallons per day of water supply for the health, safety and economy of approximately 6,000 citizens in Highland and Bourneville Counties, OH.

OTHER INFORMATION: Paint Creek Lake has prevented over \$152,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 857,688 and average annual visitation over the past five years was 977,230.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Paint Creek Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Roseville Local Protection Project, OH

AUTHORIZATION: Section 4 of the Flood Control Act (FCA) of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Roseville Local Protection Project is located in the village of Roseville, OH, on the Moxahala Creek, a tributary of the Muskingum River, about 9.5 miles southwest of Zanesville, OH. The protection works consist of 7,291 lineal feet of channel improvement, 5,500 lineal feet of levee, a pump station to prevent flooding from internal drainage, and 4 gatewells on outfall sewers that empty into Moxahala Creek. The new channel has a 60 foot bottom width and side slopes of 1 vertical to 2 horizontal, except along the levee where the slopes are 1 to 2.5.

CONFERENCE AMOUNT FOR FY 2013: \$35,000^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$35,000 T: \$35,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$35,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to maintain a clear channel and reduce flood damages.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Roseville Local Protection Project has prevented over \$1,000,000 in damages over the course of its operation.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Sandusky Harbor, OH

AUTHORIZATION: River & Harbor Acts of 1899, 1902, 1919 (P.L. 65-200), 1927, 1935 (P.L. 74-409), 1945 (P.L. 79-14) and 1960 (P.L. 86-645)

LOCATION AND DESCRIPTION: Sandusky Harbor is a deep draft commercial harbor, located on Lake Erie in the city of Sandusky, Erie County, OH, with authorized depths ranging from 21-26 feet.

CONFERENCE AMOUNT FOR FY 2013: \$983,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,440,000 O: \$0 T: \$1,440,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,440,000 - Funding will be used for critical minimum routine maintenance dredging. These funds would improve navigation performance by reducing unsafe conditions within the harbor, vessel delays and transportation costs. The dredging will remove approximately 140,000 cubic yards of sediment from the harbor thereby improving the availability and reliability of the navigation channels.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Sandusky Harbor is the 100th leading U.S. port with 2,304,000 tons of material shipped or received in 2010 and ranked 24th among the Great Lakes Ports. The project provides maintained deep draft navigation channels that facilitate the movement of goods and materials to and from commercial docks. Coal is the major commodity shipped. Major stakeholders include Norfolk Southern, Sandusky Dock Corp., City of Sandusky, George Gradel Co., Cedar Point Amusement Park and commercial ferries. Bulk commodities that pass through Sandusky Harbor generate approximately \$90,000,000 annually in direct revenue.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$50 (X1000). This amount will be used to perform work on the project as follows: Supervisory and administration for maintenance dredging contractual work proceeding into the fall.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Sandusky Harbor, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Toledo Harbor, OH

AUTHORIZATION: River and Harbor Acts of 1910 (P.L. 60-317), 1935 (P.L. 74-409), 1950 (P.L. 81-516), 1954 (P.L. 83-780), 1958 (P.L. 85-500) and 1960 (P.L. 86-645)

LOCATION AND DESCRIPTION: Toledo Harbor is a deep-draft commercial harbor, located at the southwestern corner of Lake Erie, 110 miles west of Cleveland, OH and 42 miles south of Detroit, MI. Authorized depths are 28 feet in the bay, 27 feet in the lower river, and 25 feet in the upper river.

CONFERENCE AMOUNT FOR FY 2013: \$5,472,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$5,290,000 O: \$581,000 T: \$5,871,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,871,000 - Funding will be used for critical minimum routine operation and maintenance for navigation including dredging of the Maumee Bay and Maumee River and project condition surveys. These funds will improve navigation performance by reducing unsafe navigation conditions within the harbor, vessel delays and transportation costs. The dredging will remove approximately 150,000 cubic yards of sediment from the Maumee River and 600,000 cubic yards of sediment from the Maumee Bay thereby improving the availability and reliability of the navigation channels.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Toledo Harbor is the 50th leading U.S. port with 10,720,000 tons of material shipped or received in 2010, and is ranked 7th among the Great Lakes Ports. Toledo Harbor has direct access to inter-modal connections and also functions as a critical harbor of refuge. Cargo includes coal, petroleum, aggregates, metal products, limestone, grain, chemicals, iron ore, steel products, cement, ores, minerals and sugar. Bulk commodities that pass through Toledo Harbor generate approximately \$326,000,000 annual revenue. Major stakeholders include the Toledo-Lucas County Port Authority, City of Toledo, U.S. Coast Guard, St. Mary's Cement Inc., Midwest Terminals of Toledo International, Kuhlman Corporation, The Andersons Inc., Archer-Daniels-Midland Company, Hansen Mueller Co., BP Husky Refining LLC, Arc Terminals Holdings LLC, Shelly Liquid Division, Seneca Petroleum Company, Sunoco MidAmerica M&R, CSX, Lafarge Cement, Arms Trucking Co., Kraft Foods and Ironhead Marine Inc.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$100 (X1000). This amount will be used to perform work on the project as follows: Supervisory and administration for Maumee Bay and Maumee River maintenance dredging contractual work proceeding into the fall.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Buffalo

Toledo Harbor, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Tom Jenkins Dam, OH

AUTHORIZATION: Section 10 of Flood Control Act of 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: Tom Jenkins Dam is located in Athens County, OH, on the East Branch of Sunday Creek, a tributary of the Hocking River. It is 0.3 miles above the mouth of East Branch and 57.2 miles above the mouth of the Hocking River. The project includes operation and maintenance of Tom Jenkins Dam and Burr Oak Reservoir. The lake is impounded by a rolled earth fill dam with a maximum height of 84 feet and a top length of 944 feet. The dam was completed in 1950.

CONFERENCE AMOUNT FOR FY 2013: \$796,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$15,000 O: \$980,000 T: \$995,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$884,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; for risk assessment activities to address mineral extraction activities, including review of Bureau of Land Management documentation, independent subsidence modeling and expert opinion elicitation for barrier dimension determination; and to insulate the office and maintenance shop to produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

RC: \$68,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$7,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: \$36,000 – Funding provides for routine operation and maintenance for water supply to provide an estimated 8 million gallons per day of water supply for the health, safety and economy of approximately 25,000 citizens in Athens and Morgan Counties, Ohio.

OTHER INFORMATION: Tom Jenkins Dam has prevented over \$28,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 259,444 and average annual visitation over the past five years was 440,110.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Tom Jenkins Dam, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: West Fork of Mill Creek Lake, OH

AUTHORIZATION: Flood Control Act of 1946 (P.L. 79-526)

LOCATION AND DESCRIPTION: West Fork Lake is located in Hamilton County, Ohio. The dam is an earth embankment dam, 100 ft high and 1,100 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, and water quality. In addition, it provides a reduction of pumping requirements at the barrier dam of the local protection works at Cincinnati. Recreational development is under lease agreement with the Hamilton County Park District Board.

CONFERENCE AMOUNT FOR FY 2013: \$873,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$939,000 T: \$939,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$852,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$50,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$37,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: N/A

OTHER INFORMATION: FY 2011 flood damages prevented were \$4,110,000, FY 2011 recreation visits were 677,000, and FY 2011 visitor expenditures were \$12,460,000.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

West Fork of Mill Creek Lake, OH

O&M JUSTIFICATION SHEET

PROJECT NAME: William H Harsha Lake, OH

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: William H Harsha Lake is located in Clermont County, Ohio. The dam is earthfill with outlet works, a separate saddle dam and spillway. The dam is 200 ft high and 1,450 ft long. The Saddle Dam is 100 ft high and 2,600 ft long. The project was authorized as a multi-purpose flood control project with additional authorized responsibilities for recreation management, environmental stewardship, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$1,586,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$35,000 O: \$1,191,000 T: \$1,226,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,040,000 – Funding provides for critical minimum routine operation and maintenance of the dam, outlet works and related infrastructure. These funds support execution of our mission to prevent damages to flood-prone areas, property and communities in the floodway, as well as the destructive impacts of floods on human activities within those areas. Critical dam safety programs and activities are also supported with these funds.

RC: \$127,000 – Funding provides for routine operation and maintenance of day-use recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, healthy recreation experiences, and visitor assistance and protection, as well as for real estate functions to support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$53,000 – Funding provides for performance of environmental stewardship activities which protects the health, sustainability and integrity of the public lands associated with this project. Activities include natural resource management practices, environmental evaluations and reviews, shoreline protection, cultural resource investigations, water quality control, boundary line inspection, and encroachment resolution.

WS: \$6,000 – Funding provides for performance of annual activities required to support the negotiation, revision and/or coordination of water supply contracts, and addresses local and congressional interests and concerns for water needs affecting public health and welfare.

OTHER INFORMATION: FY 2011 flood damages prevented were \$10,970,000, FY 2011 recreation visits were 849,000, and FY 2011 visitor expenditures were \$18,350,000.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

William H Harsha Lake, OH

Pennsylvania

O&M JUSTIFICATION SHEET

PROJECT NAME: Allegheny River, PA

AUTHORIZATION: Rivers and Harbors Act 1912 and 1935; Emergency Relief Administration program 1935

LOCATION AND DESCRIPTION: Project consists of the navigable portion of the Allegheny River which extends 72 miles from the Point in Pittsburgh, PA to East Brady, PA. Commercial and recreational navigation is provided from eight locks and dams which are Locks and Dams 2 thru 9 within the 72 mile reach of river, including the CW Bill Young Lock and Dam (formerly Lock and Dam 3).

CONFERENCE AMOUNT FOR FY 2013: \$ 4,317,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 4,892,000 T: \$ 4,892,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,892,000 – Critical minimum routine operation and maintenance of eight navigation locks and dams that provide approximately 72 miles of navigable river. Lock 2, CW Bill Young, and Lock 4 will be operated with three shifts operating twenty-four hours a day and seven days a week. Lock 5 will be operated with two eight-hour shifts (8:15 am – 11:45 pm), seven days per week for commercial and recreational traffic. Locks 6, 7, 8 and 9 will only be available for commercial navigation lockages by appointment and will be closed for all recreation traffic.

FRM: N/A

RC: N/A

HYD: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Allegheny River navigation system serviced an annual average of 2,392,000 tons of cargo from 2006 to 2010. The lower Allegheny River (L/Ds 2-4) has higher use navigation facilities.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Allegheny River, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Conemaugh River Lake, PA

AUTHORIZATION: Flood Control Act of 22 June 1936 (P.L. 74-738), as amended by the Flood Control Act of 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Conemaugh Dam is located on the Conemaugh River, in Indiana and Westmoreland Counties, PA, 7.5 miles upstream from Saltsburg, PA where the Conemaugh River and Loyalhanna Creek join to form the Kiskiminetas River. The reservoir is located in Indiana and Westmoreland Counties, PA. Conemaugh River Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,252,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 164,000 O: \$ 1,229,000 T: \$ 1,393,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,260,000 - Accomplish flood reduction mission for critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management. Repair #12 Emergency Gate Stem as continued usage will result in the failures of the seal and cylinder, making the gate inoperable. The cylinder rod has a deep score which leaks severely when scored area passes through seal.

RC: \$69,000 – Operate and maintain recreation facilities, including a picnic area with two pavilions, a playground, a visitor information center, and nature and hiking trails. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$64,000 - Accomplish shoreline management, threatened/endangered species surveillance, and cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure the sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 48 jobs and has prevented more than \$2,223,540,000 in damages since its completion in 1953. The average annual recreational visits from 2006 through 2011 was 96,208.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River District: Pittsburgh

Conemaugh River Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Crooked Creek Lake, PA

AUTHORIZATION: Flood Control Act of 22 June 1936 (P.L. 74-738), as amended by the Flood Control Act of 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Crooked Creek Dam is located on Crooked Creek, in Armstrong County, PA, 7.2 miles above the junction of the creek with the Allegheny River near Ford City, PA. Crooked Creek Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,632,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 3,000 O: \$ 1,349,000 T: \$ 1,352,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,005,000 - Accomplish flood reduction mission providing critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$320,000 – Operate and maintain recreation facilities, including tent, trailer, and group camping areas, swimming areas, picnic shelters, and hiking, snowmobile, and horseback riding trails, as well as one boat launch ramp for fishing and water skiing. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$27,000 - Accomplish shoreline management, threatened/endangered species, surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 110 jobs and has prevented more than \$548,302,000 in damage since its completion in 1940. In addition to flood control, Crooked Creek also stores water and releases it downstream during dry periods to improve water quality and quantity for domestic and industrial use, navigation, recreation, aesthetics, and protection of aquatic life. The average annual recreational visits from 2006 through 2011 was 317,286.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Crooked Creek Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: East Branch Clarion River Lake, PA

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761) and 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: East Branch Dam is on the East Branch of the Clarion River, 7.5 miles upstream from its junction with the West Branch of the Clarion River at Johnsonburg, PA. The reservoir is located entirely in Elk County PA. East Branch Clarion River Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,725,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 3,000 O: \$ 1,191,000 T: \$ 1,194,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,013,000 – Accomplish flood reduction mission for critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$172,000 – Operate and maintain recreation facilities for camping, picnicking on interpretive trail, and boating access for fishing and water skiing. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$9,000 – Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 94 jobs and has prevented more than \$91,042,000 in damages since its completion in 1951. The average annual recreational visits from 2006 through 2011 was 214,611.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

East Branch Clarion River Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Johnstown, PA

AUTHORIZATION: Flood Control Acts of 1936 (P.L. 74-738) and 1937

LOCATION AND DESCRIPTION: The project is located along the Conemaugh River, Little Conemaugh River, and Stonycreek River at Johnstown, in Cambria County, PA. Johnstown, PA is a Local Flood Protection Project. The major rehabilitation of the nine mile long local flood protection project along the three rivers in Johnstown, PA was authorized in 1991. The approved rehabilitation report included operation and maintenance funded repairs. These repairs mainly consist of sediment removal, channel clearing, concrete slope lining, and toe repairs, as well as repairs to safety railing.

CONFERENCE AMOUNT FOR FY 2013: \$ 41,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 64,000 T: \$ 64,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$64,000 – Assure safety, structure, integrity, and operational adequacy through inspection of the project.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project has prevented more than \$814,620,000 in damage since its completion in 1939.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Johnstown, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Kinzua Dam and Allegheny Reservoir, PA

AUTHORIZATION: Flood Control Act of 1936 (P.L. 74-738), as amended by the Flood Control Act of 28 June 1938 (P.L. 75-761) and 18 August 1941

LOCATION AND DESCRIPTION: Kinzua Dam is located on the Allegheny River in Warren County, PA, approximately 198 miles above the mouth of the river at Pittsburgh, PA. The reservoir is located in Warren and McKean Counties, PA, and Cattaraugus County, NY Kinzua Dam and Allegheny Reservoir, PA is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,777,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 4,000 O: \$ 1,321,000 T: \$ 1,325,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,088,000 - Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$218,000 – Operate and maintain recreation facilities; the lake has nine boat ramps, numerous campgrounds, extensive trails, picnic areas, and a visitor information center. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$19,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 85 jobs and has prevented more than \$1,266,049,000 in damage since its completion in 1965. The project also houses a hydroelectric power plant operated by the First Energy Corporation. Its peak capacity is 400,000 kilowatts per hour. The reservoir also provides water to be released during dry periods. These releases have the effect of reducing pollution and improving the quality and quantity of water for domestic, industrial and recreation uses. Flow regulation also helps to maintain navigable depths for commercial traffic on the Allegheny and upper Ohio Rivers. The average annual recreational visits from 2006 through 2011 was 271,945.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River District: Pittsburgh Kinzua Dam and Allegheny Reservoir, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Loyalhanna Lake, PA

AUTHORIZATION: Flood Control Act of 22 June 1936 (P.L. 74-738), as amended by Flood Control Act of 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Loyalhanna Dam is on Loyalhanna Creek, 4.75 miles above its junction with the Conemaugh River at Saltsburg, PA, forming the Kiskiminetas River. The reservoir is located entirely in Westmoreland County, PA. Loyalhanna Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,316,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,400,000 O: \$ 1,323,000 T: \$ 2,723,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,563,000 - Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety related analyses and studies, and real estate outgrant management. Perform repairs to service bridge and dam to restore structural integrity and maintain operability of dam service bridge. The concrete and steel on the bridge is in severe state of deterioration. The service bridge is critical to the operation of the dam and supports the use of gantry cranes for crest gate movements.

RC: \$128,000 – Operate and maintain recreation facilities, including an unique self-guided boating trail, a picnic area, campgrounds at Bush Run and Kiski areas, and two boat launching ramps. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$32,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 73 jobs and has prevented more than \$529,045,000 in damages since its completion in 1943. The average annual recreational visits from 2006 through 2011 was 198,865.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Loyalhanna Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Mahoning Creek Lake, PA

AUTHORIZATION: Flood Control Act of 22 June 1936 (P.L. 74-738), as amended by the Flood Control Act of 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Mahoning Dam is on Mahoning Creek in Armstrong County, PA 22.9 miles upstream from the junction of the creek and the Allegheny River. The reservoir is located in Armstrong, Indiana and Jefferson Counties, PA. Mahoning Creek Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 3,333,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,000 O: \$ 1,166,000 T: \$ 1,168,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,095,000 - Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$62,000 - Operate and maintain recreation facilities, including picnic areas, trails, boat launch ramps, and campsites. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$11,000 – Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 55 jobs and has prevented more than \$686,441,000 in damage since its completion in 1941. The average annual recreational visits from 2006 through 2011 was 91,512.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Mahoning Creek Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Monongahela River, PA and WV

AUTHORIZATION: Rivers and Harbors Act, 1902, 1905, 1909, 1922, 1930 and 1950; WRDA 1986 and 1992; Supplemental Appropriations Act 1985

LOCATION AND DESCRIPTION: Project consists of the navigable portion of the Monongahela River for the entire 128.7 miles of river from just above Fairmont, WV to the Point at Pittsburgh, PA. The nine navigation locks and dams are Braddock, Grays Landing, Hildebrand, Maxwell, Morgantown, Opekiska, Point Marion and Locks and Dam 3 and 4.

CONFERENCE AMOUNT FOR FY 2013: \$13,267,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$300,000 O: \$10,735,000 T: \$11,035,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$11,035,000 – Critical minimum routine operation and maintenance of nine navigation locks and dams. Project provides approximately 129 miles of navigable river including nine navigation facilities. Perform critical dredging and debris removal at lock chambers and approaches to avoid vessel groundings and significant disruptions to a high-use commercial navigation system that would result in increased transportation costs associated with delays.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Commercial and recreational navigation is provided via nine locks and dams within the 128.7 mile reach of river. An annual average of 24,908,000 tons of cargo traffic was serviced by the Monongahela navigation system from 2006 to 2010. The locks between Braddock and Point Marion are operated 24 hours a day/365 days a year. The upper Monongahela River locks at Morgantown, Hildebrand, and Opekiska are being operated at greatly reduced hours due to limited commercial traffic.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Monongahela River, PA & WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Ohio River Locks and Dams, PA, OH, and WV

AUTHORIZATION: Rivers and Harbors Act dated 1909 and 1918

LOCATION AND DESCRIPTION: Project consists of the navigable portion of the Ohio River from the Point at Pittsburgh, PA for 127.2 miles of the river downstream to New Martinsville, WV. Commercial and recreational navigation is provided from six locks and dams which are Emsworth, Dashields, Montgomery, New Cumberland, Pike Island, and Hannibal within the 127.2 mile reach of river.

CONFERENCE AMOUNT FOR FY 2013: \$20,362,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$15,939,000 O: \$14,966,000 T: \$30,905,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$30,905,000 – Critical minimum routine operation and maintenance of 127.2 miles of navigable river including six navigation locks and dams. Maintenance funds will be used to conduct emergency repairs of Montgomery dam lift gates and install one lift gate (out of eight) which is in active failure at Montgomery Dam. Install four floating mooring bits and track extensions in the main chamber and replace hydraulic cylinders at New Cumberland. Overhaul hydraulic cylinders and piping and replace sector pins at Pike Island. Fabricate struts and dewater Dashields main chamber to repair miter sill, pintle base, and anchorage. Replace lock hydraulic controls, deteriorated hydraulic cylinders, and leaking pipe system at Emsworth.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Project provides approximately 127.2 miles of navigable river including six navigation facilities. Emsworth is a Dam Safety Action Class (DSAC) I rated dam and Montgomery Dam is a DSAC II rated dam. The six locks and dam structures on the Ohio River have an average age of 62 years (82 years for the upper three locks and 43 years for the lower three locks). This project funds the operation and maintenance of the three oldest structures on the mainstem of the Ohio River. These structures are currently being studied for major capital improvements in the Upper Ohio Navigation Study.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Ohio River Locks and Dams,
PA, OH, & WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Ohio River Open Channel Work, PA, OH, & WV

AUTHORIZATION: Rivers and Harbors Act dated 1909 and 1918

LOCATION AND DESCRIPTION: The project is located along the Ohio River from its beginning at the confluence of the Monongahela and Allegheny Rivers, Pittsburgh, PA to river mile 127.2 at New Martinsville, WV. The Ohio River has an authorized navigation channel depth of nine (9) feet. This project includes dredging activities necessary to maintain the authorized navigation channel depth ensuring commercial navigation. The six locks and dams are Emsworth, Dashields, Montgomery, New Cumberland, Pike Island, and Hannibal.

CONFERENCE AMOUNT FOR FY 2013: \$ 682,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$359,000 T: \$359,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$359,000 - Routine maintenance removal of sediment, debris, and drift to maintain an authorized navigation channel between the six upper Ohio River navigation facilities.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Ohio River Open Channel Works,
PA, OH, & WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Punxsutawney, PA

AUTHORIZATION: Flood Control Act of 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: The project is located at Punxsutawney, in Jefferson County, PA, on Mahoning Creek, 52 miles above its mouth and 30 miles above Mahoning Creek Lake Dam. Punxsutawney, PA is a local flood protection project. The project provides flood protection by channel enlargement, dikes, and walls. Improvement is designed to accommodate discharges 20% greater than that of maximum flood of record.

CONFERENCE AMOUNT FOR FY 2013: \$ 35,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$34,000 T: \$34,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$34,000 - Assure safety, structure, integrity, and operational adequacy through inspection of the project.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports approximately 7 jobs and has prevented more than \$98,684,000 in damage since its completion in 1940.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Punxsutawney, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Shenango River Lake, PA

AUTHORIZATION: Flood Control Act of 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Shenango Dam is located on the Shenango River about 0.8 mile above Sharpsville, PA and about 34.2 miles above its junction with the Mahoning River near New Castle, PA, forming the Beaver River. The reservoir is located in Mercer County, PA, and Trumbull County, OH. Shenango River Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,203,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,718,000 T: \$1,718,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$839,000 – Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$772,000 – Operate and maintain recreation facilities that supports a full range of activities including camping, swimming, boating, fishing, hunting, and picnicking, as well as providing trails for hiking and nature interpretation. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$107,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 175 jobs and has prevented more than \$171,126,000 in damage since its completion in 1965. The average annual recreational visits from 2006 through 2011 was 535,114.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Shenango River Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Tionesta Lake, PA

AUTHORIZATION: Flood Control Act of 22 June 1936 (P.L. 74-738), as amended by Flood Control Act 28 June 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Tionesta Dam is located on Tionesta Creek, 1.17 miles above the junction of the creek with the Allegheny River at Tionesta, PA, and about 78 miles northeast of Pittsburgh, PA. The reservoir is located entirely in Forest County, PA. Tionesta Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,735,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,939,000 T: \$1,939,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,415,000 - Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$490,000 – Operate and maintain recreation facilities supporting boating, camping, fishing, hunting, picnicking, hiking and interpretation trails, as well as a visitor center. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$34,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 238 jobs and has prevented more than \$570,521,000 in damage since its completion in 1940. The average annual recreational visits from 2006 through 2011 was 732,541.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Tionesta Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Union City Lake, PA

AUTHORIZATION: Flood Control Act of 23 October 1962 (P.L. 87-4)

LOCATION AND DESCRIPTION: Union City Dam is located on French Creek, about 73.9 miles upstream from its junction with the Allegheny River at Franklin, PA. The reservoir is located entirely in Erie County, PA. Union City Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 449,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 450,000 T: \$ 450,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$406,000 - Accomplish flood reduction mission for critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$40,000 – Operate and maintain recreation facilities, including a picnic and fishing area. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$4,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, and invasive species eradication and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 16 jobs and has prevented more than \$80,084,000 in damages since its completion in 1971. The average annual recreational visits from 2006 through 2011 was 28,671.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Union City Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Woodcock Creek Lake, PA

AUTHORIZATION: Flood Control Act of 23 October 1962 (P.L. 87-4)

LOCATION AND DESCRIPTION: Woodcock Dam is located on Woodcock Creek, 3.6 miles upstream from its confluence with French Creek at a point 37.1 miles up French Creek from its junction with the Allegheny River at Franklin, PA. The reservoir is located entirely within Crawford County, PA. Woodcock Creek Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,419,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 1,102,000 T: \$ 1,102,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$922,000 – Accomplish flood reduction mission for critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$171,000 – Operate and maintain recreation facilities, including a designated national recreational trail, boating, swimming, camping, fishing, hunting, and picnicking. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$9,000 – Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: N/A

OTHER INFORMATION: This project supports approximately 85 jobs and has prevented more than \$33,723,000 in damages since its completion in 1974. The average annual recreational visits from 2006 through 2011 was 284,797.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Woodcock Creek Lake, PA

O&M JUSTIFICATION SHEET

PROJECT NAME: Youghiogheny River Lake, PA and MD

AUTHORIZATION: Flood Control Act of 28 June 1938 (P.L 75-761)

LOCATION AND DESCRIPTION: The dam is located on the Youghiogheny River about 74.2 miles above its junction with the Monongahela River at McKeesport, PA, and 1.2 miles above Confluence, PA. The reservoir is located in Fayette and Somerset Counties, PA, and Garrett County, MD. Youghiogheny River Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,451,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 11,000 O: \$ 2,136,000 T: \$ 2,147,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,567,000 – Accomplish flood reduction mission for critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management. Replace roof on maintenance building which presents an opportunity to provide natural lighting and reduce energy usage.

RC: \$487,000 – Operate and maintain recreation facilities including boating, water skiing, swimming, camping, fishing, hunting, and picnicking. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$86,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: \$7,000 – Manage water storage agreement and coordination with The Municipal Authority of Westmoreland County, PA.

OTHER INFORMATION: This project supports approximately 160 jobs and has prevented more than \$567,723,000 in damage since its completion in 1943. In addition to flood control, the dam helps to alleviate pollution problems by releasing additional water downstream during low water periods. Increased stream flow improves water quality by diluting polluted waters entering the rivers from towns, industries, and coal mine drainage. The increased stream flow also improves the navigability of the Monongahela and upper Ohio Rivers for commercial navigation, and enables state permitted water withdrawals from the Youghiogheny River downstream of the reservoir. The average annual recreational visits from 2006 through 2011 was 495,239.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Youghiogheny River Lake, PA & MD

Tennessee

O&M JUSTIFICATION SHEET

PROJECT NAME: Center Hill Lake, TN

AUTHORIZATION: Section 1, River and Harbor Act of 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: Center Hill Lake is located in eastern Middle Tennessee, about 80 miles east of Nashville, TN. The project consists of a combination earth and concrete gravity-type dam, a hydropower plant and a flood storage reservoir with recreation and stewardship areas.

CONFERENCE AMOUNT FOR 2013: \$5,299,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,849,000 O: \$5,436,000 T: \$7,285,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$872,000 - funding provides for critical minimum routine operation and maintenance.

RC: \$2,186,000- funding provides critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, day use areas and campgrounds. Funding will also be used to supply station power to the Left Bank Area, including Long Branch Campground & Day Use Area.

H: \$4,008,000 - funding provides for routine operation and maintenance for hydroelectric power plant and hydropower joint costs for operation and maintenance of the dam, as well as engineering and design for the excitation system. Funds would allow power plant and dam to accomplish assigned missions of providing low cost reliable electric power by maintaining optimum availability and peak availability and maintaining control of the river.

EN: \$175,000 - funding provides for the management of natural resources including operation, safety, environmental compliance, maintenance of the project boundary line, shoreline management, and cultural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevent loss and degradation of more than 39,000 acres of project lands and water.

WS: \$44,000 - funding provides for vital coordination with all water supply users for continuing major rehabilitation work, to include a determination of annual operations and maintenance costs as well as repair, rehabilitation and replacement costs for ongoing major rehabilitation work. Revenues returned to the U.S. Treasury under Water Supply Agreement collections for FY12 is \$233,000.

OTHER INFORMATION: Hydropower plant generates 381,000 MWH of energy annually, which is enough supply for 32,000 homes. Center Hill Lake ranks #20 of 422 among the Corps for recreation with 3,281,165 project visits in FY11 with an associated \$77,070,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Center Hill Lake, TN

O&M JUSTIFICATION SHEET

PROJECT NAME: Cheatham Lock and Dam, TN

AUTHORIZATION: Section 1, River and Harbor Act of 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: Cheatham Lake is located in Middle Tennessee, 42 river miles downstream of Nashville, TN. The project consists of a 110' x 800' lock, concrete gravity-type dam, hydropower plant and recreation and stewardship areas.

CONFERENCE AMOUNT FOR FY 2013: \$8,369,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$54,000 O: \$6,957,000 T: \$7,011,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,862,000 - funding provides for critical minimum routine operation and maintenance for navigation; critical fleet maintenance support service; navigation portion of joint costs for data acquisition for dam safety, FRM operations and RE costs to resolve encroachments. These funds would improve navigation performance by providing maintenance of locks & channels. No alternate navigation route is available. Approx 3.5M tons coal shipped thru lock providing 4.7B KWH to electrical grid. Nashville industries depend on bulk commodity delivery for raw materials.

FRM: N/A

RC: \$767,000 - funding provides critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, day use areas & campgrounds.

H: \$2,220,000 - funding provides for routine operation and maintenance for hydroelectric power plant. These funds would allow power plant to accomplish assigned mission of providing low cost reliable electric power by maintaining high availability and peak availability.

EN: \$140,000 - funding provides for management of natural resources including operation, safety, environmental compliance, maintenance of the project boundary line, shoreline management, and cultural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevent loss and degradation of more than 10,000 acres to project lands and water.

WS: \$22,000 - funding provides for processing any new intake requests or increases to current withdrawals by existing water supply users at this Lock and Dam project.

OTHER INFORMATION: Cheatham Lock processed 8,635,282 tons of waterborne commerce in 2011. Coal & aggregates are dominant commodities. Electric utilities serving the Southeast move coal from mines in Wyoming & Kentucky thru Cheatham. Construction companies move cement & aggregates and steel fabricators move iron & steel products into the Cumberland Valley. These & other shippers realize average annual transportation cost savings of more than \$82M. Hydropower plant generates 153,000 MWH of energy annually - enough supply for 13,000 homes. Cheatham Lake ranks #38 of 422 among the Corps for recreation with 2,166,570 project visits in FY11 with \$44,680,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Cheatham Lock and Dam, TN

O&M JUSTIFICATION SHEET

PROJECT NAME: Cordell Hull Dam and Reservoir, TN

AUTHORIZATION: Section 1, River and Harbor Act of 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: Cordell Hull Dam & Reservoir is located on the Cumberland River at river mile 313.5. The project consists of an 84' x 400' lock, concrete gravity and earth fill dam, hydropower plant and recreation and stewardship areas.

CONFERENCE AMOUNT FOR FY 2013: \$6,430,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$204,000 O: \$6,788,000 T: \$6,992,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$687,000 - Funding provides for critical minimum routine operation and maintenance. Lock must remain operational for maintenance of dam and hydroelectric facility.

FRM: N/A

RC: \$2,799,000 - Funding provides critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, day use areas and campgrounds; as well as joint costs associated with operation of the dam structure, spillway gates, intake and outlet works for reservoir regulation; removal and disposal of trash and debris on or in vicinity of dam structures; dam safety/failure training and contingency plans, etc.

H: \$3,256,000 - Funding provides for routine operation and maintenance for hydroelectric power plant and hydropower's part of joint costs for operation and maintenance of the dam. Funds would allow power plant and dam to accomplish assigned missions of providing low cost reliable electric power by maintaining high availability and peak availability and to maintain control of the river.

EN: \$239,000 - Funding provides for the management of natural resources including operation, safety, environmental compliance, maintenance of the project boundary line, shoreline management, and cultural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevent loss and degradation of more than 14,000 acres of project lands and water.

WS: \$11,000 - Funding provides for processing any new intake requests and increases to current withdrawals by existing water supply users at this Lock and Dam project.

OTHER INFORMATION: Hydropower plant generates 363,000 MWH of energy annually, which is enough supply for 30,250 homes. Cordell Hull Reservoir ranks #29 of 422 among the Corps for recreation with 2,672,802 project visits in FY11 with an associated \$53,770,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Cordell Hull Dam and Reservoir, TN

O&M JUSTIFICATION SHEET

PROJECT NAME: Dale Hollow Lake, Tennessee

AUTHORIZATION: Section 1, River and Harbor Act of 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: Dale Hollow Lake, TN project is located in northeastern Middle Tennessee, near Celina, TN. The project consists of a concrete gravity dam, a hydropower plant and a flood storage reservoir with recreation and stewardship areas.

CONFERENCE AMOUNT FOR 2013: \$6,650,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$904,000 O: \$6,391,000 T: \$7,295,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$715,000 - Funding provides for critical minimum routine operation and maintenance.

RC: \$2,170,000 - Funding provides critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, day use areas and campgrounds. Funding is also included to design and construct a new septic system to replace two existing sand filter systems located below the dam.

H: \$4,148,000 - Funding provides for routine operation and maintenance for hydroelectric power plant and hydropower's part of joint costs for operation and maintenance of the dam. Funds allow power plant and dam to accomplish assigned missions of providing low cost reliable electric power by maintaining high availability and peak availability and maintaining control of the river.

EN: \$232,000 - Funding provides for the management of natural resources including operation, safety, environmental compliance, maintenance of the project boundary line, and cultural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevent loss and degradation of more than 52,000 acres of project lands and water.

WS: \$30,000 - Funding provides for evaluating any new intake requests or requests to increase existing withdrawals. Existing water supply agreements require determining the O&M costs each fiscal year and coordinating with users for payment. In addition, these contracts need to be updated every five years to reflect the interest rate changes. Revenues collected and sent to the U.S. Treasury in FY12 under these contracts was \$39,000.

OTHER INFORMATION: Hydropower plant generates 126,000 MWH of energy annually, which is enough supply for 10,500 homes. Dale Hollow Lake ranks #26 of 422 among the Corps for recreation with 2,824,267 project visits in FY11 with an associated \$67,540,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Dale Hollow Lake, TN

O&M JUSTIFICATION SHEET

PROJECT NAME: J Percy Priest Dam & Reservoir, TN

AUTHORIZATION: Section 1, River and Harbor Act of 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: J Percy Priest Dam & Reservoir, TN is located on the Stones River, 6.8 miles above its confluence with Cumberland River (mile 205.9) in Davidson County, TN. The project consists of a combination earth and concrete gravity dam, a hydropower plant and a flood storage reservoir with recreation and stewardship areas.

CONFERENCE AMOUNT FOR FY 2013: \$4,622,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$54,000 O: \$4,768,000 T: \$4,822,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$734,000 - Funding provides for critical minimum routine operation and maintenance at minimum levels.

RC: \$3,003,000 - Funding provides critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, day use areas and campgrounds and also provides for joint costs associated with operation of dam structure, spillway gates, intake and outlet works for reservoir regulation; removal and disposal of trash and debris on or in vicinity of dam structures; dam safety/failure training and contingency plans, etc.

H: \$813,000 - Funding provides for routine operation and maintenance for hydroelectric power plant and hydropower joint costs for operation and maintenance of dam. Funds would allow power plant and dam to accomplish missions of providing low cost reliable electric power by maintaining high availability and peak availability and to maintain control of the river.

EN: \$137,000 - Funding provides for the management of natural resources including operation, safety, environmental compliance, maintenance of the project boundary line, and cultural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevent loss and degradation of more than 33,000 acres of project lands and water.

WS: \$135,000 – A water supply reallocation study is currently underway per terms of settlement agreement with the town of Smyrna. Existing water supply agreements require determining the O&M costs each fiscal year and coordinating with users for payment. Revenues returned to the U.S. Treasury under Water Supply Agreements for FY12 was \$81,000.

OTHER INFORMATION: Hydropower plant generates 75,000 MWH of energy annually, which is enough supply for 6,250 homes. J. Percy Priest ranks #7 of 422 among the Corps for recreation with 5,993,596 project visits in FY11 with an associated \$120,520,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$250 (X1000). This amount will be used to perform work on the project as follows: supervision and administration of the Greenway contract.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

J. Percy Priest Dam and Reservoir, TN

O&M JUSTIFICATION SHEET

PROJECT NAME: Old Hickory Lock and Dam, TN

AUTHORIZATION: Section 1, River and Harbor Act of 1946 (P.L. 79-525)

LOCATION AND DESCRIPTION: Old Hickory Lock and Dam is located in Metropolitan Nashville Davidson County, TN. The project consists of an 84' by 400' lock, concrete gravity and earth fill dam, hydropower plant and recreation and stewardship areas.

CONFERENCE AMOUNT FOR FY 2013: \$9,755,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$529,000 O: \$9,316,000 T: \$9,845,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,979,000 - Funding provides for critical minimum routine operation and maintenance for navigation; critical fleet maintenance; navigation costs for data acquisition for dam safety, flood risk management operations and Real Estate to resolve encroachments, and a new tow haulage unit. Funds would improve navigation performance by providing maintenance of locks and channels, thus reducing industry delays.

FRM: N/A

RC: \$1,203,000 - Funding provides for critical health and safety maintenance and services at minimally acceptable levels for designated recreation areas, including access points, overlooks, day use areas and campgrounds.

H: \$3,785,000 - Funding provides for routine operation and maintenance for hydroelectric power plant and hydropower joint costs for operation and maintenance of the dam. Funds would allow power plant and dam to accomplish missions of providing low cost reliable electric power by maintaining high availability and peak availability and maintain control of the river.

EN: \$843,000 – Funding provides sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and prevents loss and degradation of more than 26,000 acres of project lands and water. Funding is also included to update the project's Master Plan.

WS: \$35,000 - Funding provides for evaluating all new intake requests' impacts to authorized purposes. It also provides for the necessary coordination with other District elements in order to process the required real estate easements and other regulatory permits.

OTHER INFORMATION: Old Hickory Lock processed 4,778,882 tons of waterborne commerce in 2011. Coal and industrial chemicals are dominant commodities. Shippers realize average annual transportation cost savings of more than \$27,400,000. Navigation through Old Hickory Lock is the only coal fuel source for one of TVA's major electric generating stations, Gallatin Steam Plant. Hydropower plant generates 482,000 MWH of energy annually, which is enough supply for 40,200 homes. Ranks #3 of 422 among Corps for recreation with 7,707,214 project visits in FY11 with an associated \$172,160,000 in trip spending.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Old Hickory Lock and Dam, TN

O&M JUSTIFICATION SHEET

PROJECT NAME: Tennessee River, TN

AUTHORIZATION: Tennessee Valley Authority Act of 1933. (P.L. 73-17)

LOCATION AND DESCRIPTION: Formed by the junction of French Broad and Holston Rivers in eastern Tennessee, the river flows southwest into northern Alabama, in westerly course across north Alabama, to the northeast boundary of Mississippi, north across Tennessee and Kentucky, entering Ohio River at Paducah, Kentucky. Tennessee River navigation system has 10 locks and 780 miles of navigable channel. There are 150 terminals (13 municipal, 15 governments and 122 private). A total of 79 terminals have railroad connections. Principal commodities are petroleum products, stone, sand, gravel, coal, coke, grain, chemicals, iron and steel.

CONFERENCE AMOUNT FOR FY 2013: \$20,726,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$4,035,000 O: \$18,640,000 T: \$22,675,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$22,675,000 – Funding provides for critical minimum routine operation and maintenance for navigation, critical fleet maintenance support service and maintenance dredging. These funds would improve navigation performance by providing maintenance of locks and channels, restoring project dimensions to safe levels and preventing damage of vessels and destruction of the waterway environment.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Locks on the Tennessee River processed 39,222,000 tons in 2011 and is the most economical means of bulk material transport for 780 miles of navigation channel. The average age of locks is 59 years. There is considerable river use for military and rocket booster shipments and oversized components such as nuclear steam generators. The Tennessee Valley Authority heavily uses barge transportation to service hydroelectric, coal, steam and nuclear plants. The Power Service shop at Muscle Shoals performs maintenance on dam and lock components for multiple Corps of Engineers Districts.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$506 (X1000). This amount will be used to perform work on the project as follows: N/A. This amount is earmarked for Guntersville Landing, AL and will not be used.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Nashville

Tennessee River, TN

Virginia

O&M JUSTIFICATION SHEET

PROJECT NAME: John W. Flannagan Dam and Reservoir, VA

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: John W. Flannagan Dam and Reservoir is located in Dickenson County, VA and situated on the Pound River, a tributary of the Russell Fork of the Levisa Fork of the Big Sandy River. It is 1.8 miles above the mouth of Pound River and 150.0 miles above the mouth of the Big Sandy River. The project includes operation and maintenance of John W. Flannagan Dam and Reservoir. The lake is impounded by a rockfill dam with a central impervious core, with a maximum height of 250 feet, and a top length of 916 feet. The dam was completed in 1964.

CONFERENCE AMOUNT FOR FY 2013: \$2,608,000 ^{2/}

BUDGET FOR FY 2014: M: \$55,000 O: \$2,073,000 T: \$2,128,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,375,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management, including required inspections, to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and replacement of the outdated heat pump with a high efficiency geothermal heat pump at the office/shop to supplement energy requirements, produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

RC: \$661,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$51,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: \$41,000 – Funding provides for routine operation and maintenance for water supply to provide an estimated 10 million gallons per day of water supply for the health, safety and economy of approximately 30,000 citizens in Dickenson, Wise, and Buchanan Counties, Virginia.

OTHER INFORMATION: John W. Flannagan Dam and Reservoir has prevented over \$285,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 355,594 and average annual visitation over the past five years was 429,035.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

John W. Flannagan Dam and
Reservoir, VA

O&M JUSTIFICATION SHEET

PROJECT NAME: North Fork of Pound River Lake, VA

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: North Fork of Pound River Lake is located in Wise County, VA, on the North Fork of the Pound River. The Pound River is a tributary of the Russell Fork of the Levisa Fork of the Big Sandy River, 1.1 miles above the mouth of North Fork of Pound River and 184 miles above the mouth of the Big Sandy River. The project includes operation and maintenance of North Fork of Pound River Lake. The lake is impounded by a rockfill dam with central impervious core with a height of 122 feet and length measuring 600 feet. The dam was completed in January 1966.

CONFERENCE AMOUNT FOR FY 2013: \$547,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$547,000 T: \$547,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$411,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$100,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: N/A

WS: \$36,000 – Funding provides for routine operation and maintenance for water supply to provide an estimated 0.3 million gallons per day of water supply for the health, safety and economy of approximately 1,000 citizens for the Town of Pound, VA.

OTHER INFORMATION: North Fork of Pound River Lake project has prevented over \$16,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 94,342 and average annual visitation over the past five years was 99,206.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

North Fork of Pound River Lake, VA

West Virginia

O&M JUSTIFICATION SHEET

PROJECT NAME: Beech Fork Lake, WV

AUTHORIZATION: Section 203 of Flood Control Act of 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: The project is located in Wayne County, WV on Beech Fork of Twelvepole Creek. It is 3.7 miles above the mouth and 2 miles southeast of Lavalette, WV. The project includes operation and maintenance of Beech Fork Lake. The lake is impounded by a rolled earth fill dam with a maximum height of 86 feet, and a crest length of 1,080 feet. The dam was completed in February 1977.

CONFERENCE AMOUNT FOR FY 2013: \$1,648,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,472,000 T: \$1,472,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$997,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management, including required inspections, to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and for the performance of an emergency exercise as an Interim Risk Reduction Measure.

RC: \$441,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$34,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Beech Fork Lake has prevented over \$21,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 690,355 and average annual visitation over the past five years was 1,161,441.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Beech Fork Lake, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Bluestone Lake, WV

AUTHORIZATION: Section 5 of the Flood Control Act (FCA) of 1936 (P.L. 74-738) as amended by Section 4 of the FCA 1938 (P.L. 75-761) incorporating the Executive Order of the President 7183A, September 12, 1935

LOCATION AND DESCRIPTION: Bluestone Lake is located in Summers County, WV on the New River, a tributary of the Kanawha River; 64.8 miles above the mouth of the New River. The project includes operation and maintenance of Bluestone Lake. The lake is impounded by a concrete gravity dam with a gated spillway. The top length of the dam is 2,048 feet with a maximum height of 165 feet. The dam was completed in December 1947.

CONFERENCE AMOUNT FOR FY 2013: \$1,885,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,914,000 T: \$1,914,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,556,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management, including required inspections, to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and for accomplishment of Interim Risk Reduction Measures including performing an emergency exercise and updating the consequence study and developing an Environmental Assessment to defined post Phase 3 (penstocks spillway) and post Phase 4 (additional anchors) interim operations based upon modifications to the project being accomplished through the Dam Safety Assurance program.

RC: \$317,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$41,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Bluestone Lake has prevented over \$2,137,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 1,513,774 and average annual visitation over the past five years was 1,730,219.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Bluestone Lake, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Burnsville Lake, WV

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Burnsville Lake is located in Braxton County, WV on the Little Kanawha River. It is 124.2 miles above its confluence with the Ohio River and approximately 3 miles above the town of Burnsville, WV. The project includes operation and maintenance of Burnsville Lake. The lake is impounded by a rockfill embankment with impervious core dam with a gated spillway. The crest length of the dam is 1,400 feet. The dam was completed in January 1976.

CONFERENCE AMOUNT FOR FY 2013: \$2,776,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,564,000 T: \$2,564,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,492,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and for the performance of an emergency exercise as an Interim Risk Reduction Measure.

RC: \$969,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$103,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Burnsville Lake has prevented over \$151,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 797,462, and average annual visitation over the past five years was 738,285.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Burnsville Lake, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: East Lynn Lake, WV

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: East Lynn Lake is located on the East Fork of Twelvepole Creek, 10 miles above the mouth of East Fork and 42 miles above the mouth of Twelvepole Creek. The project includes operation and maintenance of East Lynn Lake. The lake is impounded by a rolled earth fill dam with an uncontrolled saddle spillway. The top length of the dam is 652 feet. The dam was completed in April 1971.

CONFERENCE AMOUNT FOR FY 2013: \$2,052,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,310,000 T: \$2,310,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,655,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management, including required inspections, to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and for risk assessment activities to address mineral extraction at the project, including review of Bureau of Land Management documentation, independent subsidence modeling and expert opinion elicitation for barrier dimension determination.

RC: \$577,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$78,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: East Lynn Lake has prevented over \$86,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 400,172 and average annual visitation over the past five years was 428,596.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

East Lynn Lake, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Elkins, WV

AUTHORIZATION: Section 4 of the Flood Control Act of 1938 (P.L 75-761)

LOCATION AND DESCRIPTION: The project is located on the Tygart River at Elkins, Randolph County, West Virginia. Elkins, WV is a local flood protection project.

CONFERENCE AMOUNT FOR FY 2013: \$ 32,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 56,000 T: \$ 56,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$56,000 - Assure safety, structure, integrity, and operational adequacy through inspection of the project.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project has prevented more than \$23,936,000 in damage since its completion in 1949.

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Elkins, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Kanawha River Locks and Dams, WV

AUTHORIZATION: River and Harbor Acts of 1930 (P.L. 71-520) and 1935 (P.L. 74-409)

LOCATION AND DESCRIPTION: Kanawha River Locks and Dams is located in WV, begins at the mouth of the Kanawha River and encompasses 90.6 miles upstream of its confluence with the Ohio River. The locks and dams located along this stretch include London, Marmet and Winfield.

CONFERENCE AMOUNT FOR FY 2013: \$10,164,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$3,340,000 O: \$8,188,000 T: \$11,528,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$11,392,000 – Funding provides for critical minimum routine operation and maintenance for navigation; dredging to maintain the navigation channel; and critical fleet maintenance to replace the rim gear bolts at Winfield Locks and Dam, which are severely corroded and nearing complete failure. The roller gates rest on this rim gear and roll up an incline gear; rim gear bolts failure will result in the roller gate failure, which could result in pool loss.

FRM: N/A

RC: \$115,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

E: \$21,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: The 5 year average tonnage of commodities transported on the Kanawha River Locks and Dams exceeds 20,500,000 tons. Project visitation for FY 2012 totaled 277,286 and average annual visitation over the past five years was 362,568.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Kanawha River Locks and Dams, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Ohio River Locks and Dams, WV, KY & OH

AUTHORIZATION: River and Harbor Acts of 1909 (P.L. 60-317) and 1935 (P.L. 74-409)

LOCATION AND DESCRIPTION: Ohio River Locks and Dams is located in WV, KY and OH and begins 127 miles downstream from Pittsburgh, PA (mile 127) and continues to mile 438 on the Ohio River. The project includes Willow Island, Belleville, Racine, Robert C. Byrd, Greenup, and Captain Anthony Meldahl Locks and Dams which are the six locks within the Huntington District located on the Ohio River.

CONFERENCE AMOUNT FOR FY 2013: \$41,137,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$14,665,000 O: \$17,381,000 T: \$32,046,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

IN: \$31,822,000 – Funding provides for critical minimum routine operation and maintenance, including required inspections, necessary to provide safe, reliable, efficient, effective, and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation; continuation of the Inland Waterways Transportation Economics effort, to ensure that resources are applied to the most critical projects throughout the Ohio River basin; critical fleet maintenance including rehabilitation of the empty valves and installation of the piggyback crane at Meldahl L&D, installation of the second set of replacement miter gates at Greenup L&D, and replacement of miter gate pintle components, miter blocks, and quoin blocks and dewatering and inspecting the main lock chamber at RC Byrd L&D; and to replace the existing 4WD diesel mule with an electric powered model recharged by the hydropower at the project to produce environmental benefits, contribute to green effort and reduce operational cost of utilities.

FRM: N/A

RC: \$216,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$8,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: The 5 year average tonnage of commodities transported on this waterway exceeds 97,300,000 tons. Project visitation for FY 2012 totaled 726,420 and average annual visitation over the past five years was 895,681.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Ohio River Locks and Dams,
WV, KY, & OH

O&M JUSTIFICATION SHEET

PROJECT NAME: Ohio River Open Channel Work, KY, IL, IN & OH

AUTHORIZATION: River and Harbors Act of 1827

LOCATION AND DESCRIPTION: This project consists of the Ohio River channel from Mile 438, at Foster, KY to Mile 981, at Cairo, IL, and is maintained by the Louisville District. Work under this project consists of channel condition surveys, navigation chart updates, channel maintenance dredging, and other activities necessary to support the work.

CONFERENCE AMOUNT FOR FY 2013: \$5,829,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$5,500,000 O: \$0 T: \$5,500,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,500,000 - Funds will be used to perform annual channel condition surveys, in order to identify areas of sediment deposit which decrease channel depths to less than the authorized dimensions. Areas requiring dredging will be dredged by contract, with after dredge surveys to verify satisfactory completion of the work. Other work to be performed includes updates of navigation charts, coordination with federal and state wildlife agencies regarding environmental impacts and mitigation measures, and state water quality certification.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Louisville

Ohio River Open Channel Work,
KY, IL, IN & OH

O&M JUSTIFICATION SHEET

PROJECT NAME: R. D. Bailey Lake, WV

AUTHORIZATION: Section 203 of Flood Control Act of 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: R. D. Bailey Lake is located on the Guyandotte River in Mingo and Wyoming Counties in WV approximately 112 miles above the mouth of the Guyandotte River and about 1 mile northeast of the community of Justice. The project includes operation and maintenance of R. D. Bailey Lake. The lake is impounded by a random and rock fill dam with a concrete face. The maximum height is 310 feet, and the top length of the dam is 1,397 feet. The dam was completed in 1980.

CONFERENCE AMOUNT FOR FY 2013: \$2,576,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$3,000 O: \$2,454,000 T: \$2,457,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,695,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management, including required inspections, to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$732,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$30,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: R. D. Bailey Lake has prevented over \$278,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 452,009 and average annual visitation over the past five years was 392,813.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

R.D. Bailey Lake, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Stonewall Jackson Lake, WV

AUTHORIZATION: Flood Control Act of November 1966 (P.L. 89-789)

LOCATION AND DESCRIPTION: Stonewall Jackson Dam is on the West Fork River at Brownsville, WV, approximately 73.9 miles above its junction with the Tygart River at Fairmont, WV, where the two rivers form the Monongahela River. The lake is located entirely within Lewis County, WV. Stonewall Jackson Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$1,184,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$25,000 O: \$1,159,000 T: \$1,184,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,093,000 - Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management.

RC: \$53,000 - Operate and maintain recreation facilities including a visitor center, fishing access, and leased lands to the state of WV for hunting, fishing, camping, and other recreation. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$31,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: \$7,000 – Management and oversight of water supply storage.

OTHER INFORMATION: This project supports approximately 165 jobs and has prevented more than \$221,581,000 in damage since its completion in 1990. Benefits include flood protection, low flow augmentation for water quality, water supply, fish and wildlife enhancement, hydropower, and recreation. The average annual recreational visits from 2006 through 2011 was 518,572.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Stonewall Jackson Lake, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Summersville Lake, WV

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Summersville Lake is located in Nicholas County, WV, on the Gauley River, a tributary of the Kanawha River. It is 34.5 miles above the mouth of the Gauley River and 131.5 miles above the mouth of the Kanawha River. The project includes operation and maintenance of Summersville Lake. The dam is a rock fill with a central impervious core, a maximum height of 390 feet, and a top length of 2,280 feet. The dam was completed in 1966.

CONFERENCE AMOUNT FOR FY 2013: \$2,642,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$1,100,000 O: \$2,248,000 T: \$3,348,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,443,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy; and for replacement of Howell Bunger Valve #3.

RC: \$815,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$49,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: \$41,000 – Funding provides for routine operation and maintenance for water supply to provide an estimated 4 million gallons per day of water supply for the health, safety and economy of approximately 12,000 citizens in Summersville, WV.

OTHER INFORMATION: Summersville Lake has prevented over \$706,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 889,191 and average annual visitation over the past five years was 889,231.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Summersville Lake, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Sutton Lake, WV

AUTHORIZATION: Section 4 of Flood Control Act of 1938 (P.L. 75-761)

LOCATION AND DESCRIPTION: Sutton Lake is located in Braxton County, WV, on the Elk River, a tributary of the Kanawha River. It is 100.4 miles above the mouth of the Elk River and 158.9 miles above the mouth of the Kanawha River. The project includes operation and maintenance of Sutton Lake. The lake is impounded by a concrete gravity dam with a maximum height of 210 feet, a top length of 1,178 feet, a top width of 20 feet, and a maximum base width of 195 feet. The dam was completed in 1961.

CONFERENCE AMOUNT FOR FY 2013: \$2,674,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,328,000 T: \$2,328,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,522,000 – Funding provides for critical minimum routine operation and maintenance for flood risk management, including required inspections, to enhance the quality of American life by reducing flood risk to both life and property, providing benefits to individuals, communities, and the national economy.

RC: \$786,000 – Funding provides for routine operation and maintenance to provide recreational opportunities to the public to enhance the quality of American life by providing benefits to individuals, communities, the national economy, and the environment.

H: N/A

EN: \$20,000 – Funding provides for routine operation and maintenance for environmental stewardship to provide management of natural and cultural resources to achieve healthy, sustainable conditions, and foster healthy lands and waters by balancing public uses and needs.

WS: N/A

OTHER INFORMATION: Sutton Lake has prevented over \$419,000,000 in damages over the course of its operation. Project visitation for FY 2012 totaled 377,837 and average annual visitation over the past five years was 461,106.

^{1/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Huntington

Sutton Lake, WV

O&M JUSTIFICATION SHEET

PROJECT NAME: Tygart Lake, WV

AUTHORIZATION: Rivers and Harbors Act of 1935 (P.L. 74-409)

LOCATION AND DESCRIPTION: Tygart Dam is located on the Tygart River, in Taylor County, WV, about 23.1 miles above the mouth of the river at Fairmont, WV, about 2.25 miles above Grafton, WV, and about 78 miles south of Pittsburgh, PA. The lake is located in Taylor and Barbour Counties, WV. Tygart Lake is a multi-purpose reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,399,000 ²

BUDGETED AMOUNT FOR FY 2014: M: \$ 336,000 O: \$ 1,503,000 T: \$ 1,839,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,715,000 - Accomplish flood reduction mission by critical minimum routine operation of the dam, water control management, dam safety inspections, required safety-related analyses and studies, and real estate outgrant management. Additionally, maintenance actions will include the installation of a jib crane for the bulkhead hoist which will allow removal/replacement of bulkhead hoist during high water which is critical to meet the authorized purpose of the project and prevent loss of bulkhead. OCA Report identified design deficiencies and operator safety issues that will be addressed as part of this action.

RC: \$60,000 – Operate and maintain recreation facilities to support boating, swimming, camping, fishing, hunting, picnicking, and hiking trails. Also fulfills Corps requirements for visitor health and safety.

H: N/A

EN: \$57,000 - Accomplish shoreline management, threatened/endangered species surveillance, cultural resource protection/preservation, invasive species eradication, and protection of natural resources. These funds will assure sustainability of natural resources in accordance with the Corps Environmental Operating Principles and stewardship policies and will prevent loss of and degradation to project lands and water.

WS: \$ 7,000 – Management and oversight of water supply contract with City of Grafton, WV.

OTHER INFORMATION: This project supports approximately 158 jobs and has prevented more than \$1,187,374,000 in damage since its completion in 1938. In addition to flood control, the Tygart project was also authorized for navigation and water supply purposes. During the summer and fall low-water season, Tygart releases additional water downstream to meet navigation water supply requirements on the Monongahela and upper Ohio River for commercial navigation. The increased flow also improves water quality and quantity for domestic and industrial use, recreation, aesthetics, and protection of aquatic life. The average annual recreational visits from 2006 through 2011 was 444,158.

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Pittsburgh

Tygart Lake, WV

Wisconsin

O&M JUSTIFICATION SHEET

PROJECT NAME: Fox River, WI

AUTHORIZATION: River and Harbor Act of 1886, as amended; and Section 332, WRDA 1992 (PL 102-580)

LOCATION AND DESCRIPTION: The project is located on the Lower Fox River from Lake Winnebago to Green Bay, Wisconsin. The project includes nine dams consisting of concrete gravity spillways and tainter gate structures operated by lift machinery. The project is primarily operated for flood control purposes.

CONFERENCE AMOUNT FOR FY 2013: \$1,949,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,005,000 T: \$2,005,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,953,000 – Funding provides for collection of water level data, critical minimum routine operation of the dams to regulate pools for multiple uses (flood risk management, and supply of water to private hydropower, paper mills and municipal uses), completion of dam safety inspections, and update of the project water control plan. Without continued dam operations, the risk of flooding increases, the State owned locks cannot operate and power plants/paper mills would lose pool and not be able to function. There are a total of 24 paper and pulp plants located along the Fox River that draw water from the river for use in processing and power production.

RC: N/A

H: N/A

EN: \$52,000 – Funding provides for annual activities that are associated with compliance with State and Federal historic preservation requirements, including investigation and coordination of operation and maintenance activities and document preservation.

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Fox River, WI

O&M JUSTIFICATION SHEET

PROJECT NAME: Green Bay Harbor, WI

AUTHORIZATION: River and Harbor Act of 1866, as amended

LOCATION AND DESCRIPTION: Located at the mouth of the Fox River at the head of Green Bay in Lake Michigan. Green Bay Harbor is a deep draft commercial harbor with over 14 miles of maintained channel. Maintenance dredging is required on an annual basis and dredged material is currently placed in the Bay Port disposal facility under an agreement with the Brown County Port Authority, since the Green Bay Confined Disposal Facility at Renard Island is currently at capacity.

CONFERENCE AMOUNT FOR FY 2013: \$3,180,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$3,000,000 O: \$367,000 T: \$3,367,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,367,000 - Funding provides for critical minimum routine operation and maintenance for navigation, including project condition surveys and maintenance dredging by contract to provide minimum functional depth at the most critical portions of this Federal channel. Shoaling results in a need to remove upwards of 190,000 cubic yards of material annually in order to maintain channel functionality and avoid increased transportation costs.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Green Bay Harbor, WI

O&M JUSTIFICATION SHEET

PROJECT NAME: Milwaukee Harbor, WI

AUTHORIZATION: River and Harbor Act of 1886, as amended

LOCATION AND DESCRIPTION: Milwaukee Harbor is a deep draft commercial harbor located in Wisconsin, on the west shore of Lake Michigan, approximately 85 miles north of Chicago, IL. The project includes both lake approach channels and river channels with depths varying from 27 to 30 feet. Maintenance dredging is required on a three to four year cycle and was last dredged in 2011. Dredged material is placed in the Milwaukee Disposal Facility. Commercial commodities include petroleum and petroleum products and manufactured equipment. The project also includes over 21,000 feet of structures, including breakwaters, piers and revetments.

CONFERENCE AMOUNT FOR FY 2013: \$0^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$700,000 O: \$0 T: \$700,000^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$700,000 – Funding provides for critical minimum routine maintenance repair by government floating plant of the most critical portions of N. breakwater to protect navigation channel. Repairs will reduce the risk of full structure breach which would block navigation and create unsafe navigation conditions and/or vessel delays.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

^{2/} / At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Milwaukee, WI

O&M JUSTIFICATION SHEET

PROJECT NAME: Sturgeon Bay Harbor & Lake Michigan Ship Canal, WI

AUTHORIZATION: River and Harbor Act of 1873, as amended

LOCATION AND DESCRIPTION: Sturgeon Bay Harbor is located in Wisconsin on the west shore of Lake Michigan approximately 52 miles northeast of Green Bay and about 128 miles north of Milwaukee. Provides for deep draft commercial navigation with 8.5 miles of maintained navigation channel depths of 22 to 23 feet and at 20 feet within the turning basin. Project also includes approximately 15,100 feet of navigation structures, including breakwaters and revetments. Sturgeon Bay is home to two ship builders and a U.S. Coast Guard search and rescue operation.

CONFERENCE AMOUNT FOR FY 2013: \$19,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$20,000 T: \$20,000 ^{1/}

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: \$20,000 – Funding provides for maintenance of recreational features of this project, thereby ensuring access to parking areas and foot trails.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

^{1/} Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Great Lakes and Ohio River

District: Detroit

Sturgeon Bay Harbor & Lake Michigan
Ship Canal, WI

Mississippi Valley Division

MISSISSIPPI VALLEY DIVISION
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Justification of Estimates for Civil Works Activities
 Department of the Army, Corps of Engineers
 Fiscal Year 2014

SUMMARY MISSISSIPPI VALLEY DIVISION

	<u>FY 2013</u> <u>President's</u> <u>Budget</u>	<u>FY 2014</u> <u>President's</u> <u>Budget</u>	<u>Increase</u> <u>or Decrease</u>
Investigations	17,427,000	8,067,000	(9,360,000)
Survey	6,980,000	6,103,000	(877,000)
Preconstruction Engineering and Design	10,447,000	1,964,000	(8,483,000)
Construction	70,348,000	140,716,000 1/	70,368,000
Operation and Maintenance	417,045,000	463,531,000	46,486,000
 GRAND TOTAL, MISSISSIPPI VALLEY DIVISION	 \$504,820,000	 612,314,000	 107,494,000

1/ Includes \$4,450,000 for FY 2013 and \$11,400,000 for FY2014 from the Inland Waterways Trust Fund.

INVESTIGATIONS

ARKANSAS

APPROPRIATION TITLE: Investigations, Fiscal Year 2014
 SURVEYS – COMPLETION
 Feasibility Study

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Lower Mississippi River Resource Assessment, AR, IL, KY, LA, MS, MO, and TN (ENR) Memphis District	1,745,000	601,000	50,000	195,000 <u>3/</u>	800,000 <u>2/</u>	99,000 <u>1/</u>	0

The study area includes portions of the states of Illinois, Missouri, Kentucky, Arkansas, Tennessee, Mississippi and Louisiana; 66 counties and parishes; more than 954 miles of free-flowing river reaches and adjacent floodplain in the Lower Mississippi River Alluvial Valley (LMRAV) from Cairo, Illinois to the Gulf of Mexico and 165 miles of the Atchafalaya Basin floodway system. The LMRAV has a surface area of 600,000 acres, an active floodplain of approximately 2,800,000 acres; includes 1,600 lakes, 145 river side channels and contains the largest natural wetlands in North America. Thirty-two percent of the US population lives in the 74-county LMR corridor and 55 percent of the population lives within a day's drive of the watershed. The resource serves as a vital conveyance for waterborne commerce, provides a source of water for human consumption and use, provides a source of irrigation for agricultural production and offers a myriad of Recreations opportunities. The main stem and its tributaries encompass over 281,000 acres of National Wildlife Refuge, the largest floodplain fishery and the largest bottomland hardwood forests in North America. At its mouth in the Gulf of Mexico, the LMRAV supports 4,500,000 million acres of coastal marsh, an ecological extension of the forested alluvial valley, forming a wetland complex of unrivaled scope in the Temperate Zone of the Western Hemisphere. The nationally significant ecosystem supports 241 species of fish, 50 species of mammals, 45 species of reptiles and amphibians and 37 species of mussels. Aside from its natural resource value, the LMRAV provides employment opportunities for over 572,000 residents and recreation activities such as boating, hunting, fishing, wildlife viewing and camping. Recreationists contribute at least \$500,000 and tourists spend over \$11,000,000,000 annually to support the economy of the region. Over time, essential ecosystem structures and functions in the LMR system have been altered, resulting in a loss of 80 percent of its forested wetlands and 90 percent of its original floodplain corridor. While data is available from many sources, it is often incomplete, disparate, and not readily accessible making it difficult for Federal and state agencies to effectively balance mandated uses with stakeholder needs. In cooperation with the Department of Interior and the states of Illinois, Missouri, Arkansas, Tennessee, Louisiana, Mississippi, and Kentucky, a feasibility watershed study will be conducted using a watershed approach. The objectives of the study are to assess: (1) information needed for river-related management; (2) natural resource habitat needs; and (3) the need for river-related recreation and access. A feasibility cost sharing agreement was executed with The Nature Conservancy 11 January 2012. The study is authorized by Section 402 of WRDA 2000.

Funds were used in Fiscal Year 2012 to begin Assessment 1 of the feasibility watershed study. Fiscal year 2013 funds are being used to complete Assessment 1 by 2014 and initiate Assessments 2 and 3. Fiscal Year 2014 funds will be used to complete Assessments 2 and 3. The final report for all three assessments is scheduled for completion in Fiscal Year 2014. The reconnaissance phase was completed in January 2012. The estimated Federal cost estimate is the same as

last presented to Congress (FY 2012). The study completion date is to be determined. The estimated cost of the feasibility phase is \$1,660,000, which is to be shared on a 75-25 percent basis by Federal and non-Federal interests as follows:

Total Estimated Study Cost	\$2,167,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	1,245,000
Feasibility Phase (non-Federal)	415,000

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Reflects \$5,000 reprogrammed from the project in FY 2012.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

STUDY - Feasibility

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
White River Basin Comprehensive, Cache River Sub-Basin WMP, AR (Resumption)	4,185,000 <u>1/</u>	3,380,000	0	5,000 <u>2/</u>	0	650,000 <u>3/</u>	150,000

Memphis District

The Cache River Watershed Management Plan under the White River Basin Comprehensive (WRBC) effort studies a 2,018 square mile sub-basin within the White River basin (approximately 27,765 square miles - Missouri 10,622, Arkansas 17,143). The area is a significant migratory waterfowl wintering area. The southern portion of the watershed is a Wetland of International Importance per the 1986 Ramsar Convention. It includes the Cache National Wildlife Refuge, several state Wildlife Management Areas, State Parks and Natural Areas. The basin provides habitat for several threatened or endangered species including fat pocketbook, pink mucket, scaleshell, curtis pearly, and speckled pocketbook mussels; pallid sturgeon; gray and Indiana bats; alligator gar, red-cockaded woodpeckers; and piping plover.

Several studies have been completed under the WRBC that will inform the Cache River Watershed Management Plan, including the Cache River Ecosystem Restoration Study and the Cache River Sedimentation Study. The expectation of the Cache River Watershed Management Plan effort is to identify measures necessary to address the water resource issues in the watershed and to identify what organization or agency would lead the effort to address each of those issues. In this manner, this will be a comprehensive, collaborative watershed management plan. It will establish multi-agency (Federal and state) collaborative programs to identify sub-watershed projects, which would potentially include habitat restoration, sediment management, recreational opportunities, and public outreach. Federal, state, and private natural resource agencies and organizations are highly supportive of the Cache River Management Plan and the White River Basin comprehensive study.

The WRBC offers several opportunities to support and intersect, in a collaborative multi-agency environment, with President Obama's America's Great Outdoors (AGO) Initiative. A component of the WRBC, the Cache River sub-basin, is identified in support of the AGO as a near term plan. The WRBC, building on AGO efforts, investigates water resource problems such as ecosystem restoration, water quality, flood risk management, recreation, navigation, hydropower and water supply. The project sponsors for the WRBC study are the Arkansas Game and Fish Commission, Arkansas Natural Resources Commission, Arkansas Natural Heritage Commission, Arkansas Waterways Commission, Missouri Department of Natural Resources, Missouri Department of Conservation, and The Nature Conservancy. The study is authorized by Sec. 729 of WRDA 1986, as amended by Sec. 202 of WRDA 2000 and Sec. 2010 of WRDA 2007. A Feasibility Cost Sharing Agreement (FCSA) for the White River Basin Comprehensive study was executed 22 May 2002 and amended 6 April 2009 as a result of WRDA of 2007

to change the cost share requirements to 75% Federal and 25% non-Federal. This focus on the Cache River sub-basin may require an amendment to the FCSA. Funds for this study were not included in the Fiscal Year 2013 President's Budget. Fiscal Year 2014 funds will be used to initiate the Cache River Sub-Basin Watershed Restoration/Management Plan and complete the BLH-HG study which is a near term component of the overall White River Basin Comprehensive study. The White River Basin Comprehensive study completion date is to be determined. A summary of study cost sharing for the Cache River Watershed Management Plan is as follows:

Total Estimated Study Cost	\$5,527,000
Reconnaissance Phase (Federal)	160,000
Feasibility Phase (Federal)	4,025,000
Feasibility Phase (Non-Federal Cash/WIK)	1,342,000

The current Federal cost estimate of \$4,185,000 is a decrease of \$2,425,000 from the latest estimate (\$6,610,000) and reflects a change in scope to delete future activities that would lead to a Watershed Restoration/Management Plan for the total White River Basin. The change in scope deletes all remaining study activities included in the approved study plan and the existing Feasibility Cost Share Agreement that are not directly associated with the Cache River sub-basin, which is the focus of the AGO initiative.

1/ Total estimated cost shown includes previous sunk costs associated with the Comp Study which is the allocation prior to FY 2011.

2/ Reflects \$5,000 reprogrammed to the project.

3/ Estimated Unobligated "Carry-in" Funding: As of 1 October 2012, the total unobligated dollars estimated to be carried into the Program Year (PY) from prior appropriations for use on this study effort is \$0.

ILLINOIS

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2013 \$
Illinois River Basin Restoration, IL SURVEYS – Continuing (ENR) Rock Island District	12,170,000 <u>2/</u>	5,955,500	793,000	383,000	400,000 <u>3/</u>	400,000 <u>1/</u>	4,239,000

The Illinois River Basin Restoration Study encompasses the entire Illinois River watershed within the State of Illinois, a nationally significant ecosystem. The primary purpose of the Illinois River Basin Restoration Study is to develop a comprehensive plan for the restoration of the Illinois River watershed and evaluate and construct critical restoration projects within the basin. The feasibility cost sharing agreement with the State of Illinois was signed 31 July 2002.

The Comprehensive Plan was completed and transmitted to Congress in June 2008. The Plan addresses habitat, water quality, navigation, and economic opportunities. Major components include fish and wildlife conservation and rehabilitation measures; land and water resources enhancement; sediment transport; sediment removal and disposal measures; long-term resource monitoring; and a computerized inventory and analysis. The Illinois River Basin Critical Restoration Projects authorized in WRDA 2000, Section 519, (as amended by WRDA 2007) are continuing and no additional authority is required.

Sixteen critical restoration projects have been identified to date. These projects were selected based on assessment of restoration needs with involvement of Federal and non-Federal partners. Critical restoration projects are currently being evaluated through feasibility, design, and two have proceeded to construction using Construction funds.

Construction of the Waubonsie Creek Fish Passage project has been completed and construction of the Peoria Island/Backwater project will be complete in 2013.

Feasibility planning for Pekin Lake-Southern Unit and Pekin Lake-Northern Unit projects has been completed and approved and is awaiting funding to complete design and initiate construction.

Fiscal Year 2013 funds are being used to complete feasibility planning for the Starved Rock Pool Backwater and Alton Pool Side Channel projects and continue feasibility efforts on the Senachwine Creek and Kankakee River projects.

Funds requested for Fiscal Year 2014 will be used to complete Senachwine Creek and Kankakee River project feasibility efforts and initiate feasibility at Ten Mile Creek and McKee Creek at an efficient rate in concert with the non-Federal sponsor.

The draft feasibility study for the Blackberry Creek Fish Passage critical restoration project was completed in FY 12. However, partial failure of the dam resulted in the State of Illinois (sponsor) removing the structure in late 2012. Engineering products produced for the feasibility study were instrumental in allowing the sponsor to accomplish the removal in a timely manner. The proposed restoration benefits from the study have been achieved.

After FY 2014, the remainder of the sixteen critical restoration projects will initiate feasibility planning efforts (Iroquois River, LaGrange Pool, Yellow River, Crow Creek West, & Fox River Fish Passage).

The estimated cost of the feasibility phase has been revised based on (1) the actual costs incurred through approval of the Comp Plan in 2007 and the costs for the remaining feasibility work for the original six critical restoration projects (CRP's) and the ten additional CRP's approved for feasibility studies by the ASA(CW). The previous estimate was based on the inflated FCSA amount from 2002 which identified work on the Comp Plan and CRP's. These feasibility costs had previously been included as part of the construction account and are now properly allocated to the investigations account. The estimate for the construction account has been reduced to match this amount. Therefore, the entire program estimate, for both I and C, remains the same but has reallocated \$6,475,000 from C to I. The revised feasibility cost estimate of \$18,015,000 (in the I account) is higher than the \$11,540,000 previously presented to Congress because it includes the reallocated \$6,475,000 (from the C account).

The study is authorized by Section 519(b) of WRDA 2000; as amended by Section 5071, WRDA, 2007.

In accordance with Section 519, WRDA 2000, this study is to be shared on a 65-35 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$18,475,000
Reconnaissance Phase (Federal)	460,000
Feasibility Phase (Federal)	11,710,000
Feasibility Phase (Non-Federal)	6,305,000

The Recon phase was completed in July 2002. The Feasibility study completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ \$12,170,000 total Federal cost is the \$460,000 Recon plus the \$11,710,000 for feasibility.

3/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

LOUISIANA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional To Complete After FY 2014 \$
Calcasieu Lock, LA SURVEYS – COMPLETING (NAV) New Orleans District	7,883,000	3,977,000	1,049,000	1,357,000	750,000 2/	750,000 1/	0

Calcasieu Lock is a feature of the Gulf Intracoastal Waterway (GIWW) between Appalachee Bay, Florida, and the Mexican Border Project. The lock is located east of the Calcasieu River, approximately 10 miles south of Lake Charles, Louisiana, in Calcasieu Parish. The lock prevents saltwater intrusion from the Calcasieu River into the Mermentau River basin, a major rice producing area. Calcasieu Lock, which was completed in 1950, has dimensions of 13 by 75 by 1,206 feet and is structurally sound. The lock is congested due to increasing traffic. A study authority resolution was adopted in the Senate for Calcasieu Lock in September 1972 and was followed by another resolution by the House in October of 1972 with the intent to either replace or generally improve the GIWW through various means. Intracoastal Waterway Locks, Louisiana, a Reconnaissance study completed in 1992, determined that there is an immediate need for capacity increases at Bayou Sorrel and Calcasieu Locks. The Calcasieu Lock Section 905(b) analysis supports a benefit-cost ratio of 1.2:1 for provision of a new lock and recommended proceeding with feasibility phase studies. The study is addressing the feasibility of measures to replace or supplement the existing lock to reduce navigation delays. The study is being conducted with Federal funds. The anticipated output of improved navigation efficiency is in accord with Administration policy.

Funds for Fiscal Year 2013 will be used to continue feasibility study efforts which include advanced H&H modeling on selected alternatives, economic modeling on selected alternatives, an Alternative Formulation Briefing, and the preparation of a draft integrated Feasibility Report.

Funds requested for Fiscal Year 2014 will be used to complete feasibility study efforts which include completion of the economic analysis, environmental analysis, development of preliminary design of alternative plans, and the identification of a draft tentatively selected plan. Study tasks completing in 2014 include conducting Independent External Peer Review, submission of a Draft Report in (1st FY 14) and signing of the Chief's Report September 2014.

The FY 2014 J-sheet shows an increase in \$705,000 over the FY 2013 J-sheet. This increase is due to revisions in the PMP for updated labor rates, IEPR, feasibility level design on the selected alternative, and additional economic modeling review requirements. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$7,883,000
Reconnaissance Phase (Federal)	\$90,000
Feasibility Phase (100% Federal)	\$7,793,000

The Reconnaissance phase was completed in FY 2001. The feasibility study completion date is scheduled for FY 2014.

The study authority is based on resolutions from both the House and Senate (SR 29 Sep 72 and HR 12 Oct 72) with a view "to determining the advisability of modifying the existing project in any way at this time, particularly with regard to widening and deepening the existing and/or authorized channel." The average annual benefits are TBD.

1/Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$1,000 rescinded from the project in FY 2001.

\$1,000 rescinded from the project in FY 2003.

\$1,000 rescinded from the project in FY 2004.

\$2,000 rescinded from the project in FY 2005.

\$2,000 rescinded from the project in FY 2006.

\$2,369 rescinded from the project in FY 2011.

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional To Complete After FY 2014 \$
Louisiana Coastal Area Comprehensive Plan, LA (ENR) (New Start)	\$1,600,000	0	0	0	0	100,000	1,500,000

New Orleans District

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

The study area includes the entire Louisiana Coastal Area (LCA). Over 1 million acres of Louisiana's coastal wetlands have been lost since the 1930's; another one-third of a million acres could be lost over the next 50 years unless large-scale corrective actions are taken. Disruption of natural processes by the development of the watershed of the Mississippi River and in the LCA is the primary cause of the coastal land loss. Additional impacts result from natural subsidence and erosion of the lands where the Mississippi delta meets the Gulf of Mexico. Managing water and sediment for restoration creates/sustains nesting, feeding and resting habitats for threatened/endangered species (eagle, sturgeon, brown pelican, piping plover) and numerous migratory avian and waterfowl species. Barrier Island restoration favorably impacts nesting and resting cover for brown pelican and piping plover.

The LCA Ecosystem Restoration Study Report was completed in November 2004. A feasibility cost sharing agreement was executed between the Federal Government and the State of Louisiana, Department of Natural Resources, the non-Federal sponsor, in February 2000 and amended in March 2002 and October 2004. A Chief of Engineers Report was signed on 31 January 2005.

The requested FY 2014 funds will be used to conduct a Reconnaissance study, prepare a Reconnaissance Report, prepare a Project Management Plan and prepare a Feasibility Cost Share Agreement to establish the framework of a Comprehensive Plan. The Comprehensive Plan will be prepared in cooperation with the State of Louisiana.

Total Estimated Study Cost	\$3,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

Title VII, WRDA 2007 authorized LCA. Section 7002 authorized development of a Comprehensive Plan, in coordination with the Governor, for protecting, preserving, and restoring the coastal Louisiana ecosystem. The Comprehensive Plan will establish a framework for a long-term, multi-faceted program directed at

protecting, preserving, and restoring coastal Louisiana and will identify the role of other Federal and State agencies and programs in carrying out the comprehensive plan. Development of the Comprehensive Plan will also serve to transition from the Louisiana Coastal Protection and Restoration Study as well as integrate the efforts under the Louisiana Master Plan.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Amount FY 2014 \$	Additional to Complete After FY 2014 \$
Louisiana Coastal Area, Ecosystem Restoration, LA	73,527,000	62,398,000 ^{1/}	(1,975,000)	3,620,000	1,000,000 ^{2/}	3,321,000 ^{3/}	5,163,000 ^{11/}
LCA PED Cost	47,637,000	0	0	5,916,000	1,600,000 ^{2/}	1,964,000 ^{3/}	38,157,000 ^{11/}
LCA Program (Continuing) New Orleans District	121,164,000	62,398,000 _{5/ 6/ 7/ 8/ 9/}	(1,975,000) ^{10/}	9,536,000 ^{11/}	2,600,000 ^{2/}	5,285,000 ^{3/}	43,320,000 ^{4/ 11/}

The Louisiana Coastal Area Ecosystem Restoration (LCA) Study area includes the entire Louisiana coastal area. Over 1 million acres of Louisiana's coastal wetlands have been lost since the 1930's; another one-third of a million acres could be lost over the next 50 years unless large-scale corrective actions are taken. Disruption of natural processes by the development of the watershed of the Mississippi River and in the Louisiana coastal area is the primary cause of the coastal land loss. Additional impacts result from natural subsidence and erosion of the lands where the Mississippi delta meets the Gulf of Mexico. More specifically, the coastal land loss results from human intervention and natural processes, including: (1) efforts to maintain a Federal navigation channel from the Gulf of Mexico to New Orleans and farther up the Mississippi River; (2) the implementation of flood and storm damage reduction projects by or for communities in the Louisiana coastal plain; (3) oil and gas development, including thousands of miles of canals built by private interests for exploration and production; (4) natural subsidence and erosion of the lands where the Mississippi Delta meets the Gulf of Mexico; and (5) winter cold fronts, tropical storms, and hurricanes. Managing water and sediment for restoration creates and sustains nesting, feeding and resting habitats for species listed as threatened or endangered under the Endangered Species Act (ESA)—including the eagle, sturgeon, brown pelican, and piping plover—and numerous migratory avian and waterfowl species. Barrier Island restoration can reduce the rate of loss of wetlands and provide nesting and resting cover for brown pelican and piping plover.

1/ Includes \$11 million provided in Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006, PL109-148, December 2005. \$1M was executed by the Louisiana Coastal Area Science & Technology Program for Hurricane Assessment.

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the stated capability that takes into consideration unobligated FY 2013 carry-in funds and the current schedule as of the date of this J-sheet.

3/ Note: As of 11 January 2013 estimated carry-in to FY2013 is expected in the amount \$9.2 M, of which \$1.05 M was set aside for reconciliation for other MVN projects during the CR (see note 11), the difference (\$8.1 M) to be used to execute the LCA program. While current plans in FY 2013 seek full execution of carryover funds plus the revised capability, continued negotiations with the State of Louisiana present risks to full execution in -FY 2013. The revised capability has considered risks within the program. Based on current path forward the FY 2014 and FY 2013 amounts plus FY 2012 carryover will be exhausted no later than FY 2014.

4/ Note: \$31,000,000 in Preconstruction Engineering and Design (PED) is un-programmed at this time in lieu of the State's current path forward.

- 5/ \$3,000 were rescinded from the project in FY 2001.
- 6/ \$6,000 were rescinded from the project in FY 2003.
- 7/ \$15,000 were rescinded from the project in FY 2004.
- 8/ \$55,000 were rescinded from the project in FY 2005.
- 9/ \$75,000 were rescinded from the project in FY 2006.
- 10/ \$2,000,000 were transferred to HQ for the Mississippi River Flood in FY 2011.
- 11/ \$1,050,000 was set aside for reconciliation of other MVN non-LCA projects during CR

The LCA Program's primary purpose is to restore the Louisiana wetland coastal area through the beneficial use of dredged material, river diversion of sediment and water, head land and barrier island restoration, and coastal protection efforts. The Louisiana coastal plain contains one of the largest expanses of coastal wetlands in the contiguous United States, and has experienced 90 percent of the total coastal marsh loss in the Nation. The coastal wetlands, built by the deltaic processes of the Mississippi River, contain diverse coastal habitats that range from narrow natural levee and beach ridges to expanses of forested swamps and freshwater, intermediate, brackish, and saline marshes. These unique habitats include upland areas as well as the near shore Gulf of Mexico and are hydrologically connected to each other. Taken as a whole, these habitats combine to make Louisiana's wetlands among the Nation's most productive and ecologically-significant natural assets. Additionally, Louisiana's coastal wetlands have also been a center for culturally diverse social development. LCA will construct significant restoration features; undertake demonstration projects, study potentially promising large-scale, long-term concepts, take other needed actions to restore the ecosystem.

The LCA Study (Program) is a near-term plan consisting of studies, projects and science support developed through a public involvement process, working closely with other Federal agencies and the State of Louisiana.

The State of Louisiana recently released its 2012 Coastal Master Plan and is currently in the process of assessing on-going and planned coastal ecosystem restoration studies and projects, including LCA projects, to ensure alignment with that plan. While the State of Louisiana has expressed continued support for the LCA program, the State plans to pursue a path forward that more closely aligns with its 2012 Coastal Master Plan. To do this, the State has indicated its intent to pursue four of the LCA 6 projects outside of the LCA Program: Amite River Diversion Canal Modification; Terrebonne Basin Barrier Shoreline Restoration; and Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of Houma Navigation Canal Lock; with development of the Medium Diversion at White Ditch and Small Diversion at Convent/Blind River projects continuing within the LCA program. In addition, the State has recently requested efforts on the Land Bridge between Caillou Lake and Gulf of Mexico project, the Gulf Shoreline at Point Au Fer Island project, the Modification of Davis Pond Diversion project and the Modification of Caernarvon Diversion project be suspended. The State has indicated its intent for advancement of the Medium Diversion at Myrtle Grove Feasibility Study, and the Mississippi River Hydro/Delta Management Study, and to implement the Barataria Basin Barrier Shoreline project and Demonstration projects within the LCA program. The 2014 Budget continues the restoration planning efforts that are underway in the LCA near-term plan and aligns investments with the State of Louisiana's desire to be consistent with its 2012 Plan.

Fiscal Year 2012 carry-out funds are being used in Fiscal Year 2013 to execute the following study and PED efforts:

Investigation will continue for Mississippi River Hydro Delta Management	\$2,400,000
Development of the Demonstration Program Implementation Plan (complete)	\$17,000
Complete PED Barataria Basin Barrier Shoreline Restoration	\$1,800,000
Continue PED Small Diversion at Convent Blind River	\$3,217,000
Medium Diversion at White Ditch	\$700,000

Fiscal Year 2013 funds will be used as follows:

Investigations will conclude Medium Diversion at Myrtle Grove	\$771,000
Investigation will continue for Mississippi River Hydro Delta Management	\$100,000
Close-out of the LCA 4 studies	\$129,000
PED will continue for Small Diversion at Convent / Blind River	\$543,000
Medium at White Ditch	\$907,000
Close-out of 4 of LCA 6	\$150,000

Fiscal Year 2014 funds will be used for the following efforts:

Investigations will complete for the following study Medium Diversion at Myrtle Grove	NFS funds
Investigations will continue for the following study: Mississippi River Hydrodynamic/Delta Management Study Demonstration Program Projects	\$2,971,000 \$350,000
PED will initiate for the following project: Medium Diversion at Myrtle Grove with Dedicated Dredging	\$50,000
PED will complete for the following project: Small Diversion at Convent / Blind River	\$1,436,000
PED will complete for the following project: Medium Diversion at White Ditch	\$478,000

The below LCA projects are anticipated to have additional work pursued in FY 2014.

* The Mississippi River Hydro/Delta Management feature is a combination of the Mississippi River Hydrodynamic Model and the Mississippi River Delta Management Study features. This combined feature would provide a model to assess the effects on navigation and sediment dynamics along the Mississippi River main stem associated with combinations of Mississippi River diversions. Model outputs would also be used to formulate and assess management options for the Delta. The project would improve habitat for many wildlife species including pallid sturgeon; also eagle, pelican, migratory/colonial birds. The FCSA was signed 24 August 2011. In FY 2014 the study continues.

* Demonstration Program Projects. The State sponsor, to align with their 2012 State Master Plan, has only recently indicated a desire to initiate any Demonstration projects. In FY 2013 an Implementation Plan will be sent to the ASA for approval. That plan is expected to identify potential projects and request that a FCSA will be initiated. Decision documents will be initiated in order to implement Demonstration projects. These projects are designed to resolve critical areas of scientific or technological uncertainty related to the implementation of the restoration plan and ultimately the comprehensive plan. In 1st Qtr FY 2014, sign FCSA, develop Engineering Design Report and conduct first Demonstration study.

* The Medium Diversion at Myrtle Grove (Myrtle Grove) with dedicated dredging project. The project consists of diverting 2,500 to 15,000 cfs from the Mississippi River into the Barataria Basin through a box culvert system and using 2 million cubic yards of Mississippi River material annually for several years to create marsh wetlands. As authorized, this feature is expected to deliver benefits in the range of 11,500 acres. The project would improve habitat for many wildlife species

including sturgeon/manatee/loggerhead, Kemp's Ridley, hawksbill turtles; also eagle, pelican, migratory/colonial birds, also essential fish habitat. The feasibility study will complete in the 4th Qtr FY 2014. In 4th Qtr FY 2014, sign design agreement and initiate PED.

* Small Diversion at Convent / Blind River project. The project is located approximately equidistant between Baton Rouge and New Orleans, Louisiana within the Maurepas Swamp, one of the largest remaining cypress swamps in coastal Louisiana. The recommended plan (Alternative 2), which is also the national ecosystem restoration plan, will reintroduce the natural periodic, nearly annual flooding by the Mississippi River to the Maurepas Swamp and Blind River that was cut off by construction of the Mississippi River and Tributaries (MR&T) flood control system. The project consists of a 3,000 cubic feet per second (cfs) capacity gated box culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Romeville, Louisiana. The project will restore freshwater, nutrients, and sediment input from the Mississippi River and improve habitat function by 6,421 AAHUs over a total of 21,369 acres of bald cypress-tupelo swamp. The project would improve habitat for many fish and wildlife species including migratory birds, bald eagles, alligators, gulf sturgeon, and the manatee. The DA was executed 9 December 2011. PED will complete in 3rd Qtr FY2014.

* Medium Diversion at White Ditch project (MDWD) project. Additional Congressional authority is required to build project. The project will restore the supply and distribution of freshwater and sediment disrupted by the construction of the Mississippi River and Tributaries flood control. The project includes a 35,000 cubic feet per second (cfs) capacity gated box culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Phoenix, Louisiana. Dredged material from the conveyance channel will be used beneficially to create approximately 416 acres of marsh and ridge habitat. The project will improve habitat function by 13,353 AAHUs by creating and nourishing approximately 20,315 acres of fresh, intermediate, brackish, and saline wetlands. The project would improve habitat for many wildlife species including pallid sturgeon, manatee; also brown pelican/eagle/migratory/colonial birds. The DA was executed 9 December 2011. In FY2014, PED will complete.

The below LCA projects are not anticipated to have work performed in FY 2014 based on the State of Louisiana's lack of intent to partner with USACE at this time.

* Terrebonne Basin Barrier Shoreline Restoration project - The State sponsor has indicated they wish Federal participation be suspended (anticipated in late FY 2012). Therefore, they have no interest at this time in pursuing any previously scheduled PED action in FY 2013 as they anticipate using only non-Federal funds to complete PED and execute construction. Accordingly, no activity is scheduled for FY 2014. The project will reintroduce sediment to the coastal sediment transport system through the restoration of Raccoon Island with 25 years of advanced fill and construction of a terminal groin. The project also includes restoration of Whiskey and Trinity Islands with five years of advanced fill and restoration of Timbalier Island with 25 years of advanced fill. The project consists of restoration of four islands (Whiskey, Raccoon, Trinity, and Timbalier) improving habitat function by 2,833 AAHUs by adding 3,283 acres to the islands for a total size of 5,840 acres. The restored acreage would include 472 acres of dune, 4,320 acres of supra-tidal habitat, and 1,048 acres of intertidal habitat and ensure the geomorphic and hydrologic form and ecological function of the majority of the estuary over the period of analysis. The estimated total first cost of the project is \$646,931,000. The Federal share of the estimated first cost of this project is \$420,505,000 and the non-Federal share is estimated at \$226,426,000. Post-construction monitoring and adaptive management of this ecosystem restoration project is projected to be conducted for no more than ten years. Additional authority is needed to implement the entire project. The Whiskey Island component can be implemented under the existing authority provided in Section 7006(e)(3) of WRDA 2007. The Whiskey Island component is an implementable increment of the NER plan. The estimated total first cost of the Whiskey Island component is \$113,434,000. The DA was executed 9 December 2011. By letter dated 20 Aug 2012, the State of Louisiana requested we suspend future performance.

* The Convey Atchafalaya River Water to Northern Terrebonne Marshes restoration project -- The State sponsor has indicated they wish Federal participation be suspended (confirmation anticipated in late FY 2012). Therefore, they have no interest at this time in pursuing any previously scheduled PED action in FY 2013 as they anticipate using only non-Federal funds to complete PED and execute construction. Accordingly, no activity is scheduled for FY 2014. The project would increase existing Atchafalaya River influence to central (Lake Boudreaux) and eastern (Grand Bayou) Terrebonne marshes via the Gulf Intercoastal Waterway (GIWW) by introducing flow into the Grand Bayou Basin. This may be accomplished by enlarging the connecting channel (Bayou L'Eau Bleu) to capture as much of the surplus flow (max. 2000 to 4000 cfs) that would otherwise leave the Terrebonne Basin. Gated control structures would be installed to restrict channel cross-sections to prevent increased saltwater intrusion during the late summer and fall when Atchafalaya River influence is typically low. Some auxiliary freshwater distribution structures may be included. This project also includes increasing freshwater supply through repairing banks along the GIWW, enlarging constrictions in the GIWW, and diverting additional Atchafalaya River freshwater through the Avoca Island Levee and into Bayou Chene/GIWW system. Benefits to threatened/endangered species and colonial nesting birds are in addition to wetlands benefits. The DA was executed 9 December 2011. By letter dated 20 Aug 2012, the State of Louisiana requested we suspend future performance.

* The Amite River Diversion Canal Modification project. The State sponsor has indicated they wish Federal participation be suspended (confirmation anticipated in late FY 2012). Therefore, they have no interest at this time in pursuing any previously scheduled PED action in FY 2013 as they anticipate using only non-Federal funds to complete PED and execute construction. Accordingly, no activity is scheduled for FY 2014. This project involves the construction of gaps in the existing dredged material banks of the Amite River Diversion Canal. The objective of this project is to allow waters to introduce additional nutrients and sediment into western Maurepas Swamp to facilitate organic deposition, improve biological productivity, and prevent further swamp deterioration. The exchange of flow would occur during high flow events on the river. This project would also provide benefits to threatened/endangered species and colonial nesting birds. The DA was executed 9 December 2011. By letter dated 20 Aug 2012, the State of Louisiana requested we suspend future performance.

* The Beneficial Use of Dredged Material Program projects. The State sponsor has indicated no interest in pursuing any action in FY 2013 or 2014 (confirmation anticipated in late FY 2012). Accordingly, no activity would occur in FY 2013 or FY 2014. The Program will provide the framework, process and procedures for selecting, funding and implementing projects over a 10-year period that could create an estimated 21,000 acres of coastal wetlands over the 10-year life of the program. Dredged material will be acquired from maintenance activities of Federal waterways. A Program report approved by the Administration was transmitted to Congress 13 August 2010. During a face-to-face meeting between the State of Louisiana and the District Commander, 19 Jul 2012, the State indicated they are not interested in cost sharing in the Beneficial Use of Dredged Material Program at this time. Plaquemines Parish Government has inquired about their participation as a project cost share partner in the Beneficial Use of Dredged Material Program. Preliminary discussions have initiated.

* Small Bayou Lafourche Reintroduction project consists of increasing channel flows by introducing 1,000 cfs of Mississippi River water into the Bayou at Donaldsonville to mimic the actions of a river crevasse. Dredging and bank stabilization would be required to control water levels and maintain bank stability and a sediment trap. Weirs are also features of the project. Projections are that 2,500 acres of coastal marsh would be protected, thousands of acres would benefit as would the bald eagle and essential fish habitat. During prior face-to-face meetings with the State of Louisiana, they have indicated they are not interested in cost sharing in this project at this time.

* Small Diversion at Hope Canal is expected to enhance approximately 36,000 acres of Maurepas Swamp wetlands primarily by introducing approximately 5,000 cfs from the Mississippi River. Project includes two box culverts; a receiving pond reinforced with riprap; and a 50-foot wide, and a 10-foot deep outflow channel

roughly 27,500 feet long that will run from the river to U.S. Interstate 10. During prior face-to-face meetings with the State of Louisiana, they have indicated they are not interested in cost sharing in this project at this time.

* Mississippi River Gulf Outlet Environmental Restoration involves the construction of shoreline protection measures such as rock breakwaters along the north bank of the Mississippi River Gulf Outlet and along important segments of the southern shoreline of Lake Borgne. WRDA 2007 Section 7013 authorized additional investigations related to the deep draft navigation channel closure. The environmental restoration plan associated with the closure is currently under review by the administration. The LCA Section 7006 efforts will not begin until the Section 7013 report is finalized.

* The Modification to Davis Pond diversion project. The project will increase wetland creation and protection outputs for this existing structure through changes in the structure's operation. The structure, operating on average at about one-half capacity, maintains salinity gradients in the central Barataria Basin. In addition to wetland creation, the freshwater wetlands of the upper Barataria Basin will be directly benefitted by the added sediments and freshwater introduced from the Mississippi River. Wetland acreage benefits may range from 2,000 to 14,000 acres. The tentatively selected plan may call for increased use of the structure which can result in the need to purchase of flowage easements in the influence area as a major construction cost. The project would improve habitat for many wildlife species including pallid sturgeon/manatee; also, eagle, migratory/colonial birds, essential fish habitat. The FCSA was signed 5 June 2009. By letter dated 16 Oct 2012, the State of Louisiana requested we suspend future performance.

* Modification to the Caernarvon diversion project. The project will increase wetland creation and protection outputs for this existing structure through changes in the structure's operation. Currently, the structure operates on average at about one-half capacity to maintain salinity gradients. The wetlands of St. Bernard and Plaquemines Parishes suffered extensive losses from Hurricane Katrina and will directly benefit from the added sediments and freshwater introduced from the Mississippi River by increasing the freshwater introduction volume. Wetland acreage benefits may range from 2,000 to 14,000 acres. The project would improve habitat for many wildlife species including pallid sturgeon/manatee; also eagle, migratory/colonial birds, essential fish habitat. The FCSA was signed 5 June 2009. By letter dated 16 Oct 2012, the State of Louisiana requested we suspend future performance.

* The Land Bridge between Caillou Lake and Gulf of Mexico project. The project would maintain the natural hydrologic barrier between the Gulf and Caillou Lake and associated Terrebonne Basin wetlands as well as allow increased freshwater influence from the Atchafalaya River waters flowing eastward into Four League Bay. Subsidence, storm damage, increased tidal influence, and lack of sediment inputs have all caused significant adverse impacts resulting in wetland loss, habitat conversion, and ecosystem degradation. These habitat losses have had a direct adverse impact on wildlife and fisheries resources and State-designated Public Oyster Seed Reservations. The tentatively selected plan would maintain the separation between Caillou Lake and the Gulf of Mexico and Bay Voisin and the Gulf of Mexico, maintain the estuarine gradient, reduce the marine influences on Caillou Lake and Bay Voisin, and reverse the trend of deterioration in the associated wetlands and wildlife habitat. The tentatively selected plan will create and nourish approximately 1,588 acres of saline marsh and install 29,000 linear feet (8,839 m) of shoreline protection to increase the stability of the land bridge separating Caillou Lake from the Gulf of Mexico and of the stability of the critical land bridge separating Bay Voisin and the Gulf of Mexico. The project would improve habitat for many wildlife species including manatee; migratory/colonial birds; also loggerhead, Kemp's Ridley, hawksbill sea turtles, also essential fish habitat. The FCSA was signed 5 June 2009. By letter dated 16 Oct 2012, the State of Louisiana requested we suspend future performance.

* The Gulf Shoreline at Point Au Fer Island (Point Au Fer) project. The project provides for stabilizing the Gulf shoreline of this island, thereby precluding the formation of direct connections between the Gulf and Four League Bay, a situation that would lead to increasing salinities of island and inland coastal wetlands influenced by Atchafalaya River water. Protecting this island also provides storm surge protection to the southwestern corner of the Terrebonne Bay wetland system. Subsidence, storm damage and increased tidal influence and lack of sediment inputs have all resulted in shoreline retreat/loss, dune habitat, and protected back-bay barrier marshes. The project would improve habitat for many wildlife species including piping plover, manatee; also migratory/colonial birds; loggerhead, Kemp's Ridley, hawksbill sea turtle. The FCSA was signed 5 June 2009. By letter dated 16 Oct 2012, the State of Louisiana requested we suspend future performance.

The estimated cost of preparing the Near-Term Program follow-on feasibility studies is \$147,054,000 which is cost shared on a 50-50 percent basis by Federal and non-Federal interests. PED will be cost shared 65 percent Federal and 35 percent Non-Federal as authorized in Title VII, WRDA 2007.

The total estimated cost of preparing all LCA feasibility studies is \$147,054,000 a decrease of \$3,159,000 from the latest cost estimate of \$150,213,000 presented to Congress in FY 2012 due to refinements of cost estimates for the LCA program. The total estimated cost for preparing all LCA PED documents is \$73,288,000.

Total Estimated Study Cost	\$ 147,054,000	Total Estimated PED Cost (65/35)	\$73,288,000
Reconnaissance Phase (Federal)	N/A	Federal	\$47,637,000
Feasibility Phase (Federal)	73,527,000	Non-Federal	\$25,651,000
Feasibility Phase (Non-Federal)	73,527,000		

STATUS SUMMARY(as of 25 January 2013)

Active	
Beneficial Use of Dredged Material Program	Feasibility Complete: ROD signed 13 Aug 2010, developing Design Agreement
Demonstration Projects Program	Developing Program Implementation Plan
Medium Diversion at Myrtle Grove with Dedicated Dredging	Feasibility study continues
Barataria Basin Barrier Shoreline Restoration	Developing Design Agreement
Small Diversion at Convent Blind River	In PED
Medium Diversion at White's Ditch	In PED

Suspended

Amite River Diversion Canal Modification	Suspended by state's letter dated 20 Aug 2012
Convey Atchafalaya River Water to Northern Terrebonne Marshes	Suspended by state's letter dated 20 Aug 2012
Houma Navigation Canal	Suspended by state's letter dated 20 Aug 2012
Terrebonne Basin Barrier Shoreline Restoration	Suspended by state's letter dated 20 Aug 2012

Landbridge between Caillou Lake and the Gulf of Mexico	Suspended by state's letter dated 16 Oct 2012
Gulf Shoreline at Point au Fer island	Suspended by state's letter dated 16 Oct 2012
Modification of Caernarvon Diversion	Suspended by state's letter dated 16 Oct 2012
Modification of Davis Pond Diversion	Suspended by state's letter dated 16 Oct 2012

Feasibility studies never initiated

Hope Canal
Bayou Lafourche

OTHER

Mississippi River Gulf Outlet Environmental Restoration	Pursuant to WRDA 2007 Section 7013: Production of a feasibility report proceeding separately from Section 7006 - Section 2013 report in review
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WRDA 2007, Title VII (Public Law 110-114); the Report of the Chief of Engineers, LCA Ecosystem Restoration, Six Projects Authorized by Section 7006(e)(3) of WRDA 2007, dated 30 December 2010; Louisiana Coastal Area (LCA), Louisiana, Beneficial Use of Dredged Material Program Record of Decision (signed 13 August 2010); and the Report of the Chief of Engineers (dated 22 June 2012), LCA Ecosystem Restoration, Barataria Basin Barrier Shoreline Restoration Project, Louisiana.

The completion schedule of the near-term program is TBD.

MINNESOTA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost	Allocation Prior to FY 2011	Allocation FY 2011	Allocation FY 2012	Allocated Amount For FY 2013	Budget Allocation FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Minnesota River Watershed Study, MN and SD (Minnesota River Basin) SURVEYS – Continuing (ENR) St. Paul District	\$4,520,000	329,000	499,000	335,000	350,000 <u>2/</u>	350,000 <u>1/</u>	\$2,657,000

The Minnesota River in southwestern Minnesota originates at the Minnesota-South Dakota border, flows 335 miles through some of the richest agricultural land in Minnesota and joins the Mississippi River at Minneapolis and St. Paul, Minnesota. The river drains 16,770 square miles, of which 14,840 are in Minnesota, 1,610 in South Dakota, and the remainder in North Dakota and Iowa. The Minnesota River reconnaissance study recommended three Feasibility studies. One of the recommendations included an integrated watershed, water quality management, and ecosystem restoration analysis that would produce a watershed management plan to facilitate better watershed management and identify specific opportunities for the Corps of Engineers and other stakeholders. This study was initiated in September 2008 and the Minnesota Environmental Quality Board is acting as the local sponsor. An interagency technical team of Federal and non-Federal partners with expertise in Hydrology, geomorphology, limnology, ecology, agriculture, and economics, planning and modeling has assisted in the scoping of the study. The non-Federal participants include the Minnesota Pollution Control Agency (MPCA), the Minnesota Department of Natural Resources (DNR), the Minnesota Board of Water and Soil Resources (BWSR), the Metropolitan Council of the Twin Cities, Minnesota State University – Mankato, the University of Minnesota and the Nature Conservancy. Federal participants would include the Corps of Engineers, the Natural Resources Conservation Service (NRCS), the Agricultural Research Service (ARS), the U.S. Fish and Wildlife Service (FWS), the U.S. Geological Survey (USGS), the National Weather Service (NWS), and the U.S. Environmental Protection Agency (EPA). The study will take advantage of advanced watershed modeling techniques to understand the relationship of hydrologic and water quality parameters and the relative impacts and benefits of alternative measures for watershed management and ecosystem restoration and integrate the efforts of a wide range of agencies currently working independently, leading to more cost-effective use of existing government programs. It is expected that the integrated watershed study will identify additional projects for study and implementation. The local sponsors will be providing in-kind technical services as well as collecting LiDAR data in the Minnesota River Basin to fulfill cost-share obligations. The study is authorized by resolution of the House Committee on Public Works, 10 May 1962.

Fiscal Year 2013 funds will be used for continuing the feasibility study. Funds requested for Fiscal Year 2014 will be used to continue modeling work and initiate development of a decision support system. The preliminary estimated cost of the feasibility phase is \$9,040,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Costs decreased as a result of initial efforts to re-scope the study for compliance with 3x3x3. A summary of study cost sharing is as follows:

Total Estimated Feasibility Study Cost	\$9,040,000
Reconnaissance Phase (Federal)	N/A 3/
Feasibility Phase (Federal)	4,520,000
Feasibility Phase (Non-Federal)	4,520,000

A feasibility cost share agreement was executed 29 September 2008. The completion for the feasibility study is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Program Year (PY) from prior appropriations for use on this study is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Reconnaissance phase funded under overall study authority for Minnesota River Basin.

\$0 rescinded from the project in N/A.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account in N/A.

NORTH DAKOTA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocated Amount For FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Red River of the North Basin, ND, MN, SD and Manitoba, Canada SURVEYS – Continuing (ENR) St. Paul District	\$10,580,000	4,131,000	1,892,000	489,000 <u>4/</u>	433,000 <u>2/</u>	433,000 <u>1/</u>	\$3,202,000

A watershed study for the entire Red River of the North Basin was initiated with execution of a Feasibility Cost Share Agreement in June 2008. Reconnaissance activities will continue for specific locations within the Basin as described in the Reconnaissance report approved in October 2002. The Red River of the North, a northward flowing stream, originates at the convergence of the Ottertail, Minnesota, and Bois de Sioux Rivers, Minnesota and North Dakota and ends at Lake Winnipeg in Manitoba, Canada. Within the United States, the Red River drains portions of South Dakota, Minnesota, and North Dakota and forms the border between the latter two. The basin has lost much of the natural environment that existed in early settlement times, and flooding has repeatedly caused economic and human hardship. Major flood events totaling billions of dollars in damages have occurred in 1826, 1852, 1893, 1897, 1914, 1919, 1950, 1974, 1975, 1978, 1979, 1985, 1989, 1996, 1997, 2001, 2006, 2009, 2010, and 2011. Additional floods with substantial documented damages occurred on tributaries in other years. Drainage, river modifications, and land use changes (including those for enhancement of agriculture) have adversely affected the natural ecosystems. The basin's water resources issues have been the focus of several watershed planning and management initiatives by the International Red River Board and Red River Basin Commission. Studies will address flood damage reduction and ecosystem restoration. Federal agencies, state agencies in Minnesota, North Dakota, and South Dakota, local units of government, non-profit environmental organizations, Canadian interests, business and agricultural representatives, and citizens participating in support of these initiatives see this study as critical to continued basin planning and implementation. The initial task in the basin-wide watershed study is development of a digital elevation model using LIDAR data, followed by the development of a decision support system and watershed management plan. The study will build models and develop tools to assist local governments in managing the watershed. The study is authorized by resolution of the Senate Committee on Public Works, 30 September 1974.

Fiscal Year 2013 funds will be used for continuing progress on the updated Decision Support System, hydrologic model development, and the Comprehensive Watershed Management Plan. Funds requested for Fiscal Year 2014 will be used to continue progress on the updated Decision Support System and the comprehensive watershed management plan, and if approved, any follow-on feasibility studies. The estimated cost of the feasibility phase is \$18,560,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. The study is currently being re-scoped for compliance with the 3x3x3. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$19,860,000	<u>3/</u>
Reconnaissance Phase (Federal)	1,300,000	
Feasibility Phase (Federal)	9,280,000	
Feasibility Phase (Non-Federal)	9,280,000	

The feasibility study completion date is TBD.

- 1/ Estimated Unobligated "Carry-in" funding: As of the date this J-Sheet was prepared, the total dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the study as follows: N/A
- 2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
- 3/ Excludes costs for Wild Rice River, MN; Roseau, MN; Fargo, ND-Moorhead, MN and Upstream; and Fargo, ND-Moorhead, MN Metro; feasibility studies.
- 4/ \$75,000 increase in FY2012 Allocation due to funding of \$400,000 received from feasibility study of Fargo, ND-Moorhead, MN Metro and funding of \$325,000 reallocated to feasibility study of Valley City, ND.

\$4,000 rescinded from the project in 2011.

\$0 rescinded from the project in 2012.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account in N/A.

CONSTRUCTION

ILLINOIS

APPROPRIATION TITLE: Construction – Channels and Harbors (Flood Risk Management)

PROJECT: Chain of Rocks Canal, Mississippi River, Illinois, (Deficiency Correction) (Completion)

LOCATION: The Chain of Rocks Canal is located on the Mississippi River adjacent to river miles 184 to 194.4 in Madison County, Illinois.

DESCRIPTION: The recommended plan for deficiency correction involves the installation of relief wells and construction of berms and a pump station. All work is programmed.

AUTHORIZATION: The original project was authorized by the River and Harbor Act of 2 March 1945.

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 0.9 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 7 3/8 percent (FY 1999).

BASIS OF BENEFIT-COST RATIO: Based on the Level 1 Economic Reevaluation of the Chain of Rocks Canal Design Deficiency Report approved July 2011, at October 2011 price levels.

SUMMARIZED FINANCIAL DATA 1/	Original Project	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
		Entire Project	94	FY 2014
Actual Federal Cost	\$59,260,000	PHYSICAL DATA		
Actual Non-Federal Cost	0	The proposed plan provides for correcting underseepage deficiencies on the nine-mile long levee, installing new relief wells, replacing nonfunctional relief wells, utility relocations landside of the levee, adding fill to berms and filling in low areas, constructing a 155 cfs pump station, and constructing wetland mitigation features.		
Cash Contributions	\$ 0			
Other Costs	0			
Total Original Project Cost	\$59,260,000			

Mississippi Valley Division

St. Louis District

Chain of Rocks Canal, Mississippi River, IL
(Deficiency Correction)

SUMMARIZED FINANCIAL DATA (CONTINUED)

ACCUM
PCT OF EST
FED COST
(Remedial Work Only)

Remedial Work

Estimated Federal Cost	\$60,131,000		
Estimated Non-Federal Cost	\$0		
Cash Contributions	0		
Other Costs	0		
Total Estimated Remedial Cost	\$60,131,000		
Total Estimated Project Cost	\$119,391,000		
Allocations to 30 September 2010	\$ 46,051,000		
Allocation for FY 2011	7,415,000		
Allocation for FY 2012	3,265,000	^{1/}	
Conference Allowance for FY 2013	3,000,000	^{2/}	
Allocation for FY 2013	3,000,000		
Allocations through FY 2013	59,731,000	^{3/}	99
Estimated Carry-in Funds	0	^{4/}	
Budget Amount for FY 2014	400,000		
Programmed Balance to Complete after FY 2014	0		
Unprogrammed Balance to Complete after FY 2014	0		

1/ Additional funding in the amount of \$1,245,000 was received via the FY2012 Work Plan.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Includes ARRA (\$9,912,000).

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: This project is receiving a higher funding priority in the budget than its remaining benefit-remaining cost ratio would normally allow because it addresses significant risk to human safety in accordance with the Army Corps of Engineers performance-based guidelines for the construction account. The Chain of Rocks Canal Levee System consists of a dual line of levees running parallel to the canal constructed as part of the Chain of Rocks Canal, Illinois, navigation project. The operation and maintenance of these levees is a 100 percent Federal responsibility. The eastern line of this levee system serves as an integral part of the main line levee protection to the East St. Louis and vicinity area. The east levee has demonstrated inadequate underseepage performance during past floods. Quick conditions and sand boils developed on the landside of the levee during high river stages. The original design assumptions related to the coefficients of permeability for the aquifer and top stratum materials were incorrect. The relief well system was found to be deficient. The levee, as originally designed, relies on the impoundment of water against the landside toe of the levee in order to maintain levee stability; however, development over the last 40 years has prevented effective use of this method. Correction of the deficiencies will assure the integrity of the levee system and help to provide urban level protection for the East St. Louis metropolitan area. Failure of the levee would affect a population of approximately 250,000 mainly low income residential neighborhoods and a heavily industrialized area with property values of approximately \$1.4 billion.

The Budget includes funding primarily to address a significant risk to human safety. The Corps made this determination based on many factors such as the likelihood and magnitude of the potential flooding, the number of people living in the flood plain, the likely warning time, the availability of evacuation routes, and site-specific engineering factors. This project, in addition to preventing damages to property, is effective in reducing a high risk to life for the population in the project area. That risk must be considered in evaluating the project justification in addition to economic analyses. The life safety hazard index is depth 22 feet, warning time 24 hours, and population affected is 250,000. The average annual damages without project are estimated at \$2,649,000 and \$2,000 with the project.

Average annual benefits for the deficiency correction are as follows:

Annual Benefits	Amount
Flood Damage Reduction	\$ 2,618,000
Navigation	29,000
Total	\$ 2,647,000

FISCAL YEAR 2013: Unobligated carryover funds will be used as follows:

Continue Relief Well Construction	1,260,000
Continue turf establishment for North Berms Ditch work	50,000
Mitigation	100,000
Planning, Engineering and Design	450,000
Construction Management	200,000
Total	\$2,060,000

FISCAL YEAR 2013: Funds will be used as follows:

Relief Well Construction and Ditching	2,190,000
Maintenance During Construction	15,000
Mitigation	25,000
Planning, Engineering and Design	470,000
Construction Management	300,000
Total	\$3,000,000

FISCAL YEAR 2014: The requested amount will be used to complete O&M manuals and project closeout. Funds will be applied as follows:

Planning, Engineering, and Design	400,000
Total	\$400,000

NON-FEDERAL COST: The project is 100 percent Federal.

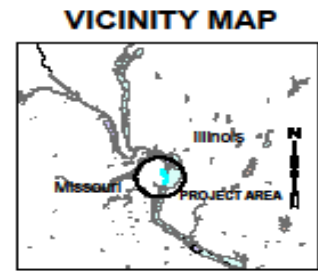
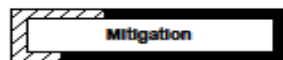
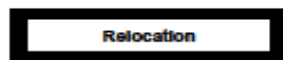
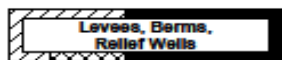
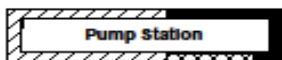
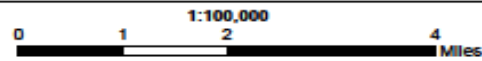
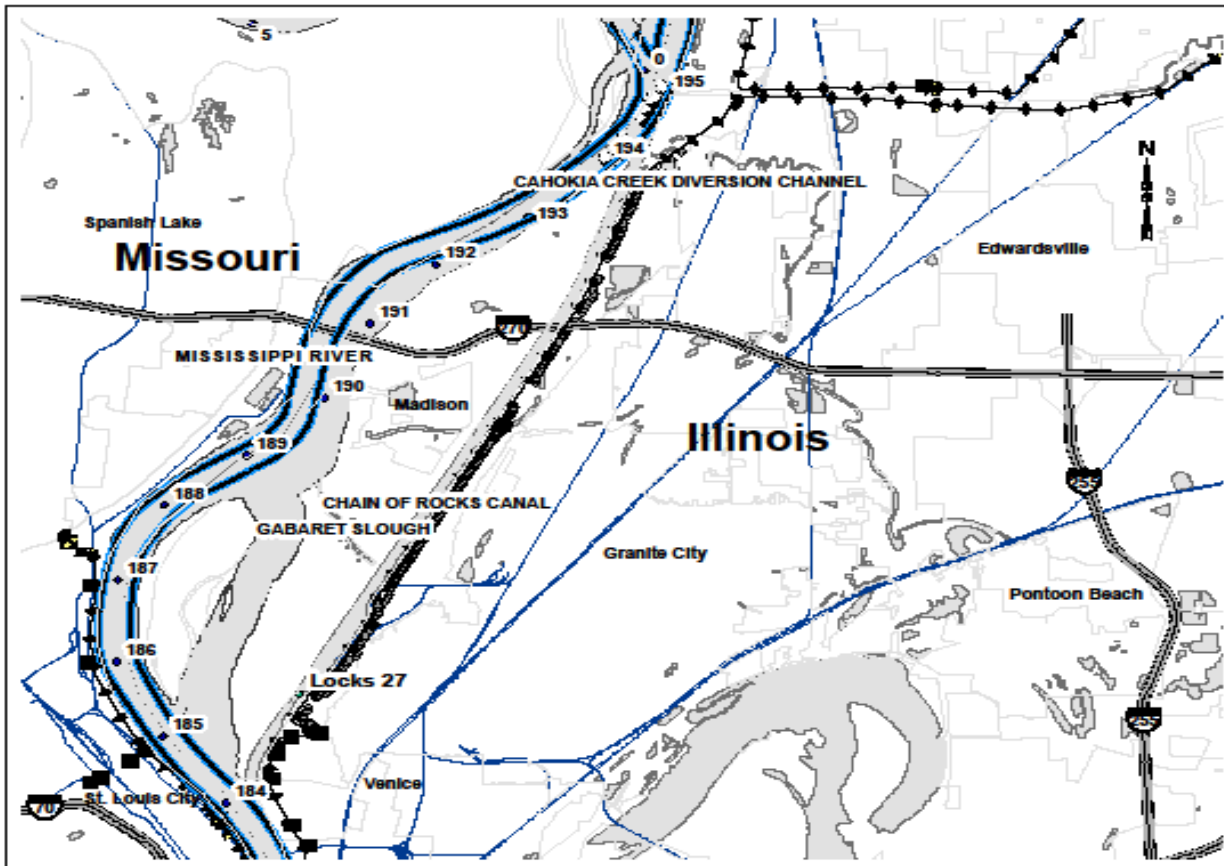
STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$60,131,000 is an increase of \$831,000 from the latest estimate (\$59,300,000) presented to Congress (FY 2013). Post contract award costs reflect an increase in cost due to the analysis of requirements for south berms relief wells and ditch work as well as increases in construction management and maintenance during construction to support these contracts. This change includes the following items:

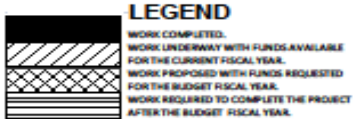
Item	Amount
Price Escalation on Construction Features	(\$704,000)
Post Contract Award and Other Estimating (including Contingency) Adjustments	1,535,000
Total	\$831,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment resulted in a Finding of No Significant Impact (FONSI); it was signed 21 May 1996. A second FONSI for revised plans was signed 14 August 2002.

OTHER INFORMATION: Previous funding included the actual cost of \$59,260,000 for the construction of the original project, which was completed in Fiscal Year 1953. Funds to initiate construction for the remedial work were appropriated in Fiscal Year 1999. The deficiency report documented a need for a pumping station to handle 155 cubic feet per second in interior flows. Without this pump station, there is no means of handling the additional flows from newly installed relief wells. Fish and Wildlife costs are \$2,057,000.



1:6,000,000



MAP SYMBOLS

- ◆ Levee / Floodwall
- Channels
- Interstate_Highway
- US_Highway
- Pump Station
- Relief Well

**CHAIN OF ROCKS CANAL,
MADISON COUNTY
MISSISSIPPI RIVER, ILLINOIS**
U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction – Local Protection (Flood Risk Management)

PROJECT: East St. Louis, Illinois (Rehabilitation) and (Deficiency Correction) (Continuing)

LOCATION: The project is located in St. Clair and Madison Counties, Illinois, along the left bank of the Mississippi River between river miles 175 and 195 above the Ohio River.

DESCRIPTION: The rehabilitation project consists of the rehabilitation or closure of 21 small gravity drains, 10 large gravity drains (gatewells), 20 closure structures, and 300 relief wells; minor floodwall and levee repair work; rehabilitation of 12 pumping stations, 3 drainage control structures, and 6 channel segments; and replacement of 3 bridge structures and abandonment and removal of 4 bridge structures. All work, except bridges, is programmed. The bridge work, which is unprogrammed, was performed at 100 percent non-Federal costs. A Limited Reevaluation Report (LRR) that addresses design deficiencies in underseepage and through seepage controls was approved August 2010. These deficiencies manifested during the 1993, 1995, and 2008 floods. Deficiency corrections are required for a segment of levee that is adjacent to a proposed EPA Superfund site and other hazardous and toxic waste sites. A supplement to the LRR that addressed remediation features using berm designs that follow current criteria as specified in Engineering Technical Letter 1110-2-569 was approved 28 June 2011. The deficiency correction project consists of 305 new relief wells, grouting 312 existing wood stave relief wells, ditching and pipe collector systems, a seepage pump station, a lift station, a variable frequency drive, seepage berms, cutoff walls, riverside clay blanket, and environmental and archeological mitigation work.

AUTHORIZATION: Flood Control Act of 1936 (PL 74-738) for Deficiency Correction project; Energy and Water Development Appropriations Act of 1988 (PL 100-202) for Rehabilitation project.

REMAINING BENEFIT-REMAINING COST RATIO: 11.6 to 1 at 7 percent (rehabilitation project); 1.1 to 1 at 7 percent (deficiency correction project).

TOTAL BENEFIT-COST RATIO: 6.9 to 1 at 7 percent (rehabilitation project); 1.1 to 1 at 7 percent (deficiency correction project).

INITIAL BENEFIT-COST RATIO: 5.6 to 1 at 8 7/8 percent (FY 1988) (rehabilitation project) and 1.7 at 4 percent (FY 2012) (deficiency correction).

BASIS OF BENEFIT-COST RATIO: Benefits for the rehabilitation project are from the Supplemental Project Report, completed March 1999. Benefits for the deficiency correction project are from the Level 4 Limited Reevaluation Report (LRR) and Environmental Assessment Design Deficiency Corrections Report, East St. Louis, approved Illinois Flood Protection Project 31 August 2010 and Level 4 LRR Supplement approved 28 June 2011.

Mississippi Valley Division

St. Louis District

East St. Louis, IL
(Rehabilitation and Deficiency Correction)

1 May 2013

MVD-44

SUMMARIZED FINANCIAL DATA	ACCUM		Deficiency Correction	ACCUM		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
	Rehabilitation	PCT OF EST FED COST		PCT OF EST FED COST	FED COST			
Estimated Federal Cost	\$42,523,000		\$80,500,000		Entire Project	30	TBD	
Programmed Construction	42,523,000		80,500,000		Rehabilitation	98	TBD	
Unprogrammed Construction	0		0		Deficiency Correction	0	TBD	
Estimated Non-Federal Cost	18,107,000		61,100,000					
Programmed Construction					PHYSICAL DATA:			
Cash Contributions (Rehab)	10,323,000 ^{1/}				Rehabilitation			
Other Costs (Rehab)	3,709,000				Floodwall and Levee Work			
Cash Contributions	40,200,000				Small Gravity Drains		21	
(Deficiency Correction)					Large Gravity Drains		10	
Other Cost	3,100,000				Closure Structures		20	
(Deficiency Correction)					Relief Wells		300	
Estimated Non-Federal Cost					Pumping Stations		12	
Unprogrammed Construction					Drainage Control Structures		3	
Cash Contributions		0		0	Bridge Replacements		3	
(Rehabilitation / Deficiency Correction)					Bridge Abandonment and Removal		4	
Other Costs					Channels		6	
(Rehabilitation)	4,075,000						segments	
(Deficiency Correction)	17,800,000				Deficiency Correction			
Total Estimated Programmed Construction Cost	56,555,000		123,800,000		Relief Wells		617	
Total Estimated Unprogrammed Construction Cost	4,075,000		17,800,000		Seepage Berms		5,770 linear feet	
Total Estimated Project Cost	60,630,000		141,600,000		VFD Pump Upgrade		1	
Allocations to 30 September FY 2010	40,461,000		0		61 cfs pump station		1	
Allocation for FY 2011	998,000		0		7 cfs lift station		1	
Allocation for FY 2012	658,000		850,000		Slurry Trench Cutoff Wall		17,340 linear feet	
Conference Allowance for FY 2013	0 ^{2/}		1,290,000 ^{2/}		Shallow Cutoff Wall		2,640 linear feet	
Allocation for FY 2013	0		1,290,000		Clay Filled Cutoff Trench		3,640 linear feet	
Allocation through FY 2013	42,117,000	99	2,140,000	3				
Estimated Carry-in Funds	0 ^{3/}		0 ^{3/}					
Budget Amount for FY 2014	0	99	12,855,000	18				
Programmed Balance to Complete after FY 2014	406,000		65,505,000					
Unprogrammed Balance to Complete After FY 2014	0		0					
Mississippi Valley Division			St. Louis District				East St. Louis, Illinois	
							(Rehabilitation and Deficiency Correction)	

^{1/} A cash contribution of \$13,356,000 is partially offset by a credit of \$3,033,000 for work-in-kind on completed work.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/} Estimated unobligated Carry-in Funding: As of the date this justification was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

JUSTIFICATION: The original project, authorized by the Flood Control Act of 1936, provides protection for 85,000 acres consisting of business, industrial, residential, and metropolitan areas, including East St. Louis, Granite City, Madison, Venice, Brooklyn, Fairmont City, Sauget, and Cahokia, Illinois. The urban design levee was designed to provide flood protection from the Mississippi River to a flood stage of 52 feet on the St. Louis, Market Street gage. The project protects the largest urbanized Mississippi River floodplain north of New Orleans. The rehabilitation project was authorized by the Energy and Water Development Appropriations Act of 1988. As a result of failure of a deteriorated roller gate, localized flooding occurred in 1986 leading to the evacuation of 1,200 residents and causing an estimated \$35,000,000 in property damage. The need for extensive rehabilitation work was confirmed during preparation of a General Design Memorandum for the project during Fiscal Year 1990. Because the levee system protects heavy industry (including chemical manufacturing facilities and steel mills) as well as hazardous/toxic chemical disposal sites (Sauget Area 1 Superfund Site/Sauget Area 2 Superfund site), failure of the levee could create an environmental disaster as well as adversely impact the economy. Flood events occurred in 1973, 1995, 1993, and 2008. 1993 was the flood of record, with an expected frequency of occurrence of once in 300 years. The design frequency against which flood risk reduction is to be provided is 500 year. This project, in addition to preventing damages to property, is effective in reducing a high risk to life for the populations in the project area. The life safety hazard index is: depth 22 feet, warning time 24 hours, and population affected 250,000. The average annual benefits, all flood damage reduction, are \$30,159,000 for the rehabilitation portion of the project. The average annual damages without the project are estimated at \$12,585,000 and \$11,000 with the project for deficiency correction. The average annual benefits, all flood damage reduction, are \$12,574,000 for the deficiency correction portion of the project.

FISCAL YEAR 2013: Unobligated carry-in funds will be used as follows:

Reconstruction:

Construct relief wells/collector system	\$ 102,000
Planning, Engineering, and Design	626,000
Construction Management	58,000
Total	\$786,000

Deficiency Correction:

Construct relief wells	\$ 100,000
Planning, Engineering, and Design	710,000
Construction Management	000
Total	\$810,000

Mississippi Valley Division

St. Louis District

East St. Louis, IL
(Rehabilitation and Deficiency Correction)

FISCAL YEAR 2013: Current year funds are being applied on deficiency correction as follows:

Construct relief wells	\$ 604,000
Planning, Engineering, and Design	592,000
Construction Management	94,000
Total	\$1,290,000

FISCAL YEAR 2014: The budget amount will be used on the deficiency correction project to construct new relief wells and cutoff wall required for underseepage control and for planning, engineering, and design, and construction management. Funds will be applied as follows:

Construct 40 Relief Wells and Grout 27 Existing Wells	\$ 912,000
Construct Slurry Trench Cutoff Wall	8,500,000
Planning, Engineering, and Design	2,600,000
Construction Management	843,000
Total	\$12,855,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$ 3,822,000	
Pay 23.9 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103(m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsor's work-in-kind credit based on Section 215 of the Flood Control Act of 1968.	53,556,000	\$ 786,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for construction of the project.	21,829,000	
Total Non-Federal Costs	\$79,207,000	\$ 786,000

Local interests are also required to operate and maintain all works after completion.

Mississippi Valley Division

St. Louis District

East St. Louis, IL
(Rehabilitation and Deficiency Correction)

STATUS OF LOCAL COOPERATION: The local sponsor, the Metro East Sanitary District, is strongly supportive of the project. Three Project Cooperation Agreements (PCA) were executed for this project - November 1989, 11 December 1990, and 11 March 1992. Amendment No. 1 to the third PCA, crediting the local sponsor for costs of work-in-kind (Clearing & Excavation of Drainage Channels), was executed on 9 August 1994. Amendment No. 2, executed on 2 September 1997, allows the Corps to award a contract for the previously identified work-in-kind and adds mitigation as a project cost feature. A Third Party Agreement, executed in August 1999 between Metro East Sanitary District and Canteen Creek Drainage District, eliminated the requirement for a fourth PCA for this project. In a financial document dated 19 May 1999, the non-Federal sponsor indicated they are financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. In order to restore the authorized level of protection to the levee, additional work will be needed to address critical underseepage and through-seepage problems that manifested themselves during the floods of 1993, 1995 and 2008. The project sponsor has been notified that these problems are the result of design deficiency issues that have been addressed in the LRR and Supplemental LRR. Deficiency correction project costs resulting from the LRR will be maintained separately from the East St. Louis rehabilitation project costs. The Design Agreement for the deficiency correction project was executed 20 December 2012. The Project Partnership Agreement for the deficiency correction project is scheduled to be executed in August 2013.

COMPARISON OF FEDERAL COST ESTIMATES: The current total Federal cost estimate for deficiency correction and rehabilitation of \$123,023,000 is an increase of \$562,000 from the latest estimate of \$122,461,000 submitted to Congress (FY 2013). This change is associated with the rehabilitation project cost estimate and includes the following items:

Price Escalation on Construction Features	\$386,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	176,000
Total	\$562,000

The current Federal cost estimate of \$80,500,000 for the deficiency correction project is the same as the last estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The project consists of rehabilitation of existing facilities and, for the major part of the project, will not affect environmental conditions except for short-term localized impacts. An environmental assessment and Finding of No Significant Impact was signed by the District Commander on 1 August 1991. An environmental assessment and Finding of No Significant Impact for the deficiency correction project supplement was signed by the District Commander on 16 May 2011.

OTHER INFORMATION: Funds to initiate construction of the rehabilitation project were appropriated in Fiscal Year 1988. Funds to initiate construction for the deficiency correction project were appropriated in Fiscal Year 2012. Fish and Wildlife mitigation costs are \$19,000 for rehabilitation project. Fish and Wildlife mitigation costs are estimated at \$879,000 for deficiency correction project.

As a result of the drainage ditch clearing and excavation, mitigation was approved as a project cost per amendment Number 2 to the third PCA and was accomplished on project lands.

Mississippi Valley Division

St. Louis District

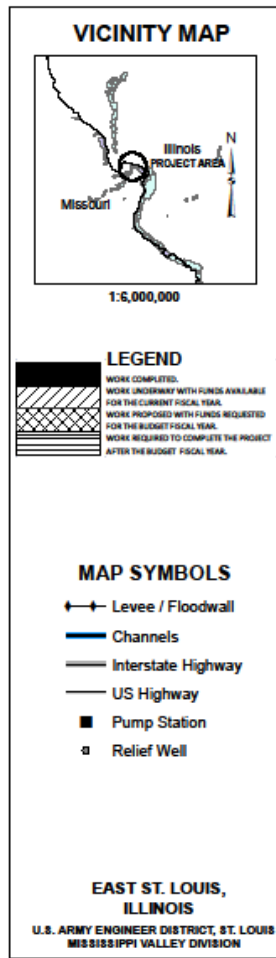
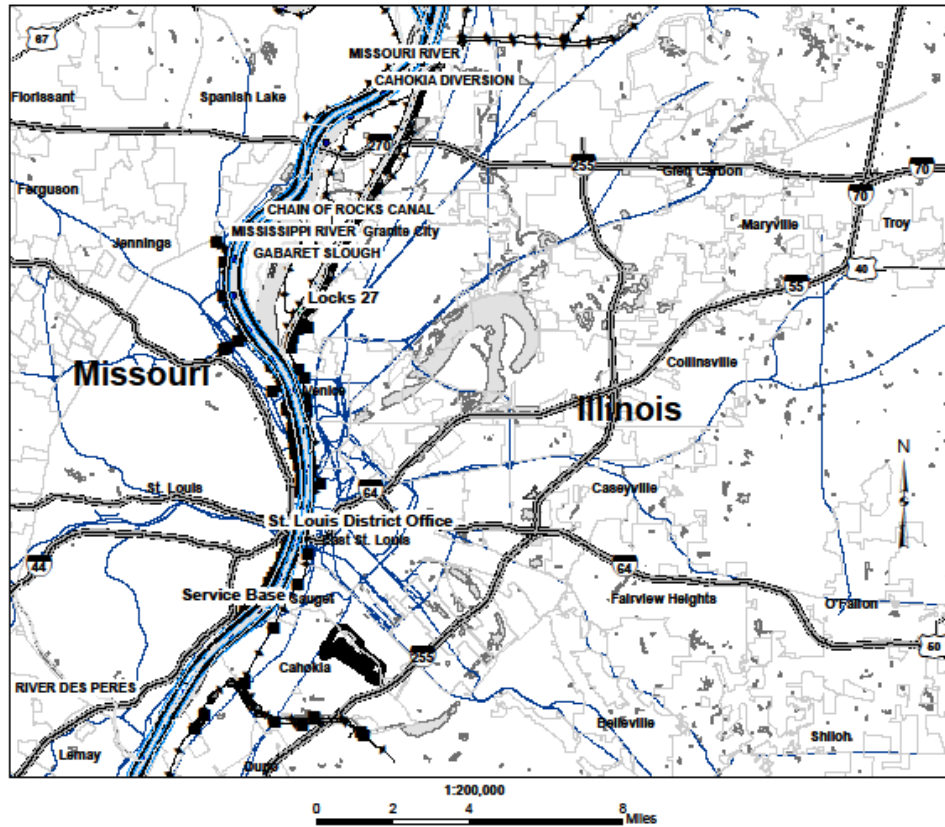
East St. Louis, IL
(Rehabilitation and Deficiency Correction)

Physical completion of the rehabilitation project is largely dependent on the need for low river stages to complete the North Pump Station work. Remaining construction work includes construction of relief wells/collector system and is expected to complete September 2013. The FY 2013 justification sheet reflected 20 August 2010 as the approved date of the LRR for deficiency corrections; the correct date is 31 August 2010.

Breakdown of FY 2013 allocation (\$1,290,000) for deficiency correction reflects a change in projected costs due to recent reanalysis of the work scheduled for FY 2013.

The FY 2013 justification sheet reflected 1.0 as the deficiency correction BCR at 7%; the correct BCR at 7% is 1.1.

The FY 2013 justification sheet reflected \$122,461,000 for the total estimated Federal cost; it should have been \$123,023,000. The total estimated non-Federal cost reflected was \$78,904,000; it should have been \$79,207,000. The total estimated cost reflected was \$201,365,000; it should have been \$202,230,000.



Mississippi Valley Division

St. Louis District

East St. Louis, IL
(Rehabilitation and Deficiency Correction)

APPROPRIATION TITLE: Construction – Major Rehabilitation – Locks and Dams (Navigation)

PROJECT: Illinois Waterway, Lockport Lock and Dam, Illinois (Major Rehabilitation) (Completion)

LOCATION: The project is located within a three mile reach of the Lockport Lock Pool of the Illinois Waterway (River Mile 291.0 - 294.1) at Lockport, Illinois. As part of the Chicago Sanitary and Ship Canal (CSSC), which extends from the Chicago River to the Illinois Waterway, the structures extend up river from the Lockport Lock.

DESCRIPTION: This section of the CSSC is a perched pool sitting 38 feet above the Des Plaines River on the right descending bank and Deep Run Creek on the left descending bank. The Lockport Pool contains several major features that are located on this lower reach of the CSSC, a component of the Illinois Waterway System. The Approach Dike is a high hazard dam and is constructed of limestone cement core wall and non-homogeneous materials dating back as far as the early 1900's, which has deteriorated where its function as a seepage cutoff is limited. The concrete Canal Wall of the CSSC is in an advanced state of concrete deterioration that could affect wall stability. The Controlling Works primarily function as a flood control feature for the CSSC navigation pool. The Controlling Works rehabilitation involves gate bay sub-structure repairs and embankment Reconstruction. The Lockport powerhouse structure and dam retains the navigation pool. The key powerhouse structure components, including the Forebay Wall, are deteriorated and require rehabilitation. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 5.3 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.6 at 5-1/8 percent.

BASIS OF BENEFIT-COST RATIO: The Lockport Pool Rehabilitation Evaluation Report, dated March 2004. Cost estimate is as of May 2012. An economic update will not be prepared as this project is substantially complete and budgeted for completion in FY 2014.

SUMMARIZED FINANCIAL DATA		PHYSICAL STATUS: (1 January 2013)	COMPLETE	PERCENT SCHEDULE	COMPLETION
Estimated Federal Cost	\$130,385,000	Entire Project	80%	TBD	
General Appropriations	115,385,000				
Inland Waterways Trust Fund	15,000,000				
Estimated Non-Federal Cost	0				
Total Estimated Project Cost	\$130,385,000				

PHYSICAL DATA			
Lock – 600 feet long x 110 feet wide.			
	GENERAL APPROPRIATIONS	INLAND WATERWAYS TRUST FUND	ACCUM PCT OF EST FED COST
Allocations to 30 September 2010	\$ 110,090,000 ^{1/}	\$ 0	
Allocation for FY 2011	(222,000) ^{2/}	0	
Allocation for FY 2012	5,517,000 ^{3/}	0	
Conference Allowance for FY 2013	0	\$ 3,600,000 ^{4/}	
Allocation for FY 2013	\$ 0	\$ 3,600,000	
Allocations through FY 2013	\$ 115,385,000 ^{5/}	3,600,000	89%
Estimated Carry-in Funds	\$ 2,000,000 ^{6/}	0	
Budget for FY 2014	\$ 0	\$ 11,400,000	100%
Programmed Balance to Complete after FY 2014	0	0	
Unprogrammed Balance to Complete after FY 2014	0	0	

^{1/} Reflects allocations from ARRA, General appropriations and the Dam Safety and Seepage/Stability Correction Program.

^{2/} Reflects reprogramming of \$2,000 of ARRA and \$220,000 of Construction.

^{3/} Includes reprogramming of \$325,000.

^{4/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{5/} Includes ARRA of \$89,009,657 in FY 2009; (\$31,051,657) in FY 2010; (\$2,260) in FY 2011, and \$1,416,700 in FY 2012.

^{6/} Estimated "Carry-in" funding: As of the date this j-sheet was prepared, the total unobligated dollars estimated to be carried in from prior appropriations for use on this project effort is \$2,000,000. This amount will be used to perform work on the project as follows: Closeout contracts for Canal Wall replacement and Controlling Works repair, design and award contract for partial repair of Forebay Wall.

JUSTIFICATION: The CSSC construction began in 1892 and opened in 1900 allowing water from Lake Michigan, to flow through the Chicago River and into the Des Plaines River at Lockport. An extension was added in 1907 including the Lockport lock, Lockport powerhouse, the lock approach dike, the controlling works, and the concrete guide walls. The Metropolitan Water Reclamation District of Greater Chicago (MWRD), through Congressional action, transferred the maintenance responsibilities for the Lockport Upper Pool retaining structures to USACE in 1984. The CSSC has been in service for over 100 years, and the original Approach Dike was built with a lime cement core wall and non-homogeneous materials, to cut off seepage through the dike, to a height matching river levels in the early 1900's. A cutoff wall to stabilize this embankment was completed as part of the current rehabilitation in FY 2009. The CSSC is perched above surrounding ground levels and can exceed 38 feet in depth. A concrete canal wall separates the CSSC from Deep Run Creek on the left descending bank. This concrete wall was built in stages, and the lower wall area is deteriorating at its key connection to the upper wall. This wall is continually subject to barge strikes and normal freeze-thaw deterioration. Like the dike, loss of one wall section could mean complete loss of pool and a halt to navigation. A contract was awarded in FY 2009 to rehabilitate a 2-mile segment of this and was substantially complete in July 2012. Rehabilitation of the Controlling Works was substantially complete as of September 2012. The powerhouse Forebay Wall, in the Approach Dike Reach, was identified by a Dam Safety Probable Failure Modes Analysis as a credible seepage concern in FY 2011 and needs to be addressed. This component of the Lockport Pool was completed in 1907, and is similar construction to the Canal Wall that collapsed during construction in 2011. Once completed, repair of this Forebay Wall will allow improvement of the Dam Safety Action Classification (DSAC) rating for Lockport Pool. The current DSAC rating is 2, indicating unsafe or potentially unsafe dam conditions.

The powerhouse, controlling works, and dam were all built about the same time and are subject to the same types of deterioration. While the District is only responsible for the base and support structures under the 1984 Congressional action, loss of the base structures could mean total loss of pool and a halt to navigation. These factors affect the District's ability to maintain the safety, reliability, and design service level of these facilities. The average annual benefits are \$16,098,000 for navigation.

Lock tonnage figures for the last twelve years are as follows:

Year	Tonnage	Year	Tonnage	Year	Tonnage	Year	Tonnage
2011	10,552,834	2008	12,460,893	2005	16,929,707	2002	16,872,206
2010	9,853,988	2007	13,507,517	2004	17,341,066	2001	15,970,297
2009	10,240,591	2006	17,259,650	2003	15,310,005	2000	16,788,986

FISCAL YEAR 2013: The total unobligated dollars are being used as follows:

Design and award contract for partial repair of Forebay Wall	\$ 3,800,000
Total	\$ 3,800,000

FISCAL YEAR 2013: The current amount will be applied as follows:

Contract Administration and Closeout (Canal Wall, Controlling Works)	\$ 75,000 ^{1/}
Design and award contract for partial repair of Forebay Wall	\$ 3,525,000 ^{2/}
Total	\$ 3,600,000

^{1/}Contract Administration amount has decreased due to contract completion in FY13.

^{2/}Contract design and award amount has increased due to site conditions discovered during detail design.

FISCAL YEAR 2014: The budget amount plus anticipated FY 2013 carry-in of \$2,000,000 will be used for the Forebay Wall contract and the associated contract management. Funds will be applied as follows:

Award contract for complete repair of Forebay Wall	\$11,000,000
Administer contracts	\$ 2,400,000
Total	\$13,400,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction is to be derived from the Inland Waterways Trust Fund (IWTF). However, the American Reinvestment and Recovery Act of 2009 provided an exemption from withdrawing funds allocated under that Act from IWTF. Also, in the 2009 Energy and Water Development Appropriations Act, the Congress funded work on this project entirely from the General Fund. FY 2013 and FY 2014 funds will be drawn entirely from IWTF to help balance previously appropriated regular construction funds.

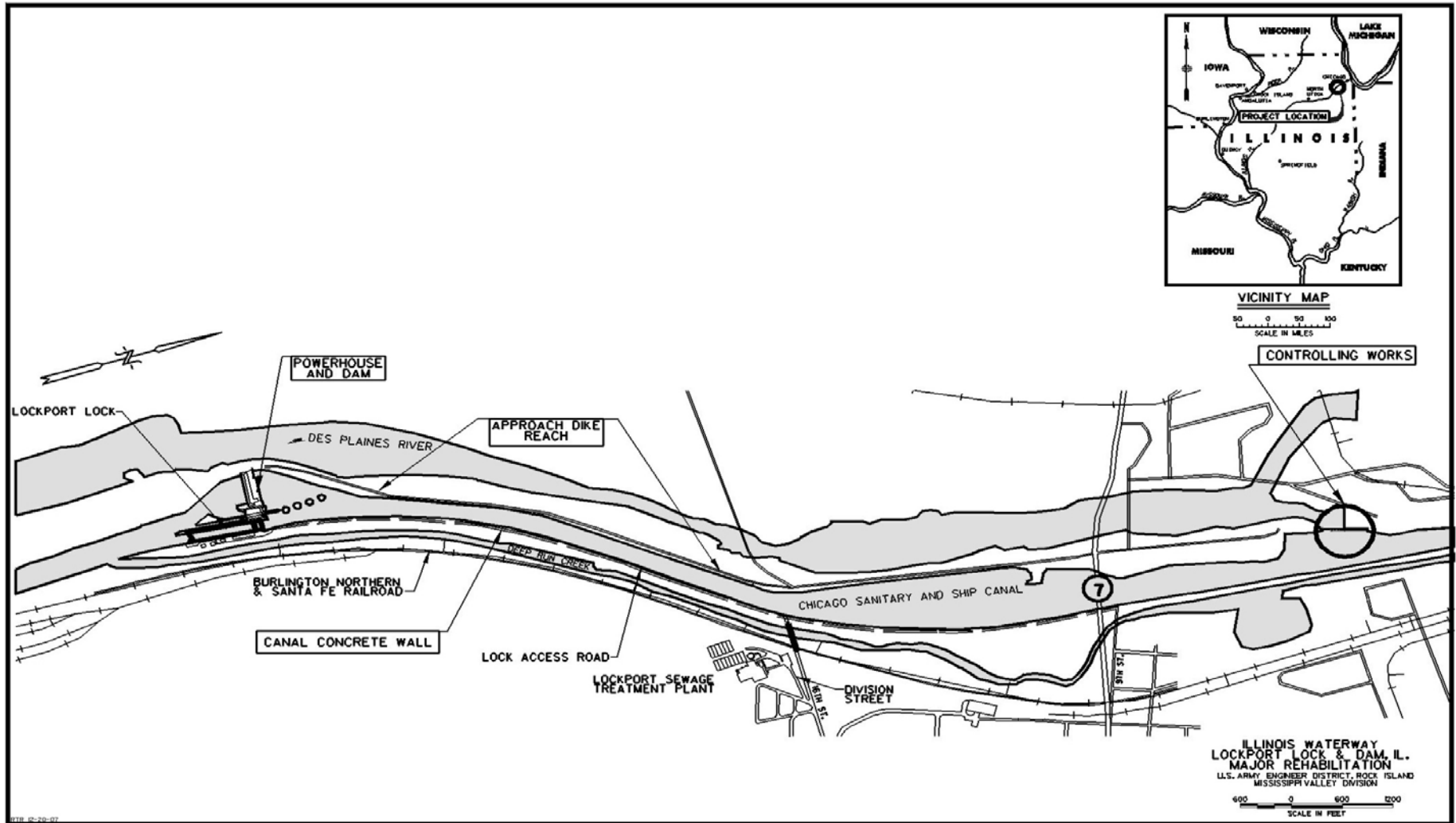
STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$130,385,000 is an increase of \$11,725,000 from the latest estimate (\$118,660,000) presented to Congress (FY 2013). The increase includes additional work needed to improve the reliability of the Lockport Powerhouse Forebay wall against probable failure.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was completed and a Finding of No Significant Impact was signed on 19 May 2004.

OTHER INFORMATION: Operations and Maintenance funds were allocated to initiate and complete the Rehabilitation Evaluation Report. Project was approved to be included in the Dam Safety and Seepage/Stability Correction Program and allocated \$4,700,000 in FY 2006 for PED and construction and FY 2007 funds from the Construction Appropriation. The Lockport Upper Pool Project is currently rated as a DSAC II facility, defined as a dam that has confirmed (unsafe) or unconfirmed (potentially unsafe) dam safety issues.

The FY 2013 use of funds is different than presented to Congress in FY 2013. The Contract Administration amount has decreased due to contract completion in FY 2013. Contract design and award has increased due to site conditions discovered during detail design.



APPROPRIATION TITLE: Construction – Local Protection (Flood Risk Management)

PROJECT: Wood River Levee, Illinois – Deficiency Correction and Reconstruction (Continuing)

LOCATION: The Wood River Levee Project is located in Madison County, Illinois, along the left bank of the Mississippi River between river miles 195 and 203 above the Ohio River. The study area lies in the Mississippi River flood plain of Madison County, Illinois, just upstream of the City of East St. Louis.

DESCRIPTION: The deficiency correction portion of the project includes replacing/modifying 253 existing relief wells and 154 new relief wells. It includes replacing 163 of 170 of the existing relief wells, filling 83 non-functional existing obsolete relief wells with grout, and installing 154 new relief wells under the existing project authorization. The project to correct deficiencies also includes ditching and pipe collector systems; the addition of two 25 cubic feet per second pump stations; one 20 cubic feet per second pump station; 815 linear feet of seepage berm, 1,010 linear feet of landside clay fill, 2,910 linear feet of slurry trench cutoff wall at the riverside levee toe and to bedrock (140 feet deep), 1,060 linear feet of slurry trench cutoff wall (100 feet deep) at the riverside levee toe, 2,875 linear feet of slurry trench cutoff wall (25 ft deep) at the riverside toe, environmental and archeological mitigation work, utility relocations, 9.88 acres flowage easement area, easements for berms, relief wells, slurry trench cutoff wall staging areas and equipment access areas along the levee, disposal areas for material excavated for the slurry trench cutoff walls, and wetland and bottomland hardwood mitigation areas. The reconstruction portion of the project includes the lining or replacement of 38 gravity drains, the rehabilitation of 7 pump stations including pump rehabilitation and structural updates, and the rehabilitation of 26 gates and gate closure structures.

AUTHORIZATION: (Deficiency Correction) Section 4 of Flood Control Act of 1938; (Reconstruction) Section 1001(20) of WRDA 2007. Cost sharing for Deficiency Correction and Reconstruction consistent with Section 103 of Water Resources Development Act (WRDA) of 1986 as amended by Section 202 of WRDA 1996.

REMAINING BENEFIT-REMAINING COST RATIO: (See Basis of Benefit-Cost Ratio.)

TOTAL BENEFIT-COST RATIO: (See Basis of Benefit-Cost Ratio.)

INITIAL BENEFIT-COST RATIO: (See Basis of Benefit-Cost Ratio.)

BASIS OF BENEFIT-COST RATIO:

Deficiency correction – Benefits are based on the Level 4 General Reevaluation Report (GRR) dated March 2006 at October 2005 price level and the Level 4 Limited Reevaluation Report (LRR) for Design Deficiency Corrections, approved 31 August 2011 at May 2011 price level. The initial benefit to cost ratio is 3.6 to 1 at 4 7/8 percent (FY 2008). The current benefit to cost ratio from the approved LRR for Design Deficiency Corrections is 3.1 to 1 at 7 percent. The remaining benefit-remaining cost ratio is 3.1 to 1 at 7 percent.

Reconstruction – Benefits are based on the Level 4 GRR dated March 2006 at October 2005 price level and updated in the Post-Authorization Change Report (PACR) dated 23 August 2012 (scheduled for approval in FY 2013). The initial benefit to cost ratio is 3.4 to 1 at 4 5/8 percent (FY 2010). The current benefit to cost ratio from the PACR is 2.3 to 1 at 7 percent. The remaining benefit-remaining cost ratio is 1.2 to 1 at 7 percent.

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

1 May 2013

MVD-57

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
<u>Project Summary</u>					
Estimated Federal Costs	\$62,361,000		<u>Deficiency Correction</u>		
Estimated Non-Federal Costs	\$33,040,000		Entire Project	10	TBD
Cash Contributions	\$28,254,000				
Other Costs	4,786,000		<u>Reconstruction</u>		
Total Estimated Project Costs	95,401,000		Entire Project	93	TBD
<u>Deficiency Correction</u>					
Estimated Federal Cost	\$45,590,000		PHYSICAL DATA:		
Estimated Non-Federal Cost	24,009,000		<u>Deficiency Correction</u>		
Cash Contributions	\$19,223,000		Relief Wells – Existing		253
Other Costs	4,786,000		Relief Wells – New		154
Total Deficiency Correction	\$69,599,000		Pump Stations		3
			Dams		2
Allocations to 30 September FY 2010	\$7,476,000		Slurry Trench cutoff wall	6,845 linear feet	
Allocation for FY 2011	968,000		Landside Clay fill	1,010 linear feet	
Allocation for FY 2012	212,000	^{1/}	Seepage Berm	815 linear feet	
Conference Allowance for FY 2013	4,202,000	^{2/}			
Allocation for FY 2013	3,961,000	^{3/}	<u>Reconstruction</u>		
Allocation through FY 2013	12,617,000	^{4/} 28	Closure Structures		26
Estimated Carry-in Funds	0	^{6/}	Gravity drains		38
President's Budget for FY 2014	20,860,000	73	Pump Stations		7
Programmed Balance to Complete after FY 2014	12,113,000				

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

1 May 2013

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Reconstruction

Estimated Federal Cost	\$16,771,000		
Estimated Non-Federal Cost	9,031,000		
Cash Contributions	9,031,000		
Other Costs	0		
Total Reconstruction	\$25,802,000		
Allocations to 30 September FY 2010	\$12,520,000		
Allocation for FY 2011	2,231,000		
Allocation for FY 2012	394,000	^{1/}	
Conference Allowance for FY 2013	0	^{2/}	
Allocation for FY 2013	0		
Allocation through FY 2013	15,145,000	^{4,5/}	90
Estimated Carry-in Funds	0	^{6/}	
President's Budget for FY 2014	0		90
Programmed Balance to Complete after FY 2014	1,626,000		

^{1/} Reflects revocation of \$207,000 in ARRA funds.

^{2/} At the time this justification sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/} Reflects revocation of \$241,000 in ARRA funds.

^{4/} Includes American Recovery and Reinvestment Act funds of \$13,935,000.

^{5/} PED costs of \$1,231,000 are included in this amount.

^{6/} Estimated unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: The levee district is protected by an urban design levee, across the Mississippi River from St. Louis and St. Charles counties in Missouri. This existing system includes approximately 21 miles of main line levee, 170 existing relief wells of which 7 are wells installed in 1985 and are not part of the deficiency correction, 26 closure structures, 41 gravity drains of which 3 have been fixed due to emergency, 7 pump stations, and two low water dams. It provides flood protection for residential, commercial, and industrial structures located within a 21.4 square mile area. There are approximately 12,700 acres of bottomland within the district and 4,700 acres of hill land tributary to the levee units. The design frequency against which flood risk reduction is to be provided is 500 year. The maximum flood of record occurred in 1993 when the St. Louis gage recorded 49.58 feet which was approximately a 200-year flood at the Wood River levee. River stage exceeds flood stage in approximately three out of every four years at the Wood River levee. The most recent flood was in 2002 which was approximately 11 feet over flood stage and was about a 10-year flood. For the design event and the without project condition, the average depth and velocity affecting most of the area is 22 feet and 2 feet per second, respectively. In the event of a design flood, overtopping would occur and average warning time is estimated to be 24 hours; however, in case of catastrophic event occurrence (underseepage failure), estimated warning time is less than 6 hours. The limiting factor to leave most of the benefit area is several dozen roads. Certain reaches of the levee system could become unstable during high water events. Levee reaches where problems were identified during the 1993 flood will worsen, while new reaches will begin to demonstrate additional underseepage issues and additional problems. Depending on the level and type of failure experienced there is a potential for the loss of pool at Melvin Price Lock and Dam resulting in a stoppage of river navigation. A catastrophic failure on the Upper Wood River Levee could impact the Lower Wood River Levee, while the Lower Wood River Levee could impact the downstream

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

levee (East St. Louis), potentially affecting an additional 200,000 residents and potentially producing an additional billion dollars in damage. The levee protects in this area a significant amount of industrialization including the region's largest oil refinery (10th largest U.S. refinery of gasoline, jet and diesel fuel), chemical manufacturing, steel manufacturing, and ammunitions production, and protects a residential population of approximately 20,000 in the urban areas. Failure of the levee at the refineries or the other heavy industrial areas adjacent to the system could create an environmental disaster whose recovery costs are projected to be a minimum of \$125,000 per acre not accounting for relocation costs, loss of agricultural lands and damages to the river and surrounding ecosystems. An actual levee failure would result in a major catastrophe; with potential loss of life to thousands of residents in the immediate vicinity, billions of dollars in property damages and potential environmental contamination from oil, oil byproducts and chemicals used in the oil refinement and petrochemical industries adjacent to the levee. Development is expected to continue on the interior as a major Interstate Highway has recently opened in the levee district. The connection that this new highway makes to the regional interstate system increases the likelihood of future development in the project area. At current estimates, levee failure and flooding of the area would cause approximately \$1,500,000,000 in economic damages to residential, commercial and industrial buildings and would shut down transport between Illinois and Missouri at St. Louis as bridge approaches could be submerged. The average annual benefits for the deficiency correction portion of the project, flood control and navigation, are \$13,026,000. The average annual benefits for the reconstruction portion, all flood control, are estimated at \$4,681,300.

FISCAL YEAR 2013: Unobligated carryover funds will be used as follows:

Deficiency Correction	
Initiate Construction of Relief Wells	\$50,000
Planning, Engineering, and Design	93,000
Construction Management	100,000
Total	\$243,000
Reconstruction	
Complete Pump Station and Closure Work	\$127,000
Complete Post Authorization Change Report (PACR)	36,000
Planning, Engineering, and Design	115,000
Construction Management	100,000
Total	\$378,000

FISCAL YEAR 2013: The current amount is being applied as follows:

Deficiency Correction	
Initiate Slurry Trench Cutoff Wall, Reach 1 & 2	\$ 912,000
Initiate Slurry Trench Cutoff Wall, Reach 5	650,000
Initiate Relief Wells	430,000
Initiate Seepage Berms	463,000
Planning, Engineering, and Design	1,579,000
Construction Management	168,000
Total	\$4,202,000

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

FISCAL YEAR 2014: The budget amount will be used to award a contract for relief wells to control underseepage, continue construction of a cutoff wall to control underseepage, prepare a report incorporating local sponsor's 100-year FEMA accreditation project, and for planning, engineering, and design and construction management, funds will be applied as follows:

Deficiency Correction	
Complete Slurry Trench Cutoff Wall, Reach 1 & 2	\$ 1,274,000
Continue Slurry Trench Cutoff Wall, Reach 5	11,782,550
Continue Relief Wells	3,121,480
Continue Seepage Berms	810,000
Planning, Engineering, and Design	1,949,920
Construction Management	1,922,050
Total	\$20,860,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
<u>Deficiency Correction</u>		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$3,632,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	1,154,000	
Pay 35 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 35 percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay, but no less than 5 percent of the costs allocated to flood risk management and bear all cost of operation, maintenance, repair, rehabilitation and replacement of flood risk management features.	\$19,223,000	
Total Deficiency Correction Non-Federal Costs	\$24,009,000	\$243,000

Local interests are also required to operate and maintain all works after completion.

Reconstruction

Pay 35 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 35 percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay, but no less than 5 percent of the costs allocated to flood risk management and bear all cost of operation, maintenance, repair, rehabilitation and replacement of flood risk management features.

	\$9,031,000	
Total Reconstruction Non-Federal Costs	\$9,031,000	\$185,000
Total Wood River Levee Non-Federal Costs	\$33,040,000	\$428,000

Local interests are also required to operate and maintain all works after completion.

STATUS OF LOCAL COOPERATION: The Wood River Drainage and Levee District is the local sponsor for the project. The Project Partnership Agreement (PPA) was executed on 30 June 2008 in support of the GRR, which dealt with issues involving the reconstruction and design deficiency portions of the project. The Design Agreement for the deficiency corrections was executed on 28 November 2012. The PPA for new deficiency corrections is tentatively scheduled for execution in FY 2013.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$62,361,000 is an increase of \$15,362,000 from the latest estimate (\$46,999,000) submitted to Congress (FY 2013). Other Information paragraph explains error in last year's comparison and this year's data. This change includes the following items:

Price Escalation on Construction Features	\$1,801,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	13,561,000
Total	\$15,362,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was completed in July 2005. A Finding of No Significant Impact was signed on 23 March 2006. An environmental assessment for the deficiency correction project was completed in July 2011. A Finding of No Significant Impact was signed on 31 August 2011 for the deficiency correction project.

OTHER INFORMATION:

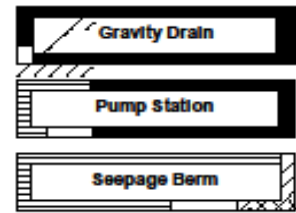
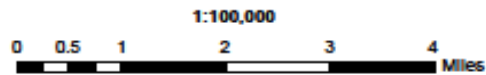
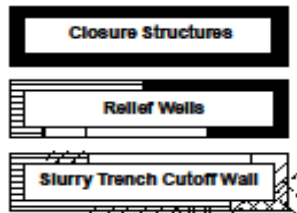
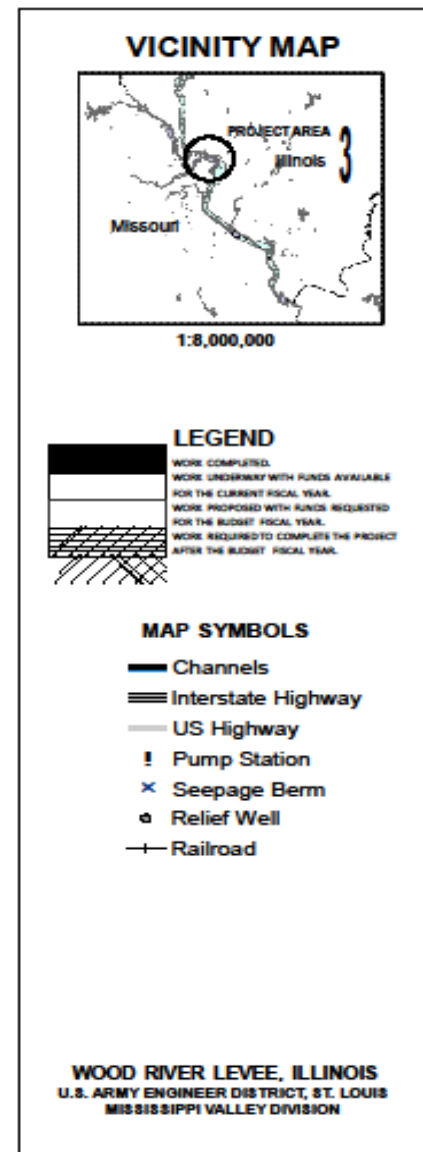
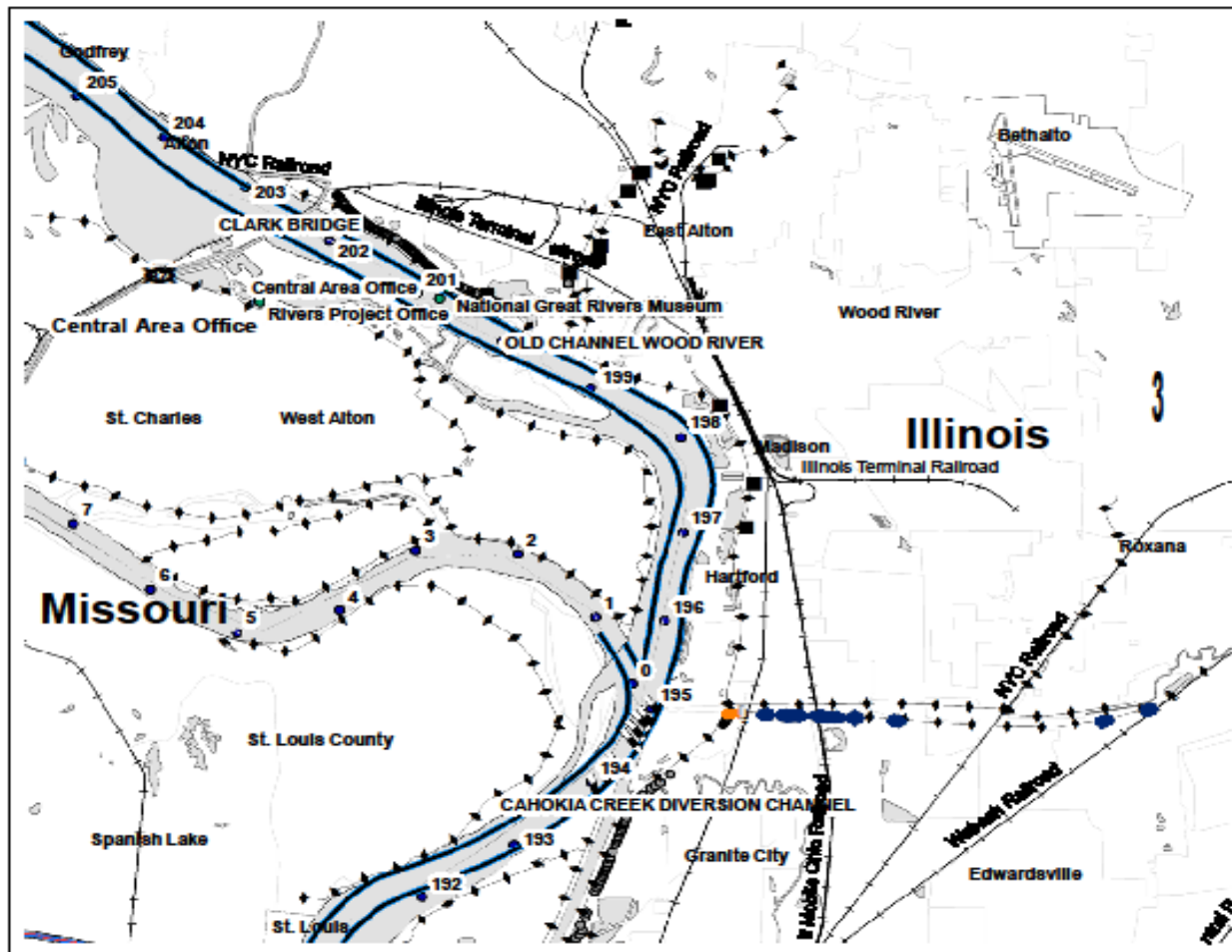
Deficiency correction - Funds to initiate preconstruction engineering and design were appropriated in FY 2000 and construction funds were appropriated in FY 2008. The current approved GRR recommended that the project requires no mitigation. Based on the approved LRR, mitigation construction costs are estimated to be \$114,000.

Reconstruction – Funds to initiate construction were appropriated in FY 2009. The current approved GRR recommended that the project requires no mitigation. The PACR recommends that the project requires no mitigation.

The FY 2013 justification erroneously reflected \$46,999,000 as the Federal cost estimate; it inadvertently omitted the original deficiency correction effort addressed in the March 2006 GRR. As a result, last year's comparison should have reflected an increase of \$32,807,000 (\$1,267,000 price escalation and \$31,540,000 post contract award costs), which includes \$29,317,000 for the federal cost of design and construction of additional needed under seepage measures included in the 31 August 2011 approved LRR and \$2,223,000 for reconstruction). Had last year's comparison been reflected correctly, this year's comparison would have reflected an increase of \$5,127,000 (from \$57,234,000 to \$62,361,000) for price escalation increases of \$554,000 and post contract award adjustments of \$4,573,000. The total cost estimate of the reconstruction portion of the project exceeds the Section 902 limit of \$23,414,000; a PACR has been prepared and is pending approval. No funds are being requested in FY 2014 for reconstruction, pending additional authorization. The total project cost estimate is based on a completed PACR.

Correction of performance problems that resulted from deficiencies (relief wells) would not require further authorization. Deficiency correction and reconstruction project features will be cost shared 65 percent Federal and 35 percent non-Federal in accordance with Section 103 of WRDA 1986, as amended by Section 202 of WRDA 1996.

Breakdown of FY 2013 allocation (\$4,202,000) reflects redirection of funds to the approved deficiency correction underseepage LRR measures. This is due to Section 902 constraints associated with the reconstruction effort.



Mississippi Valley Division

St. Louis District

Wood River Levee, IL
 (Deficiency Correction and Reconstruction)

1 May 2013

MVD-64

APPROPRIATION TITLE: Construction – Environmental Mitigation, Restoration, and Protection

PROJECT: Upper Mississippi River Restoration, Illinois, Iowa, Minnesota, Missouri, and Wisconsin (Continuing)

LOCATION: The project is authorized for those river reaches having commercial navigation channels on the Upper Mississippi River, Illinois River, Minnesota River, St. Croix River, and Kaskaskia River in the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The following counties are included: (Illinois) Jo Daviess, Carroll, Whiteside, Rock Island, Mercer, Henderson, Hancock, Adams, Pike, Calhoun, Jersey, Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, Pulaski, Brown, Cass, Schuyler, Fulton, Mason, Peoria, Tazewell, Woodford, Marshall, Putnam, Bureau, LaSalle, Grundy, Will; (Iowa) Allamakee, Clayton, Dubuque, Jackson, Clinton, Scott, Muscatine, Louisa, Des Moines, Lee; (Wisconsin) St. Croix, Pierce, Pepin, Buffalo, Trempealeau, La Cross, Vernon, Crawford, Grant; (Minnesota) Anoka, Hennepin, Scott, Dakota, Ramsey, Washington, Goodhue, Wabasha, Winona, Houston; (Missouri) Clark, Lewis, Marion, Ralls, Pike, Lincoln, St. Charles, St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi.

DESCRIPTION: The purpose of the Upper Mississippi River Restoration program is to address adverse impacts to the aquatic ecosystem of the Upper Mississippi River, which were caused by many factors; these include population growth and more intensive land use within the watershed, and changes in the river due to construction and maintenance of the inland navigation system. Habitat rehabilitation and enhancement projects are effectively preserving and improving fish and wildlife habitat on the Upper Mississippi River System (UMRS). Projects completed to date have been designed to counteract the effects of backwater sedimentation through dike construction to limit sedimentation of prime habitat and dredging to restore aquatic habitat; provide water level control and optimal food growth for waterfowl; create islands to decrease wind generated disturbances, thereby reducing turbidity; alter the flow of water to side channels and backwaters to decrease flows of sediment-laden water during high water and to increase dissolved oxygen levels during low water; increase the diversity and abundance of mast (nut) producing trees and prairies to benefit wildlife. Long-Term Resource Monitoring provides scientific information for more informed management of the UMRS ecosystem. Ninety-seven percent of authorized Upper Mississippi River Restoration appropriations have been used to design and construct habitat rehabilitation and enhancement projects and for Long-Term Resource Monitoring. Recreation development is also an authorized program element, although not a current program focus.

AUTHORIZATION: Fiscal Year 1985 Supplemental Appropriations Act, P.L. 99-88; Water Resources Development Act (WRDA) of 1986, PL 99-662, Section 1103; WRDA of 1990, P.L. 101-640, Section 405; WRDA of 1992, P.L. 102-580, Section 107; WRDA of 1999, P.L. 106-53, Section 509; and the WRDA of 2007, P.L. 110-114, Section 3177.

REMAINING BENEFIT-REMAINING COST: The remaining benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms. Projects within the Upper Mississippi River Restoration project are selected for design and construction based on continued assessment of habitat restoration and enhancement opportunities as determined by the involved Federal and non-Federal partners.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

BASIS OF BENEFIT-COST RATIO: The basis for the benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST
Estimated Federal Cost	\$ 925,783,000	
Estimated Non-Federal Cost	12,549,000	
Cash Contribution	\$ 12,549,000	
Other Costs	0	
Total Estimated Project Cost	\$ 938,332,000	
Allocations to 30 September 2010	\$383,724,000	<u>1/</u>
Allocations for FY 2011	\$ 19,408,000	
Allocation for FY 2012	17,466,000	<u>2/</u>
Conference Allocation for FY 2013	17,880,000	<u>3/</u>
Allocation for FY 2013	17,880,000	
Allocations through FY 2013	438,478,000	<u>4/</u> 47
Estimated Unobligated Carry-in Funds	0	<u>5/</u>
Budget for FY 2014	31,968,000	51
Programmed Balance to Complete After FY 2014	455,337,000	
Unprogrammed Balance to Complete After FY 2014	0	

1/ Allocations include Supplemental Appropriations as well as American Recovery and Reinvestment Act (ARRA) funds.

2/ Funding in the amount of (\$315,000) (ARRA) and (\$5,600) (Supplemental Appropriations) was returned in FY 2012.

3/ At the time this justification sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

4/ Includes ARRA funding of \$14,847,000 in FY 2009; (\$918,000) in FY 2010; (\$8,000) in FY 2011; and (\$315,000) in FY 2012.

5/ Estimated unobligated "Carry-in" funding: As of the date this justification sheet was prepared, the total dollars estimated to be carried in from prior appropriations for use on this project effort is \$0. This amount will be used to perform the project as follows: N/A.

STATUS:		PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Long Term Resource Monitoring		NA	NA
Economic Impacts of Recreation Study		100	(Sep 92)
Traffic Monitoring		100	(Sep 90)
Habitat Rehabilitation and Enhancement Projects (Construction)			
Angle Blackburn, MO	ST. LOUIS DISTRICT	0	Deferred
Batchtown Mgt. Area, IL	ST. LOUIS DISTRICT	88	(Aug 17)
Calhoun Point, IL	ST. LOUIS DISTRICT	100	(Aug 11)
Clarence Cannon NWR, MO	ST. LOUIS DISTRICT	7	TBD
Clarksville Refuge, MO	ST. LOUIS DISTRICT	100	(Apr 90)
Cuivre Island, MO	ST. LOUIS DISTRICT	100	(Jul 99)
Dresser Island, MO	ST. LOUIS DISTRICT	100	(Sep 91)
Establishment Chute, MO	ST. LOUIS DISTRICT	0	Deferred
Godar Wetland Complex, IL	ST. LOUIS DISTRICT	2	TBD
Glades Wetland Complex, IL	ST. LOUIS DISTRICT	2	TBD
Jefferson Barracks Side Channel, IL	ST. LOUIS DISTRICT	0	Deferred
Harlow Island, MO	ST. LOUIS DISTRICT	1	TBD
Least Tern, MO	ST. LOUIS DISTRICT	22	Deferred
Norton Woods, MO	ST. LOUIS DISTRICT	0	Deferred
Pharrs Island, MO	ST. LOUIS DISTRICT	100	(Jun 92)
Piasa & Eagle Nest Island, IL	ST. LOUIS DISTRICT	3	TBD
Pool 24 Islands, MO	ST. LOUIS DISTRICT	2	TBD
Pools 25 and 26, MO	ST. LOUIS DISTRICT	40	(Sep 16)
Reds Landing, IL	ST. LOUIS DISTRICT	2	TBD
Rip Rap Landing, IL	ST. LOUIS DISTRICT	8	TBD
Salt Lake/Ft Chartres S.C., IL	ST. LOUIS DISTRICT	7	TBD
Stag & Keaton Is., MO	ST. LOUIS DISTRICT	100	(Sep 98)
Stump Lake, IL	ST. LOUIS DISTRICT	100	(Nov 98)
Schenimann, MO	ST. LOUIS DISTRICT	15	TBD
Stone Dike Alteration, IL/MO	ST. LOUIS DISTRICT	10	Deferred
Swan Lake, IL	ST. LOUIS DISTRICT	98	(Dec 15)
Ted Shanks, MO	ST. LOUIS DISTRICT	20	(Oct 22)
West Alton Missouri Islands	ST. LOUIS DISTRICT	2	TBD
Wilkinson Island, IL	ST. LOUIS DISTRICT	5	TBD

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

STATUS:
(Continued)

PERCENT
COMPLETE

PHYSICAL
COMPLETION
SCHEDULE

Andalusia Refuge, IL	ROCK ISLAND DISTRICT	100	(Dec 94)
Banner Marsh, IL	ROCK ISLAND DISTRICT	100	(Dec 03)
Bay Island, MO	ROCK ISLAND DISTRICT	100	(Nov 94)
Beaver Island, IA	ROCK ISLAND DISTRICT	3	TBD
Bertom Lake, WI	ROCK ISLAND DISTRICT	100	(Jun 92)
Big Timber, IA	ROCK ISLAND DISTRICT	100	(Jun 95)
Boston Bay, IL	ROCK ISLAND DISTRICT	1	TBD
Brown's Lake, IA	ROCK ISLAND DISTRICT	100	(Sep 94)
Chautauqua Refuge, IL	ROCK ISLAND DISTRICT	100	(Dec 03)
Cottonwood Island, MO	ROCK ISLAND DISTRICT	100	(Dec 99)
DeLair Division, IL	ROCK ISLAND DISTRICT	1	TBD
Fox Island, MO	ROCK ISLAND DISTRICT	80	(Apr 15)
Gardner Div., IL	ROCK ISLAND DISTRICT	100	(Jan 98)
Huron Island, IA	ROCK ISLAND DISTRICT	25	(May 17)
Keithsburg Division, IL	ROCK ISLAND DISTRICT	1	TBD
Lake Odessa, IA	ROCK ISLAND DISTRICT	100	(Sep 11)
Pool 11 Islands, WI/IA	ROCK ISLAND DISTRICT	100	(Sept 07)
Pleasant Creek, IA	ROCK ISLAND DISTRICT	100	(Jan 03)
Monkey Chute, MO	ROCK ISLAND DISTRICT	100	(Aug 89)
Peoria Lake, IL	ROCK ISLAND DISTRICT	100	(Sep 97)
Peosta Channel, IA	ROCK ISLAND DISTRICT	0	Deferred
Pool 12 Overwintering IA/IL	ROCK ISLAND DISTRICT	27	(Sep 19)
Potters Marsh, IL	ROCK ISLAND DISTRICT	100	(Jun 18)
Princeton, IA	ROCK ISLAND DISTRICT	100	(Dec 01)
Rice Lake, IL	ROCK ISLAND DISTRICT	60	(Sep 15)
Smith's Creek, IA	ROCK ISLAND DISTRICT	9	Deferred
Snyder Slough, WI	ROCK ISLAND DISTRICT	1	TBD
Spring Lake, IL	ROCK ISLAND DISTRICT	100	(Sep 01)
Steamboat Island, IA	ROCK ISLAND DISTRICT	1	TBD
Turkey Island, IA/WI	ROCK ISLAND DISTRICT	1	TBD

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

1 May 2013

MVD-68

STATUS:
(Continued)

PHYSICAL
COMPLETE

PHYSICAL
COMPLETION
SCHEDULE

Project Name	District	PHYSICAL COMPLETE	PHYSICAL COMPLETION SCHEDULE
Ambrough Slough, WI	ST. PAUL DISTRICT	100	(Sep 04)
Bass Ponds, MN	ST. PAUL DISTRICT	0	TBD
Blackhawk Park, WI	ST. PAUL DISTRICT	100	(Nov 90)
Bussey Lake, IA	ST. PAUL DISTRICT	100	(Jun 96)
Capoli Slough, WI	ST. PAUL DISTRICT	30	(Sep 14)
Clear Lake, MN	ST. PAUL DISTRICT	0	TBD
Cold Springs, WI	ST. PAUL DISTRICT	100	(Aug 94)
Conway Lake, IA	ST. PAUL DISTRICT	45	TBD
East Channel, WI, MN	ST. PAUL DISTRICT	100	(Jun 97)
Finger Lakes, MN	ST. PAUL DISTRICT	100	(Jul 94)
Guttenberg Waterfowl Ponds, IA	ST. PAUL DISTRICT	100	(Oct 90)
Harpers Slough, IA	ST. PAUL DISTRICT	15	TBD
Indian Slough, WI	ST. PAUL DISTRICT	100	(Jun 94)
Island 42, MN	ST. PAUL DISTRICT	100	(May 87)
Lake Onalaska, WI	ST. PAUL DISTRICT	100	(Jul 90)
Lake Winneshiek, WI	ST. PAUL DISTRICT	18	TBD
Lansing Big Lake, IA	ST. PAUL DISTRICT	100	(Nov 94)
Lock & Dam 3 Fish Passage, MN/WI	ST PAUL DISTRICT	18	TBD
Long Lake, WI	ST. PAUL DISTRICT	100	(May 00)
Long Meadow Lake, MN	ST. PAUL DISTRICT	100	(Nov 06)
Lower Pool 10 Islands & Backwater Complex, IA	ST. PAUL DISTRICT	1	TBD
McGregor Lake, WI	ST. PAUL DISTRICT	1	TBD
Miss. River Bank Stabilization, MN/WI	ST. PAUL DISTRICT	100	(Sep 99)
North & Sturgeon Lakes, MN	ST PAUL DISTRICT	2	TBD
Peterson Lake, MN	ST. PAUL DISTRICT	100	(Jun 96)
Polander Lake, MN	ST. PAUL DISTRICT	100	(Nov 00)
Pool 8 Isl, Phase I, WI	ST. PAUL DISTRICT	100	(Jun 93)
Pool 8 Isl, Phase II, WI	ST. PAUL DISTRICT	100	(Sep 99)
Pool 8 Isl, Phase III, WI	ST. PAUL DISTRICT	100	(Jul 12)

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

1 May 2013

MVD-69

STATUS: (Continued)		PHYSICAL COMPLETE	PHYSICAL COMPLETION SCHEDULE
Pool 9 Island, WI	ST. PAUL DISTRICT	100	(Jun 95)
Pool Slough, IA	ST. PAUL DISTRICT	100	(Apr 07)
Rice Lake, MN	ST. PAUL DISTRICT	100	(Nov 98)
Small Scale Drawdown, WI	ST. PAUL DISTRICT	100	(Sep 97)
Spring Lake Peninsula, WI	ST. PAUL DISTRICT	100	(Nov 94)
Spring Lake Islands, WI	ST. PAUL DISTRICT	100	(Jul 06)
Trempealeau NWR, WI	ST. PAUL DISTRICT	100	(Sep 99)
Weaver Bottoms, MN	ST. PAUL DISTRICT	0	TBD
Whitewater River, MN	ST. PAUL DISTRICT	2	Deferred
Recreation		0	Unscheduled
Habitat Needs Assessment		100	(Sep 00)

JUSTIFICATION: Implementation of the Upper Mississippi River Restoration project is essential to the continued viability of the ecosystem of the Upper Mississippi River and important to the long-term public acceptance and support of Upper Mississippi River System (UMRS) navigation activities. Habitat rehabilitation and enhancement projects help reduce the negative effects of navigation features on the system's backwater and side channels. Projects are selected for design and construction based on continued assessment of habitat restoration and enhancement opportunities as determined by the involved Federal and non-Federal partners and following the project sequencing process adopted in 2003. Long-Term Resource Monitoring provides data to indicate trends in key environmental parameters, analyzing sedimentation and other UMRS resource problems, and producing a spatial information database. An Economic Impacts of Recreation Study has been conducted to enable Federal and non-Federal management decisions to better consider impacts on recreation and the consequent changes in recreation-related expenditures in the local and regional economies.

FISCAL YEAR 2013: The Total unobligated dollars are being used as follows:

PROJECT	DISTRICT	AMOUNT	STATUS
Ted Shanks, MO	ST. LOUIS DISTRICT	11,000	Continue Construction
Pool 12, IL	ROCK ISLAND DISTRICT	337,000	Initiate Construction
Capoli Slough, WI	ST. PAUL DISTRICT	420,000	Continue Construction
Total		768,000	

FISCAL YEAR 2013: The requested amount will be used to continue design on multiple projects, initiate planning on three new projects, initiate construction on one project and to continue monitoring and other restoration-related activities, as follows:

PROJECT	DISTRICT	AMOUNT	STATUS
Batchtown Mgmt Area, IL	ST. LOUIS DISTRICT	250,000	Continue Construction
Clarence Cannon, NWR, MO	ST. LOUIS DISTRICT	175,000	Continue Design
Piasa and Eagles Nest Islands, IL	ST. LOUIS DISTRICT	200,000	Continue Design
Pool 25 and 26, MO	ST. LOUIS DISTRICT	400,000	Continue Construction
Red's Landing, IL	ST. LOUIS DISTRICT	105,000	Continue Design
Rip Rap Landing, IL	ST. LOUIS DISTRICT	350,000	Continue Design
Swan Lake, IL	ST. LOUIS DISTRICT	150,000	Continue Construction
Ted Shanks, MO	ST. LOUIS DISTRICT	1,201,000	Continue Construction
Schenimann, MO	ST. LOUIS DISTRICT	25,000	Continue Design
Wilkinson Island, IL	ST. LOUIS DISTRICT	25,000	Continue Design
Beaver Island, IA	ROCK ISLAND DISTRICT	250,000	Continue Design
Huron Island, IA	ROCK ISLAND DISTRICT	300,000	Continue Design
Rice Lake, IL	ROCK ISLAND DISTRICT	200,000	Continue Construction
Pool 12, IL	ROCK ISLAND DISTRICT	3,591,000	Initiate Construction
Boston Bay, IL	ROCK ISLAND DISTRICT	100,000	Continue Design
Steamboat Island, IA	ROCK ISLAND DISTRICT	50,000	Continue Design
Illinois River	ROCK ISLAND DISTRICT	50,000	Initiate Planning
DeLair Division, IL	ROCK ISLAND DISTRICT	50,000	Initiate Planning
Turkey Island, IA/WI,	ROCK ISLAND DISTRICT	50,000	Initiate Planning
Capoli Slough, WI	ST. PAUL DISTRICT	3,100,000	Continue Construction
Harpers Slough, IA	ST. PAUL DISTRICT	330,000	Complete Design/Initiate Construction
Conway Lake, IA	ST. PAUL DISTRICT	250,000	Continue Design
North/Sturgeon Lake, MN	ST. PAUL DISTRICT	250,000	Continue Design
Lake Winneshiek, WI	ST. PAUL DISTRICT	150,000	Continue Design
Regional Project Sequencing		75,000	

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

Habitat Evaluation/Monitoring	200,000
Public Outreach	50,000
Model Certification/Regional HREP	150,000
Long Term Resource Monitoring	5,379,000
Adaptive Management	100,000
Regional Program Management	324,000
Total	17,880,000 <u>1/</u>

1/ FY12 funds in the amount of \$600,000 were reallocated from St. Louis District to St. Paul District. This reallocation resulted in changes to the FY13 individual project distribution amount.

FISCAL YEAR 2014: The requested amount will be used to continue design and construction on multiple projects under way in FY 2013 and continue monitoring and other restoration-related activities, as follows:

PROJECT	DISTRICT	AMOUNT	STATUS
Batchtown Mgmt Area, IL	ST. LOUIS DISTRICT	500,000	Continue Construction
Clarence Cannon, NWR, MO	ST. LOUIS DISTRICT	400,000	Continue Design
Piasa and Eagles Nest Islands, IL	ST. LOUIS DISTRICT	285,000	Continue Design
Pool 25 and 26, MO	ST. LOUIS DISTRICT	450,000	Continue Construction
Red's Landing, IL	ST. LOUIS DISTRICT	200,000	Continue Design
Rip Rap Landing, IL	ST. LOUIS DISTRICT	450,000	Continue Design
Swan Lake, IL	ST. LOUIS DISTRICT	200,000	Continue Construction
Ted Shanks, MO	ST. LOUIS DISTRICT	5,120,000	Continue Construction
Schenimann, MO	ST. LOUIS DISTRICT	25,000	Continue Design
Wilkinson Island, IL	ST. LOUIS DISTRICT	25,000	Continue Design
Beaver Island, IA	ROCK ISLAND DISTRICT	325,000	Continue Design
Huron Island, IA	ROCK ISLAND DISTRICT	2,225,000	Continue Construction
Rice Lake, IL	ROCK ISLAND DISTRICT	245,000	Continue Construction
Pool 12, IL	ROCK ISLAND DISTRICT	8,035,000	Continue Construction
Boston Bay, IL	ROCK ISLAND DISTRICT	150,000	Continue Design
Steamboat Island, IA	ROCK ISLAND DISTRICT	50,000	Continue Design
Capoli Slough, WI	ST. PAUL DISTRICT	2,400,000	Complete Phase and Construction
Harpers Slough, IA	ST. PAUL DISTRICT	3,500,000	Complete Phase/Continue Construction
Conway Lake, IA	ST. PAUL DISTRICT	100,000	Continue Design
North/Sturgeon Lake, MN	ST. PAUL DISTRICT	300,000	Continue Design
Mississippi Valley Division	Rock Island District		Upper Mississippi River Restoration, IL, IA, MN, MO, and WI

Lake Winneshiek, WI	ST. PAUL DISTRICT	127,000	Continue Design
Regional Project Sequencing		75,000	
Habitat Evaluation/Monitoring		750,000	
Public Outreach		50,000	
Model Certification/Regional HREP		150,000	
Long Term Resource Monitoring		5,226,000	
Adaptive Management		155,000	
Regional Program Management		450,000	
Total		31,968,000	

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 and amended by Section 107(b) of the Water Resources Development Act of 1999, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 25 percent of the first costs allocated to fish and wildlife enhancement for the following projects:		
Baldwin Backwater, IL	\$ 624,000	
Banner Marsh, IL	1,780,000	
Batchtown, IL	146,000	
Blackhawk Park, WI	77,000	
Bussey Lake, IA	162,000	
Cuivre Island, MO	479,000	
Osborne Channel, IL	190,000	
Peoria Lake, IL	42,000	
Princeton, IA	54,000	
Swan Lake, IL	262,000	
Subtotal	\$ 3,816,000	\$ 0

Pay 35 percent of the first costs allocated to fish and wildlife enhancement for the following projects:

Alton Pool		\$ 231,000
Mississippi Valley Division	Rock Island District	Upper Mississippi River Restoration, IL, IA, MN, MO, and WI

Ambrough Slough, WI	166,000	
KasKasKia Oxbows	350,000	
Pool Slough, IA, MN	175,000	
Rice Lake, IL	7,280,000	
Smith Creek, IA	300,000	
Rip Rap Landing	231,000	
Subtotal	\$ 8,733,000	\$ 0
Pay 50 percent of the first costs allocated to recreation projects.	0 ^{1/}	
Total Non-Federal Construction Costs	\$ 12,549,000	\$ 0

^{1/} No recreation projects scheduled.

The non-Federal sponsors have agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: A Project Agreement is required only for projects that are not located on lands managed as a national wildlife refuge.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$925,783,000 is an increase of \$149,588,000 from the latest estimate (\$776,195,000) presented to Congress (FY 2013). Costs increased due to the approval of additional fact sheets and increased costs resulting from updates and inflation.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: National Environmental Policy Act compliance is accomplished prior to implementation of each individual project.

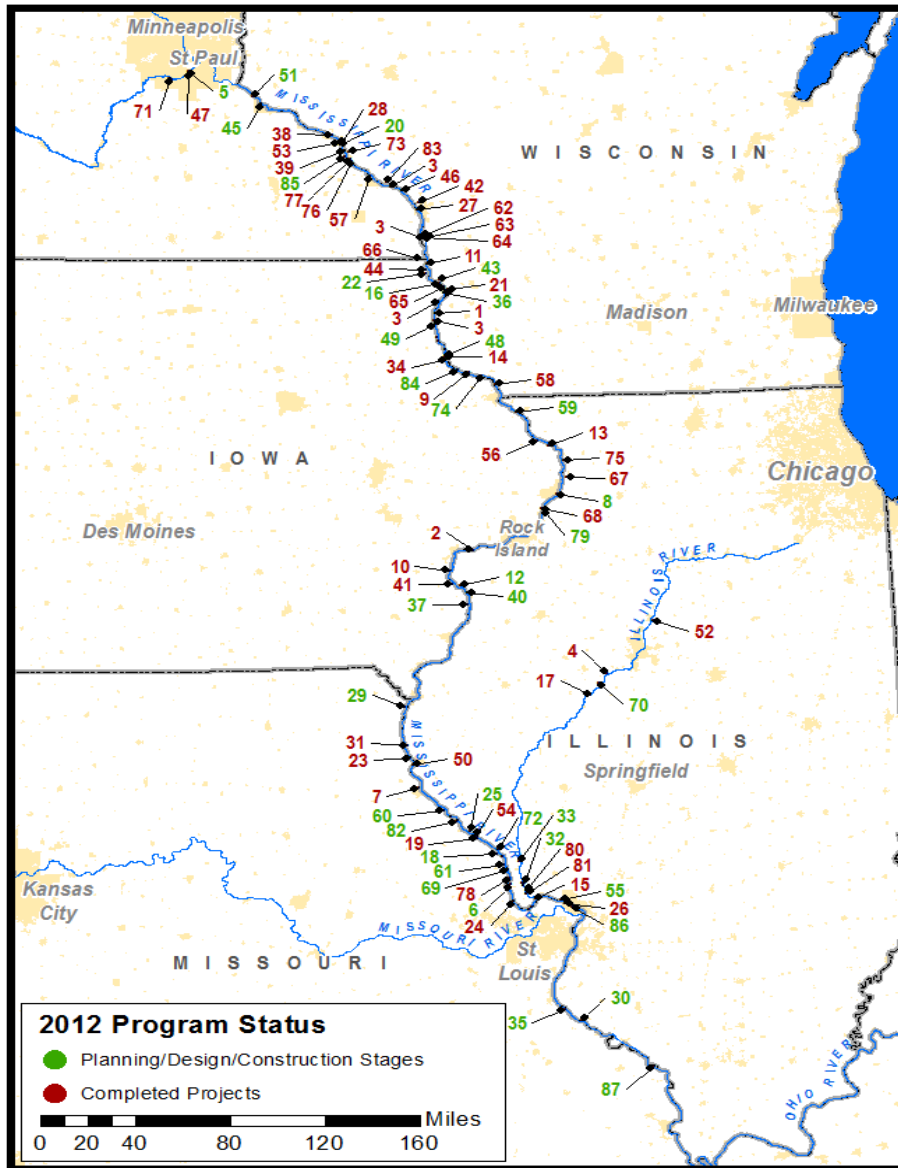
OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985. The Water Resources Development Act of 1999, P.L. 106-53, amends the previous authority to increase annual appropriation limits available to the project; requires submission of a report to Congress on a 6 year cycle which began in December 2004 to evaluate projects, accomplishments, systemic habitat needs, and identifies any needed changes to the project authorization; and authorized an independent technical review committee through FY 2009. To date the program has received \$4,987,732 in Supplemental Appropriations due to flood damages at Odessa Habitat site and \$13,606,537 of American Recovery and Reinvestment Act (ARRA) funds.

This project was authorized in Section 1103, WRDA 1986 as amended in Section 405, WRDA 1990, Section 107, WRDA 1992, and Section 509, WRDA 1999, Section 3177, WRDA 2007 as the Upper Mississippi River System Environmental Management Program (Section 3177, WRDA 2007). Since 2006, this program has been budgeted and funds appropriated under the name Upper Mississippi River Restoration, IL, IA, MN, MO, WI.

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI



Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

1 May 2013

MVD-75

EMP HREP Projects	Site Ref.	EMP HREP Projects	Site Ref.
Ambrough Slough	1	Long Meadow Lake	47
Andalusia Refuge	2	Lower Pool 10 Island and Backwater Complex	48
Banner Marsh	4	Mcgregor Lake	49
Bass Ponds, Marsh, and Wetland	5	Mississippi River Bank Stabilization	3
Batchtown	6	Monkey Chute	50
Bay Island	7	North and Sturgeon Lakes	51
aver Island	8	Peoria Lake	52
Bertom Mccartney Lakes	9	Peterson Lake	53
Big Timber	10	Pharrs Island	54
Blackhawk Park	11	Piasa - Eagle's Nest Islands	55
Boston Bay	12	Pleasant Creek	56
Brown's Lake	13	Polander Lake	57
Bussey Lake	14	Pool 11 Islands-Mud Lake	58
Calhoun Point	15	Pool 11 Islands-Sunfish Lake	58
Capoli Slough	16	Pool 12 Overwintering	59
Chautauqua Refuge	17	Pool 24 Islands	60
Clarence Cannon	18	Pool 25 and 26 Islands	61
Clarksville Refuge	19	Pool 8 Islands Phase I	62
Clear Lake (Finger Lake) Dredging	20	Pool 8 Islands Phase II	63
Cold Springs	21	Pool 8 Islands Phase III	64
Conway Lake	22	Pool 9 Islands	65
Cottonwood Island	23	Pool Slough	66
Cuivre Island	24	Potters Marsh	67
Delair Division	25	Princeton Refuge	68
Dresser Island	26	Red's Landing Wetlands	69
East Channel	27	Rice Lake-IL	70
Finger Lakes	28	Rice Lake-MN	71
Fox Island	29	Rip Rap Landing	72
Gardner Division (Long Island Division)	31	Salt Lake/Ft Chartres Side Channel	30

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

Glades Wetlands	32		Schenimann Chute	88
Godar Refuge	33		Small Scale Drawdown	73
Guttenberg Waterfowl Ponds	34		Snyder Slough Backwater Complex	74
Harlow Island	35		Spring Lake	75
Harpers Slough	36		Spring Lake Islands	76
Huron Island	37		Spring Lake Peninsula	77
Indian Slough	38		Stag and Keaton Islands	78
Island 42	39		Steamboat Island	79
Keithsburg Division	40		Stump Lake	80
Lake Odessa	41		Swan Lake	81
Lake Onalaska	42		Ted Shanks	82
Lake Winneshiek	43		Trempeleau	83
Lansing Big Lake	44		Turkey River Bottoms Delta and Backwater Complex	84
Lock & Dam 3	45		Weaver Bottoms	85
Long Lake	46		West Alton Tract	86
			Wilkinson Island	87

LOUISIANA

APPROPRIATION TITLE: Construction, Channels and Harbors (Navigation)

PROJECT: Calcasieu River and Pass, LA (Dredged Material Disposal Facility) (Resumption)

LOCATION: The 68-mile channel is located in southwest Louisiana and extends from the Gulf of Mexico to Lake Charles, Louisiana. The project is authorized at - 40x400 feet inland and - 42x800 feet in the bar channel.

DESCRIPTION: The project will either design new dredged material disposal facilities, perform major rehabilitation of existing confined disposal facilities or construct new dredged material disposal facilities and beneficial use disposal areas to create additional disposal capacity IAW the approved 2010 Dredge Material Management Plan.

AUTHORIZATION: River and Harbor Act of 24 July 1946, as amended, CH 594-PL525, River and Harbor Act of 1960, PL86-645, dated Jul 14, 1960, River and Harbor Act of October 23, 1962, House Document 582

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Not applicable.

INITIAL BENEFIT - COST RATIO: Not applicable.

BASIS OF BENEFIT: Not applicable.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (10 Oct 2012)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$188,335,000		Construction Portion of Project	0%	TBD
Estimated Non-Federal Cost	\$62,778,000				
Cash Contributions	\$40,367,000				
Other Cost	\$22,411,000				
Total Estimated Project Cost	\$251,113,000				
Allocations to 30 September 2010	\$ 2,168,000				
Allocation for FY 2011	\$(2,155,000)				
Allocation for FY 2012	\$0				
Conference allocation for FY 2013	\$0				
Allocation for FY 2013	\$0				
Allocation through FY 2013	\$13,000	1/ 2/	0%		
Estimated Carry-in Funds	\$0	3/			
Budget for FY 2014	\$10,543,000		6%		
Programmed Balance to Complete After FY 2014	\$177,779,000				
Unprogrammed Balance to Complete After FY 2014	\$0				

1/ \$1,855,239 rescinded from the project in FY 2011.

2/ \$300,000 transferred to HQ for the Mississippi River Flood in FY 2011.

3/ Estimated unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

PHYSICAL DATA: The project will include new dredged material disposal facilities; perform major rehabilitation of existing confined disposal facilities or construct new dredged material disposal facilities and beneficial use disposal areas to create additional disposal capacity IAW the approved 2010 Dredge Material Management Plan.

JUSTIFICATION: Currently, the project does not have the adequate dredged material disposal capacity needed to maintain the channel to authorized dimensions. The gross 20-year dredging capacity required to maintain the channel is approximately 97 million cubic yards, while the existing confined disposal capacity is only five million cubic yards. Existing discharge sites are at or near capacity, and past maintenance have resulted in substantial erosion of discharge facilities into adjacent water bodies. As a result, it has become necessary to reduce channel widths in some reaches.

The Calcasieu Ship Channel supports a thriving commercial navigation industry. The tonnage of commodities handled at the ship channel's docks makes the Port of Lake Charles the 14th largest seaport in the U.S. and the 3rd largest Strategic Petroleum Reserve facility. The Port of Lake Charles is also the 3rd largest export port in the country. Calcasieu River is very important to the nation's energy resources. It services two major refineries, 2 LNG facilities plus many other facilities requiring the deep draft channel.

Since 1932, Louisiana has lost 1.2 million acres of coastal wetlands from the combined impact of natural processes and human intervention. In Southwestern Louisiana, a primary resource for restoring coastal wetlands is dredged material. The Calcasieu DMMP designates 9,550 acres of eroded and subsided coastal wetlands for the beneficial use of material.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate construction of the DMMP	\$10,543,000
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NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area.	\$22,411,000	
Provide during the period of construction a cash contribution equal to 25 percent of total project cost allocated to building navigation features.	\$40,367,000	
Modify or relocate utilities, roads, bridges (except railroad bridges) where necessary for the construction of the project.	N/A	
Pay all cost allocated to operation, maintenance, repair, rehabilitation, and replacement of the project features.		
Total Non-Federal Cost	\$ 62,778,000	

Non federal cost share for construction of navigation features will be 25% of total construction cost plus LERRD's. However, above statements are subject to change pending the signing of the PPA.

STATUS OF LOCAL COOPERATION: The Lake Charles Harbor and Terminal District is the Local Sponsor for this project. A Letter of Intent, dated November 19, 2010 was provided. Negotiations have begun on the Project Partnership Agreement (PPA). Execution of PPA is expected in FY 2014.

COMPARISON OF FEDERAL COST ESTIMATE: The Federal project cost estimate of \$188,355,000 is an increase of \$109,169,000 from the last estimate (\$79,166,000) reported to Congress (FY 2013). The cost shown in the FY2013 Justification sheet of \$79,166,000 is a first cost in FY2008 price levels and was inadvertently used in that submission. In preparation of the FY 2014, the fully funded cost to the mid-point of construction was updated to \$188,335,000. This correction and the resulting price level increases related to inflation from 2008 to 2012 are the cause for this significant change in cost estimate.

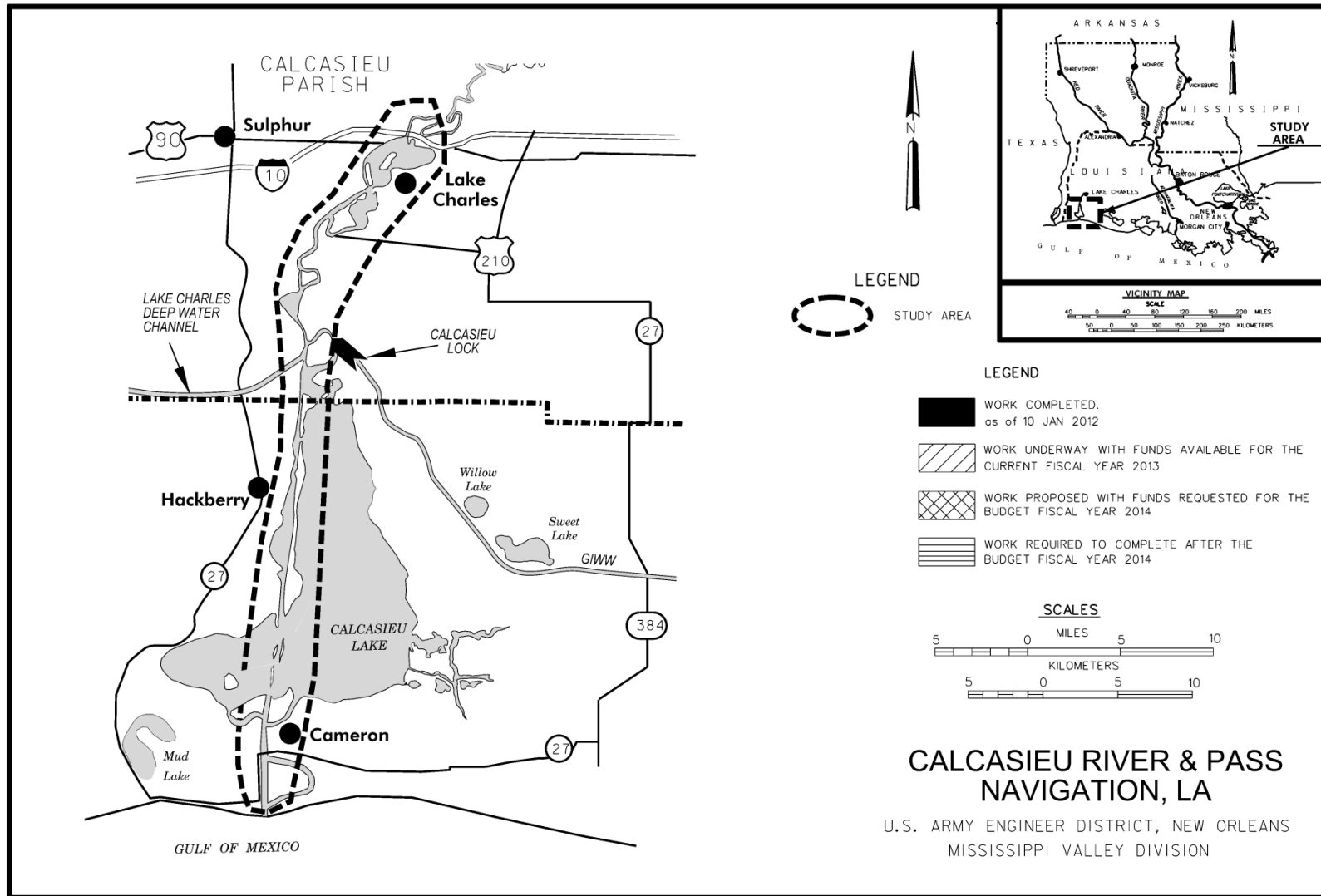
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with EPA on 15 December 2010.

OTHER INFORMATION: Construction funds allocated in FY's 2007 and 2008. The Calcasieu River and Pass Dredged Material Management Plan was approved on 16 December 2010.

Mississippi Valley Division

New Orleans District

Calcasieu River and Pass,
Dredged Material Disposal Facility, LA



APPROPRIATION TITLE: Construction, Ecosystem Restoration

PROJECT: Louisiana Coastal Area, Ecosystem Restoration, Louisiana (New)

LOCATION: The project Louisiana Coastal Area (LCA) includes the Louisiana coastal area from Mississippi to Texas, that includes the following Louisiana parishes in the study area: Ascension, Assumption, Calcasieu, Cameron, Iberia, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, and Vermilion.

DESCRIPTION: The project's primary purpose is to restore the Louisiana wetland coastal area through the beneficial use of dredged material, river diversion of sediment and water, head land and barrier island restoration, and coastal protection efforts. The Louisiana coastal plain contains one of the largest expanses of coastal wetlands in the contiguous United States (U.S.), and has experienced 90 percent of the total coastal marsh loss in the Nation. The coastal wetlands, built by the deltaic processes of the Mississippi River, contain diverse coastal habitats that range from narrow natural levee and beach ridges to expanses of forested swamps and freshwater, intermediate, brackish, and saline marshes. These unique habitats are hydrologically connected to each other, upland areas, the Gulf of Mexico, and migratory routes of species, including birds and fish. Taken as a whole, these habitats combine to make Louisiana's wetlands among the Nation's most productive and ecologically-significant natural assets. Additionally, Louisiana's coastal wetlands have also been a center for culturally diverse social development.

AUTHORIZATION: WRDA 2007, Title VII (Public Law 110-114).

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT - COST RATIO: The total benefit-cost-ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFITS: Benefits are based on the Report of the Chief of Engineers (dated 31 January 2005) on Louisiana Coastal Area, Ecosystem Restoration Feasibility Study; the Report of the Chief of Engineers (dated 30 December 2010), LCA Ecosystem Restoration, Six Projects Authorized by Section 7006(e)(3) of WRDA 2007; and the Report of the Chief of Engineers (dated 22 June 2012), LCA Ecosystem Restoration, Barataria Basin Barrier Shoreline Restoration Project, Louisiana.

SUMMARIZED FINANCIAL DATA – Total Project			ACCUM PCT of EST FED COST	STATUS (1 October 2012)	PCT CMPL	PHYSICAL COMPETITION SCHEDULE
Estimated Federal Cost		\$2,112,144,000		Beneficial Use Dredge Matl	0	
Programmed	\$ 1,455,482,000			Demonstration Projects	0	
Un-Programmed	\$656,662,000 ^{1/}			Amite River Diversion	0	
Estimated Non-Federal Cost		\$ 1,137,307,000		Convey Atchafalaya River	0	
Programmed: Cash	\$ 783,721,000			Houma Navigation Canal	0	
Other	\$			Convent LA & Blind River	0	
Un-Programmed: Cash	\$353,586,000 ^{1/}			Terrebonne Basin	0	
Other	\$ ^{1/}			Barataria Basin Shoreline Rest	0	
Total Estimated Project Programmed Cost		\$2,239,203,000		Houma Navigation Canal	0	
Total Estimated Project Un-Programmed Cost		\$1,010,248,000		Convent LA & Blind River	0	
Total Estimated Project Cost		\$ 3,249,451,000		Terrebonne Basin	0	
Allocations to 30 September 2010		0		Barataria Basin Shoreline Rest	0	
Allocations for FY 2011		0		Caillou Lake & Gulf	0	
Allocations for FY 2012		0		Point Au Fer island	0	
Conference Allowance for FY 2013		0		Mod to Caernarvon	0	
Allocations through 2013		0		Mod to Davis Pond	0	
Estimated Carry-in Funds		0		Bayou Lafourche	0	
Budget for FY 2014		1,000,000		Diversion at Myrtle Grove	0	
Programmed Balance to Complete After FY 2014		1,454,482,000		Hope Canal	0	
Un-Programmed Balance to Complete After FY 2014		656,662,000		Mississippi R. Gulf Outlet-Env Rest	0	
				Diversion at White's Ditch	0	
				Total Project	0	

1/ Medium Diversion at White Ditch, Barataria Basin Barrier Shoreline, and Terrebonne Basin Barrier Shoreline – requires additional authorization; the unprogrammed cost of \$1,010,248,000 is the difference between the Fully Funded Authorized cost of \$576,497,000 and the Fully Funded project cost of \$1,586,745,000 based upon the project cost reflected in the 2010 Chief's Report.

PHYSICAL DATA:

Pumping Stations & Siphon Facility	Adjustable Weirs
Sediment Traps	Land Bridge Creation
Dredging	Breakwaters
Dredged Material	Diversion Structure
Bank Stabilization	Conveyance Channel
Monitoring Stations	Groins

JUSTIFICATION:

Louisiana's coastal wetland provide nationally significant habitat to migratory bird species, protect an internationally significant commercial-industrial complex from storm-driven waves and tides, and support commercial and recreational fishing activities. However, natural land building process limitations, saltwater intrusion, subsidence, and sea level rise have led to the degradation of Louisiana's coastal wetlands. This threatens the environmental, economic, and social benefits provided to the region. This project seeks to restore Louisiana's coastal wetlands to preserve these benefits. The below details further explain the value and history of the Louisiana wetlands to be restored through this construction program.

The coastal wetlands of Louisiana provide nationally significant habitat to migratory bird species. Approximately 70 percent of all waterfowl migrating through the U.S. use the Mississippi and Central flyways, which pass over these wetlands. These wetlands are habitat to the more than 5 million birds wintering in Louisiana and for neo-tropical migratory songbirds and other avian species that use them as stopover habitat. Additionally, coastal Louisiana provides crucial nesting habitat for many water bird species, such as the endangered brown pelican.

In addition to their bird habitat, Louisiana's coast wetland and barrier island systems enhance protection of an internationally significant commercial-industrial complex from storm-driven waves and tides. Commercial navigation interests in Louisiana include the Port of South Louisiana, which handles more tonnage than any other port in the Nation, and the most active segment of the Nation's Gulf Intracoastal Waterway (GIWW) (Waterborne Commerce Statistics Center (WCSC) 2002). Louisiana produces high amounts of fossil fuels. In 2000, Louisiana led the Nation in oil production, with 592 million barrels of oil and condensate, (including the outer continental shelf (OCS) produced, valued at \$17 billion, and was second nationally in natural gas production with \$1.3 billion worth produced (excluding OCS and casing head gas) (Louisiana Department of Natural Resources [LDNR] 2003a). In addition to producing large amounts of fossil fuels, Louisiana moves and refines even larger amounts, with nearly 34 percent of the Nation's natural gas supply and over 29 percent of the Nation's crude oil supply moving through the state and connections to nearly 50 percent of U.S. refining capacity (LDNR 2003a).

Coastal Louisiana is home to over 2 million people, representing 46 percent of the state's population. Investments in facilities, supporting service activities, and urban infrastructure represent a total capital investment in the Louisiana coastal area of approximately \$100 billion. Excluding Alaska, Louisiana produced the Nation's highest commercial marine fish landings (excluding mollusk landings such as clams, oysters, and scallops) with an annual value of about \$284 million (National Marine Fisheries Service (NMFS) 2009). Annual data from the Louisiana Department of Wildlife and Fisheries show expenditures on recreational fishing (trip and equipment) in Louisiana to be nearly \$1.7 billion, and hunting expenditures were valued at \$975 million (2006).

Louisiana's coastal wetlands were built by deltaic processes through which the Mississippi River transported enormous volumes of sediment and water. This sediment was eroded from the Mississippi River Basin lands and carried through the river to eventually be deposited at the river's mouth forming the delta. For the last several thousand years, deltaic processes that built land resulted in a net increase of more than four million acres of coastal wetlands. In addition, processes created an extensive skeleton of higher natural levee ridges along the past and present Mississippi River channels, distributaries, and bayous in the Deltaic Plain and beach ridges of the Chenier Plain. The landscape created by these deltaic processes gave rise to one of the most productive ecosystems on Earth.

Today, however, most of the Mississippi River's fresh water, nutrients, and sediment, flow directly into the Gulf of Mexico, largely bypassing the coastal wetlands. Deprived of land building sediment, the wetlands are damaged by saltwater intrusion and other factors associated with sea level change and land subsidence, and will eventually convert to open water. Deprived of nutrients, the plants that define the surface of the coastal wetlands die off. Once the coastal wetlands are denuded of vegetation, the substrate is left exposed to the erosive forces of waves and currents, especially during tropical storm events. The loss of coastal wetlands has been well documented over time. Since the 1930s, coastal Louisiana has lost more than 1.2 million acres (485,830 ha) (Barras et al. 2003; Barras et al. 1994; and Dunbar et al. 1992). As recently as the 1970s, the loss rate for Louisiana's coastal wetlands was as high as 25,200 acres per year (10,202 ha per year). The rate of loss from 1990 to 2000 was about 15,300 acres per year (6,194 ha per year), mainly due to the residual effects of past human activity (Barras et al. 2003). It was estimated in 2000 that coastal Louisiana would continue to lose land at a rate of approximately 6,600 acres per year (2,672 ha per year) over the next 50 years. It is estimated that an additional net loss of 328,000 acres (132,794 ha) may occur by 2050, which is almost 10 percent of Louisiana's remaining coastal wetlands (Barras et al. 2003). The cumulative effects of human and natural activities in the coastal area have severely degraded the deltaic processes and shifted the coastal area from a condition of net land building to one of land loss.

Project descriptions for FY 2014:

These projects are part of the LCA portfolio and will be in a position to execute construction in FY 2014.

Beneficial Use of Dredged Material Program (BUDMat) provides the framework, process and procedures for selecting, funding and implementing projects over a 10-year period that could create an estimated 21,000 acres of coastal wetlands over the 10-year life of the program. Dredged material will be acquired from maintenance activities of Federal waterways. Plaquemines Parish government, LA has passed a resolution to enter into a Design Agreement in FY 2013. FY 2014 funds would be used to negotiate and execute a PPA agreement.

Barataria Basin Barrier Shoreline – Funds would be used to negotiate and execute a PPA agreement. The Barataria Basin Barrier Shoreline restoration project (BBBS) is a barrier island restoration project situated between the west bank of the Mississippi River at the active delta and the eastern shore of Terrebonne Bay. The Recommended Plan for this project restores and protects the shorelines, dunes, and marshes of the Caminada Headland and Shell Island. The initial construction of the barrier shorelines will restore or create 2,849 acres of beach, dune, and marsh habitats. On the Caminada Headland, approximately 880 acres of beach and dunes and 1,186 acres of marsh will be restored or created. Shell Island will be restored to its pre-Hurricane Bob (1979) configuration and create or restore 317 acres of beach and dune and 466 acres of marsh. The Recommended Plan will include re-nourishment of the Caminada Headland and Shell Island, sustaining the benefits created by the project construction. Over each 10 year period, a minimum of 3.9 million cubic yards of material will be returned. To construct the full National Ecosystem Restoration (NER) plan additional authorization is required. The construction of Caminada Headland is a separable element within the existing authorized cost. These funds would be used for the Caminada separable element. The State of Louisiana will use exclusively state funds to build approximately 5 miles of beach and dune features of this restoration project. The remaining beach and dune features, as well as all marsh restoration features complete the Caminada Headlands element of the BBBS project and are to be constructed with Federal/state cost-shared funds. Completion of the project will result in: restoring/protecting water and sediment dynamics impacting the landscape features affecting thousands of coastal wetland acres of the Barataria Basin and their dependent flora and fauna to include the habitats of migratory waterfowl, threatened and endangered species, as well as Federal and state refuges and management areas.

Small Diversion at Convent / Blind River - Project is located approximately equidistant between Baton Rouge and New Orleans, Louisiana within the Maurepas Swamp, one of the largest remaining cypress swamps in coastal Louisiana. The recommended plan (Alternative 2), which is also the national ecosystem restoration plan, will reintroduce the natural periodic, nearly annual flooding by the Mississippi River to the Maurepas Swamp and Blind River that was cut off by construction of the Mississippi River and Tributaries (MR&T) flood control system. The project consists of a 3,000 cubic feet per second (cfs) capacity gated box

culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Romeville, Louisiana. The project will restore freshwater, nutrients, and sediment input from the Mississippi River and improve habitat function by 6,421 average annual habitat units over a total of 21,369 acres of bald cypress-tupelo swamp. The project would improve habitat for many fish and wildlife species including migratory birds, bald eagles, alligators, gulf sturgeon, and the manatee. PED for the Small Diversion at Convent / Blind River project is scheduled for completion in FY 2014.

These projects are part of the LCA portfolio but are not currently scheduled for construction in FY 2014:

Demonstration Projects are designed to resolve critical areas of scientific or technological uncertainty related to the implementation of the restoration plan, and in the future, the comprehensive plan.

Medium Diversion at White's Ditch project provides for a medium diversion from the Mississippi River into the central River aux Chenes area using a controlled structure to provide additional freshwater, nutrients, and fine sediment to the area. The additional freshwater would facilitate organic sediment deposition, improve biological productivity, and prevent further deterioration of the marshes. Additional authorization will be required prior to initiating construction as the recommended plan exceeds the authorized project cost.

Medium Diversion at Myrtle Grove with Dedicated Dredging project consists of diverting 2,500 to 15,000 cfs from the Mississippi River into the Barataria Basin through a box culvert system and using two million cubic yards of Mississippi River material annually for several years to create marsh wetlands. As authorized, this project is expected to deliver benefits in the range of 11,500 acres and would benefit essential fish habitat, threatened/endangered species and colonial nesting birds. The Feasibility Cost Share Agreement was enacted May 2010.

Projects that are part of the LCA portfolio, however, the State of Louisiana does not intend to pursue a partnership at this time. No work is anticipated to be performed in FY 2014:

Amite River Diversion Canal Modification restoration project includes portions of the Maurepas Swamp adjacent to the Amite River Diversion Canal which connects and diverts flows from the Amite River to the lower Blind River near Lake Maurepas. The Amite River Diversion Canal recommended plan (Alternative 33-Chief of Engineers Report dated 30 December 2010) will restore the most degraded portion of the Maurepas Swamp within the study area by restoring the natural hydrology modified by the construction of the Amite River Diversion Canal and from the resulting impoundment of water, lack of freshwater, sediment and nutrients and surge-related saltwater intrusion. The project includes the creation of three gaps and delivery channels through the north bank of the Amite River Diversion Canal. The recommended plan is an implementable increment of the NER plan, meets the LCA Program and project objectives, and is within the cost and scope of the authorization contained in Section 7006(e)(3) of WRDA 2007. The NER plan would create gaps on both the north and south bank of the Amite River Diversion Canal along with delivery channel, gaps in the railroad grade and vegetative plantings benefiting 3,881 acres of swamp. The NER plan also includes all the areas addressed by the recommended plan and an additional area that is expected to need restoration in the next 20 years. The NER plan would provide 1,602 average annual habitat units. The recommended plan will improve habitat function by 679 average annual habitat units over the 50-year period of analysis and benefit approximately 1,602 acres of existing freshwater swamp.

Convey Atchafalaya River Water to Northern Terrebonne Marshes / Multipurpose Operation of the Houma Navigation Canal Lock restoration project is located in coastal Louisiana south of Houma, between the Atchafalaya River and Bayou Lafourche. These two projects are hydrologically linked and subsequently have been analyzed and are presented as a combined project. The Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of the Houma Navigation Canal Lock recommended plan (Alternative 2-Chief of Engineers Report dated 30 December 2010), which is also the NERplan, will reduce the current

trend of marsh degradation in the project area resulting from subsidence, sea level rise, erosion, saltwater intrusion, and lack of sediment and nutrient deposition. The project consists of elimination of GIWW flow constrictions and construction of flow management features in the interior portions of the project area.

The project consists of construction of 56 structures and other water management features and also includes the multipurpose operation of the proposed Houma Navigation Canal Lock, if and when constructed. The lock complex would be closed and operated more frequently in order to maximize distribution of freshwater into wetlands downstream of the lock and minimizing saltwater intrusion upstream of the lock. The project would improve habitat function by approximately 3,220 average annual habitat units. The project would improve habitat for fish and wildlife species including migratory birds, estuarine fish and shell fish. Benefits include the reduction of projected existing wetland loss by approximately 9,655 acres over the 50-year period of analysis.

Terrebonne Basin Barrier Shoreline Restoration project is located in Terrebonne Parish, which is 30 miles south of the city of Houma, Louisiana and includes the Isles Dernieres and the Timbalier Islands. These barrier islands have undergone significant reductions in size due to natural processes and human actions including lack of sediment, storm-induced erosion and breaching, subsidence, sea level rise and hydrologic modifications such as navigation and oil and gas canals. The project will reintroduce sediment to the coastal sediment transport system through the restoration of Raccoon Island with 25 years of advanced fill and construction of a terminal groin. The project also includes restoration of Whiskey and Trinity Islands with five years of advanced fill and restoration of Timbalier Island with 25 years of advanced fill. The project consists of restoration of four islands (Whiskey, Raccoon, Trinity, and Timbalier), improving habitat function by 2,833 average annual habitat units by adding 3,283 acres to the islands for a total size of 5,840 acres. The restored acreage would include 472 acres of dune, 4,320 acres of supratidal habitat, and 1,048 acres of intertidal habitat and ensure the geomorphic and hydrologic form and ecological function of the majority of the estuary over the period of analysis. Additional authority is needed to raise the total project cost to allow the entire project's implementation. The Whiskey Island component can be implemented under the existing authority provided in Section 7006(e)(3) of WRDA 2007(Chief of Engineers Report dated 30 December 2010). The Whiskey Island component includes renourishment every 20 years to maintain the constructed features. Restoration of the one island will increase habitat function by 678 average annual habitat units by restoring a total of 1,272 acres on the island, including 65 acres of dune, 830 acres of supratidal habitat, and 377 acres of intertidal habitat. The Whiskey Island component is an implementable increment of the NER plan.

Land-bridge between Caillou Lake and the Gulf of Mexico project would maintain the natural hydrologic barrier between the Gulf and Caillou Lake and associated Terrebonne Basin wetlands as well as allow increased freshwater influence from the Atchafalaya River waters flowing eastward into Four League Bay. The project includes armoring the Gulf shoreline and rock armoring or marsh creation to plug and fill broken marsh to preserve the land bridge's integrity and increase freshwater influences. Coastal marsh and habitat crucial to migratory birds would be protected. The bald eagle and essential fish habitat would also benefit. Subsidence, storm damage, increased tidal influence, and lack of sediment inputs have resulted in wetland loss, habitat conversion, and ecosystem degradation. These habitat losses have had a direct adverse impact on wildlife and fisheries resources and State-designated Public Oyster Seed Reservations. The bald eagle and essential fish habitat would also benefit. Essential fish habitat is defined as waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Act), specific to Federally managed species. The project would maintain the separation between Caillou Lake and the Gulf of Mexico and Bay Voisin and the Gulf of Mexico, maintain the estuarine gradient, reduce the marine influences on Caillou Lake and Bay Voisin, and reverse the trend of deterioration in the associated wetlands and wildlife habitat. It will create and nourish approximately 1,588 acres of saline marsh and install 29,000 linear feet (8,839 m) of shoreline protection to increase the stability of the land bridge separating Caillou Lake from the Gulf of Mexico and of the stability of the critical land bridge separating Bay Voisin and the Gulf of Mexico.

Gulf Shoreline at Point Au Fer Island project provides for stabilizing the Gulf shoreline of this island, thereby precluding the formation of direct connections between the Gulf and Four League Bay, a situation that would lead to increasing salinities of island and inland coastal wetlands influenced by Atchafalaya River

water. Protecting this island also protects habitat crucial to migratory birds, and provides storm surge protection to the southwestern corner of the Terrebonne Bay wetland system.

Modification of Caernarvon Diversion project will increase wetland creation and protection outputs for this existing structure through changes in the structure's operation. Currently, the structure operates on average at about one-half capacity to maintain salinity gradients. The wetlands of St. Bernard and Plaquemines Parishes suffered extensive losses from Hurricane Katrina and will directly benefit from the added sediments and freshwater introduced from the Mississippi River by increasing the freshwater introduction volume. The bald eagle and essential fish habitat are also expected to benefit.

Modification of Davis Pond Diversion project will increase wetland creation and protection outputs for this existing structure through changes in the structure's operation. The structure, operating on average at about one-half capacity, maintains salinity gradients in the central Barataria Basin. In addition to wetland creation, the freshwater wetlands of the upper Barataria Basin will be directly benefitted by the added sediments and freshwater introduced from the Mississippi River. The bald eagle and essential fish habitat are also expected to benefit.

Projects that are part of the LCA portfolio; however, Feasibility studies have not been initiated:

Small Bayou Lafourche Reintroduction project consists of increasing channel flows by introducing 1,000 cfs of Mississippi River water into the Bayou at Donaldsonville to mimic the actions of a river crevasse. Dredging and bank stabilization would be required to control water levels and maintain bank stability and a sediment trap. Weirs are also features of the project. Projections are that 2,500 acres of coastal marsh would be protected, thousands of acres would benefit as would the bald eagle and essential fish habitat.

Small Diversion at Hope Canal is expected to enhance approximately 36,000 acres of Maurepas Swamp wetlands primarily by introducing approximately 5,000 cfs from the Mississippi River. Project includes two box culverts; a receiving pond reinforced with riprap; and a 50-foot wide, and a 10-foot deep outflow channel roughly 27,500 feet long that will run from the river to U.S. Interstate 10.

Mississippi River Gulf Outlet Environmental Restoration (which is separate from WRDA 2007 Section 7013) involves the construction of shoreline protection measures such as rock breakwaters along the north bank of the Mississippi River Gulf Outlet and along important segments of the southern shoreline of Lake Borgne. Additional ecosystem restoration features including marsh creation, freshwater introduction, barrier island restoration, and channel modification would be investigated to develop a suite of measures to stabilize and maintain important estuarine components. Pursuant to WRDA 2007 Implementation Guidance for Section 7006, the Section 7006 study is held in abeyance pending completion of the supplemental report under Section 7013 of WRDA 2007. Section 7013 report is in review.

FISCAL YEAR 2014: Funding of \$1,000,000 will be used to negotiate and execute PPA agreements for BUDMat and BBBS.

NON-FEDERAL COST: In accordance with the cost sharing reflected in the Water Resources Development Act of 2007; Chief's Report dated 30 Dec 2010; and Chief's Report dated 22 June 2012, the non-Federal sponsor must comply with the requirements listed below:

Provide all lands, easement, relocations, rights-of-way, and disposal areas (LERRD's) equal to 35 percent of the total project cost. Cash must be provided to make up the difference between LERRD's and 35 percent total project cost.

Requirements for Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Barataria Basin Barrier Shoreline Restoration	163,805,000	500,000
Small Diversion at Convent/Blind River	43,953,000	2,754,000
Beneficial Use of Dredged Material Program	51,399,000	
Demonstration Projects	35,000,000	
Amite River Diversion Canal Modification	3,048,000	10,000
Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose	104,865,000	73,000
Operation of Houma Navigation Canal Lock		
Terrebonne Basin Barrier Shoreline Restoration	245,262,000	6,900,000
Land-bridge between Caillou Lake and the Gulf of Mexico	25,044,000	745,000
Gulf Shoreline at Point Au Fer Island	18,641,000	644,000
Modification of Caernarvon Diversion	11,992,000	0
Modification of Davis Pond Diversion	31,849,000	0
Small Bayou Lafourche Reintroduction	57,886,000	1,400,000
Medium Diversion at White's Ditch	146,293,000	120,000
Medium Diversion at Myrtle Grove with Dedicated Dredging	123,346,000	120,000
Small Diversion at Hope Canal	28,368,000	120,000
Mississippi River Gulf Outlet Environmental Restoration	46,556,000	711,000
Total	1,137,307,000	14,097,000

STATUS OF LOCAL COOPERATION: The State of Louisiana has expressed continued support for the LCA Program moving forward. The State is currently in the process of assessing all on-going and planned coastal ecosystem restoration studies and projects, including LCA projects, to ensure alignment with the State's 2012 Master Plan. Individual PPAs between the Federal Government and the State of Louisiana will be executed for each project that will move into Construction. Final preparation of the PPA for the BBBS shoreline restoration project is scheduled for completion in FY 2014. The State has indicated its intent to continue advancement of the Medium Diversion at Myrtle Grove Feasibility Study, the Mississippi River Hydro/Delta Management Study, and the Demonstration Program projects within the LCA program. However, the path forward the State will pursue more closely aligns with the recently released 2012 State Master Plan. Accordingly, the State of Louisiana has indicated its intent to pursue four of the LCA 6 projects outside of the LCA Program: Amite River Diversion Canal Modification; Terrebonne Basin Barrier Shoreline Restoration; and Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of Houma Navigation Canal Lock; with development of the Medium Diversion at White Ditch and Small Diversion at Convent/Blind River projects continuing within the LCA program. Additionally, the State has also requested suspension of the LCA 4 projects: Land Bridge between Caillou Lake and the Gulf of Mexico, Gulf Shoreline at Point au Fer Island, Modification of Caernarvon Diversion, and Modification of Davis Pond Diversion.

Preliminary discussions have initiated with Plaquemines Parish government regarding their participation in the BUDMat program and Plaquemines Parish government recently passed a resolution to enter into a Design Agreement for Beneficial Use of Dredged Material

COMPARISON OF FEDERAL COST ESTIMATES: The Federal project cost estimate of \$2,112,144,000 is an increase of \$683,301,000 from the latest cost estimate of \$1,428,843,000 presented to Congress (FY 2013) due to refined cost estimates for completed studies, inflation factors, and including the fully funded cost of the unauthorized projects or separable elements. The current Federal Cost estimate is based on the fully funded cost estimates dated 1 October 2012.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Record of Decision for the Programmatic Environmental Impact Statement for the Beneficial Use of Dredged Material Program (BUDMat) was signed on 13 August 2010.

A Record of Decision for the following LCA Six Projects Authorized by WRDA 2007 Section 7006(e) was signed 12 April 2011: Small Diversion at Convent/Blind River; Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of Houma Navigation Lock; Medium Diversion at White Ditch; Amite River Diversion Canal Modification; and Terrebonne Basin Barrier Shoreline Restoration.

A Barataria Basin Barrier Shoreline Project Integrated Report completed state and agency review May 2012, Chief of Engineers Report signed 22 June 2012, awaiting signature of the ROD.

All subsequent environmental documentation associated with the work planned will be completed prior to initiation of construction.

OTHER INFORMATION: PED for the near-term program was initiated in FY 2012. Medium Diversion at White Ditch will require additional authorization prior to initiating construction as the recommended plan exceeds the authorized project cost. There is not a constructible feature of the project that can be completed within the cost authorized in WRDA 2007. Terrebonne Basin Barrier Shoreline and Barataria Basin Barrier Shoreline projects require additional authorization; however there is a constructible feature within the cost authorized in WRDA 2007.

STATUS SUMMARY(as of 14 January 2013)

Active	
Beneficial Use of Dredged Material Program	Feasibility Complete: ROD signed 13 Aug 2010, developing Design Agreement
Demonstration Projects Program	Developing Program Implementation Plan
Medium Diversion at Myrtle Grove with Dedicated Dredging	Feasibility study continues
Barataria Basin Barrier Shoreline Restoration	Developing Design Agreement
Small Diversion at Convent Blind River	In PED
Medium Diversion at White's Ditch	In PED
Suspended (In close –out)	
Amite River Diversion Canal Modification	Suspended by state's letter dated 20 Aug 2012
Convey Atchafalaya River Water to Northern Terrebonne Marshes	Suspended by state's letter dated 20 Aug 2012
Houma Navigation Canal	Suspended by state's letter dated 20 Aug 2012
Terrebonne Basin Barrier Shoreline Restoration	Suspended by state's letter dated 20 Aug 2012
Suspended	
Landbridge between Caillou Lake and the Gulf of Mexico	Suspended by state's letter dated 16 Oct 2012
Gulf Shoreline at Point au Fer island	Suspended by state's letter dated 16 Oct 2012
Modification of Caernarvon Diversion	Suspended by state's letter dated 16 Oct 2012
Modification of Davis Pond Diversion	Suspended by state's letter dated 16 Oct 2012
Feasibility studies never initiated	
Hope Canal	
Bayou Lafourche	
Mississippi River Gulf Outlet Environmental Restoration	Sec. 7006 held in abeyance pending completion of the Sec. 7013 supplemental study
OTHER	
Mississippi River Gulf Outlet Environmental Restoration	Pursuant to WRDA 2007 Section 7013: Production of a supplemental report proceeding separately from Section 7006 - Section 7013 report in review

For programmed work only; remaining work is un-programmed pending decision to construct these features.

Updated cost estimates: effective date 1 October 2012	Estimated Federal Cost \$	Estimated Non-Federal Cost \$	Total Estimated Cost (Fully Funded) \$	Programmed Balance to Complete \$	Un-Programmed Balance to Complete \$
Barataria Basin Barrier Shoreline Restoration	\$304,209,000	\$163,805,000	\$468,014,000	\$328,303,000	\$139,711,000
Small Diversion at Convent/Blind River	\$81,628,000	\$43,953,000	\$125,581,000	\$125,581,000	\$0
Beneficial Use of Dredged Material Program (BUDMat)	\$95,455,000	\$51,399,000	\$146,854,000	\$146,854,000	\$0
Demonstration Projects	\$65,000,000	\$35,000,000	\$100,000,000	\$100,000,000	\$0
Amite River Diversion Canal Modification	\$5,662,000	\$3,048,000	\$8,710,000	\$8,710,000	\$0
Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of Houma Navigation Canal Lock	\$194,748,000	\$104,865,000	\$299,613,000	\$299,613,000	\$0
Terrebonne Basin Barrier Shoreline Restoration	\$455,488,000	\$245,262,000	\$700,750,000	\$124,842,000	\$575,908,000
Land-bridge between Caillou Lake and the Gulf of Mexico	\$46,511,000	\$25,044,000	\$71,555,000	\$71,555,000	\$0
Gulf Shoreline at Point Au Fer Island	\$34,618,000	\$18,641,000	\$53,259,000	\$53,259,000	\$0
Modification of Caernarvon Diversion	\$22,272,000	\$11,992,000	\$34,264,000	\$34,264,000	\$0
Modification of Davis Pond Diversion	\$59,147,000	\$31,849,000	\$90,996,000	\$90,996,000	\$0
Small Bayou Lafourche Reintroduction	\$107,503,000	\$57,886,000	\$165,389,000	\$165,389,000	\$0
Medium Diversion at White's Ditch	\$271,688,000	\$146,293,000	\$417,981,000	\$123,352,000	\$294,629,000
Medium Diversion at Myrtle Grove with Dedicated Dredging	\$229,070,000	\$123,346,000	\$352,416,000	\$352,416,000	\$0
Small Diversion at Hope Canal	\$52,683,000	\$28,368,000	\$81,051,000	\$81,051,000	\$0
Mississippi River Gulf Outlet Environmental Restoration	\$86,462,000	\$46,556,000	\$133,018,000	\$133,018,000	\$0

MISSOURI

APPROPRIATION TITLE: Construction – Channels and Harbors (Navigation)

PROJECT: Mississippi River between the Ohio and Missouri Rivers (Regulating Works), Missouri and Illinois (Continuing)

LOCATION: The project involves improvement of the Mississippi River from the mouth of the Ohio River to the mouth of the Missouri River at river mile 195 above the mouth of the Ohio River. The project covers the following counties: (Missouri) St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi; (Illinois) Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, and Pulaski.

DESCRIPTION: The project consists of a navigation channel 9 feet deep and not less than 300 feet wide with additional width in bends, from the mouth of the Ohio River to the mouth of the Missouri River, a distance of approximately 195 miles. Project improvements are achieved by means of dikes, revetment, construction dredging, and rock removal. All work is programmed.

AUTHORIZATION: River and Harbor Acts of 1910, 1927, and 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 33.6 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 18.6 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 7.2 to 1 at 2.5 percent (FY 1961).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Regulating Works Project – Mississippi River between Ohio and Missouri Rivers Level 2 – Benefit Update Report, approved 28 October 2011, at October 2011 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$375,000,000		Entire Project	85	TBD
Estimated Non-Federal Cost	0				
Cash Contributions	0				
Other Cost	0				
PHYSICAL DATA					
Total Estimated Project Cost	\$375,000,000		195 miles of navigation channel Ohio River to mouth of Missouri River 9 feet deep x 300 feet wide		
Allocations to 30 September 2010	\$250,895,000				
Allocation for FY 2011	4,453,000				
Allocation for FY 2012	1,487,000 ^{1/}				
Conference Allowance for FY 2013	7,938,000 ^{2/}				
Allocation for FY 2013	7,893,000 ^{3/}				
Allocations through FY 2013	264,728,000 ^{4/}	71			
Estimated Unobligated Carry-in Funds	0 ^{5/}				
Budget Amount for FY 2014	49,690,000	84			
Programmed Balance to Complete After FY 2014	60,582,000				
Unprogrammed Balance to Complete After FY 2014	0				

^{1/}Reflects revocation of \$5,687,000 in ARRA funds.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/}Reflects revocation of \$44,000 in ARRA funds.

^{4/}Includes ARRA funds of \$18,481,000.

^{5/}Estimated unobligated "Carry-in" Funding: As of the date of this justification sheet the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: The Mississippi River between the Ohio and Missouri Rivers is a major artery of the inland waterway system. Commerce in this reach has increased from 4,500,000 tons in 1945 to 102,967,673 tons in 2010 worth approximately \$15 billion. Commerce is expected to increase to 167,000,000 tons by the year 2020; therefore, it is essential that construction of project works be continued at a rate which will insure 9-foot channel depths for a year-round navigation season. The ten year average (2002-2011) tonnage is 107,937,578. The average annual benefits, all navigation, are \$5,018,392,000.

FISCAL YEAR 2013: Unobligated carryover will be used as follows:

Planning, Engineering, and Design	\$214,000
Total	\$214,000

FISCAL YEAR 2013: The current amount is being applied as follows:

Initiate and complete Rock Removal Phase 1	\$7,000,000
Planning, Engineering, and Design	200,000
Construction Management	738,000
Total	\$7,938,000

FISCAL YEAR 2014: The budget amount will be used for the following: Rock Removal Phase 2 (remove rock pinnacles from the river bed), Dogtooth Bend, Phase 5 contract (construct river training structures and revetments); Eliza Point-Greenfield Bend Phase 3; (construct river training structures and revetments); Grand Tower Phase 5; (construct river training structures and revetments); Mosenthein-Ivory Landing Phase 4 contract (construct river training structures and revetments); planning, engineering and design for FY 2015 contracts, continue Environmental Assessment and/or Supplemental Environmental Impact Statement; and engineering during construction; and construction management for FY 2014. Funds will be applied as follows:

Rock Removal Phase 2 Contract	\$30,000,000
Initiate and Complete Dogtooth Bend Phase 5 Dike and Revetment Contract	2,800,000
Initiate and Complete Eliza Point-Greenfield Bend Phase 3 Dike and Revetment Contract	1,000,000
Initiate and Complete Grand Tower Phase 5 Dike and Revetment Contract	4,000,000
Initiate and Complete Mosenthein-Ivory Landing Phase 4 Dike and Revetment Contract	4,200,000
Continue bank line stabilization through tree planting at Thompson Bend Riparian Corridor	180,000
Program EA/Supplemental EIS completion	2,000,000
Planning, Engineering, and Design	2,510,000
Construction Management	3,000,000
Total	\$49,690,000

NON-FEDERAL COST: None.

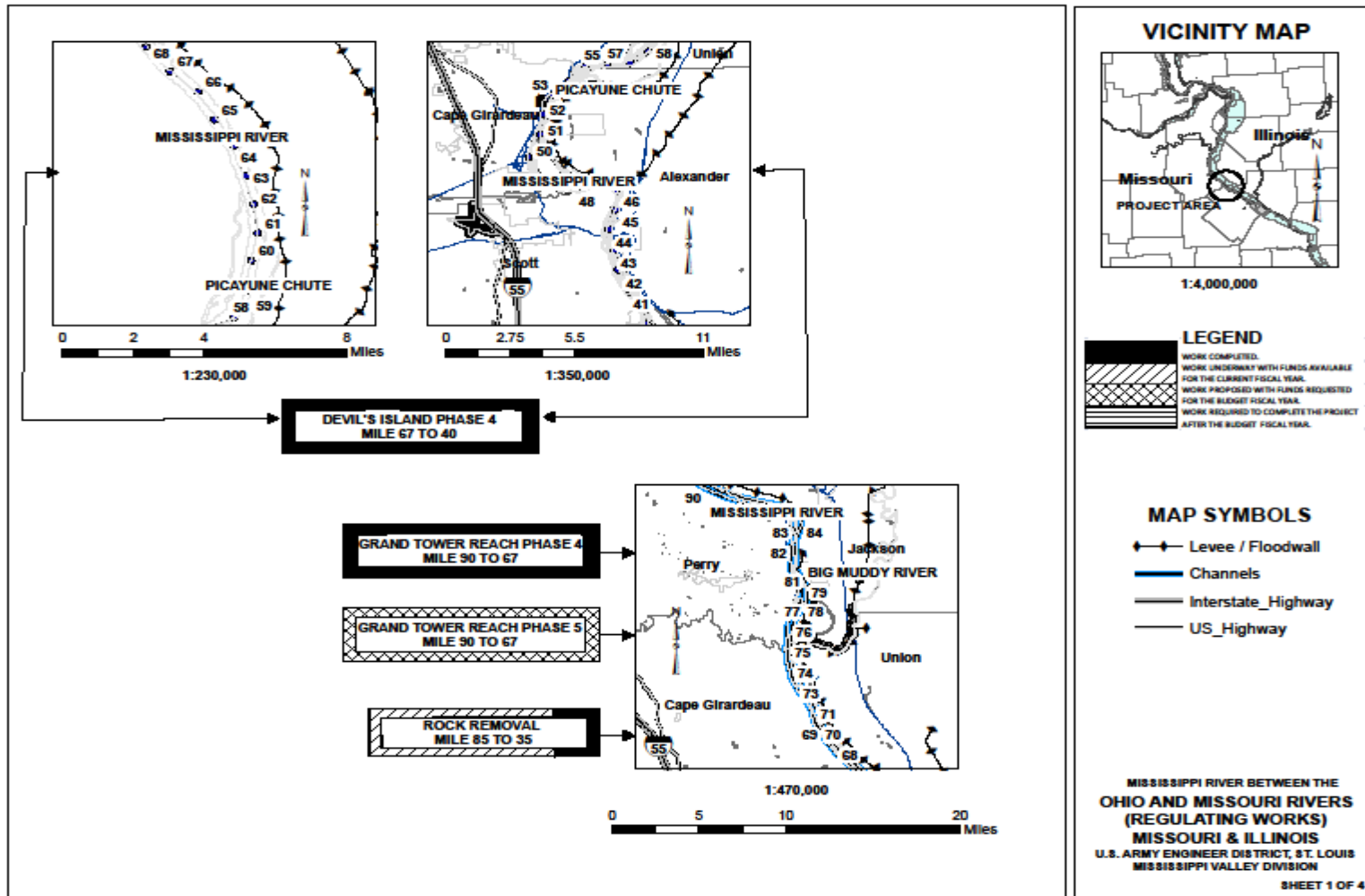
STATUS OF LOCAL COOPERATION: Not applicable.

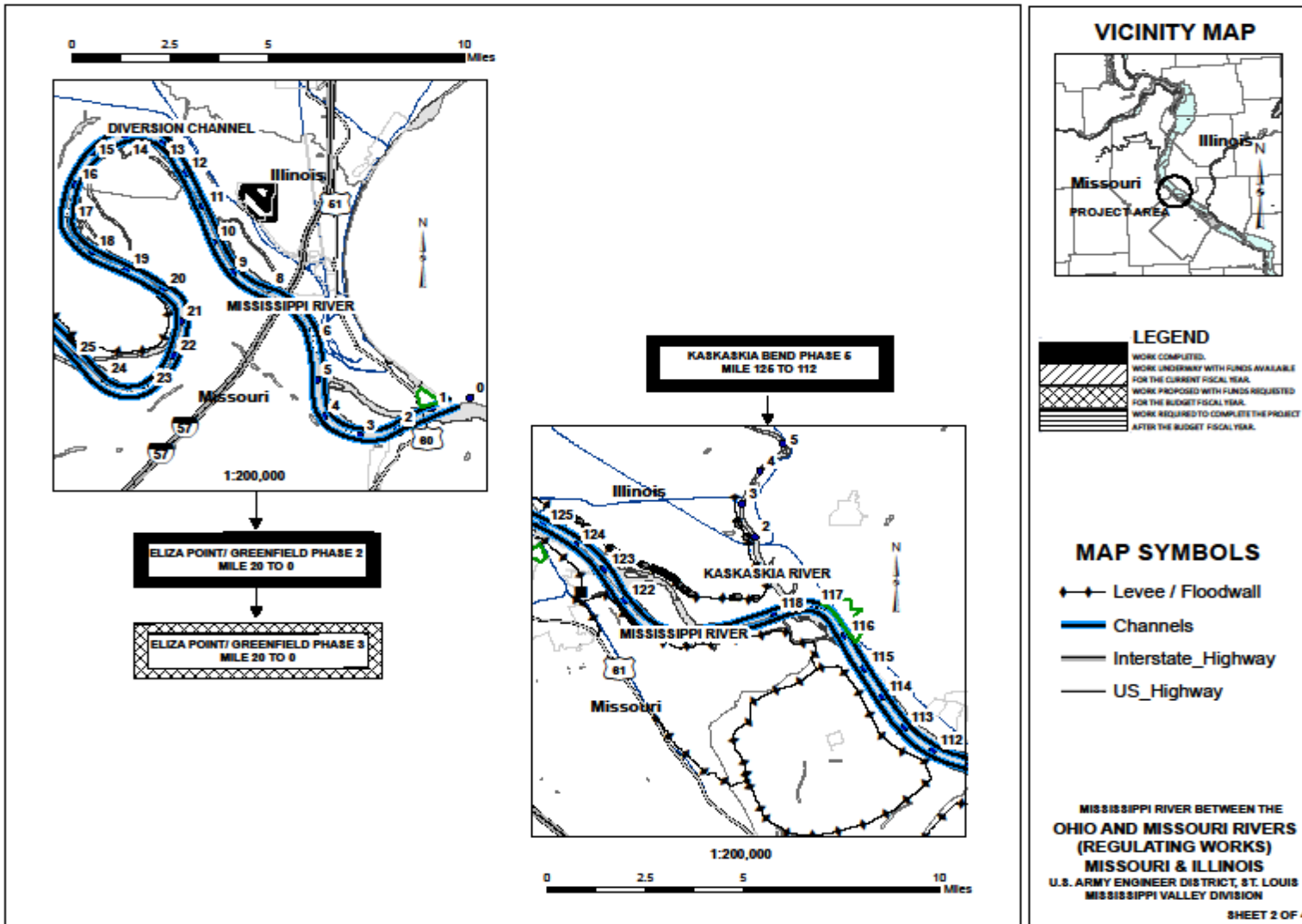
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$375,000,000 is an increase of \$52,000,000 from the latest estimate (\$323,000,000) presented to Congress (FY 2013). Post contract award costs reflect an increase due to the recent reanalysis of requirements for rock removal and associated labor requirements as well as increases in engineering and design for model studies for future work and for further environmental analysis. This change includes the following items:

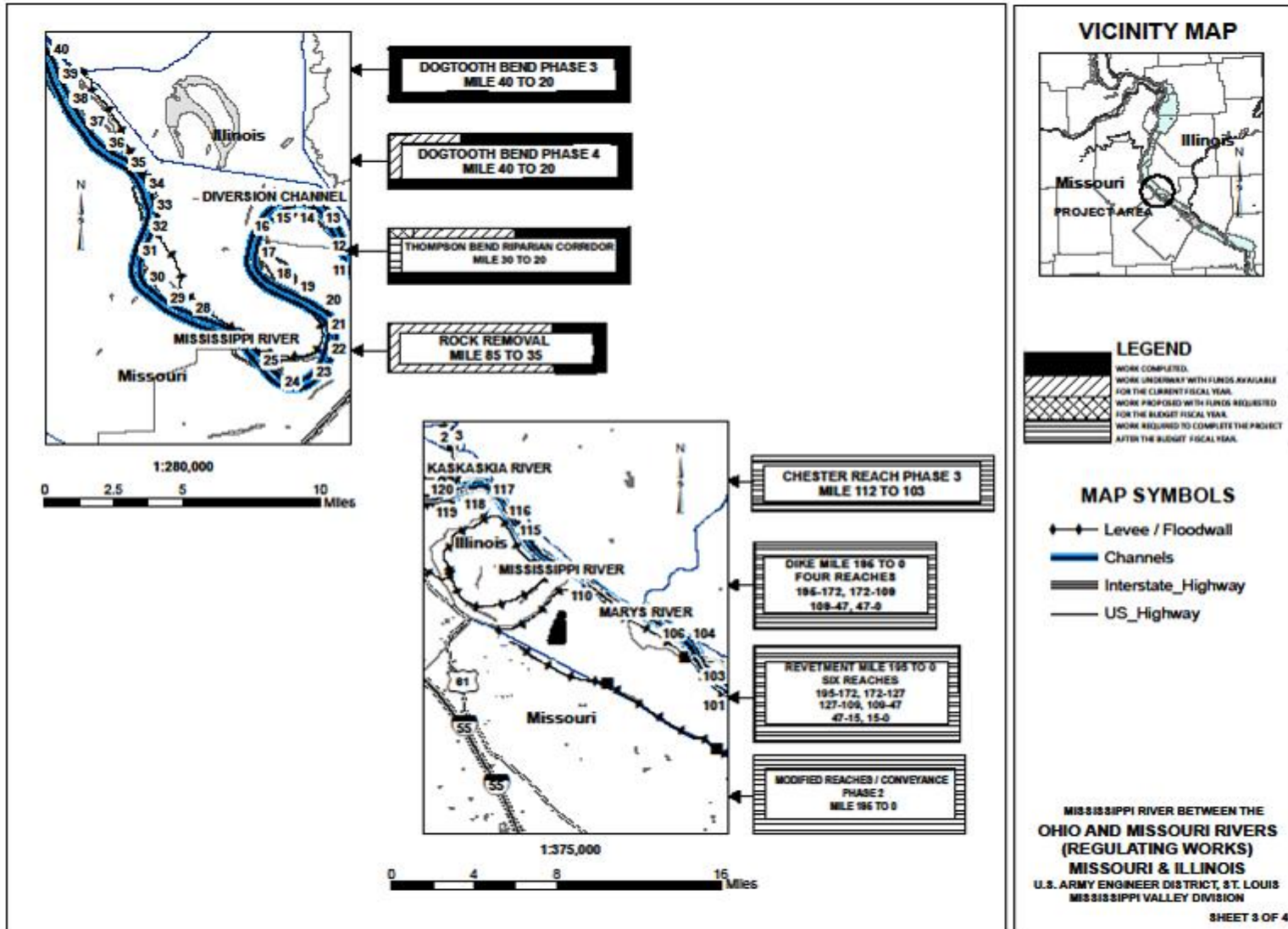
Item	Amount
Price Escalation on Construction Features	\$2,641,000
Post Contract Award and Other Estimating (including Contingency) Adjustments	49,359,000
Total	\$52,000,000

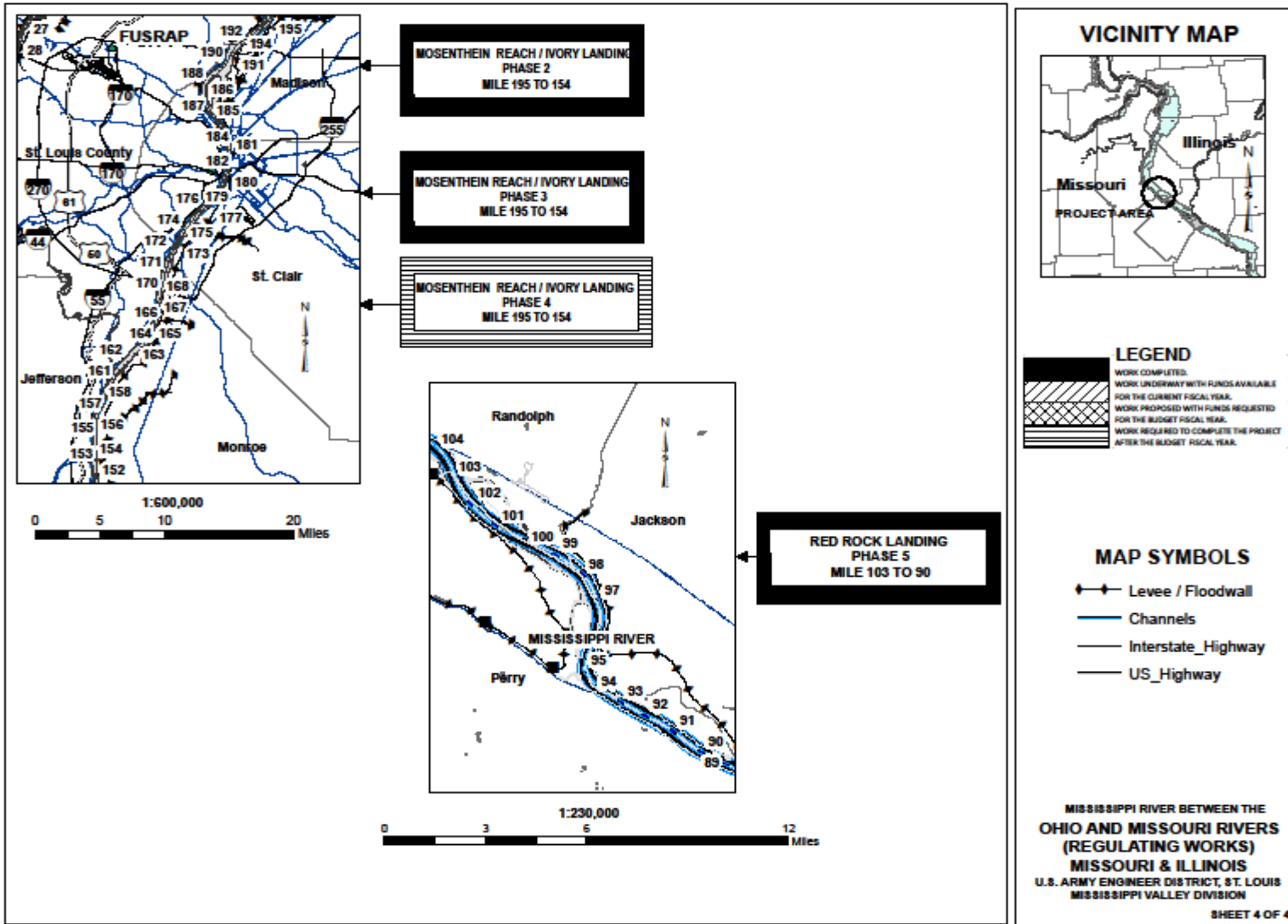
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Council on Environmental Quality on 8 April 1976 and published in the Federal Register on 23 April 1976. An Environmental Analysis was completed for the Rock Removal and Finding of No Significant Impact signed on 28 October 1988. MVS is currently engaged in completing an Environmental Assessment (EA) of the Middle Mississippi Regulating Works Program. The scope of work for the EA is being finalized with a tentative scheduled completion of FY 2014 which could result in the need for a supplemental EIS.

OTHER INFORMATION: Planning was initiated prior to 1910, and construction was initiated in 1910. This project requires no mitigation. Due to the low water event, the pinnacle rock removal was prioritized in FY 2013.









APPROPRIATION TITLE: Construction – Local Protection (Flood Risk Management)

PROJECT: Monarch-Chesterfield, Missouri (Continuing)

LOCATION: The project is located in westernmost St. Louis County, Missouri within the boundaries of the City of Chesterfield. The levee system is located along the right bank of the Missouri River between river miles 46.0 and 38.5.

DESCRIPTION: The existing private levee system is 11.5 miles long and protects approximately 4,700 acres from the 1 percent annual chance of exceedance (100-year event). During the Great Flood of 1993, the existing levee failed causing flood damages in excess of \$200,000,000. The project consists of raising the existing levees on the Missouri River and Bonhomme Creek to provide protection from a .2 percent annual chance of exceedance (500-year event) along with relief wells, a sheet pile cutoff, and berms to control underseepage. Other features include roadways, railroad and roadway closure structures, retaining walls, relocations, pumping stations with gravity structures, and environmental mitigation features. All work is programmed.

AUTHORIZATION: The Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 13.6 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 3.8 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 5 5/8 percent (FY 2004).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Level 2 Economic Reevaluation on the Chesterfield Flood Control Feasibility Study approved 28 June 2011 at 2011 price level.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	PHYSICAL STATUS (1 Jan 2013)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost	\$61,421,000	Entire Project		63	TBD
Estimated Non-Federal Cost	33,071,000				
Cash Contributions	\$ 4,725,000				
Other Costs	28,346,000				
Total Estimated Project Cost	\$94,492,000				
Allocations to 30 September 2010	21,723,000				
Allocation for FY 2011	6,460,000				
Allocation for FY 2012	1,936,000 ^{1/}				
Conference Allowance for FY 2013	2,340,000 ^{2/}				
Allocation for FY 2013	2,151,000 ^{3/}				
Allocations through FY 2013	32,270,000 ^{4/}	53			
Estimated Carry-in Funds	0 ^{5/}				
Budget Amount for FY 2014	2,000,000	56			
Programmed Balance to Complete after FY 2014	27,151,000				
Unprogrammed Balance to Complete after FY 2014	0				

PHYSICAL DATA

Levee:	11.5 miles
Pump Stations:	4 (222 cfs; 44.5 cfs; 133.5 cfs; 273.5 cfs)
Large Gravity Drains:	8
Relief Wells:	33
Mitigation features:	12.94 acres
Sheetpile cutoff wall:	1,100 feet long by 50 feet deep
Berms:	150 to 300 feet wide 5 to 15 feet thick
Road closure structures:	2
Railroad closure structures:	2

^{1/} Reflects revocation of \$315,000 in ARRA funds.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/} Reflects revocation of \$189,000 in ARRA funds.

^{4/} Includes ARRA \$11,344,000.

^{5/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: During the Great Flood of 1993 the levee system breached with approximately 8 feet of water covering the valley causing 250 businesses, comprising over 3,000,000 square feet of commercial development to close, 50 residences were evacuated, Interstate 64/U.S. Route 40 was closed for three weeks as were other transportation routes into the area, the Spirit of St. Louis Airport was closed for nearly three months, and the St. Louis County Correctional Institution was forced to evacuate inmates to temporary quarters for up to six months. Estimated flood damages totaled in excess of \$200,000,000. The present value of properties that will be protected by the project is \$1,800,000,000. Major flood events along the lower Missouri River occurred in 1951, 1973, 1986, 1993 and 1995, with 1993 being the largest flood in the last 50 years. The design frequency against which flood risk reduction is to be provided is 500 year. The life safety hazard index is 15 feet, warning time 12 hours for Missouri River and 1 hour for local streams, and population affected is 61,000. With an average annual cost of \$7,251,000, the average annual net benefit for this project is \$20,000,000. The average annual damages without the project are estimated at \$27,300,000 and \$49,000 with the project. The average annual benefits, all flood control, are \$27,251,000.

FISCAL YEAR 2013: The total unobligated dollars are being used as follows:

Construct Watershed 5 Relief Wells	\$ 816,000
Construct Levee Raise at Pump Station 7	492,000
Continue construction of Pump Station 5 and Centaur Road Closure	863,000
Planning, Engineering, and Design	700,000
Construction Management	66,000
Total	\$2,937,000

FISCAL YEAR 2013: The current amount is being applied as follows (see Other Information):

Continue construction of Watershed 5 Relief Wells	\$ 275,000
Continue construction of Levee Raise at Pump Station 7	700,000
Planning, Engineering, and Design	961,000
Construction Management	404,000
Total	\$2,340,000

FISCAL YEAR 2014: The requested amount will be used for plans and specifications for pump stations and gravity drain work and engineering during construction and construction management for previously awarded contracts. Funds will be applied as follows:

Planning, Engineering, and Design	\$1,676,000
Construction Management	324,000
Total	\$2,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way.	\$13,933,000	\$0
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	3,900,000	0
Pay 35 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 35 percent as determined under Section 103(m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay as reduced for credit allowed based on prior work (Section 104 of the Water Resources Development Act of 1986) as amended; and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	15,238,000	836,000
Total Non-Federal Costs	\$33,071,000	\$836,000

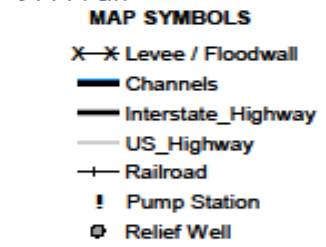
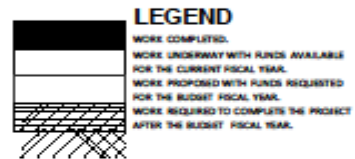
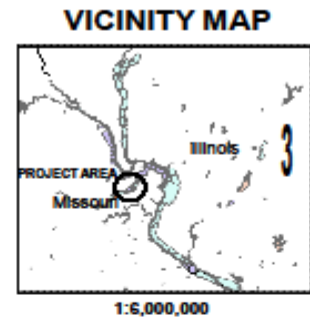
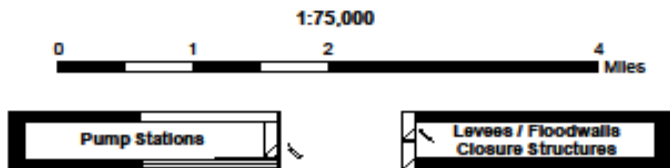
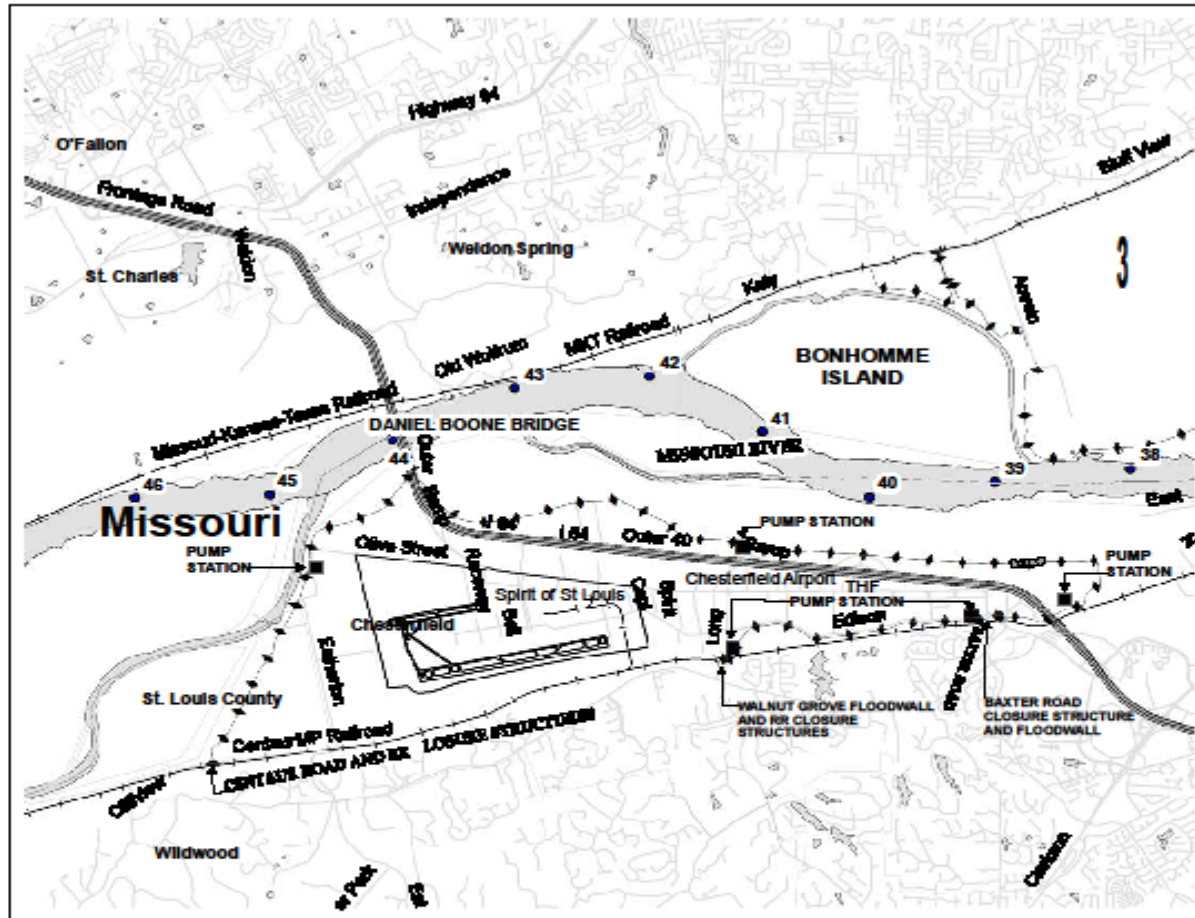
STATUS OF LOCAL COOPERATION: The local sponsor for this project is the Monarch-Chesterfield Levee District. The Project Cooperation Agreement was executed 1 February 2008. The local sponsor has received approval from the Assistant Secretary of the Army (Civil Works) for three credit applications of work. These applications included: 1) construction of three pump stations within the protected area, 2) levee improvement from Centaur Road to Interstate 64/U.S. 40, and 3) realignment of the levee near Boone's Crossing Interchange and levee improvement along the left bank of Bonhomme Creek. The Levee District has not been reimbursed for the credits.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$61,421,000 is the same as the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with EPA in October 2000 and published in the Federal Register on 9 November 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 2001. Funds to initiate construction were appropriated in FY 2004. Breakdown of FY 2013 amount (\$2,340,000) reflects updated estimates in work package costs based on recent site visit.

Fish and wildlife mitigation costs are estimated at \$470,000.



MONARCH-CHESTERFIELD, MISSOURI
 U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
 MISSISSIPPI VALLEY DIVISION

OPERATIONS AND MAINTENANCE

Key to Abbreviations:

N = Navigation

FRM- = Flood Risk Management

RC = Recreation

H = Hydropower

ES = Environmental Stewardship

WS = Water Supply

ARKANSAS

O&M JUSTIFICATION SHEET

PROJECT NAME: Blakely Mountain Dam, Lake Ouachita, AR

AUTHORIZATION: Flood Control Act 1944, Section 10.

LOCATION AND DESCRIPTION: Blakely Mountain Dam, Lake Ouachita is located on the Ouachita River in Garland and Montgomery Counties, Arkansas, west of Hot Springs, Arkansas. The project consists of an earth-fill dam, power plant and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity of the lake is 2,768,000 acre-feet. The power plant has a generating capacity of 75,000 kilowatts. Twenty campgrounds and recreation areas are located on the project. Annual public visitation to the project is 4,500,000.

CONFERENCE AMT. FOR FY 2013: \$8,534,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,420,000 O: \$5,518,000 T: \$7,938,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$996,000 provides for minimal critical operation and maintenance of the dam including inspections and water control data collection. Blakely Mountain Dam has prevented over \$23,000,000 in flood damages since it was placed in operation.

RC: \$2,777,000 provides minimal operation and maintenance of recreation facilities.

H: \$4,026,000 provides for minimal critical operation and maintenance of the hydropower facilities and rehab of the power tunnel. In FY 2012, Blakely Mountain Power Plant generated 158,945 kilowatt-hours (1000) of hydroelectric power and since being placed in operation, has produced gross revenues of over \$74,000,000.

EN: \$114,000 provides for monitoring and surveying wildlife and other organisms listed as threatened or endangered, monitoring culturally significant sites for disturbances, taking protective measures to prevent disturbances, investigating and reporting disturbances of sites, forest management activities, monitoring exotic species infestations in Lake Ouachita and updating Lake Ouachita Master Plan.

WS: \$25,000 complete water reallocation studies

OTHER INFORMATION: Visitors to the lake spent \$18,620,000 in the immediate area in 2011, resulting in \$11,630,000 in direct sales to tourism-related firms. With multiplier effects, visitor spending resulted in \$16,240,000 in total sales, \$5,840,000 in total personal income and supported 324 jobs, boosting the local economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: DeGray Lake, AR

AUTHORIZATION: River and Harbor Act 1950, Section 101 and Water Supply Act of 1958, as amended by Federal Water Pollution Control Act of 1961.

LOCATION AND DESCRIPTION: DeGray Lake is located on the Caddo River in Clark and Hot Spring Counties, AR, northwest of Arkadelphia, AR. The project consists of an earth-fill dam, power plant and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity of the lake is 495,100 acre-feet. The power plant has a generating capacity of 68,000 kilowatts. There is a re-regulating pool below the main dam for water supply storage and pumped-storage power generation. Eighteen campgrounds and recreation areas are located on the project. Annual public visitation to the project is approximately 3,000,000.

CONFERENCE AMT. FOR FY 2013: \$6,881,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,043,000 O: \$4,594,000 T: \$5,637,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$35,000 provides for joint activities for road repair at small dike and paving channel road and Forestry Circle.

FRM: \$552,000 provides for minimal critical operation and maintenance of the dam including inspections and data collection road repair, and update EAP. DeGray Dam has prevented \$9,000,000 in flood damages since it was placed in operation.

RC: \$2,782,000 provides minimal operation and maintenance of recreation facilities.

H: \$1,906,000 provides for minimal critical operation and maintenance of the hydropower facilities, rehab of intake crane controls and repairs and refurbish intake cylinder gate. In FY 2012, DeGray Power Plant generated 85,040 kilowatt-hours (1000) of hydroelectric power and since being placed in operation, has produced gross revenues of over \$40,200,000.

EN: \$362,000 provides for minimal management of cultural and natural resources from further degradation. This includes boundary surveillance for encroachments, outgrant and land use request evaluations, surveillance of lands and waters to monitor and control invasive species such as hydrilla and the gypsy moth, selective timber thinning, prescribed burning activities, and the creation of fish and wildlife habitat.

WS: N/A

OTHER INFORMATION: Visitors to the lake spent \$15,630,000 in the immediate area in 2011, resulting in \$9,760,000 in direct sales to tourism-related firms. With multiplier effects, visitor spending resulted in \$13,630,000 in total sales, \$4,900,000 in total personal income and supported 272 jobs, boosting the local economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Helena Harbor, Phillips County, AR

AUTHORIZATION: River and Harbor Act of 1960, Sec. 107, as amended

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River (mile 663.0) at Helena in Phillips County, Arkansas. This is a slack-water harbor used primarily for the export of agricultural goods. The project provides for maintenance of the navigation channel for year-round access to barge transportation for the existing facilities. The approved channel dimensions are 9 feet deep by 450 feet wide by 3,200 feet long. The local interest is the city of Helena, AR.

CONFERENCE AMT. FOR FY 2013: \$ 74,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$26,000 O: \$0 T: \$26,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$26,000 – Funding provides for performance of minimal critical surveys. This information can be provided to the local interests to be used in the determination of the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 1,797.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Narrows Dam, Lake Greeson, AR

AUTHORIZATION: Flood Control Act 1944.

LOCATION AND DESCRIPTION: Narrows Dam/Lake Greeson is located on the Little Missouri River in Pike County, AR, north of Murfreesboro, AR. The project consists of a concrete dam, power plant and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity of the lake is 407,000 acre-feet. The power plant has a generating capacity of 25,500 kilowatts. There are 16 campgrounds and recreation areas on the project. Annual public visitation to the project is approximately 2,000,000.

CONFERENCE AMT. FOR FY 2013: \$4,659,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,079,000 O: \$3,762,000 T: \$5,841,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,158,000 provides for minimal critical operation and maintenance of the dam including inspections and data collection. Narrows Dam has prevented over \$9,700,000 in flood damages since it was placed in operation.

RC: \$1,705,000 provides minimal operation and maintenance of recreation facilities.

H: \$2,519,000 provides minimal critical operation and maintenance of the hydropower facilities. In FY 12, Narrows Power Plant generated 40,113 kilowatt-hours (1000) of hydroelectric power and since being placed in operation, has produced gross revenues of over \$29,600,000.

EN: \$459,000 provides for management of cultural and natural resources. It also enables the continuation of contracts or agreements for cultural resources surveys, testing, evaluation, analysis, protection, and work to prevent or mitigate damage or deterioration to those characteristics or attributes that contribute to their significance. Also, the participation of environmental stewardship partnership agreements with the Arkansas Game and Fish Commission, including large scale establishment of fish habitat and structure, establishment of native aquatic vegetation, and seeding of exposed shoreline during periods of low water.

WS: N/A

OTHER INFORMATION: Visitors to the lake spent \$7,300,000 in the immediate area in 2011, resulting in \$4,040,000 in direct sales to tourism-related firms. With multiplier effects, visitor spending resulted in \$5,210,000 in total sales, \$1,910,000 in total personal income and supported 133 jobs, boosting the local economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Osceola Harbor, AR

AUTHORIZATION: River and Harbor Act of 1960, Section 107, as amended; WRDA 2007, Sec. 3010

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River at mile 785.0 near Osceola, in Mississippi County, Arkansas. This is a slack-water harbor used primarily for the export of agricultural goods. The project provides for maintenance of a navigation channel for year-round access for barge transportation. The approved channel dimensions are 9 feet deep by 250 feet wide by 6,500 feet long, with a 250-foot radius turning basin at the upstream end. The local interest is the city of Osceola, AR.

CONFERENCE AMT. FOR FY 2013: \$13,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$15,000 T: \$15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 – Funding provides for performance of minimal critical surveys. This information can be provided to the local interests for their use in determining the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 486.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ouachita and Black Rivers, AR and LA

AUTHORIZATION: River and Harbor Act 1950 as modified by River and Harbor Act 1960.

LOCATION AND DESCRIPTION: The project for navigation on the Ouachita/Black Rivers extends 366 miles from the mouth of the Black River to Camden, Arkansas, and provides for a 9- by 100-foot navigation channel. The project also includes a diversion channel through Catahoula Lake near Jonesville, Louisiana, for ecological reasons.

CONFERENCE AMT. FOR FY 2013: \$7,507,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,711,000 O: \$6,075,000 T: \$9,786,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$8,289,000 provides for minimal critical operation and maintenance of locks and dams, minimal critical dredging, collection of data for water control and quality, inspections, and real estate management. Amount also includes a one-time cost of approximately \$2,000,000 for purchase and installation of a system for remote operation of tainter gates on two locks and dams.

FRM: \$14,000 provides for real estate management of the project lands leased to others in the Camden, AR area.

RC: \$1,420,000 provides for minimal operation and maintenance of recreation facilities.

H: N/A.

EN: \$63,000 provides for minimal natural resource management activities on the waterway including conservation and protection of soil, water, wetland, vegetation, waterfowl, fish, and wildlife.

WS: N/A.

OTHER INFORMATION: On 29 July 2012, the locking hours for the four locks and dams were changed from Full Service 24/7/365 to Reduced Service – Two Shifts Per Day. At Jonesville and Columbia Locks and Dams, locking hours are from 0500-1400 and 1700-0200. Felsenthal and H. K. Thatcher Locks and Dams have locking hours of 0500-1300 and 1700-0100. Reduction in funding for FY 2013 resulted in the shift of focus to maintenance of the locks vs. operation using savings realized from reduced lock operations. In 2010, 1,121,313 tons of cargo was shipped on the Ouachita and Black Rivers.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: White River, AR

AUTHORIZATION: The River and Harbors Act of 13 July 1892 authorized the original project. Maintenance was discontinued after FY 1951 due to a decline in traffic volume. Maintenance was resumed in FY 1961. The Office of the Chief of Engineers modified the project authority on 11 March 1968, per Section 107 of the 1960 River and Harbors Act.

LOCATION AND DESCRIPTION: This project is located on the White River from mile 9.8 to mile 255, near Newport, in Jackson County. The project provides for maintenance of the navigation channel with sufficient width and depth to accommodate existing commerce by snagging, dredging, and construction work. The existing authority is for 4.5 feet by 100 feet from mile 198 to 255 at 3.5 feet on the Newport gage; and 8 feet by 125 feet from mile 9.8 to 198 at 12 feet on the Clarendon gage, including a 5 feet minimum draft at low river stages. The local interest is the Arkansas Waterways Commission.

CONFERENCE AMT. FOR FY 2013: \$39,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$31,000 T: \$31,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$31,000 – Funding provides for performance of minimal critical surveys. This information can be provided to local interests for their use in determining the navigation capacity of the channel in the project area.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 115.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Yellow Bend Port, AR

AUTHORIZATION: River and Harbor Act of 1960.

LOCATION AND DESCRIPTION: Yellow Bend Port is an inland port located along the Mississippi River in Desha County, Arkansas. This project's purpose is to meet transportation needs for water-oriented industry in Desha and Chicot Counties in Arkansas.

CONFERENCE AMT. FOR FY 2013: \$3,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$3,000 T: \$3,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,000 - provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods. This is a high sediment harbor controlled by the rise and fall of the Mississippi River.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs for water-oriented industry for many small communities and farmers in the Arkansas Delta. The project was constructed in 1990 and has been maintained annually. In 2010, the port shipped 224,764 tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

ILLINOIS

O&M JUSTIFICATION SHEET

PROJECT NAME: Carlyle Lake, IL

AUTHORIZATION: FCA 1938, 1944, and 1958.

LOCATION AND DESCRIPTION: The project, completed in 1967, is located on Kaskaskia River, approximately 107 miles above its mouth, near community of Carlyle, Illinois. Portions of the project are situated in Clinton, Fayette, Bond, and Marion Counties. Carlyle Lake is the largest man-made lake in Illinois, with over 26,000 acres of water and 11,000 acres of public land. Lake provides flood control, water quality control and water supply to nearby communities; recreation; and fish and wildlife conservation. It is authorized to augment navigation flows downstream on the Kaskaskia River.

CONFERENCE AMT. FOR FY 2013: \$5,462,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,148,000 O: \$3,394,000 T: \$5,542,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,232,000 – Minimal critical operation and maintenance for flood risk management (FRM); critical dam maintenance, dam safety, water control and Real Estate costs for compliance management. Operate and maintain FRM features ensuring operational availability of critical FRM infrastructure.

RC: \$2,804,000 - Minimal operation and maintenance of recreation areas, facilities and programs, public health and safety, law enforcement agreements, use fees collection, and visitor center operations. Funds will be leveraged to maximize benefits regionally and nationally.

H: N/A

EN: \$466,000 - Minimal operation and maintenance of environmental stewardship program and features; environmental compliance, control of invasive species, cultural and natural resource protection, environmental stewardship on 37,543 acres of fee lands and waters, with 75 miles of boundary.

WS: \$40,000 - Annual recurring minimal operation and maintenance costs associated with water supply. Funding will ensure availability of water supply meeting contract requirements.

OTHER INFORMATION: FY 2012 project visitation was 2,844,000, generating recreation economic benefits estimated at \$67,601,000. Leveraged funds for FY 2012 were \$581,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Farm Creek Reservoirs, IL

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project includes two dry reservoirs (Fondulac and Farmdale) located on tributary streams to the Illinois Waterway upstream of Peoria, Illinois, providing flood control for East Peoria, Illinois.

CONFERENCE AMT. FOR FY 2013: \$457,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$216,000 O: \$96,000 T: \$312,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$309,000 – Funding provides for minimum critical maintenance of two dry reservoirs upstream of Peoria, Illinois. Funds would also provide for the Development of Dam Safety Program Implementation Actions to Reduce Probability and Consequences of Catastrophic Failure. Population at risk = 135,000.

RC: N/A

H: N/A

EN: \$3,000 – Funding provides for minimal operations and maintenance to reduce immediate degradation and loss of natural resource base to include land and water acres, as well as cultural and historic property management.

WS: N/A

OTHER INFORMATION: Regional FY2011 economic impacts are \$705,562 from an estimated 45,000 recreation visitations.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Illinois Waterway (MVR Portion), IL & IN

AUTHORIZATION: River and Harbor Acts 1927 and 1930

LOCATION AND DESCRIPTION: The project includes a total of 268 river miles of 9-foot commercial navigation channel from Chicago to LaGrange Lock and Dam, near Beardstown, Illinois; with 8 locks and 7 dams. The navigable portions of this river and the locks and dams that allow waterway traffic to move from one pool to another are integral parts of a regional, national, and international transportation network. The system is significant for certain key exports and the Nation's balance of trade. recreation facilities include a Visitor Center at Starved Rock Lock and Dam.

CONFERENCE AMT. FOR FY 2013: \$32,727,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$20,493,000 O: \$19,088,000 T: \$39,581,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$38,943,000 – Funding provides for minimal critical operations and maintenance at 8 lock and dams sites and the project office, critical fleet maintenance support service; dredging, water control, dredged material disposal, dam safety, and real estate management. FY2014 funds will also be used to procure upper and lower miter gates for Lagrange Lock.

FRM: N/A

RC: \$531,000 – Funding provides for minimal operation and maintenance of the visitor center at Starved Rock Lock and Dam. These funds support management of the recreation program and public visitation by providing safe recreation facilities, and visitor assistance and protection. FY2014 funds will also be used to procure and install solar panels and wind turbines for power at the Starved Rock Visitor Center.

H: N/A

EN: \$107,000 – Funding provides for annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and water quality control.

WS: N/A

OTHER INFORMATION: More than 580 manufacturing facilities, terminals and docks ship and receive goods on the Upper Mississippi River Basin, which includes the Illinois Waterway. Annually, the regional project generates an estimated \$1,000,000,000 of transportation cost savings compared to overland methods. This savings equates to approximately \$24 per ton.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Illinois Waterway (MVS Portion), IL & IN

AUTHORIZATION: River and Harbor Acts of 1927 and 1930

LOCATION AND DESCRIPTION: The portion of the Illinois Waterway within the boundaries of the St. Louis District extending from the mouth of the Illinois River at Grafton, Illinois, to the tail water of LaGrange Lock and Dam at mile 80.15. The project operates and maintains the nine-foot navigation channel by dredging, channel patrol, water management, environmental compliance, stewardship of lands and waters and river engineering. The project has stewardship responsibility for 16,000 acres of public lands.

CONFERENCE AMT. FOR FY 2013: \$1,832,000 2/

BUDGET FOR FY 2014: M: \$3,433,000 O: \$458,000 T: \$3,891,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,828,000 - Minimal critical operations and maintenance for the lower 80 miles of navigation channel to include water management, water quality, surveys, channel patrol, and only the most critical dredging needs.

FRM: N/A

RC: N/A

H: N/A

EN: \$63,000 - Minimal stewardship of 16,000 acres of land, management of outgrants, and coordination with environmental partners for conservation and restoration. Additionally, several flood damaged outgrant cabins will need to be removed and the land restored to public open space in coordination with Federal/State floodplain management goals. Current allocations are insufficient to meet this requirement.

WS: N/A

OTHER INFORMATION: The Illinois Waterway accounts for approximately 50% of the commercial commodity tonnage shipped south through St. Louis Harbor, 27.9M tons of commodities in FY 2011. As such, it is an important transportation corridor. Dredge planning and budgeting are complex due to river conditions and lack of channel training structures. Project has capability for construction of training structures at chronic dredging issue at miles 78-70. The lower Illinois River project lands and waters contain important Federal and State managed wildlife areas and heavily utilized recreational features. This area includes approximately 16,000 acres of Corps-owned land, six state conservation areas, and one state park. FY 2012 visitation was 152,655,189,399 visits, generating recreation economic benefits estimated at \$3,400,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Kaskaskia River Navigation, IL

AUTHORIZATION: Sec 101 of River and Harbor Act 1962, Sec 321 of Water Resources Development Act (WRDA) 1996 (Public Law (PL) 104-303), which added fish and wildlife and habitat restoration as project purposes, Sec 311 of WRDA 2000 (PL 106-541), which added recreation as a project purpose.

LOCATION AND DESCRIPTION: The project is located in south-central Illinois and empties into Mississippi River 118 miles above the Ohio River. The project consists of 36-mile navigation channel; one 600-foot lock; dam; dam with gated spillway; 2,901 acres fee and easement lands; 5,593 acres of flowage easement; three barge terminals; two marinas; four major recreation areas with boat ramps; and numerous minor access points. Authorized purposes are navigation, recreation, fish and wildlife, and habitat restoration.

CONFERENCE AMT. FOR FY 2013: \$1,902,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$313,000 O: \$1,615,000 T: \$1,928,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,623,000 - Minimal critical operation of the lock, operates the dam to maintain pool, provides limited water control operations, channel surveys, periodic inspection and assessment, and dredging of the mouth.

FRM: N/A

RC: \$164,000 - Provides for minimal operation and maintenance of recreation facilities, visitor center, and compliance with environmental regulations. Limited public safety operations with cooperative law enforcement agreement and visitor assistance patrols on lands/waters of 36-mile channel during peak use periods.

H: N/A

EN: \$141,000 - Supports RCurring environmental stewardship activities that provide protection of natural resources on 2,901 acres of project lands. Contribute to legal mandates under the Endangered Species Act, National Environmental Policy Act, Fish and Wildlife Coordination Act, Clean Water Act and Migratory Bird Treaty.

WS: N/A

OTHER INFORMATION - Commercial tonnage passing through lock is increasing with both generator units of the \$4 billion dollar Prairie State Energy Campus now on-line. The mine/power plant complex serves 8,500,000 customers. The power plant requires a million tons of limestone a year for the scrubbers, which come through the lock and up the channel to New Athens. Also, coal, scrap metal and fertilizer shipments are increasing. FY 2012 tonnage was 917,050 tons, up from 826,455 tons in 2011. KRPD and State of Illinois are currently developing a new grain terminal at Fayetteville. FY 2012 project visitation was 399,720 generating recreation economic benefits estimated at \$11,088,200.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Shelbyville, IL

AUTHORIZATION: Flood Control Acts of 1944 and 1958

LOCATION AND DESCRIPTION: The project provides flood control, water supply, recreation, conservation of fish and wildlife, and water quality control and augments navigation flows downstream on the Kaskaskia River. The lake extends northeastward to approximately river mile 275 through Shelby, Moultrie, Douglas, and Coles Counties.

CONFERENCE AMT. FOR FY 2013: \$5,412,000 2/

BUDGETED AMOUNT FOR FY 2014: **M:** \$2,149,000 **O:** \$3,562,000 **T:** \$5,711,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,357,000 - Minimal critical operation and maintenance for flood risk management; critical dam maintenance, FRM operations, dam safety, water control and RE cost for compliance management. Operate and maintain FRM features utilizing asset maintenance management program ensuring operational availability of critical FRM infrastructure and reduce high priority deferred maintenance. Maintain FRM assets, reducing risk of dam failure and assisting in ensuring operational availability of critical infrastructure. The Corps of Engineers "Screening Portfolio Risk Assessment (SPRA)" has classified the Lake Shelbyville Dam as Dam Safety Assessment Class 2 (DSAC-II). Implement sustainability measures at project maintenance building as outlined in sustainability package to reduce energy cost utilizing green technology.

RC: \$2,763,000 – Minimal operation and maintenance of recreation areas, facilities and programs; minimal operations and minor maintenance of recreation facilities, visitor assistance, public health and safety, law enforcement agreements, public access, use fees collection, and visitor center operations.

H: N/A

EN: \$551,000 - Minimal operation and maintenance of environmental stewardship program and features; environmental compliance, control of invasive species, cultural and natural resource protection.

WS: \$40,000 - Minimal operation of water supply program; dam operations for water supply, reporting requirements, coordination with external and internal partners and stakeholders.

OTHER INFORMATION: FY 2012 project visitation was 4,085,663 visits, generating recreation economic benefits estimated at \$88,487,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River Between Missouri River and Minneapolis (MVR Portion), IL

AUTHORIZATION: River and Harbor Acts 1927 and 1930

LOCATION AND DESCRIPTION: The project consists of a 314-river-mile reach of 9-foot commercial navigation channel from Guttenberg, Iowa, downstream to Saverton, Missouri. It includes 14 locks and 11 dams (L/Ds) at 12 sites from Lock 11 to Lock 22. The navigable portions of this river and the locks and dams that allow waterway traffic to move from one pool to another are integral parts of a regional, national, and international transportation network. Recreation facilities include 25 public recreation areas and the Visitor Center located at Lock & Dam 15.

CONFERENCE AMT. FOR FY 2013: \$56,758,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$34,181,000 O: \$29,558,000 T: \$63,739,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$60,573,000 – Funding provides for minimum critical operations and maintenance at 12 lock and dam sites and the project office, critical fleet maintenance support service; dredging, dredged material disposal, water control, periodic inspection, dam safety, and real estate management. FY2014 funds will also be used to construct bulkhead recesses and procure miter gates.

FRM: N/A

RC: \$2,281,000 – Funding provides for minimum operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, visitor assistance and protection, as well as functions that support recreation management by other lessees, agencies and partners. recreation facilities include 25 public recreation areas and the Visitor Center located at Lock & Dam 15.

H: N/A

EN: \$885,000 – Funding provides for annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and continuing Endangered Species responsibilities with USFWS.

WS: N/A

OTHER INFORMATION: More than 580 manufacturing facilities, terminals and docks ship and receive goods on the Upper Mississippi River Basin. Annually, the regional project generates an estimated \$1 billion of transportation cost savings compared to overland methods. The savings equates to around \$24 per ton. FY11 recreation fee receipts and lease revenues were \$952,000; and there were 11,908,000 visits.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

Rock Island District

Mississippi River between
Missouri River and Minneapolis
(MVR Portion), IL

1 May 2013

MVD-127

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River between Missouri River and Minneapolis (MVS Portion), IL

AUTHORIZATION: Rivers and Harbors Act of 1930, as amended by Public Resolution No. 10 (1932).

LOCATION AND DESCRIPTION: Project area extends from the mouth of the Missouri River at St. Louis upstream to Lock and Dam 22 tail water, includes 105 miles of river and 70,000 acres of public lands. Project provides a nine-foot navigation channel via a system of locks and dams; regulating works; dike and revetment; dredging; environmental compliance/stewardship, and recreational opportunities.

CONFERENCE AMT. FOR FY 2013: \$25,464,000 2/

BUDGETED AMOUNT FOR FY 2014: **M:** \$18,313,000 **O:** \$8,006,000 **T:** \$26,319,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$24,027,000 – Minimal critical operations and maintenance of project, including operation of Locks and Dams 24, 25, and Mel Price, navigation channel maintenance. Award IDIQ contract for multi-year goal of reducing risk associated with the dams at Locks 24 and 25 to include installation of chains and sprockets, repairs to bridge spans, and refurbishment of tainter gates.

FRM: N/A

RC: \$1,265,000 - Minimal critical operations and maintenance of 46 recreational access areas and the National Great Rivers Museum (NGRM) and conduct numerous outreach/educational programs. Continue work on Mississippi River Teacher Curriculum Guide and regional workshops; upgrade exhibits and implement Illinois esplanade plan at the NGRM; construct Eagle Viewing Platform (Lock 25); repair recreational areas damaged by debris from high water in 2011; in partnership with Missouri Audubon, upgrade eagle viewing facilities at Riverlands.

H: N/A

ES: \$1,027,000 - Basic stewardship of 70,000 acres of land, management of outgrants, and coordination with environmental partners for conservation and restoration. Complete restoration of flood damaged outgrant cabins to public open space in coordination with Federal/State floodplain management goals. Maintain project forest lands in accordance with Regional Systemic Forest Management Plan.

WS: N/A

OTHER INFORMATION: Total commercial commodities passing through project in FY 2011 was 57,298,134 tons. Unscheduled closures can impact the regional economy up to \$2,800,000 per day as well as significantly higher national and international secondary impacts. FY 2012 project visitation was 3,095,295, generating recreation economic benefits estimated at \$82,000,000. The NGRM, which has been open for 9 years with a steady increase in visitation, hosted 80,523 visitors in FY 2012 (decrease from FY 2011 due to heat and reduced school groups from lack of transportation funding).

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

Rock Island District

Mississippi River between
Missouri River and Minneapolis
(MVS Portion), IL

O&M JUSTIFICATION SHEET

PROJECT NAME: Rend Lake, IL

AUTHORIZATION: Flood Control Act 1962

LOCATION AND DESCRIPTION: The project is located near Benton, Illinois, in Franklin and Jefferson Counties. The project provides flood control, water supply, recreation, and conservation of fish and wildlife. The earth fill dam with an un-gated main and auxiliary spillway provides the necessary features to create Rend Lake and support the project's purposes. The earth dam is located on the Big Muddy River at mile 103.7 and two sub-impoundment dams are located on the upper arms of the lake.

CONFERENCE AMT. FOR FY 2013: \$5,487,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,494,000 O: \$4,087,000 T: \$5,581,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,187,000 - Minimal critical operation and maintenance costs of the earth embankment dam, 18,900 acre reservoir, monitoring of two sub-impoundment dams, 10 breakwaters, and maintenance and administration buildings to accomplish flood risk management mission in the Big Muddy Watershed. Funding provides for the structural safety and operational adequacy of the 10,600 foot main dam, 435 foot spillway, 800 foot auxiliary spillway, stilling basin and appurtenant structures.

RC: \$2,735,000 - Minimal operation and maintenances activities associated with recreation areas and recreation facilities at 15 federal recreation areas.

H: N/A

ES: \$619,000 - Minimal operation and maintenance costs for environmental stewardship activities that contribute to our legal mandates under Endangered Species Act, Forest Cover Act, National Environmental Protection Act, Fish and Wildlife Coordination Act, Clean Water Act and the Migratory Bird Treaty Act.

WS: \$40,000 – Minimal operation costs associated with the water supply functions which provide 109,000 acre feet of storage.

OTHER INFORMATION: FY 2012 project visitation was 3,672,000 visits generating recreation economic benefits estimated at \$85,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

IOWA

O&M JUSTIFICATION SHEET

PROJECT NAME: Coralville Lake, IA

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Coralville Lake is a multiple purpose project providing primary benefits in flood control and low-flow augmentation and secondary benefits in recreation, fish and wildlife management, forest management, and water quality improvement. Conservation pool is 4,900 acres; and the flood control pool is 24,800 acres with 475,000 acre-feet of storage. The dam is located on the Iowa River just upstream of Iowa City.

CONFERENCE AMT. FOR FY 2013: 4,235,000 2/

BUDGETED AMOUNT FOR FY 2014: **M:** \$ 853,000 **O:** \$ 3,515,000 **T:** \$ 4,368,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,661,000 – Funding provides for minimum critical operation and maintenance of the flood control works and related infrastructure, to reduce flooding downstream and related water control features. These funds support mission execution in preventing damages to properties and communities along the floodway. Critical dam safety programs and activities are also supported with these funds. Population at risk = 164,000.

RC: \$1,243,000 – Funding provides for minimal operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, visitor assistance and protection, as well as functions that support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$464,000 – Funding provides for minimal annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and water quality control.

WS: N/A

OTHER INFORMATION: Cumulative damages prevented are \$338,125,000. The project includes 24,591 acres of fee title lands and there are 11 recreation area sites. FY11 recreation fee receipts and lease revenues were \$526,000. Regional economic impact of 2011 project visitation is \$19,900,000 from an estimated 977,000 visits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Red Rock Dam and Lake Red Rock, IA

AUTHORIZATION: Flood Control Act of 1938, Public Law 75-761

LOCATION AND DESCRIPTION: Lake Red Rock is a multiple purpose project providing primary benefits in flood control and low-flow augmentation and secondary benefits in recreation, fish and wildlife management, forest management, and water quality improvement. Conservation pool is 15,600 acres which makes it Iowa's largest lake; and the storage volume is 1,750,400 acre-feet at flood pool level. The dam is located on the Des Moines River southeast of Des Moines, Iowa.

CONFERENCE AMT FOR FY 2013: \$4,579,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$946,000 O: \$3,775,000 T: \$4,721,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$3,013,000 – Funding provides for minimum critical routine operation and maintenance of the flood control works and related infrastructure, to reduce flooding downstream and related water control features. These funds support mission execution in preventing damages to properties and communities along the floodway. Critical dam safety programs and activities are also supported with these funds. Population at risk = 135,000.

RC: \$1,376,000 – Funding provides for minimal operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, visitor assistance and protection, as well as functions that support recreation management by other lessees, agencies and partners.

H: N/A

ES: \$332,000 – Funding provides for minimal annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and water quality control.

WS: N/A

OTHER INFORMATION: Cumulative damages prevented = \$1,104,997,000. The project includes 50,300 acres of fee title lands and there are 11 recreation area sites. FY11 recreation fee receipts and lease revenues were \$445,000. Regional economic impact of 2011 project visitation is \$11,900,000 from an estimated 597,000 visits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Saylorville Lake, Iowa

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Saylorville Lake is a multiple purpose project providing primary benefits in flood control and low-flow augmentation and secondary benefits in recreation, fish and wildlife management, forest management, and water quality improvement. Conservation pool is 5,950 acres; with a storage volume of 586,000 acre-feet at flood pool level. The dam is located about 11 miles northwest of Des Moines, Iowa, on the Des Moines River.

CONFERENCE AMT. FOR FY 2013: \$5,489,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,964,000 O: \$4,366,000 T: \$11,330,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$9,004,000 – Funding provides for routine operation and maintenance of the flood control works and related infrastructure, to reduce flooding downstream and related water control features. These funds support mission execution in preventing damages to properties and communities along the floodway. Critical dam safety programs and activities are also supported with these funds. Population at risk = 511,000. FY2014 funding also supports a contract to replace the non-functional Big Creek Lake Diversion Dam Gate.

RC: \$1,790,000 – Funding provides for operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, visitor assistance and protection, as well as functions that support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$528,000 – Funding provides for annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and water quality control.

WS: \$8,000 – Funding provides for performance of annual activities required for water supply contract administration and compliance.

OTHER INFORMATION: Cumulative damages prevented = \$324,534,000. The project includes 25,515 acres of fee title lands and there are 13 recreation area sites. FY11 recreation fee receipts and lease revenues were \$608,000. Regional economic impact of 2011 project visitation is \$23,500,000 from an estimated 1,250,000 visits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

KENTUCKY

O&M JUSTIFICATION SHEET

PROJECT NAME: Elvis Stahr (Hickman) Harbor, KY

AUTHORIZATION: River and Harbor Act of 1960, Sec. 107; WRDA 1988, Sec. 53(b)

LOCATION AND DESCRIPTION: This slack-water harbor is located near Hickman, Kentucky, in Fulton County and is used primarily for the export of agricultural products. The project provides for maintenance of an off-river harbor channel extending from the main channel (mile 922.0) of the Mississippi River along the city front to a point about 0.3 miles below the junction of Obion Creek and Bayou Du Chien. The approved channel dimensions are 9 feet deep, 250 feet wide and 5,800 feet long, with a 500 X 600 foot turning basin at its upstream end. The local interest is the city of Hickman, KY.

CONFERENCE AMT. FOR FY 2013: \$ 13,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$15,000 T: \$15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 – Funding provides for performance of minimal critical surveys. This information will be provided to local interests for their use in determining the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 843.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

LOUISIANA

O&M JUSTIFICATION SHEET

PROJECT NAME: Atchafalaya River, Bayous Chene, Boeuf and Black, LA

AUTHORIZATION: River and Harbor Act of 3 July 1968, 13 Aug 1068, Sec 101

LOCATION AND DESCRIPTION: The project is located in south central Louisiana. It provides for a 20-foot deep by 400-foot wide navigation channel.

CONFERENCE AMT. FOR FY 2013: \$8,547,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$8,382,000 O: \$530,000 T: \$8,912,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$8,912,000 - Minimal critical funds will be used to dredge critical reaches in Atchafalaya River Horseshoe, Bay and Bar. Perform channel condition surveys of the entire project and routine O&M. Coordinate and prepare environmental compliance consistency, and continue monitoring the effectiveness of Value Engineering Study alternatives to improve navigation and to alleviate unconsolidated fluid mud in the bar channel. Perform engineering and design, spec review, cost estimating for annual dredging contracts and for the rock dyke placement contract for the Crew Boat Cut bank protection and dredging. Continue working on the Dredged Material Management Plan (DMMP).

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Port of Morgan City - Tonnage rankings is #108 with 1,986,244 tons/yr (FY11). The Atchafalaya River, Bayous Chene, Boeuf and Black provide access to the Gulf of Mexico by the oil and gas industry, commercial fishing industry, supply boats and small ships. This project is high priority to local sponsor. Maintenance of Atchafalaya River will alleviate potential safety and environmental issues associated with potential maritime groundings and economic adversity to Morgan City.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Barataria Bay Waterway, LA

AUTHORIZATION: River and Harbor Act 2 March 1919

LOCATION AND DESCRIPTION: The project is located in southeast Louisiana. The navigation channel is 12 feet deep by 125 feet wide for 36.9 miles in the inland and bay channel reaches, and 15 feet deep by 250 feet wide for the 3.1 mile bar channel. The channel provides maritime accessibility to the Gulf of Mexico for industries located along the waterway. An ancillary benefit to channel maintenance is the 100% beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

CONFERENCE AMT. FOR FY 2013: \$92,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$264,000 T: \$264,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$264,000 – Minimal critical funds to be used for project management, for Hydrographic surveys, to prepare for future dredging operations, to collect and disseminate water level data, to change benchmarks, to reset gauges from NGVD to NAVD and to review permit applications.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Barataria Bay Waterway connects the Gulf Intracoastal Waterway system to natural gas, oil and sulfur production sites and to commercial fishing areas within Barataria Bay and the Gulf of Mexico. Past loss of project dimensions has caused economic hardships and incidents of vessel groundings for commercial fishing and petro-chemical industries. The involved industries are often forced to delay deliveries and increase their transit costs by light-loading vessels when utilizing the varying, deficient channel.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Bodcau Dam and Reservoir, LA

AUTHORIZATION: Flood Control Act (FCA) of 28 June 1938, H.D. 378, 74 Congress 2d Session, FCA 22 June 1936, modified by Act of 28 June 1939.

LOCATION AND DESCRIPTION: Bodcau Bayou Dam and Reservoir is a single purpose flood control reservoir located on Bayou Bodcau, a tributary of the Red River. recreation and natural resource stewardship are important secondary uses of project lands at Bodcau.

CONFERENCE AMT. FOR FY 2013: \$1,041,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,204,000 T: \$1,204,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$667,000 provides for minimal critical operation and maintenance of the dam, dam safety data gathering, water control/quality analysis and collection and real estate management and repair of five slides. Bayou Bodcau Dam was classified as a DSAC III rating in 2008 as part of the Corps-wide dam safety initiative. Bayou Bodcau Dam has prevented \$68,000,000 in flood damages since it was placed in operation.

RC: \$380,000 provides for minimal operation and maintenance of recreation areas.

H: N/A.

EN: \$157,000 provides conservation and protection of soil, water, wetland, vegetation, waterfowl, fish and state and federal endangered and threatened species of approximately 33,000 acres of fee owned property. Primary activities include forest management, wildlife management, oversight and management of mitigation areas, wildland fire protection, operational management plan update, and historic property management.

WS: N/A.

OTHER INFORMATION: Bayou Bodcau Dam was classified as DSAC III in 2008 as part of the Corps-wide dam safety initiative. Guidance indicates that the dam must be remediated to DSAC IV prior to any modifications being made to the dam or its functions that increase risk. The Bossier Parish Feasibility study initially focused on modification to the dam and its operation. However, due to high projected costs, the non-federal sponsors requested that the study's scope be widened to include other flood risk management alternatives in addition to only dam modification. Further investigations into other alternatives have resulted in termination of the study. Project visitation is over 250,000 per year. Visitors to the project spent \$3,990,000 in the immediate area in 2011, resulting in \$2,490,000 in direct sales to tourism-related firms. These sales generated \$890,000 in direct personal income and supported 55 direct jobs, boosting the local economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

Vicksburg District

Bayou Bodcau Dam and
Reservoir, LA

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Lafourche and Lafourche Jump Waterway, LA

AUTHORIZATION: River and Harbor Act 30 August 1935 and 14 July 1960

LOCATION AND DESCRIPTION: The project is located in Southeast Louisiana in Lafourche Parish. Bayou Lafourche is a 36.3-mile navigation channel in Lafourche Parish from LaRose, Louisiana, to Belle Pass in the Gulf of Mexico. Channel dimensions are 6 feet deep by 60 feet wide from Mile 35 to Mile 21.9, 9 feet deep by 100 feet wide from Mile 21.9 to Mile 13.0, 12 feet deep by 125 feet wide from Mile 13.0 to Mile 3.4, 24 feet deep by 300 feet wide from Mile 3.4 to Mile 0.0 (Port Fourchon Reach), and 26 feet deep by 300 feet wide from Mile 0.0 to Mile (-1.3) (Belle Pass). A major facility along this project is Port Fourchon. It is a multi-use facility equipped to serve approx. 250 companies involved with offshore oil, container/breakbulk shipping, trucking, commercial fishing and recreational industries. In support of the vast majority of Gulf deepwater platforms, approx. 275 large supply vessels traverse the Port Fourchon channel on a daily basis. The port performs oil rig refurbishments and has heavy lifting capabilities for deep water vessels.

CONFERENCE AMT. FOR FY 2013: \$1,089,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$881,000 O: \$172,000 T: \$1,053,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,053,000 – Minimal critical funds will be used for project management, for channel maintenance dredging, to perform Hydrographic surveys, for the preparation of Environmental Assessments for wetland development/restoration sites, to collect and disseminate water level data, to reset gauges from NGVD to NAVD, to review permit applications and to provide right-of-entry to dredged material disposal areas.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Port Fourchon is a multi-use facility which services deepwater projects that account for about 90% of the Gulf of Mexico's deepwater oil production. The port also serves as the land base for the Louisiana Offshore Oil Port which handles approx. 15% of the nation's foreign oil imports and is connected to 45%-50% of U.S. refining capacity. Port Fourchon plays a direct role in furnishing about 18% of the U.S. oil supply. An ancillary benefit to channel maintenance is the (100%) beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Pierre, LA

AUTHORIZATION: Flood Control Act 1946.

LOCATION AND DESCRIPTION: The project provides for flood control by channel improvement and enlargement of Ockley Drive Ditch and segments of Bayou Pierre in the vicinity of Shreveport, Louisiana.

CONFERENCE AMT. FOR FY 2013: \$24,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$23,000 O: \$0 T: \$23,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$23,000 provides for critical minimal operation and maintenance for flood damage reduction. The project provides for flood control by channel improvement and enlargement of Ockley Drive Ditch and segments of Bayou Pierre in the vicinity of Shreveport, Louisiana.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Segnette Waterway, LA

AUTHORIZATION: River and Harbor Act 3 Sept 1954

LOCATION AND DESCRIPTION: The project is located in Southeast Louisiana in Jefferson Parish - a 12.2-mile navigation channel from Westwego, Louisiana, to the Gulf Intracoastal Waterway. Channel dimensions are 6-feet deep by 60-feet wide for the entire channel length. The channel provides maritime accessibility to the Gulf of Mexico for industries located along the waterway.

CONFERENCE AMT. FOR FY 2013: \$15,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$63,000 T: \$63,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$63,000 – Minimal critical funds to be used for project management, for Hydrographic surveys, for dredging preparation efforts, to review permit applications, and to ensure the outgrant/consent program is followed.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Bayou Segnette Waterway connects the Gulf Intracoastal Waterway to the Gulf of Mexico for oil and gas production supply companies and serves as an access channel for local hunters and the crab and recreational fishing industries.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Teche, LA

AUTHORIZATION: River and Harbor Act 26 June 1934 and prior RHA's

LOCATION AND DESCRIPTION: The project is located in south central Louisiana in St. Mary Parish. The project is primarily a shallow draft navigation project.

CONFERENCE AMT. FOR FY 2013: \$135,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$90,000 O: \$75,000 T: \$165,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$165,000 – Minimal critical funds will be used for Hydrographic surveys, right-of-entry for dredged material disposal, to change benchmarks and reset gauges from NGVD to NAVD, and waterway debris removal.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Bayou Teche provides access for the sugar industries in New Iberia, and for a multitude of other industries. Surveys allow locals to safely navigate the navigation channel.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Teche and Vermilion River, LA

AUTHORIZATION: FCA of 18 August 1941. Reclassified as an "Operations and Maintenance, General" project under the category "Navigation" by authority of the Office, Chief of Engineers, in 1st endorsement, 23 April 1956, on letter of the Division Engineer, U.S. Army Engineer Division, Lower Mississippi Valley, 6 March 1956, subject, "Classification of the Mermentau River and Bayou Teche and Vermilion River, Operation and Maintenance, General Projects".

LOCATION AND DESCRIPTION: The project is located in southwest Louisiana. The project is a multi-purpose project providing navigation and flood control to several parishes in southwest Louisiana.

CONFERENCE AMT. FOR FY 2013: \$17,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$ 15,000 T: \$ 15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 Minimal critical funds will be used to perform Hrographic surveys and to change vertical datum from NGVD to NAVD.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Bayou Teche and Vermilion provides local entities critical information regarding the channel. Activities can be done to prevent flooding in several parishes.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Caddo Lake, LA

AUTHORIZATION: Flood Control Act of 27 October 1965, S.D. 39, 89th Congress, 1st Session, PL 89-298, WRDA 1976, PL 94-587, 22 October 1976.

LOCATION AND DESCRIPTION: Caddo Lake is located in Caddo Parish, Louisiana, about 19 miles northwest of Shreveport, Louisiana, just upstream of the confluence of Black and Twelvemile Bayous.

CONFERENCE AMT. FOR FY 2013: \$216,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$207,000 T: \$207,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$154,000 provides for routine minimal critical operation and maintenance for flood damage reduction. The lake helps to provide upstream storage and for Shreveport/Bossier City, LA (over 200,000 population) the third largest city in Louisiana.

RC: \$53,000 provides for routine minimal operation and maintenance of recreation facilities. The lake has over 27,000 visitors annually. With multiplier effects visitor spending resulted in \$37,000 total sales, \$13,000 in total personal income, and supported eight jobs.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Calcasieu River and Pass, LA

AUTHORIZATION: River and Harbor Act of 24 July 1946, as amended, CH 594-PL525

LOCATION AND DESCRIPTION: The 68-mile channel is located in southwest Louisiana and extends from the Gulf of Mexico to Lake Charles, Louisiana. The project is authorized at 40x400 feet inland and 42x800 feet in the bar channel.

CONFERENCE AMT. FOR FY 2013: \$15,753,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$14,493,000 O: \$1,747,000 T: \$16,240,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$16,240,000 – Minimal critical funds will be used for dredging, to operate and maintain the Saltwater Barrier Control Structure, Hydrographic surveys, right-of-entry for dredged material disposal areas, to reduce encroachments, gather engineering data necessary for monitoring the stability of the Calcasieu River Saltwater Barrier, and to change vertical datum from NGVD to NAVD.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Calcasieu River services the Port of Lake Charles, the 14th largest seaport and 3rd largest exporting port in the US, as well as deep draft channel users, including 2 major refineries providing 4% of the nation's refining capacity and 2 LNG facilities, The region stores 1/3 of the nation's strategic petroleum reserve. The Calcasieu Saltwater Barrier, which passed 554,000 tons in 2011, prevents saltwater intrusion further upstream, preventing damage to agricultural and fragile wetlands, as well as being operated to prevent flooding upstream of the structure.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Freshwater Bayou, LA

AUTHORIZATION: River and Harbor Act of 14 July 1960, Sec 101

LOCATION AND DESCRIPTION: The project is located in south central Louisiana. Provides for a navigation channel of 12' x 125' from the GIWW at Mile 161.2 west of Harvey Lock to the Gulf of Mexico through Freshwater Bayou, with increased width to 250 feet in the Gulf approach and a lock near the Gulf of Mexico 84 feet wide by 600 feet long and 16 feet deep. The project services the offshore petroleum industry supply boats and the commercial fishing industry.

CONFERENCE AMT. FOR FY 2013: \$1,695,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$381,000 O: \$1,314,000 T: \$1,695,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,695,000 – Minimal critical funds will be used for dredging, the operation and minor maintenance of Freshwater Bayou Lock, Hydrographic surveys, for the gathering of engineering data essential for monitoring the stability of Freshwater Bayou Lock, to change benchmarks and reset gauges from NGVD to NAVD.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Freshwater Bayou Lock prevents saltwater intrusion in the Vermilion and Mermentau River basins, preventing damage to over 300,000 acres of agricultural land (primarily rice and crawfish), and wetlands, as well as being operated to prevent flooding in the basins. The lock and channel provide 24 hour service, 7 days a week to navigation interests, including commercial fishing vessels and offshore oilfield supply vessels, between the Gulf of Mexico and Intracoastal City. Freshwater Bayou lock often ranks first or second in the nation in the number of commercial lockages, and had 1,455,000 tons of cargo in 2011.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Gulf Intracoastal Waterway, LA

AUTHORIZATION: River and Harbor Act of 14 July 1946 and prior Acts

LOCATION AND DESCRIPTION: The Gulf Intracoastal Waterway (GIWW) crosses through all five states that comprise the Gulf of Mexico coastline, connecting Brownsville, Texas in the west to St. Mark, Florida in the east. The GIWW provides a protected passage for barge traffic to move vital commodities along the Gulf Coast.

CONFERENCE AMT. FOR FY 2013: \$19,929,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$14,584,000 O: \$9,940,000 T: \$24,524,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$24,050,000 – Minimal critical funds will be used for dredging, hired labor maintenance on 6 GIWW locks, dewater Algiers Lock, operating expenses for 6 GIWW locks, Hydrographic surveys, and to collect, manage, store and disseminate data from water level gauges.

FRM: \$425,000 Funds will provide minimal maintenance on the Algiers Levee and Pumping Stations

RC: \$49,000 – Minimal funds will provide for additional patrol at 25% for visitation, prepare project master plan and complete NEPA compliance. Funding will also be utilized to develop project interpretive exhibits for new lock office.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The GIWW is a vital waterway which links all of the Gulf Coast states via shallow draft navigation. Numerous refineries and plants which provide the nation with much of its petrochemicals and refined petroleum are located along the waterway. The waterway is also very important in exporting grain from the Midwest through ports along the Gulf Coast. The GIWW also serves as a platform and conduit for the exploration and delivery of oil and gas both offshore and onshore. Tonnage thru Calcasieu Lock, busiest GIWW lock tonnage-wise, was approximately 37 million tons in 2011 and has topped 50 million in past years. The Leland Bowman and Calcasieu locks are also both critical to the release of floodwaters and prevention of saltwater intrusion for the Mermentau River Basin.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Houma Navigation Canal, LA

AUTHORIZATION: River and Harbor Act of 4 Mar 1915, Sec 5

LOCATION AND DESCRIPTION: The Houma Navigation Canal is located in Terrebonne Parish, Louisiana, and extends a distance of 38 miles from the GIWW in Houma, to the Gulf of Mexico. The authorized project dimensions are 15' x 150' from the GIWW to the Bar Channel. The Bar Channel has dimensions of 18' x 300'. The channel provides maritime accessibility to the Gulf of Mexico for the commercial fishing and petrochemical fabrication/support industries that are located along the waterway. An ancillary benefit to channel maintenance is the beneficial use of dredged material in coastal Louisiana.

CONFERENCE AMT. FOR FY 2013: \$990,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,282,000 O: \$185,000 T: \$1,467,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,467,000 – Minimal critical funds will be used for project management, for dredging operations, to perform Hydrographic surveys, to reset gauges from NGVD to NAVD, to provide right of entry for dredged material disposal areas, to review permit applications and to collect, manage, store and disseminate water level data.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Houma Navigation Canal serves as a direct route to the Gulf of Mexico from the Gulf Intracoastal Waterway and ties the Port of Terrebonne with Port Fourchon. The Canal is utilized by (30) oil, gas and ship industrial fabrication facilities and by more than (250) energy-support businesses. The oil and gas industry fabrication facilities includes those that construct large oil production platforms and use the Houma Navigation Canal for transport to the Gulf of Mexico. Major sail-outs occur on a regular basis.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: J. Bennett Johnston Waterway, LA

AUTHORIZATION: River and Harbor Act 1968; Water Resources Development Act 1976; Supplemental Appropriations Act of 1984; Water Resources Development Act 1986, 1988, 1990, 1992, 1996; and Energy and Water Development Act 1994.

LOCATION AND DESCRIPTION: The project is located in central and northwest Louisiana and provides for 9- by 200-foot navigation extending about 236 miles from the Mississippi River through Old River and Red River to the vicinity of Shreveport, Louisiana. Five locks and adjacent dams provide a lift of approximately 141 feet. The project also provides for realigning the banks of the Red River from the Mississippi River to Shreveport by means of dredging, cutoffs, and training works and stabilizing its banks by means of revetments, dikes, and other methods.

CONFERENCE AMT. FOR FY 2013: \$8,434,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,878,000 O: \$6,917,000 T: \$8,795,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,697,000 provides for minimal critical operation and maintenance of the lock and dams, minimal critical dredging, collection of data for water control and quality, inspections and real estate management.

FRM: N/A

RC: \$1,080,000 provides for minimal operation and maintenance of recreation facilities.

H: N/A.

EN: \$18,000 provides for minimal protection and surveillance of mitigation of land and endangered species. Provides enhancement of habitat for neotropical migrant songbirds at project lock and dam sites. Activities include placement and maintenance of nesting boxes, habitat manipulation, and protection measures.

WS: N/A.

OTHER INFORMATION: In 2010, 8,270,090 tons were shipped along the J. Bennett Johnston Waterway.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Providence Harbor, LA

AUTHORIZATION: River and Harbor Act 1960.

LOCATION AND DESCRIPTION: Lake Providence Harbor is an inland harbor, located along the Mississippi River in East Carroll Parish, Louisiana.

CONFERENCE AMT. FOR FY 2013: \$17,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$11,000 O: \$4,000 T: \$15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 - provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs for water-oriented industry for many small communities and farmers in and around East Carroll Parish, Louisiana. The project was constructed in 1980 and has been maintained annually. In 2010, 1,348,703 tons were shipped through Lake Providence Harbor; an increase of over 700,000 tons from the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Madison Parish Port, LA

AUTHORIZATION: River and Harbor Act 1960.

LOCATION AND DESCRIPTION: Madison Parish Port is a fast-water, shallow draft port, located on the Mississippi River in Madison Parish, Louisiana.

CONFERENCE AMT. FOR FY 2013: \$5,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,000 O: \$2,000 T: \$4,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,000 provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs for water-oriented industry for many small communities and farmers in and around Madison Parish, Louisiana. The project was constructed in 1980 and has been maintained annually. In 2010, 734,557 tons were shipped through Madison Parish Port; more than twice the tonnage shipped during the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mermentau River, LA

AUTHORIZATION: R&H Act of 26 June 1934 and prior Acts, Ch. 756

LOCATION AND DESCRIPTION: Mermentau River is a multi purpose project located in southwest Louisiana. Functions of the project include navigation, flood control, and prevention of saltwater intrusion. Structures on the project maintain a balance between agriculture and flood control. These structures also serve an important role to the fishing and oil industry, allowing access in and out of the Mermentau River basin.

CONFERENCE AMT. FOR FY 2013: \$1,319,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,370,000 T: \$1,370,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,370,000 – Minimal critical funds will be used for the operation and maintenance of the Catfish Point and Schooner Bayou Control Structures, Hrographic surveys, to provide right-of-entry for dredged material disposal areas, foreshore dike construction/revetment work, to reduce encroachments, to gather engineering data necessary for monitoring the stability of structures, and to change vertical datum from NGVD to NAVD

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Mermentau River project prevents saltwater intrusion to 4.2 million acres of the Mermentau Basin, preventing damage to over 300,000 acres of agricultural land (primarily rice and crawfish), as well as fragile wetlands. The livelihood of many people depends heavily on the structures in the project (Catfish Point Control Structure and Schooner Bayou Control Structure), which also operates to lessen flooding to many residential properties in the basin. For 2011, the tonnage for Catfish Point Control Structure was 137,000 and for Schooner Bayou Control Structure was 8,000.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River, Baton Rouge to the Gulf of Mexico, LA

AUTHORIZATION: R&H Acts of 1945, Sec 2 and 23 Oct 1962, Sec 101; SAA of 1985, PL 99-88 and WRDA of 1986, Sec 201

LOCATION AND DESCRIPTION: The project currently provides a deep draft channel between Baton Rouge and the Gulf of Mexico in Southeast Louisiana. The 45-foot deep draft channel provides access to the largest port complex in the US.

CONFERENCE AMT. FOR FY 2013: \$81,670,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$78,895,000 O: \$5,179,000 T: \$84,074,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$84,074,000 – Minimal critical funds will be used for maintenance dredging from Baton Rouge to the Gulf of Mexico (Southwest Pass, New Orleans Harbor, Crossings between Baton Rouge and New Orleans), channel surveys, water management, environmental compliance and real estate activities. This will allow transit of deep-draft vessels carrying grain, coal, and other commodities to the Ports of South Louisiana, New Orleans, Plaquemines, and Baton Rouge (1st, 7th, 11th, and 13th leading ports in the nation) which collectively handle 420,046,473 tons of cargo per year making it the largest port complex in the US.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Loss of project dimensions would limit access to the #1 US port complex, cause significant economic loss and may cause environmental & safety hazards.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River Outlets at Venice, LA

AUTHORIZATION: River and Harbor Act of 1968, Sec 101

LOCATION AND DESCRIPTION The project is located in southeastern Louisiana and provides for (2) outlets (Baptiste Collette and Grand/Tiger Pass) from the Mississippi River in the vicinity of Venice, Louisiana. Both navigation channels have authorized channel dimensions of 14-foot deep by 150-foot wide (inland reach) and 16-foot deep by 250-foot wide (bar channel reach). The project serves the Venice Port Complex -- a multi-use facility that supports offshore petrochemical production/exploration efforts, the commercial fishing industry and recreational fishing and boating. The channel also provides the shortest access route to the Gulf of Mexico for the USCG Search and Rescue unit. An ancillary benefit to channel maintenance is the (100%) beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

CONFERENCE AMT. FOR FY 2013: \$1,423,000 2/

BUDGET FOR FY 2014: M: \$1,985,000 O: \$192,000 T: \$2,177,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,177,000 – Minimal critical funds will be used for project management, for dredging operations, for Hydrographic surveys, to extend and repair shoal-reducing rock jetties, for the preparation of Environmental Assessments for wetland development/restoration sites, to review permit applications, to collect, manage, store and disseminate water level data and to reset gages from NGVD to NAVD.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Baptiste Collette project channel serves approx. 40% of the offshore petrochemical production/exploration efforts in the eastern Gulf of Mexico from the Venice Port Complex. This area is one of the most prolific federal offshore producing areas, with an average annual oil production of about 200 million barrels. The Tiger Pass channel provides access to central Gulf of Mexico (GOM) Federal lease areas that account for 40%-50% of all Federal oil and gas production. On average, the channels are utilized daily by 25-30 petrochemical-industry vessels.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Removal of Aquatic Growth, LA

AUTHORIZATION: River and Harbor Act of 1958

LOCATION AND DESCRIPTION: The project provides for annual recurring maintenance control of water hyacinth and other invasive aquatic vegetation in federally maintained waterways and feeder water-bodies throughout south Louisiana. The project is required to maintain navigation for the shipping industry, the oil and gas industry, commercial fisheries and recreational users. Invasive aquatic vegetation growth can also affect flood control and lock operations.

CONFERENCE AMT. FOR FY 2013: \$ 200,000 2/

BUDGETED AMOUNT FOR FY 2014: M: 200,000 O: \$ 0 T: \$ 200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$200,000 - Minimal critical funds to be used to work with State applicators to identify and treat specific point sources (if State resources are available) and to handle inquiries and complaints from the public regarding the expansion of water hyacinth, alligator weed, common salvina and other noxious aquatic plants within District navigable waterways.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The District is tasked to maintain 95% of Federal waterway fairways clear for navigation and aquatic plant control is essential to meet this acceptable level of availability in the numerous channels affected by aquatic growth. During the 2012 growing season, the feeder and main navigation channels were clogged and bridge operations were adversely affected. The District received (21) local representative complaints and several congressional inquiries.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wallace Lake, LA

AUTHORIZATION: Flood Control Act of 22 June 1936, H.D. 378, 74th Congress.

LOCATION AND DESCRIPTION: Wallace Lake Dam is located on Cypress Bayou, a tributary of Bayou Pierre. The primary purpose of the project is flood control, with conservation and recreation as other benefits.

CONFERENCE AMT. FOR FY 2013: \$232,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$222,000 T: \$222,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$161,000 provides for minimal critical operation and maintenance of the operations of dam, water control/quality analysis, collection of data and evaluation and real estate management. The project has prevented over \$31,300,000 in flood damages since it was placed in operation.

RC: \$61,000 provides for minimal operation and maintenance of recreation facilities.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: Annual visitation is in excess of 15,000 visitors. With multiplier effects visitor spending resulted in \$200,000 total sales, \$7,000 in total personal income, and supported four jobs.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Waterway from Empire to the Gulf, LA

AUTHORIZATION: River and Harbor Act of 24 July 1946, Ch. 594 – PL 525.

LOCATION AND DESCRIPTION: The project is located in Plaquemines Parish. It consists of a 9.5 mile channel from the Dollut Canal to the Gulf of Mexico, with 9 foot by 80 foot dimensions. The channel provides maritime accessibility to the Gulf of Mexico for fishing industries located along the waterway. An ancillary benefit to channel maintenance is the 100% beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

CONFERENCE AMT. FOR FY 2013: \$9,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$17,000 T: \$17,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$17,000 – Minimal critical funds to be used for project management, for Hydrographic surveys and to review permit applications.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Empire Waterway connects the Mississippi River to the Gulf of Mexico for commercial and recreational fishing interests. The loss of project dimensions has caused economic hardships and incidents of vessel groundings. A deterioration of existing project jetties has caused land loss of a critical coastal barrier island (Pelican Island) and has increased channel shoaling.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Waterway from Intracoastal Waterway to Bayou Dulac, LA

AUTHORIZATION: River and Harbor Act of 23 Oct 1962, Sec 101

LOCATION AND DESCRIPTION: The project is located in Terrebonne Parish and consists of a 10-foot deep by 45-foot wide channel in Bayou LeCarpe from the Gulf Intracoastal Waterway via Bayou Pelton and Bayou Grand Caillou to Bayou Dulac with channel dimensions of 5-feet deep by 40-feet wide. The project provides accessibility to the Houma Nav. Canal/Gulf of Mexico for maritime industries located along the waterway. An ancillary benefit is the 100% beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

CONFERENCE AMT FOR FY 2013: \$38,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$41,000 O: \$25,000 T: \$66,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$66,000 – Minimal critical funds will be used for project management, for Hydrographic surveys, for preparations for future dredging contracts and for permit application reviews.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Waterway from the Intracoastal Waterway to Bayou Dulac, LA connects the Gulf Intracoastal Waterway with the Houma Navigation Canal and the ports of Terrebonne and Fourchon. The waterway is utilized by 35% of the area's (30) oil, gas and ship industrial fabrication facilities and (250) energy-support businesses to service oil and gas production in the Gulf of Mexico.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MINNESOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Bigstone Lake - Whetstone River, MN and SD

AUTHORIZATION: FCA 1965; RHA 1965

LOCATION AND DESCRIPTION: On Minnesota River near Ortonville and Odessa, MN, and Bigstone City, SD, at the outlet of Bigstone Lake and in Bigstone and Lac qui Parle Counties, MN, and Grant County, SD. The 1965 Flood Control Act authorized improvements for wildlife conservation and development, flood control, and recreation. The plan provided for a dam on the Minnesota River near Odessa, Minnesota, which has created a conservation pool of 2,800 acres for wildlife purposes. Upstream improvements include construction of bank protection and related work along the lower 6-mile reach of Whetstone River in South Dakota, modification of the existing dam and silt barrier at the outlet of Bigstone Lake, and channel improvement on the Minnesota River for three miles below the outlet control dam.

CONFERENCE AMT. FOR FY 2013: \$272,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$242,000 T: \$242,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$227,000 for minimal critical operation and maintenance, monitor dam and structures, complete water control data collection and analysis activities to meet minimum requirements for dam safety and provide design operation.

RC: N/A

H: N/A

EN: \$15,000 - Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: Highway 75 Dam is the main feature requiring COE O&M at the Bigstone Lake project. Located near Odessa, MN, this structure impounds water on the MN River to form the Bigstone National Wildlife Refuge operated by the US Fish & Wildlife Service. The project provides flood control benefits on the MN River mainstem in conjunction with the Lac qui Parle project downstream and has prevented over \$3,000,000 in damages since construction. The project through public access in several locations including the dam structure and embankment provides very high quality environmental focused outdoor recreation experiences for the public. Groups travel to this location from several hundred miles away for bird watching expeditions with focus on shorebirds.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

St. Paul District

Big Stone Lake and Whetstone River
(Highway 75 Dam), MN and SD

O&M JUSTIFICATION SHEET

PROJECT NAME: Lac qui Parle Lakes, Minnesota River, MN

AUTHORIZATION: FCA 1936

LOCATION AND DESCRIPTION: Works covered by this project lie along Marsh Lake and Lac qui Parle and the Minnesota River between head of Marsh Lake and Granite Falls, MN. The project was substantially completed by the Works Progress Administration and transferred from the State of Minnesota to the United States in September 1950. The project includes a main dam at the outlet of Lac qui Parle Lakes designed to control the Marsh Lake Reservoir. There is also a dam and diversion channel near Watson designed to divert Chippewa River floodwaters into Lac qui Parle Reservoir. The Corps of Engineers, in order to complete the project, improved the channel from Lac qui Parle Dam to Granite Falls and modified the Lac qui Parle and Chippewa Dam structures to secure improved operation. The dams had been in operation by the State of Minnesota for several years prior to the transfer.

CONFERENCE AMT FOR FY 2013: T: \$760,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$38,000 O: \$584,000 T: \$622,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$546,000 – Minimal Critical required to provide dam operations, maintenance, monitoring, and water control data collection and analysis necessary to meet minimum requirements for dam safety and provide design operation.

RC: \$53,000 – Minimal operation and maintenance of recreation/public use facilities; execute all directed programs, i.e. Visitor Assistance, Water Safety.

H: N/A

EN: \$23,000 – Support program to maintain and monitor habitat conditions in critical prairie pothole region, support North American Waterfowl Management Plan agreements and coordinate reservoir operations with Minnesota DNR and U.S. Fish and Wildlife Service. Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: The Lac qui Parle project consists of 4 water control structures on the Chippewa and Minnesota Rivers and is located near Montevideo, MN. It provides critical flood protection for Montevideo and areas downstream on the Minnesota and Chippewa Rivers. Since construction, the project has prevented over \$35,000,000 in damages.

Additionally, much of the water management activities in non flood situations directly support Minnesota Department of Natural Resources fisheries and wildlife management activities on Lac qui Parle Lake and adjoining lands. The project has parcels of federally owned land with virgin prairie untouched by plow on it near Marsh Lake Dam. In an area with very limited water access, the project has several locations suitable for public shore fishing. Annual economic impact to the local economy derived from Lac qui Parle project operations is estimated at almost \$10,000,000.

O&M JUSTIFICATION SHEET

(continued)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Minnesota River, MN

AUTHORIZATION: RHAs of 1892, 1909 and 1958

LOCATION AND DESCRIPTION: Minnesota River rises in Big Stone Lake, MN and SD, and flows southeasterly about 224 miles to Mankato, MN, thence northeasterly about 106 miles to join the Mississippi River opposite St. Paul, MN. The project consists of dredging and channel maintenance to provide channel of 9-foot depth below low control pool from the mouth at the Mississippi River confluence to river mile 14.7, one-half mile above the railway bridge at Savage, MN, and 4-foot depth from river mile 14.7 to 25.6 at Shakopee, MN.

CONFERENCE AMT. FOR FY 2013: T: \$ 275,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$232,000 O: \$0 T: \$232,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$232,000 – Continue annual navigation channel surveys and channel maintenance which includes dredging and snag removal as needed. Funding requested is sufficient to meet minimum legal responsibilities for environmental compliance, water control, and water analysis. Maintenance of channel will ensure long-term availability in a cost-effective manner.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Minnesota River, effectively the head of navigation for the Upper Mississippi River navigation project, is an essential component of the nation's transportation structure supporting commerce. This major agricultural tributary transports approximately one-fourth of the 16 million tons annually shipped in and out of the state of Minnesota. Several of the nation's largest agribusiness corporations (Cargill, Cenex, and Bunge) operate terminals on the Minnesota River and depend upon a reliable navigation system for movement of their commodities. The Minnesota Department of Transportation has indicated that this has an annual economic value in excess of \$362,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River between Missouri River and Minneapolis (MVP Portion), MN

AUTHORIZATION: RHA of 1930 (PL 71-520) and FCA of 1944 (PL 78-534)

LOCATION AND DESCRIPTION: The St. Paul District portion of the Upper Mississippi River extends from Minneapolis, MN, to Guttenberg, IA, and is located in or contiguous to the States of Minnesota, Wisconsin and Iowa. The St. Paul District operates and maintains 244 miles of 9-foot channel for navigation, 13 locks and dams, and 14 commercial or small boat harbors. The project includes a Corps developed and operated recreation area at Blackhawk Park located at river mile 670 below La Crosse, WI, and natural resource management for approximately 22,000 acres above normal pool elevation.

CONFERENCE AMT. FOR FY 2013: \$49,549,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$27,823,000 O: \$25,191,000 T: \$53,014,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$51,182,000 – Minimal critical operations and maintenance necessary for navigation, critical fleet maintenance support service, and dredging with upland disposal. Meet minimum legal responsibilities for environmental compliance, water control, and water analysis. Minimal maintenance of channel and lock and dam structures will ensure long-term availability in a cost-effective manner. Maintenance items include dredging of river channel by Dredge Goetz and mechanical dredging contractors; channel management structures; placement site maintenance; site unloading of dredged material and dewatering of locks to allow for winter maintenance activities.

FRM: N/A

RC: \$756,000 - Minimal operation and maintenance of recreation facilities. Execute all directed programs, i.e. water safety, fee program, visitor assistance, etc.

H: N/A

EN: \$1,076,000 – Perform maintenance at various sites in 22,000-acre resource base including reforestation, island erosion control and restoration of historic dredge placement sites. Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act. Execute Shoreline Management Program for over 600 structures.

WS: N/A

OTHER INFORMATION: The Mississippi River 9-foot channel is a major route for shipping commodities through the Midwest to and from the Gulf of Mexico. It is a major method of commerce in the United States, shipping grain, fuel, coal, other bulk commodities, and manufactured goods throughout the region and world markets. People all over the world depend on products that are transported up and down the Mississippi River. Annually, approximately 17,000,000 tons of cargo travels through the St. Paul District.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Orwell Lake, MN

AUTHORIZATION: RHA 1950; FCA 1950; FCA 1944; Fish and Wildlife Coordination Act of 1958

LOCATION AND DESCRIPTION: The Orwell Dam and Lake is located on the Otter Tail River near Fergus Falls, MN. The project was completed in 1953. It provides protection from floods during high water flows and, in conjunction with other reservoirs in the basin, provides increased flow during low water periods for water supply and pollution abatement at points in the Red River. The structure consists of an earth dam and concrete control works with a tainter gate. Most of the land, except for a part at the dam site, has been made available to the Minnesota Department of Natural Resources for wildlife conservation purposes. The area is managed for waterfowl and upland game and is open to public use for boating, fishing and other outdoor recreation.

CONFERENCE AMT. FOR FY 2013: \$500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$7,000 O: \$434,000 T: \$441,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$375,000 – Minimal critical operations and maintenance, monitor dam and structures, complete water control data collection and analysis activities necessary meet minimum requirements for dam safety and to provide design operation.

RC: \$51,000 - Minimal operation and maintenance of recreation/public use facilities. Execute all directed programs including Water Safety, Visitor Assistance.

H: N/A

EN: \$15,000 - Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: Orwell Lake located on the Ottetail River near Fergus Falls, MN provides access to the Ottetail River in the dam tailrace with very high quality fishery for this part of the state. The land base around Orwell Lake is leased to the State of MN and operated as Orwell Wildlife Management area considered by the MN DNR as one of the most productive they manage. Economic impact to the local economy resulting from operations at Orwell Lake is approx \$500,000,000 annually. Operation of Orwell Lake provides flood control benefits downstream on the Ottetail River and continuing on the Red River of the North after it intersects the Ottetail in Breckenridge, MN. The damages prevented since construction are estimated at approx \$700,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Red Lake Reservoir, MN

AUTHORIZATION: FCA 1944

LOCATION AND DESCRIPTION: Project is located 4.5 miles east of the west boundary of the Red Lake Indian Reservation in northwest Minnesota. The Flood Control Act of 1944 authorized improvements on the Red Lake-Clearwater River. Project features included about 27.5 miles of clearing, straightening, and enlarging of the Red Lake River channel between High Landing and a point 4.5 miles east of the west boundary of the Red Lake Indian Reservation. At that point a small concrete dam was built to restore the marshes for wildlife in the reservation between that dam and a point some three miles below the outlet of Red Lake. Also included were alterations of the 1931 existing control stop-log structure built by the Indian Service (Bureau of Indian Affairs) at the outlet of Lower Red Lake. Operation of Red Lake Dam was assumed by the Corps on 1 April 1951.

CONFERENCE AMT. FOR FY 2013: \$152,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$26,000 O: \$123,000 T: \$149,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$124,000 – Minimal critical routine dam and structure operations and maintenance, monitoring, and complete water control data collection and analysis operations necessary to meet minimum requirements for dam safety and provide design operation. Perform minor cyclical maintenance to dam and structures to maintain integrity of structure components.

RC: N/A

H: N/A

EN: \$25,000 – Monitor fish passage operations on structure installed in 2010-2011. Protect fee owned lands and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: Red Lake Dam is located at the outlet of lower Red Lake in the northeastern part of Clearwater County, MN. The dam structure controls lake levels on Red Lake and discharges in the Red Lake River which eventually connects with the Red River of the North at East Grand Forks, MN. Damages prevented since construction are approximately \$19.5 million. The dam and related structures are located entirely within the Red Lake Indian Reservation and a significant part of the water management executed by this structure is directly related to Tribal coordination and St. Paul District Tribal Trust responsibilities. A feature was added to Red Lake Dam in 2010 to facilitate fish migration back in to the lake from the Red Lake River and is operated in coordination with Corps of Engineer water control by the Red Lake Band.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Reservoirs at Headwaters of Mississippi River, MN

AUTHORIZATION: RHAs of 1880, 1882 and 1958; FCAs of 1944 and 1958; Water Supply Act of 1958, Fish and Wildlife Coordination Act of 1958; Federal Water Pollution Control Act Amendments of 1972

LOCATION AND DESCRIPTION: The Reservoirs at the Headwaters of the Mississippi River Project are located in north central Minnesota in Itasca, Beltrami, Hubbard, Aitkin, Cass, and Crow Wing Counties. Reservoirs include Winnibigoshish, Leech Lake, Pokegama, Sandy Lake, Pine River, and Gull Lake. The six dams were constructed or re-constructed between 1900 and 1913 for the purpose of aiding navigation by stabilizing water flow in the Mississippi River between St. Paul, Minnesota, and Prairie du Chien, Wisconsin. The project includes six Corps managed campgrounds and several day use areas serving approximately 1.7 million visitors annually. The project's water resource management impacts several communities, thousands of property owners and countless recreational users. Its natural resources are valued by resource agencies, industry and Native American communities.

CONFERENCE AMT. FOR FY2013: \$3,686,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 77,000 O: \$3,267,000 T: \$ 3,344,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,837,000 – Minimal critical operation and maintenance of six dams and associated structures to meet requirements for dam safety, instrumentation and environmental compliance and provide design operation. Complete Real Estate compliance inspection activities on all fee lands, monitor use of fee and easement properties.

RC: \$1,464,000 - Minimal operation and maintenance of recreation/public use facilities. Operate six fee camping areas separated geographically by over 100 miles. Execute all directed programs including Water Safety, Fee Program, and Visitor Assistance.

H: N/A

EN: \$32,000 - Conduct operations and operational maintenance tasks associated with managing the natural resource base. This includes implementation of operational management plan recommendations for basic natural resource operational functions including conservation and protection of soil water wetland forest and vegetation.

WS: N/A

OTHER INFORMATION: Although they were authorized primarily for navigation, the reservoirs operate to reduce flood stages in the vicinity of Aitkin and to facilitate use of the area for recreational purposes and fish and wildlife conservation. The reservoirs are in the heart of a very popular tourist and resort area. On Gull, Leech, Sandy, Pokegama and Winnibigoshish, and Cross Lakes, the Corps has placed facilities for swimming, boat launching, camping, picnicking and sanitation. The regulated outflow from the reservoirs contributes to improved water supply, pollution abatement and industrial development. The 6 Headwaters lakes generate in excess of \$63,000,000 in economic impact to the local economy, and are very important to the State of Minnesota's overall tourism program which one of the top two industries in the state. The public access to water, open space and developed recreational opportunities provide significant quality of life benefits to users and in the project area. The project has prevented over \$30,000,000 in damages through operation of water control structures since construction. Operations of the Headwaters Lakes support a significant number of Tribal Trust responsibilities in the area with many

O&M JUSTIFICATION SHEET

(continued)

of the lakes located on Reservations; and close coordination with tribes, communities and their cultures is part of daily operations.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

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O&M JUSTIFICATION SHEET

PROJECT NAME: Claiborne County Port, MS

AUTHORIZATION: River and Harbor Act 1960, Section 107 (PL 86-645).

LOCATION AND DESCRIPTION: Claiborne County Port is a slack-water, shallow draft harbor, located along the Mississippi River. This project's purpose is to provide a transportation need for water-oriented industry in Claiborne County, Mississippi.

CONFERENCE AMT. FOR FY 2013: \$1,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,000 T: \$1,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,000 provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This port services many small communities and farmers in Mississippi. The project was constructed in 1982.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mouth of Yazoo River, MS

AUTHORIZATION: River and Harbor Act 1960.

LOCATION AND DESCRIPTION: The mouth of the Yazoo River starts at the Mississippi River and continues for 9.3 miles to the junction of Old Mississippi River and Yazoo Rivers at Vicksburg, Mississippi. The channel is 150 feet wide, and a minimum operating depth of 9 feet below the lowest water of record is maintained in the channel. This project's purpose is to provide access to the Yazoo River, the Upper Vicksburg Harbor, and the Vicksburg Harbor.

CONFERENCE AMT. FOR FY 2013: \$30,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$4,000 T: \$34,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$34,000 – provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the Vicksburg harbor is open during low water periods. This is a high sediment river and is controlled by the Mississippi River.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pearl River, MS and LA

AUTHORIZATION: River and Harbor Act of 1935, as modified by River and Harbor Act of 1966.

LOCATION AND DESCRIPTION: The Pearl River navigation project is a navigation channel on the Pearl River that originally extended 58 miles from the mouth of the Pearl River to the mouth of Bogalusa Creek at Bogalusa, Mississippi. The project consisted of three locks and three weirs that provided a channel with minimum depth of 7 feet and a minimum bottom width of 100 feet. The project was placed in a caretaker status in 1995 and has been maintained only for maintenance and safety needs.

CONFERENCE AMT. FOR FY 2013: \$145,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$162,000 T: \$162,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$162,000 - provides for minimal maintenance in caretaker status.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: An Initial Appraisal Report was prepared recommending deauthorization of the project. Locks are deteriorating and are potentially unsafe. Subsequent to Hurricane Isaac, damages occurred at Lock 2 as a result of high water filling the lock chamber and overflowing. Since the project is in "Caretaker Status", the structure is left unmanned. An after action review (AAR) has been completed and solutions have been implemented to prevent similar events from occurring in the future. Damage mitigation features are currently being developed.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Rosedale Harbor, MS

AUTHORIZATION: River and Harbor Act 1960.

LOCATION AND DESCRIPTION: Rosedale Harbor is a slack-water, shallow draft harbor, located along the Mississippi River in Bolivar County, Mississippi. This project's purpose is to meet a transportation need for water-oriented industry in Bolivar, Coahoma, and Sunflower Counties in Mississippi.

CONFERENCE AMT. FOR FY 2013: \$11,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,000 O: \$4,000 T: \$10,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$10,000 - provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods. This is a high sediment harbor controlled by the rise and fall of the Mississippi River.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs for water-oriented industry for many small communities and farmers in the Mississippi Delta. The project was constructed in 1978 and has been maintained annually. In 2010, 1,452,391 tons were shipped through Rosedale Harbor; an increase of nearly 70,000 tons from the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo River, MS

AUTHORIZATION: Water Resources Development Act 1986 (PL 99-662).

LOCATION AND DESCRIPTION: The Yazoo River provides navigation from Mouth of the Yazoo River, Vicksburg, Mississippi, to Greenwood, Mississippi. Clearing and snagging of the channel provides a clear channel to Yazoo City. The project depth of 9 feet is authorized, but not dredged, to Greenwood, a distance of over 158 miles.

CONFERENCE AMT. FOR FY 2013: \$26,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$18,000 O: \$5,000 T: \$23,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$23,000 - provides for minimal clearing and snagging of the channel to maintain the authorized dimensions at the confluence of the Yazoo River, Vicksburg Harbor and the Yazoo Canal.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs of water-oriented industry for many small communities and farmers in the Mississippi Delta from Greenwood to Vicksburg, Mississippi.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSOURI

O&M JUSTIFICATION SHEET

PROJECT NAME: Caruthersville Harbor, MO

AUTHORIZATION: River and Harbor Act 1960, Section 107, as amended.

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River (mile 853.0) at Caruthersville, in Pemiscot County, MO. This is a slack-water harbor used primarily for the export of agricultural goods. The project provides for maintenance of the navigation channel for year-round access to barge transportation for the existing facilities. The approved channel dimensions are 9 feet deep by 150 feet wide by 3,500 feet long with a 300-foot radius turning basin at the upper end. The local interest is the Pemiscot County Port Authority.

CONFERENCE AMT. FOR FY 2013: \$10,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$12,000 T: \$12,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$12,000 – Funding provides for performance of minimal critical surveys of the current harbor conditions. This information that can be provided to local interests for their use in determining the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: The 5 year average commercial tonnage is 232.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study/project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Clarence Cannon Dam and Mark Twain Lake, MO

AUTHORIZATION: FCA 1938 and 1962.

LOCATION AND DESCRIPTION: The project is located on the Salt River at Mile 63 above its confluence with the Mississippi River. This multi-purpose project provides flood risk management, hydropower, water supply, navigation storage, pollution abatement, fish and wildlife conservation, and recreation.

CONFERENCE AMT. FOR FY 2013: \$6,266,000 2/

BUDGET FOR FY 2014: M: \$2,172,000 O: \$4,329,000 T: \$6,501,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,000 - Minimal critical annual recurring operations and maintenance activities associated with the re-regulation downstream channel, dam, reservoir, administration and shop buildings to assure availability of critical infrastructure and structural safety.

FRM: \$1,385,000 – Minimum critical operations and maintenance for flood risk management; critical dam maintenance, FRM operations, dam safety, water control and RE cost for compliance management. Operate and maintain FRM features ensuring operational availability and reliability of critical FRM infrastructure.

RC: \$2,648,000 – Minimum routine operations and maintenance of recreation areas, facilities and programs; operations and minor maintenance of recreation facilities, visitor assistance, public health and safety, law enforcement agreements, public access, use fees collection, visitor center operations.

H: \$1,712,000 – Minimum routine operations and maintenance cost for remote operation of 58 megawatts. Funding will ensure meeting Southwestern Power Administration contract requirements. Sustain hydropower performance by increasing availability and reliability of generating units.

EN: \$651,000 - Minimal operations and maintenance of environmental stewardship program and features; environmental compliance, control of invasive species, Federally-listed threatened and endangered species, cultural and natural resource protection, environmental stewardship. Meet minimum environmental stewardship responsibilities.

WS: \$103,000 – Minimal annual recurring operations and maintenance cost and water supply agreement associated with water supply. Funding will help ensure availability of water supply meeting contract requirements. Meet minimum water supply responsibility.

OTHER INFORMATION: FY 2012 project visitation was 2,265,550, generating recreation economic benefits estimated at \$55,768,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River between the Ohio & Missouri Rivers (Reg Works), MO & IL

AUTHORIZATION: River and Harbor Acts of 1910, 1927, and 1930 as amended by the River and Harbor Acts of 1945 and 1958.

LOCATION AND DESCRIPTION: Project responsibility extends from the mouth of the Ohio River to the Missouri River at the northern boundary of the City of St. Louis including 195 miles of river and 10,000 acres of public land. Project provides nine-foot navigation channel with a lateral canal/Locks 27 at Chain of Rocks, fixed crest rock dam, channel maintenance, dredging, and environmental compliance. Project has environmental stewardship responsibility as well as land- and water-based recreational opportunities and management of flood risk for sixteen miles of federal levee.

CONFERENCE AMT. FOR FY 2013: T: \$25,710,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$33,596,000 O: \$6,707,000 T: \$40,303,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$36,793,000 – Critical operation and maintenance of the project, including Locks 27, open reach dredging, surveys, channel patrol, dam safety, and maintenance of dikes and revetments.

FRM: \$510,000 - Critical operation and maintenance of sixteen miles of Chain of Rocks Federal Levee to include mowing, inspections, and reading of dam instrumentation and operation of flood gates and pump stations. Also includes maintenance of newly constructed berms.

RC: \$345,000 – Minimally operate and maintain six recreational access areas including maintenance of access roads. Coordination with numerous partners on bike trails, access areas, water trails, outgrants, water safety. Repair of boat ramps and access areas damages by high river stages in 2011 and low river stages in 2012.

H: N/A

EN: \$2,655,000 - Basic stewardship of 10,000 acres of land, complex compliance requirements to include the Biological Opinion and Avoid and Minimize programs, management of outgrants, and coordination with environmental partners for conservation and restoration. Maintain project forest lands (American Bottoms) in accordance with Regional Systemic Forest Management Plan.

WS: N/A

OTHER INFORMATION: Over 106 million tons of commodities passed through Lower River project in FY 2011. A day of unscheduled closure at Locks 27 can impact the regional economy by \$3 million, as well as significantly higher national and international secondary impacts. Chain of Rocks levee protects over 250,000 people and \$4.5 billion in economic value. FY 2012 project visitation (Lower River) is estimated at 700,000 visits, generating recreation economic benefits estimated at \$20,824,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

St. Louis District

Mississippi River between the
Ohio & Missouri Rivers (Reg Works),
MO & IL

1 May 2013

MVD-179

O&M JUSTIFICATION SHEET

PROJECT NAME: Southeast Missouri Port (SEMO), Mississippi River, MO

AUTHORIZATION: Section 107 of River and Harbor Act of 1960 (Public Law 86-645)

LOCATION AND DESCRIPTION: This Federal project is located on the right bank of the Mississippi River between river miles 47.5 and 48.8 above the Ohio River in Scott and Cape Girardeau Counties in Southeast Missouri. The project consists of a 1,800-foot slackwater harbor with a nine-foot navigation channel, docking facilities, barge-rail-truck transfers, bagging, warehousing, outdoor storage, and nearby fleeting. It links waterborne transportation to rail and truck and provides economic stimulus to the Southeast Missouri region. The project has a Federal responsibility to dredge the approach channel and the authorized channel within the port.

CONFERENCE AMT. FOR FY 2013: \$1,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,000 O: \$0 T: \$1,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,000 – Minimal channel patrol to monitor project depth.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 864,415 tons of cargo is handled by barge (5-year average, 2007-2011). In 2011, tonnage by barge was 837,782, of a total 1,211,304 tons handled; 2012 barge tonnage and total tonnage at the port is expected to return to an increasing trend. The value of products moving through the Port exceeds \$342,000,000 annually. Jobs created total 800 to 1,000 in the port companies, trucking companies, and supporting businesses. Agricultural benefits include over \$4,000,000 in grain transportation savings and over \$2,000,000 in fertilizer transportation savings, serving 700 to 1,000 farmers in the surrounding region. Projects are attracted to SEMO Port because of its multiple modes of transportation which include waterborne, two major rail lines (Burlington Northern Santa Fe Railway and the Union Pacific Railroad) and the nearby Texas Eastern Products Pipeline which connects Texas, the Midwest, and the Northeast.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: New Madrid County Harbor, MO

AUTHORIZATION: WRDA 1992, Sec.102(n) includes language directing the Secretary of the Army to maintain the New Madrid County Harbor in lieu of maintaining the federally constructed New Madrid Harbor.

LOCATION AND DESCRIPTION: This locally constructed harbor is located on the Mississippi River (mile 885.0), south of the city of New Madrid, in New Madrid County, Missouri. It is a slack water harbor used primarily for the export of agricultural goods. The project provides for maintenance of the navigation channel for year-round access to barge transportation for the existing facilities. The approved channel dimensions are 9 feet deep by 150 feet wide by 1,500 feet long. The local interest is the New Madrid County Port Authority.

CONFERENCE AMT. FOR FY 2013: \$51,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$21,000 O: \$2,000 T: \$23,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$23,000 – Funding provides for performance of minimal critical surveys. This information can be provided to local interests to be used in the determination of the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 104.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

NORTH DAKOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Homme Lake, ND

AUTHORIZATION: FCA 1944

LOCATION AND DESCRIPTION: Dam is on South Branch of Park River about 4 miles upstream from Park River, ND, and 62.1 miles above the mouth of Park River. South, Middle, and North Branches, headwater streams of Park River, rise in Cavalier County in northeastern North Dakota and flow easterly to an almost common confluence near Grafton, ND, forming the main stream which flows easterly 35 miles to join Red River of the North about 35 miles south of the international boundary.

Homme Dam and Lake helps solve flood damage and water supply problems by providing limited protection from spring overflow and a dependable streamflow for water supply at Park River and Grafton. The dam is an earthfill structure 865 feet long, with a 5-foot diameter gate-controlled conduit under the dam and a concrete spillway 150 feet in length adjacent to the dam. The reservoir has a capacity of 3,650 acre-feet below spillway crest.

CONFERENCE AMT. FOR FY 2013: \$296,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$ 236,000 T: \$236,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$225,000 – Minimal critical for operations and maintenance, monitor dam and structures, complete water control data collection and analysis activities to meet minimum dam safety requirements and provide design operations.

RC: N/A.

H: N/A

EN: \$11,000 - Protect corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: Homme Lake located on the south branch of the Park River near Park River, ND was authorized and constructed for water supply and flood control. It provides backup water supply for the communities of Park River and Grafton, ND. The project also provides flood risk reduction benefits to downstream areas and has prevented approximately \$2 million in damages since construction. The lake is in an area with scarce water access and recreational opportunities and is a draw for users from the Grand Forks Air Force Base and general public in the area. The outdoor recreation opportunities provided add significantly to quality of life in the project area and the project generates approx \$1.5 million in economic benefits to the local economy annually.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Ashtabula and Baldhill Dam, ND

AUTHORIZATION: FCA 1944

LOCATION AND DESCRIPTION: Baldhill Dam is on the Sheyenne River, 16 miles upstream from Valley City, ND, and about 271 miles above mouth. Sheyenne River rises in central North Dakota and flows 500 miles generally southeast to enter Red River of the North about 10 miles north of Fargo, ND.

Baldhill Dam was constructed to reduce flood damages, primarily at Valley City, and to alleviate water shortages in municipal and rural areas along the Sheyenne River and the Red River of the North. The dam was placed in operation in 1950. It is a 1,650 foot long compacted earth structure with concrete gravity control works 140 feet in length. Atop the control works are three 40 foot tainter gates. There are two 3 foot diameter conduits in the piers for low water control. The reservoir, Lake Ashtabula, has a capacity of 68,600 acre feet at normal pool level. It has prevented flood damages and improved streamflow in the Sheyenne and Red Rivers. The effectiveness of this project was demonstrated during the 1950, 1969, 1975, 1978, 1979, and 1989 floods.

CONFERENCE AMT. FOR FY 2013: \$1,476,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,233,000 T: \$1,233,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$811,000 – Minimal critical to operate, maintain and monitor dam and structures, to meet requirements for dam safety and provide design operation and maintain critical instrumentation in the structure. Monitor the boundaries both fee and easement.

RC: \$282,000 - Minimal operation and maintenance of recreation facilities. Execute directed programs including Water Safety, recreation Fee Program, Visitor Assistance Program, operate Visitor Center, fund Law Enforcement contract.

H: N/A

EN: \$140,000 - Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act. Implement Shoreline Mgt Plan for over 200 structures and noxious weed control program on project lands to comply with state law.

WS: N/A

OTHER INFORMATION: The project provides limited protection from floods downstream from the dam. It also provides sufficient water flow during dry periods to meet water supply needs of municipalities and rural areas along the Sheyenne River and the Red River downstream from the mouth of the Sheyenne River. A diversion structure and pipeline constructed by the city is used by Fargo as the principal source of water during periods of low and marginal water quality water in the Red River of the North.

The Lake Ashtabula project generates over \$3,500,000 in economic impact to the local economy annually. In a mostly arid state (ND), the lake serves as a regional attraction for public water access and use. The opportunities provided on public lands and waters add significantly to the quality of life in the project area. The project has prevented over \$30,000,000 in damages through operations of the dam since construction, and the water supply benefits although unquantifiable, are critical to the downstream

O&M JUSTIFICATION SHEET

(continued)

municipalities. Lake Ashtabula is recognized by our local, state and federal partners as a major natural resource asset in the State of North Dakota.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Souris River, ND

AUTHORIZATION: WRDA 1986 (PL 99-662)

LOCATION AND DESCRIPTION: On the Souris River in Ward, Renville, McHenry, and Bottineau Counties in northwestern North Dakota. The existing Lake Darling Dam is located about 20 miles northwest of Minot, North Dakota. The project also includes features at the communities of Sawyer and Velva and at various locations along the 358 mile U.S. portion of the Souris River.

The 1986 Water Resources Development Act (Public Law 99-662) authorized dam safety and flood control modifications to Lake Darling Dam and seven other dams in the Upper Souris and J. Clark Salyer National Wildlife refuges. Associated facilities include a maintenance building at Lake Darling Dam and an electrified carp barrier at dam 357. Mitigation features for project include dikes and four pump stations at Upper Souris NWR and; raised and upgraded embankments for dams 326, 332 and 341 and a low flow structure for dam 320 at J. Clark Salyer NWR. The construction project was completed in 1998.

CONFERENCE AMT. FOR FY 2013: \$341,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$36,000 O: \$308,000 T: \$344,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$344,000 – Minimal critical operation, maintenance, and monitoring of dam to meet requirements for dam safety, instrumentation, periodic inspection and to provide design operation. Complete minor non-cyclical maintenance on Lake Darling Dam, six refuge dam structures, and two pumping plants and water control and water quality analyses and collections.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: A Memorandum of Understanding between the Department of the Interior (Fish and Wildlife Service) and the Department of the Army was formalized on June 2, 1989 establishing procedures, administration, cooperation and coordination between respective agencies for Construction, Operation and Maintenance, Rehabilitation and Replacement responsibilities for project flood control and mitigation features. This MOU in conjunction with International Agreements with Canada, commit the COE to several water management, water quality, cyclical and major maintenance responsibilities.

Lake Darling Dam which is part of the Souris River Projects complex, located on the Souris River near Minot, ND, has prevented approximately \$125,000,000 in damages since construction. The resources at Lake Darling provide high quality outdoor recreational opportunities for users from the Minot Air Force Base and public in the project area.

The entire Souris River Project consists of eight water control structures and several mitigation features all located within the Upper Souris and J. Clark Salyer National Wildlife Refuges.

O&M JUSTIFICATION SHEET

(continued)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

SOUTH DAKOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Traverse, SD and MN

AUTHORIZATION: FCA 1936

LOCATION AND DESCRIPTION: Works covered by this project lie along Lake Traverse and Bois de Sioux River between the upper end of Lake Traverse at Browns Valley, MN, and the mouth of Bois de Sioux River at Breckenridge, MN. The project terminates six miles south of Breckenridge (six miles upstream of the Bois de Sioux River mouth). Lake drains through river to Red River of the North, and the two waters form a portion of the boundary between State of Minnesota and South Dakota.

The Lake Traverse and Bois de Sioux River project was completed in 1948. It provided for use of Lake Traverse as a flood control and water conservation reservoir and for channel improvement in the river below the lake. The main structure consists of a 14,500 foot earth dam and a concrete control structure at the north end of Lake Traverse near White Rock, South Dakota. A secondary control structure at Reservation Highway near Wheaton permits control of the upper section of the reservoir at a slightly higher elevation. A 5,000 foot embankment at the south end of Lake Traverse to protect Browns Valley and channel improvement for 24 miles below the main dam completed the project. The area is popular for waterfowl hunting and is used extensively for fishing, boating, swimming, and other activities. Access points, parking areas, boat landings, launching ramps and a swimming beach have been made available.

CONFERENCE AMT. FOR FY 2013: \$583,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$554,000 T: \$554,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$443,000 – Minimal critical operations and maintenance, monitor dam and structures, meet minimum requirements for dam safety and provide design operation. Complete Real Estate compliance inspections, monitor use of fee and easement lands.

RC: \$56,000 - Minimal operation and maintenance of recreation/public use facilities. Execute all directed programs, i.e. Water Safety, Visitor Assistance.

H: N/A

EN: \$55,000 - Protect Corps owned fee land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and or environmentally induced events.

WS: N/A

OTHER INFORMATION: The Lake Traverse project is located on the MN/SD border between Browns Valley, MN and Wahpeton, ND. Browns Valley on the very southern end of the project is the location of the continental divide where flowages split between the Gulf of Mexico to the south and Hudson Bay to the north. The project consists of two dams and appurtenant structures and provides flood control benefits downstream on the Bois de Sioux River and Red River of the North. Damages prevented since construction are estimated at \$4,300,000,000 dollars. There are day use public access sites providing fishing and related outdoor recreation activities and the project boasts over 800 acres of wildlife management areas open for public use. Annual economic impact to the local economy derived from Lake Traverse operations is approx \$1,600,000 annually.

O&M JUSTIFICATION SHEET

(continued)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TENNESSEE

O&M JUSTIFICATION SHEET

PROJECT NAME: Northwest Tennessee Regional Harbor, Lake County, TN

AUTHORIZATION: River and Harbor Act of 1960, Sec. 107, as amended (Continuing Authorities Projects Not Requiring Specific Legislation)

LOCATION AND DESCRIPTION: This harbor is located at Mississippi River Mile 900.0 on the left descending bank in Lake County near Tiptonville, Tennessee. The project provides for Federal assistance, not to exceed \$5,000,000, for maintenance of the navigation channel for year-round access to the harbor facilities. The Northwest Tennessee Regional Port Authority is the local sponsor.

CONFERENCE AMT. FOR FY 2013: \$10,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$10,000 T: \$10,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$10,000 – Funding provides for performance of minimal critical surveys. This information can be provided to local interests for their use in determining the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: The harbor is known locally as “Port of Cates Landing. The local sponsor is currently constructing the harbor service facilities. The Corps of Engineers is in the 2nd year of a 5 year monitoring program to measure the success of the project mitigation site.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wolf River Harbor, TN

AUTHORIZATION: The National Industrial Recovery Act (NIRA) of 16 June 1933; modified by the Flood Control Act of 03 July 1958, J. D. 76/85/1.

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River (mile 737.0), near Memphis in Shelby County, TN. This is a slack-water harbor and is used primarily for the import of industrial materials. The project provides for a navigation channel 9 feet deep by 250 feet wide at low water from the mouth to Keel Avenue (mile 1.75) and 200 feet wide from Keel Avenue to mile 3.0. The local interest is the city of Memphis, TN.

CONFERENCE AMT. FOR FY 2013: \$109,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$149,000 O: \$70,000 T: \$219,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$219,000 – Funding provides for the performance of minimal critical surveys, water data collection, and limited dredging.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 848.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

WISCONSIN

O&M JUSTIFICATION SHEET

PROJECT NAME: Eau Galle River Lake, WI

AUTHORIZATION: FCAs of 1944 and 1958; Fish and Wildlife Coordination Act of 1958; RHA 1958; Water Supply Act of 1958

LOCATION AND DESCRIPTION: At and in vicinity of Spring Valley, WI, on Eau Galle River 30 miles above its mouth at Chippewa River, and its tributary, Mines Creek, which flows through the village. Spring Valley is about 45 miles east of St. Paul, MN, and 36 miles west of Eau Claire, WI.

The improvement under the authorization provided for a retarding reservoir and dam, including an uncontrolled spillway, on the Eau Galle River immediately upstream from Spring Valley with a discharge channel downstream from the dam, and remedial work on Mines Creek consisting of channel enlargement, low levees, and drop structures to reduce velocities prior to discharge into the Eau Galle River.

CONFERENCE AMT FOR FY 2013: \$814,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$33,000 O: \$701,000 T: \$734,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$434,000 – Minimal critical operation and maintenance, monitor dam and structures, complete water control data collection and analysis to meet minimum requirements for dam safety and provide design operation. Complete real estate compliance inspections, environment compliance (ERGO), and scheduled Bridge Inspection.

RC: \$280,000 - Minimal operation and maintenance of recreation facilities. Execute directed programs including Water Safety, recreation Fee Program, and Visitor Assistance Program.

H: N/A

ES: \$20,000 - Conduct minimal operations and operational maintenance tasks required to complete environmental stewardship mission. This includes implementation of operational management plan recommendations for basic natural resource operational functions including conservation and protection of soil, water, wetland, forest, and vegetation.

WS: N/A

OTHER INFORMATION: The Eau Galle Project with its large rolled-earth dam, controls 64-square mile drainage basin of the Eau Galle River. The dam was constructed between 1965 -1968, after repeated flooding of the Spring Valley community area. Eau Galle Lake is located on the Eau Galle River immediately upstream of Spring Valley, WI. Damages prevented for the storage in Eau Galle Lake and operations of the water control structure are estimated at approximately \$11,500,000 million since construction.

The project provides an excellent array of outdoor recreation opportunities ranging from overnight camping, hiking, water based activities, horseback camp and trails, and many related activities. These opportunities serve to provide significant quality of life benefits to users and the public in the project area. Economic impact to the local economy derived from operations at Eau Galle Lake is estimated at \$2,200,000 annually.

O&M JUSTIFICATION SHEET

(continued)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

1 May 2013

MISSISSIPPI VALLEY DIVISION
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Justification of Estimates for Civil Works Activities
 Department of the Army, Corps of Engineers
 Fiscal Year 2014

SUMMARY MISSISSIPPI VALLEY DIVISION

	<u>FY 2013 President's Budget</u>	<u>FY 2014 President's Budget</u>	<u>Increase or Decrease</u>
Investigations	17,427,000	8,067,000	(9,360,000)
Survey	6,980,000	6,103,000	(877,000)
Preconstruction Engineering and Design	10,447,000	1,964,000	(8,483,000)
Construction	70,348,000	140,716,000 1/	70,368,000
Operation and Maintenance	417,045,000	463,531,000	46,486,000
 GRAND TOTAL, MISSISSIPPI VALLEY DIVISION	 \$504,820,000	 612,314,000	 107,494,000

1/ Includes \$4,450,000 for FY 2013 and \$11,400,000 for FY2014 from the Inland Waterways Trust Fund.

INVESTIGATIONS

ARKANSAS

APPROPRIATION TITLE: Investigations, Fiscal Year 2014
 SURVEYS – COMPLETION
 Feasibility Study

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Lower Mississippi River Resource Assessment, AR, IL, KY, LA, MS, MO, and TN (ENR) Memphis District	1,745,000	601,000	50,000	195,000 <u>3/</u>	800,000 <u>2/</u>	99,000 <u>1/</u>	0

The study area includes portions of the states of Illinois, Missouri, Kentucky, Arkansas, Tennessee, Mississippi and Louisiana; 66 counties and parishes; more than 954 miles of free-flowing river reaches and adjacent floodplain in the Lower Mississippi River Alluvial Valley (LMRAV) from Cairo, Illinois to the Gulf of Mexico and 165 miles of the Atchafalaya Basin floodway system. The LMRAV has a surface area of 600,000 acres, an active floodplain of approximately 2,800,000 acres; includes 1,600 lakes, 145 river side channels and contains the largest natural wetlands in North America. Thirty-two percent of the US population lives in the 74-county LMR corridor and 55 percent of the population lives within a day's drive of the watershed. The resource serves as a vital conveyance for waterborne commerce, provides a source of water for human consumption and use, provides a source of irrigation for agricultural production and offers a myriad of Recreations opportunities. The main stem and its tributaries encompass over 281,000 acres of National Wildlife Refuge, the largest floodplain fishery and the largest bottomland hardwood forests in North America. At its mouth in the Gulf of Mexico, the LMRAV supports 4,500,000 million acres of coastal marsh, an ecological extension of the forested alluvial valley, forming a wetland complex of unrivaled scope in the Temperate Zone of the Western Hemisphere. The nationally significant ecosystem supports 241 species of fish, 50 species of mammals, 45 species of reptiles and amphibians and 37 species of mussels. Aside from its natural resource value, the LMRAV provides employment opportunities for over 572,000 residents and recreation activities such as boating, hunting, fishing, wildlife viewing and camping. Recreationists contribute at least \$500,000 and tourists spend over \$11,000,000,000 annually to support the economy of the region. Over time, essential ecosystem structures and functions in the LMR system have been altered, resulting in a loss of 80 percent of its forested wetlands and 90 percent of its original floodplain corridor. While data is available from many sources, it is often incomplete, disparate, and not readily accessible making it difficult for Federal and state agencies to effectively balance mandated uses with stakeholder needs. In cooperation with the Department of Interior and the states of Illinois, Missouri, Arkansas, Tennessee, Louisiana, Mississippi, and Kentucky, a feasibility watershed study will be conducted using a watershed approach. The objectives of the study are to assess: (1) information needed for river-related management; (2) natural resource habitat needs; and (3) the need for river-related recreation and access. A feasibility cost sharing agreement was executed with The Nature Conservancy 11 January 2012. The study is authorized by Section 402 of WRDA 2000.

Funds were used in Fiscal Year 2012 to begin Assessment 1 of the feasibility watershed study. Fiscal year 2013 funds are being used to complete Assessment 1 by 2014 and initiate Assessments 2 and 3. Fiscal Year 2014 funds will be used to complete Assessments 2 and 3. The final report for all three assessments is scheduled for completion in Fiscal Year 2014. The reconnaissance phase was completed in January 2012. The estimated Federal cost estimate is the same as

last presented to Congress (FY 2012). The study completion date is to be determined. The estimated cost of the feasibility phase is \$1,660,000, which is to be shared on a 75-25 percent basis by Federal and non-Federal interests as follows:

Total Estimated Study Cost	\$2,167,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	1,245,000
Feasibility Phase (non-Federal)	415,000

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Reflects \$5,000 reprogrammed from the project in FY 2012.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

STUDY - Feasibility

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
White River Basin Comprehensive, Cache River Sub-Basin WMP, AR (Resumption)	4,185,000 <u>1/</u>	3,380,000	0	5,000 <u>2/</u>	0	650,000 <u>3/</u>	150,000

Memphis District

The Cache River Watershed Management Plan under the White River Basin Comprehensive (WRBC) effort studies a 2,018 square mile sub-basin within the White River basin (approximately 27,765 square miles - Missouri 10,622, Arkansas 17,143). The area is a significant migratory waterfowl wintering area. The southern portion of the watershed is a Wetland of International Importance per the 1986 Ramsar Convention. It includes the Cache National Wildlife Refuge, several state Wildlife Management Areas, State Parks and Natural Areas. The basin provides habitat for several threatened or endangered species including fat pocketbook, pink mucket, scaleshell, curtis pearly, and speckled pocketbook mussels; pallid sturgeon; gray and Indiana bats; alligator gar, red-cockaded woodpeckers; and piping plover.

Several studies have been completed under the WRBC that will inform the Cache River Watershed Management Plan, including the Cache River Ecosystem Restoration Study and the Cache River Sedimentation Study. The expectation of the Cache River Watershed Management Plan effort is to identify measures necessary to address the water resource issues in the watershed and to identify what organization or agency would lead the effort to address each of those issues. In this manner, this will be a comprehensive, collaborative watershed management plan. It will establish multi-agency (Federal and state) collaborative programs to identify sub-watershed projects, which would potentially include habitat restoration, sediment management, recreational opportunities, and public outreach. Federal, state, and private natural resource agencies and organizations are highly supportive of the Cache River Management Plan and the White River Basin comprehensive study.

The WRBC offers several opportunities to support and intersect, in a collaborative multi-agency environment, with President Obama's America's Great Outdoors (AGO) Initiative. A component of the WRBC, the Cache River sub-basin, is identified in support of the AGO as a near term plan. The WRBC, building on AGO efforts, investigates water resource problems such as ecosystem restoration, water quality, flood risk management, recreation, navigation, hydropower and water supply. The project sponsors for the WRBC study are the Arkansas Game and Fish Commission, Arkansas Natural Resources Commission, Arkansas Natural Heritage Commission, Arkansas Waterways Commission, Missouri Department of Natural Resources, Missouri Department of Conservation, and The Nature Conservancy. The study is authorized by Sec. 729 of WRDA 1986, as amended by Sec. 202 of WRDA 2000 and Sec. 2010 of WRDA 2007. A Feasibility Cost Sharing Agreement (FCSA) for the White River Basin Comprehensive study was executed 22 May 2002 and amended 6 April 2009 as a result of WRDA of 2007

to change the cost share requirements to 75% Federal and 25% non-Federal. This focus on the Cache River sub-basin may require an amendment to the FCSA. Funds for this study were not included in the Fiscal Year 2013 President's Budget. Fiscal Year 2014 funds will be used to initiate the Cache River Sub-Basin Watershed Restoration/Management Plan and complete the BLH-HG study which is a near term component of the overall White River Basin Comprehensive study. The White River Basin Comprehensive study completion date is to be determined. A summary of study cost sharing for the Cache River Watershed Management Plan is as follows:

Total Estimated Study Cost	\$5,527,000
Reconnaissance Phase (Federal)	160,000
Feasibility Phase (Federal)	4,025,000
Feasibility Phase (Non-Federal Cash/WIK)	1,342,000

The current Federal cost estimate of \$4,185,000 is a decrease of \$2,425,000 from the latest estimate (\$6,610,000) and reflects a change in scope to delete future activities that would lead to a Watershed Restoration/Management Plan for the total White River Basin. The change in scope deletes all remaining study activities included in the approved study plan and the existing Feasibility Cost Share Agreement that are not directly associated with the Cache River sub-basin, which is the focus of the AGO initiative.

1/ Total estimated cost shown includes previous sunk costs associated with the Comp Study which is the allocation prior to FY 2011.

2/ Reflects \$5,000 reprogrammed to the project.

3/ Estimated Unobligated "Carry-in" Funding: As of 1 October 2012, the total unobligated dollars estimated to be carried into the Program Year (PY) from prior appropriations for use on this study effort is \$0.

ILLINOIS

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2013 \$
Illinois River Basin Restoration, IL SURVEYS – Continuing (ENR) Rock Island District	12,170,000 <u>2/</u>	5,955,500	793,000	383,000	400,000 <u>3/</u>	400,000 <u>1/</u>	4,239,000

The Illinois River Basin Restoration Study encompasses the entire Illinois River watershed within the State of Illinois, a nationally significant ecosystem. The primary purpose of the Illinois River Basin Restoration Study is to develop a comprehensive plan for the restoration of the Illinois River watershed and evaluate and construct critical restoration projects within the basin. The feasibility cost sharing agreement with the State of Illinois was signed 31 July 2002.

The Comprehensive Plan was completed and transmitted to Congress in June 2008. The Plan addresses habitat, water quality, navigation, and economic opportunities. Major components include fish and wildlife conservation and rehabilitation measures; land and water resources enhancement; sediment transport; sediment removal and disposal measures; long-term resource monitoring; and a computerized inventory and analysis. The Illinois River Basin Critical Restoration Projects authorized in WRDA 2000, Section 519, (as amended by WRDA 2007) are continuing and no additional authority is required.

Sixteen critical restoration projects have been identified to date. These projects were selected based on assessment of restoration needs with involvement of Federal and non-Federal partners. Critical restoration projects are currently being evaluated through feasibility, design, and two have proceeded to construction using Construction funds.

Construction of the Waubonsie Creek Fish Passage project has been completed and construction of the Peoria Island/Backwater project will be complete in 2013.

Feasibility planning for Pekin Lake-Southern Unit and Pekin Lake-Northern Unit projects has been completed and approved and is awaiting funding to complete design and initiate construction.

Fiscal Year 2013 funds are being used to complete feasibility planning for the Starved Rock Pool Backwater and Alton Pool Side Channel projects and continue feasibility efforts on the Senachwine Creek and Kankakee River projects.

Funds requested for Fiscal Year 2014 will be used to complete Senachwine Creek and Kankakee River project feasibility efforts and initiate feasibility at Ten Mile Creek and McKee Creek at an efficient rate in concert with the non-Federal sponsor.

The draft feasibility study for the Blackberry Creek Fish Passage critical restoration project was completed in FY 12. However, partial failure of the dam resulted in the State of Illinois (sponsor) removing the structure in late 2012. Engineering products produced for the feasibility study were instrumental in allowing the sponsor to accomplish the removal in a timely manner. The proposed restoration benefits from the study have been achieved.

After FY 2014, the remainder of the sixteen critical restoration projects will initiate feasibility planning efforts (Iroquois River, LaGrange Pool, Yellow River, Crow Creek West, & Fox River Fish Passage).

The estimated cost of the feasibility phase has been revised based on (1) the actual costs incurred through approval of the Comp Plan in 2007 and the costs for the remaining feasibility work for the original six critical restoration projects (CRP's) and the ten additional CRP's approved for feasibility studies by the ASA(CW). The previous estimate was based on the inflated FCSA amount from 2002 which identified work on the Comp Plan and CRP's. These feasibility costs had previously been included as part of the construction account and are now properly allocated to the investigations account. The estimate for the construction account has been reduced to match this amount. Therefore, the entire program estimate, for both I and C, remains the same but has reallocated \$6,475,000 from C to I. The revised feasibility cost estimate of \$18,015,000 (in the I account) is higher than the \$11,540,000 previously presented to Congress because it includes the reallocated \$6,475,000 (from the C account).

The study is authorized by Section 519(b) of WRDA 2000; as amended by Section 5071, WRDA, 2007.

In accordance with Section 519, WRDA 2000, this study is to be shared on a 65-35 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$18,475,000
Reconnaissance Phase (Federal)	460,000
Feasibility Phase (Federal)	11,710,000
Feasibility Phase (Non-Federal)	6,305,000

The Recon phase was completed in July 2002. The Feasibility study completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ \$12,170,000 total Federal cost is the \$460,000 Recon plus the \$11,710,000 for feasibility.

3/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

LOUISIANA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional To Complete After FY 2014 \$
Calcasieu Lock, LA SURVEYS – COMPLETING (NAV) New Orleans District	7,883,000	3,977,000	1,049,000	1,357,000	750,000 2/	750,000 1/	0

Calcasieu Lock is a feature of the Gulf Intracoastal Waterway (GIWW) between Appalachee Bay, Florida, and the Mexican Border Project. The lock is located east of the Calcasieu River, approximately 10 miles south of Lake Charles, Louisiana, in Calcasieu Parish. The lock prevents saltwater intrusion from the Calcasieu River into the Mermentau River basin, a major rice producing area. Calcasieu Lock, which was completed in 1950, has dimensions of 13 by 75 by 1,206 feet and is structurally sound. The lock is congested due to increasing traffic. A study authority resolution was adopted in the Senate for Calcasieu Lock in September 1972 and was followed by another resolution by the House in October of 1972 with the intent to either replace or generally improve the GIWW through various means. Intracoastal Waterway Locks, Louisiana, a Reconnaissance study completed in 1992, determined that there is an immediate need for capacity increases at Bayou Sorrel and Calcasieu Locks. The Calcasieu Lock Section 905(b) analysis supports a benefit-cost ratio of 1.2:1 for provision of a new lock and recommended proceeding with feasibility phase studies. The study is addressing the feasibility of measures to replace or supplement the existing lock to reduce navigation delays. The study is being conducted with Federal funds. The anticipated output of improved navigation efficiency is in accord with Administration policy.

Funds for Fiscal Year 2013 will be used to continue feasibility study efforts which include advanced H&H modeling on selected alternatives, economic modeling on selected alternatives, an Alternative Formulation Briefing, and the preparation of a draft integrated Feasibility Report.

Funds requested for Fiscal Year 2014 will be used to complete feasibility study efforts which include completion of the economic analysis, environmental analysis, development of preliminary design of alternative plans, and the identification of a draft tentatively selected plan. Study tasks completing in 2014 include conducting Independent External Peer Review, submission of a Draft Report in (1st FY 14) and signing of the Chief's Report September 2014.

The FY 2014 J-sheet shows an increase in \$705,000 over the FY 2013 J-sheet. This increase is due to revisions in the PMP for updated labor rates, IEPR, feasibility level design on the selected alternative, and additional economic modeling review requirements. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$7,883,000
Reconnaissance Phase (Federal)	\$90,000
Feasibility Phase (100% Federal)	\$7,793,000

The Reconnaissance phase was completed in FY 2001. The feasibility study completion date is scheduled for FY 2014.

The study authority is based on resolutions from both the House and Senate (SR 29 Sep 72 and HR 12 Oct 72) with a view "to determining the advisability of modifying the existing project in any way at this time, particularly with regard to widening and deepening the existing and/or authorized channel." The average annual benefits are TBD.

1/Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$1,000 rescinded from the project in FY 2001.

\$1,000 rescinded from the project in FY 2003.

\$1,000 rescinded from the project in FY 2004.

\$2,000 rescinded from the project in FY 2005.

\$2,000 rescinded from the project in FY 2006.

\$2,369 rescinded from the project in FY 2011.

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional To Complete After FY 2014 \$
Louisiana Coastal Area Comprehensive Plan, LA (ENR) (New Start)	\$1,600,000	0	0	0	0	100,000	1,500,000

New Orleans District

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

The study area includes the entire Louisiana Coastal Area (LCA). Over 1 million acres of Louisiana's coastal wetlands have been lost since the 1930's; another one-third of a million acres could be lost over the next 50 years unless large-scale corrective actions are taken. Disruption of natural processes by the development of the watershed of the Mississippi River and in the LCA is the primary cause of the coastal land loss. Additional impacts result from natural subsidence and erosion of the lands where the Mississippi delta meets the Gulf of Mexico. Managing water and sediment for restoration creates/sustains nesting, feeding and resting habitats for threatened/endangered species (eagle, sturgeon, brown pelican, piping plover) and numerous migratory avian and waterfowl species. Barrier Island restoration favorably impacts nesting and resting cover for brown pelican and piping plover.

The LCA Ecosystem Restoration Study Report was completed in November 2004. A feasibility cost sharing agreement was executed between the Federal Government and the State of Louisiana, Department of Natural Resources, the non-Federal sponsor, in February 2000 and amended in March 2002 and October 2004. A Chief of Engineers Report was signed on 31 January 2005.

The requested FY 2014 funds will be used to conduct a Reconnaissance study, prepare a Reconnaissance Report, prepare a Project Management Plan and prepare a Feasibility Cost Share Agreement to establish the framework of a Comprehensive Plan. The Comprehensive Plan will be prepared in cooperation with the State of Louisiana.

Total Estimated Study Cost	\$3,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

Title VII, WRDA 2007 authorized LCA. Section 7002 authorized development of a Comprehensive Plan, in coordination with the Governor, for protecting, preserving, and restoring the coastal Louisiana ecosystem. The Comprehensive Plan will establish a framework for a long-term, multi-faceted program directed at

protecting, preserving, and restoring coastal Louisiana and will identify the role of other Federal and State agencies and programs in carrying out the comprehensive plan. Development of the Comprehensive Plan will also serve to transition from the Louisiana Coastal Protection and Restoration Study as well as integrate the efforts under the Louisiana Master Plan.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocation FY 2013 \$	Budget Amount FY 2014 \$	Additional to Complete After FY 2014 \$
Louisiana Coastal Area, Ecosystem Restoration, LA	73,527,000	62,398,000 ^{1/}	(1,975,000)	3,620,000	1,000,000 ^{2/}	3,321,000 ^{3/}	5,163,000 ^{11/}
LCA PED Cost	47,637,000	0	0	5,916,000	1,600,000 ^{2/}	1,964,000 ^{3/}	38,157,000 ^{11/}
LCA Program (Continuing) New Orleans District	121,164,000	62,398,000 _{5/ 6/ 7/ 8/ 9/}	(1,975,000) ^{10/}	9,536,000 ^{11/}	2,600,000 ^{2/}	5,285,000 ^{3/}	43,320,000 ^{4/ 11/}

The Louisiana Coastal Area Ecosystem Restoration (LCA) Study area includes the entire Louisiana coastal area. Over 1 million acres of Louisiana's coastal wetlands have been lost since the 1930's; another one-third of a million acres could be lost over the next 50 years unless large-scale corrective actions are taken. Disruption of natural processes by the development of the watershed of the Mississippi River and in the Louisiana coastal area is the primary cause of the coastal land loss. Additional impacts result from natural subsidence and erosion of the lands where the Mississippi delta meets the Gulf of Mexico. More specifically, the coastal land loss results from human intervention and natural processes, including: (1) efforts to maintain a Federal navigation channel from the Gulf of Mexico to New Orleans and farther up the Mississippi River; (2) the implementation of flood and storm damage reduction projects by or for communities in the Louisiana coastal plain; (3) oil and gas development, including thousands of miles of canals built by private interests for exploration and production; (4) natural subsidence and erosion of the lands where the Mississippi Delta meets the Gulf of Mexico; and (5) winter cold fronts, tropical storms, and hurricanes. Managing water and sediment for restoration creates and sustains nesting, feeding and resting habitats for species listed as threatened or endangered under the Endangered Species Act (ESA)—including the eagle, sturgeon, brown pelican, and piping plover—and numerous migratory avian and waterfowl species. Barrier Island restoration can reduce the rate of loss of wetlands and provide nesting and resting cover for brown pelican and piping plover.

1/ Includes \$11 million provided in Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006, PL109-148, December 2005. \$1M was executed by the Louisiana Coastal Area Science & Technology Program for Hurricane Assessment.

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the stated capability that takes into consideration unobligated FY 2013 carry-in funds and the current schedule as of the date of this J-sheet.

3/ Note: As of 11 January 2013 estimated carry-in to FY2013 is expected in the amount \$9.2 M, of which \$1.05 M was set aside for reconciliation for other MVN projects during the CR (see note 11), the difference (\$8.1 M) to be used to execute the LCA program. While current plans in FY 2013 seek full execution of carryover funds plus the revised capability, continued negotiations with the State of Louisiana present risks to full execution in -FY 2013. The revised capability has considered risks within the program. Based on current path forward the FY 2014 and FY 2013 amounts plus FY 2012 carryover will be exhausted no later than FY 2014.

4/ Note: \$31,000,000 in Preconstruction Engineering and Design (PED) is un-programmed at this time in lieu of the State's current path forward.

- 5/ \$3,000 were rescinded from the project in FY 2001.
- 6/ \$6,000 were rescinded from the project in FY 2003.
- 7/ \$15,000 were rescinded from the project in FY 2004.
- 8/ \$55,000 were rescinded from the project in FY 2005.
- 9/ \$75,000 were rescinded from the project in FY 2006.
- 10/ \$2,000,000 were transferred to HQ for the Mississippi River Flood in FY 2011.
- 11/ \$1,050,000 was set aside for reconciliation of other MVN non-LCA projects during CR

The LCA Program's primary purpose is to restore the Louisiana wetland coastal area through the beneficial use of dredged material, river diversion of sediment and water, head land and barrier island restoration, and coastal protection efforts. The Louisiana coastal plain contains one of the largest expanses of coastal wetlands in the contiguous United States, and has experienced 90 percent of the total coastal marsh loss in the Nation. The coastal wetlands, built by the deltaic processes of the Mississippi River, contain diverse coastal habitats that range from narrow natural levee and beach ridges to expanses of forested swamps and freshwater, intermediate, brackish, and saline marshes. These unique habitats include upland areas as well as the near shore Gulf of Mexico and are hydrologically connected to each other. Taken as a whole, these habitats combine to make Louisiana's wetlands among the Nation's most productive and ecologically-significant natural assets. Additionally, Louisiana's coastal wetlands have also been a center for culturally diverse social development. LCA will construct significant restoration features; undertake demonstration projects, study potentially promising large-scale, long-term concepts, take other needed actions to restore the ecosystem.

The LCA Study (Program) is a near-term plan consisting of studies, projects and science support developed through a public involvement process, working closely with other Federal agencies and the State of Louisiana.

The State of Louisiana recently released its 2012 Coastal Master Plan and is currently in the process of assessing on-going and planned coastal ecosystem restoration studies and projects, including LCA projects, to ensure alignment with that plan. While the State of Louisiana has expressed continued support for the LCA program, the State plans to pursue a path forward that more closely aligns with its 2012 Coastal Master Plan. To do this, the State has indicated its intent to pursue four of the LCA 6 projects outside of the LCA Program: Amite River Diversion Canal Modification; Terrebonne Basin Barrier Shoreline Restoration; and Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of Houma Navigation Canal Lock; with development of the Medium Diversion at White Ditch and Small Diversion at Convent/Blind River projects continuing within the LCA program. In addition, the State has recently requested efforts on the Land Bridge between Caillou Lake and Gulf of Mexico project, the Gulf Shoreline at Point Au Fer Island project, the Modification of Davis Pond Diversion project and the Modification of Caernarvon Diversion project be suspended. The State has indicated its intent for advancement of the Medium Diversion at Myrtle Grove Feasibility Study, and the Mississippi River Hydro/Delta Management Study, and to implement the Barataria Basin Barrier Shoreline project and Demonstration projects within the LCA program. The 2014 Budget continues the restoration planning efforts that are underway in the LCA near-term plan and aligns investments with the State of Louisiana's desire to be consistent with its 2012 Plan.

Fiscal Year 2012 carry-out funds are being used in Fiscal Year 2013 to execute the following study and PED efforts:

Investigation will continue for Mississippi River Hydro Delta Management	\$2,400,000
Development of the Demonstration Program Implementation Plan (complete)	\$17,000
Complete PED Barataria Basin Barrier Shoreline Restoration	\$1,800,000
Continue PED Small Diversion at Convent Blind River	\$3,217,000
Medium Diversion at White Ditch	\$700,000

Fiscal Year 2013 funds will be used as follows:

Investigations will conclude Medium Diversion at Myrtle Grove	\$771,000
Investigation will continue for Mississippi River Hydro Delta Management	\$100,000
Close-out of the LCA 4 studies	\$129,000
PED will continue for Small Diversion at Convent / Blind River	\$543,000
Medium at White Ditch	\$907,000
Close-out of 4 of LCA 6	\$150,000

Fiscal Year 2014 funds will be used for the following efforts:

Investigations will complete for the following study Medium Diversion at Myrtle Grove	NFS funds
Investigations will continue for the following study: Mississippi River Hydrodynamic/Delta Management Study Demonstration Program Projects	\$2,971,000 \$350,000
PED will initiate for the following project: Medium Diversion at Myrtle Grove with Dedicated Dredging	\$50,000
PED will complete for the following project: Small Diversion at Convent / Blind River	\$1,436,000
PED will complete for the following project: Medium Diversion at White Ditch	\$478,000

The below LCA projects are anticipated to have additional work pursued in FY 2014.

* The Mississippi River Hydro/Delta Management feature is a combination of the Mississippi River Hydrodynamic Model and the Mississippi River Delta Management Study features. This combined feature would provide a model to assess the effects on navigation and sediment dynamics along the Mississippi River main stem associated with combinations of Mississippi River diversions. Model outputs would also be used to formulate and assess management options for the Delta. The project would improve habitat for many wildlife species including pallid sturgeon; also eagle, pelican, migratory/colonial birds. The FCSA was signed 24 August 2011. In FY 2014 the study continues.

* Demonstration Program Projects. The State sponsor, to align with their 2012 State Master Plan, has only recently indicated a desire to initiate any Demonstration projects. In FY 2013 an Implementation Plan will be sent to the ASA for approval. That plan is expected to identify potential projects and request that a FCSA will be initiated. Decision documents will be initiated in order to implement Demonstration projects. These projects are designed to resolve critical areas of scientific or technological uncertainty related to the implementation of the restoration plan and ultimately the comprehensive plan. In 1st Qtr FY 2014, sign FCSA, develop Engineering Design Report and conduct first Demonstration study.

* The Medium Diversion at Myrtle Grove (Myrtle Grove) with dedicated dredging project. The project consists of diverting 2,500 to 15,000 cfs from the Mississippi River into the Barataria Basin through a box culvert system and using 2 million cubic yards of Mississippi River material annually for several years to create marsh wetlands. As authorized, this feature is expected to deliver benefits in the range of 11,500 acres. The project would improve habitat for many wildlife species

including sturgeon/manatee/loggerhead, Kemp's Ridley, hawksbill turtles; also eagle, pelican, migratory/colonial birds, also essential fish habitat. The feasibility study will complete in the 4th Qtr FY 2014. In 4th Qtr FY 2014, sign design agreement and initiate PED.

* Small Diversion at Convent / Blind River project. The project is located approximately equidistant between Baton Rouge and New Orleans, Louisiana within the Maurepas Swamp, one of the largest remaining cypress swamps in coastal Louisiana. The recommended plan (Alternative 2), which is also the national ecosystem restoration plan, will reintroduce the natural periodic, nearly annual flooding by the Mississippi River to the Maurepas Swamp and Blind River that was cut off by construction of the Mississippi River and Tributaries (MR&T) flood control system. The project consists of a 3,000 cubic feet per second (cfs) capacity gated box culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Romeville, Louisiana. The project will restore freshwater, nutrients, and sediment input from the Mississippi River and improve habitat function by 6,421 AAHUs over a total of 21,369 acres of bald cypress-tupelo swamp. The project would improve habitat for many fish and wildlife species including migratory birds, bald eagles, alligators, gulf sturgeon, and the manatee. The DA was executed 9 December 2011. PED will complete in 3rd Qtr FY2014.

* Medium Diversion at White Ditch project (MDWD) project. Additional Congressional authority is required to build project. The project will restore the supply and distribution of freshwater and sediment disrupted by the construction of the Mississippi River and Tributaries flood control. The project includes a 35,000 cubic feet per second (cfs) capacity gated box culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Phoenix, Louisiana. Dredged material from the conveyance channel will be used beneficially to create approximately 416 acres of marsh and ridge habitat. The project will improve habitat function by 13,353 AAHUs by creating and nourishing approximately 20,315 acres of fresh, intermediate, brackish, and saline wetlands. The project would improve habitat for many wildlife species including pallid sturgeon, manatee; also brown pelican/eagle/migratory/colonial birds. The DA was executed 9 December 2011. In FY2014, PED will complete.

The below LCA projects are not anticipated to have work performed in FY 2014 based on the State of Louisiana's lack of intent to partner with USACE at this time.

* Terrebonne Basin Barrier Shoreline Restoration project - The State sponsor has indicated they wish Federal participation be suspended (anticipated in late FY 2012). Therefore, they have no interest at this time in pursuing any previously scheduled PED action in FY 2013 as they anticipate using only non-Federal funds to complete PED and execute construction. Accordingly, no activity is scheduled for FY 2014. The project will reintroduce sediment to the coastal sediment transport system through the restoration of Raccoon Island with 25 years of advanced fill and construction of a terminal groin. The project also includes restoration of Whiskey and Trinity Islands with five years of advanced fill and restoration of Timbalier Island with 25 years of advanced fill. The project consists of restoration of four islands (Whiskey, Raccoon, Trinity, and Timbalier) improving habitat function by 2,833 AAHUs by adding 3,283 acres to the islands for a total size of 5,840 acres. The restored acreage would include 472 acres of dune, 4,320 acres of supra-tidal habitat, and 1,048 acres of intertidal habitat and ensure the geomorphic and hydrologic form and ecological function of the majority of the estuary over the period of analysis. The estimated total first cost of the project is \$646,931,000. The Federal share of the estimated first cost of this project is \$420,505,000 and the non-Federal share is estimated at \$226,426,000. Post-construction monitoring and adaptive management of this ecosystem restoration project is projected to be conducted for no more than ten years. Additional authority is needed to implement the entire project. The Whiskey Island component can be implemented under the existing authority provided in Section 7006(e)(3) of WRDA 2007. The Whiskey Island component is an implementable increment of the NER plan. The estimated total first cost of the Whiskey Island component is \$113,434,000. The DA was executed 9 December 2011. By letter dated 20 Aug 2012, the State of Louisiana requested we suspend future performance.

* The Convey Atchafalaya River Water to Northern Terrebonne Marshes restoration project -- The State sponsor has indicated they wish Federal participation be suspended (confirmation anticipated in late FY 2012). Therefore, they have no interest at this time in pursuing any previously scheduled PED action in FY 2013 as they anticipate using only non-Federal funds to complete PED and execute construction. Accordingly, no activity is scheduled for FY 2014. The project would increase existing Atchafalaya River influence to central (Lake Boudreaux) and eastern (Grand Bayou) Terrebonne marshes via the Gulf Intercoastal Waterway (GIWW) by introducing flow into the Grand Bayou Basin. This may be accomplished by enlarging the connecting channel (Bayou L'Eau Bleu) to capture as much of the surplus flow (max. 2000 to 4000 cfs) that would otherwise leave the Terrebonne Basin. Gated control structures would be installed to restrict channel cross-sections to prevent increased saltwater intrusion during the late summer and fall when Atchafalaya River influence is typically low. Some auxiliary freshwater distribution structures may be included. This project also includes increasing freshwater supply through repairing banks along the GIWW, enlarging constrictions in the GIWW, and diverting additional Atchafalaya River freshwater through the Avoca Island Levee and into Bayou Chene/GIWW system. Benefits to threatened/endangered species and colonial nesting birds are in addition to wetlands benefits. The DA was executed 9 December 2011. By letter dated 20 Aug 2012, the State of Louisiana requested we suspend future performance.

* The Amite River Diversion Canal Modification project. The State sponsor has indicated they wish Federal participation be suspended (confirmation anticipated in late FY 2012). Therefore, they have no interest at this time in pursuing any previously scheduled PED action in FY 2013 as they anticipate using only non-Federal funds to complete PED and execute construction. Accordingly, no activity is scheduled for FY 2014. This project involves the construction of gaps in the existing dredged material banks of the Amite River Diversion Canal. The objective of this project is to allow waters to introduce additional nutrients and sediment into western Maurepas Swamp to facilitate organic deposition, improve biological productivity, and prevent further swamp deterioration. The exchange of flow would occur during high flow events on the river. This project would also provide benefits to threatened/endangered species and colonial nesting birds. The DA was executed 9 December 2011. By letter dated 20 Aug 2012, the State of Louisiana requested we suspend future performance.

* The Beneficial Use of Dredged Material Program projects. The State sponsor has indicated no interest in pursuing any action in FY 2013 or 2014 (confirmation anticipated in late FY 2012). Accordingly, no activity would occur in FY 2013 or FY 2014. The Program will provide the framework, process and procedures for selecting, funding and implementing projects over a 10-year period that could create an estimated 21,000 acres of coastal wetlands over the 10-year life of the program. Dredged material will be acquired from maintenance activities of Federal waterways. A Program report approved by the Administration was transmitted to Congress 13 August 2010. During a face-to-face meeting between the State of Louisiana and the District Commander, 19 Jul 2012, the State indicated they are not interested in cost sharing in the Beneficial Use of Dredged Material Program at this time. Plaquemines Parish Government has inquired about their participation as a project cost share partner in the Beneficial Use of Dredged Material Program. Preliminary discussions have initiated.

* Small Bayou Lafourche Reintroduction project consists of increasing channel flows by introducing 1,000 cfs of Mississippi River water into the Bayou at Donaldsonville to mimic the actions of a river crevasse. Dredging and bank stabilization would be required to control water levels and maintain bank stability and a sediment trap. Weirs are also features of the project. Projections are that 2,500 acres of coastal marsh would be protected, thousands of acres would benefit as would the bald eagle and essential fish habitat. During prior face-to-face meetings with the State of Louisiana, they have indicated they are not interested in cost sharing in this project at this time.

* Small Diversion at Hope Canal is expected to enhance approximately 36,000 acres of Maurepas Swamp wetlands primarily by introducing approximately 5,000 cfs from the Mississippi River. Project includes two box culverts; a receiving pond reinforced with riprap; and a 50-foot wide, and a 10-foot deep outflow channel

roughly 27,500 feet long that will run from the river to U.S. Interstate 10. During prior face-to-face meetings with the State of Louisiana, they have indicated they are not interested in cost sharing in this project at this time.

* Mississippi River Gulf Outlet Environmental Restoration involves the construction of shoreline protection measures such as rock breakwaters along the north bank of the Mississippi River Gulf Outlet and along important segments of the southern shoreline of Lake Borgne. WRDA 2007 Section 7013 authorized additional investigations related to the deep draft navigation channel closure. The environmental restoration plan associated with the closure is currently under review by the administration. The LCA Section 7006 efforts will not begin until the Section 7013 report is finalized.

* The Modification to Davis Pond diversion project. The project will increase wetland creation and protection outputs for this existing structure through changes in the structure's operation. The structure, operating on average at about one-half capacity, maintains salinity gradients in the central Barataria Basin. In addition to wetland creation, the freshwater wetlands of the upper Barataria Basin will be directly benefitted by the added sediments and freshwater introduced from the Mississippi River. Wetland acreage benefits may range from 2,000 to 14,000 acres. The tentatively selected plan may call for increased use of the structure which can result in the need to purchase of flowage easements in the influence area as a major construction cost. The project would improve habitat for many wildlife species including pallid sturgeon/manatee; also, eagle, migratory/colonial birds, essential fish habitat. The FCSA was signed 5 June 2009. By letter dated 16 Oct 2012, the State of Louisiana requested we suspend future performance.

* Modification to the Caernarvon diversion project. The project will increase wetland creation and protection outputs for this existing structure through changes in the structure's operation. Currently, the structure operates on average at about one-half capacity to maintain salinity gradients. The wetlands of St. Bernard and Plaquemines Parishes suffered extensive losses from Hurricane Katrina and will directly benefit from the added sediments and freshwater introduced from the Mississippi River by increasing the freshwater introduction volume. Wetland acreage benefits may range from 2,000 to 14,000 acres. The project would improve habitat for many wildlife species including pallid sturgeon/manatee; also eagle, migratory/colonial birds, essential fish habitat. The FCSA was signed 5 June 2009. By letter dated 16 Oct 2012, the State of Louisiana requested we suspend future performance.

* The Land Bridge between Caillou Lake and Gulf of Mexico project. The project would maintain the natural hydrologic barrier between the Gulf and Caillou Lake and associated Terrebonne Basin wetlands as well as allow increased freshwater influence from the Atchafalaya River waters flowing eastward into Four League Bay. Subsidence, storm damage, increased tidal influence, and lack of sediment inputs have all caused significant adverse impacts resulting in wetland loss, habitat conversion, and ecosystem degradation. These habitat losses have had a direct adverse impact on wildlife and fisheries resources and State-designated Public Oyster Seed Reservations. The tentatively selected plan would maintain the separation between Caillou Lake and the Gulf of Mexico and Bay Voisin and the Gulf of Mexico, maintain the estuarine gradient, reduce the marine influences on Caillou Lake and Bay Voisin, and reverse the trend of deterioration in the associated wetlands and wildlife habitat. The tentatively selected plan will create and nourish approximately 1,588 acres of saline marsh and install 29,000 linear feet (8,839 m) of shoreline protection to increase the stability of the land bridge separating Caillou Lake from the Gulf of Mexico and of the stability of the critical land bridge separating Bay Voisin and the Gulf of Mexico. The project would improve habitat for many wildlife species including manatee; migratory/colonial birds; also loggerhead, Kemp's Ridley, hawksbill sea turtles, also essential fish habitat. The FCSA was signed 5 June 2009. By letter dated 16 Oct 2012, the State of Louisiana requested we suspend future performance.

* The Gulf Shoreline at Point Au Fer Island (Point Au Fer) project. The project provides for stabilizing the Gulf shoreline of this island, thereby precluding the formation of direct connections between the Gulf and Four League Bay, a situation that would lead to increasing salinities of island and inland coastal wetlands influenced by Atchafalaya River water. Protecting this island also provides storm surge protection to the southwestern corner of the Terrebonne Bay wetland system. Subsidence, storm damage and increased tidal influence and lack of sediment inputs have all resulted in shoreline retreat/loss, dune habitat, and protected back-bay barrier marshes. The project would improve habitat for many wildlife species including piping plover, manatee; also migratory/colonial birds; loggerhead, Kemp's Ridley, hawksbill sea turtle. The FCSA was signed 5 June 2009. By letter dated 16 Oct 2012, the State of Louisiana requested we suspend future performance.

The estimated cost of preparing the Near-Term Program follow-on feasibility studies is \$147,054,000 which is cost shared on a 50-50 percent basis by Federal and non-Federal interests. PED will be cost shared 65 percent Federal and 35 percent Non-Federal as authorized in Title VII, WRDA 2007.

The total estimated cost of preparing all LCA feasibility studies is \$147,054,000 a decrease of \$3,159,000 from the latest cost estimate of \$150,213,000 presented to Congress in FY 2012 due to refinements of cost estimates for the LCA program. The total estimated cost for preparing all LCA PED documents is \$73,288,000.

Total Estimated Study Cost	\$ 147,054,000	Total Estimated PED Cost (65/35)	\$73,288,000
Reconnaissance Phase (Federal)	N/A	Federal	\$47,637,000
Feasibility Phase (Federal)	73,527,000	Non-Federal	\$25,651,000
Feasibility Phase (Non-Federal)	73,527,000		

STATUS SUMMARY(as of 25 January 2013)

Active	
Beneficial Use of Dredged Material Program	Feasibility Complete: ROD signed 13 Aug 2010, developing Design Agreement
Demonstration Projects Program	Developing Program Implementation Plan
Medium Diversion at Myrtle Grove with Dedicated Dredging	Feasibility study continues
Barataria Basin Barrier Shoreline Restoration	Developing Design Agreement
Small Diversion at Convent Blind River	In PED
Medium Diversion at White's Ditch	In PED

Suspended

Amite River Diversion Canal Modification	Suspended by state's letter dated 20 Aug 2012
Convey Atchafalaya River Water to Northern Terrebonne Marshes	Suspended by state's letter dated 20 Aug 2012
Houma Navigation Canal	Suspended by state's letter dated 20 Aug 2012
Terrebonne Basin Barrier Shoreline Restoration	Suspended by state's letter dated 20 Aug 2012

Landbridge between Caillou Lake and the Gulf of Mexico	Suspended by state's letter dated 16 Oct 2012
Gulf Shoreline at Point au Fer island	Suspended by state's letter dated 16 Oct 2012
Modification of Caernarvon Diversion	Suspended by state's letter dated 16 Oct 2012
Modification of Davis Pond Diversion	Suspended by state's letter dated 16 Oct 2012

Feasibility studies never initiated

Hope Canal
Bayou Lafourche

OTHER

Mississippi River Gulf Outlet Environmental Restoration	Pursuant to WRDA 2007 Section 7013: Production of a feasibility report proceeding separately from Section 7006 - Section 2013 report in review
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WRDA 2007, Title VII (Public Law 110-114); the Report of the Chief of Engineers, LCA Ecosystem Restoration, Six Projects Authorized by Section 7006(e)(3) of WRDA 2007, dated 30 December 2010; Louisiana Coastal Area (LCA), Louisiana, Beneficial Use of Dredged Material Program Record of Decision (signed 13 August 2010); and the Report of the Chief of Engineers (dated 22 June 2012), LCA Ecosystem Restoration, Barataria Basin Barrier Shoreline Restoration Project, Louisiana.

The completion schedule of the near-term program is TBD.

MINNESOTA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost	Allocation Prior to FY 2011	Allocation FY 2011	Allocation FY 2012	Allocated Amount For FY 2013	Budget Allocation FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Minnesota River Watershed Study, MN and SD (Minnesota River Basin) SURVEYS – Continuing (ENR) St. Paul District	\$4,520,000	329,000	499,000	335,000	350,000 <u>2/</u>	350,000 <u>1/</u>	\$2,657,000

The Minnesota River in southwestern Minnesota originates at the Minnesota-South Dakota border, flows 335 miles through some of the richest agricultural land in Minnesota and joins the Mississippi River at Minneapolis and St. Paul, Minnesota. The river drains 16,770 square miles, of which 14,840 are in Minnesota, 1,610 in South Dakota, and the remainder in North Dakota and Iowa. The Minnesota River reconnaissance study recommended three Feasibility studies. One of the recommendations included an integrated watershed, water quality management, and ecosystem restoration analysis that would produce a watershed management plan to facilitate better watershed management and identify specific opportunities for the Corps of Engineers and other stakeholders. This study was initiated in September 2008 and the Minnesota Environmental Quality Board is acting as the local sponsor. An interagency technical team of Federal and non-Federal partners with expertise in Hydrology, geomorphology, limnology, ecology, agriculture, and economics, planning and modeling has assisted in the scoping of the study. The non-Federal participants include the Minnesota Pollution Control Agency (MPCA), the Minnesota Department of Natural Resources (DNR), the Minnesota Board of Water and Soil Resources (BWSR), the Metropolitan Council of the Twin Cities, Minnesota State University – Mankato, the University of Minnesota and the Nature Conservancy. Federal participants would include the Corps of Engineers, the Natural Resources Conservation Service (NRCS), the Agricultural Research Service (ARS), the U.S. Fish and Wildlife Service (FWS), the U.S. Geological Survey (USGS), the National Weather Service (NWS), and the U.S. Environmental Protection Agency (EPA). The study will take advantage of advanced watershed modeling techniques to understand the relationship of hydrologic and water quality parameters and the relative impacts and benefits of alternative measures for watershed management and ecosystem restoration and integrate the efforts of a wide range of agencies currently working independently, leading to more cost-effective use of existing government programs. It is expected that the integrated watershed study will identify additional projects for study and implementation. The local sponsors will be providing in-kind technical services as well as collecting LiDAR data in the Minnesota River Basin to fulfill cost-share obligations. The study is authorized by resolution of the House Committee on Public Works, 10 May 1962.

Fiscal Year 2013 funds will be used for continuing the feasibility study. Funds requested for Fiscal Year 2014 will be used to continue modeling work and initiate development of a decision support system. The preliminary estimated cost of the feasibility phase is \$9,040,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Costs decreased as a result of initial efforts to re-scope the study for compliance with 3x3x3. A summary of study cost sharing is as follows:

Total Estimated Feasibility Study Cost	\$9,040,000
Reconnaissance Phase (Federal)	N/A 3/
Feasibility Phase (Federal)	4,520,000
Feasibility Phase (Non-Federal)	4,520,000

A feasibility cost share agreement was executed 29 September 2008. The completion for the feasibility study is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Program Year (PY) from prior appropriations for use on this study is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Reconnaissance phase funded under overall study authority for Minnesota River Basin.

\$0 rescinded from the project in N/A.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account in N/A.

NORTH DAKOTA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation FY 2011 \$	Allocation FY 2012 \$	Allocated Amount For FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Red River of the North Basin, ND, MN, SD and Manitoba, Canada SURVEYS – Continuing (ENR) St. Paul District	\$10,580,000	4,131,000	1,892,000	489,000 <u>4/</u>	433,000 <u>2/</u>	433,000 <u>1/</u>	\$3,202,000

A watershed study for the entire Red River of the North Basin was initiated with execution of a Feasibility Cost Share Agreement in June 2008. Reconnaissance activities will continue for specific locations within the Basin as described in the Reconnaissance report approved in October 2002. The Red River of the North, a northward flowing stream, originates at the convergence of the Ottertail, Minnesota, and Bois de Sioux Rivers, Minnesota and North Dakota and ends at Lake Winnipeg in Manitoba, Canada. Within the United States, the Red River drains portions of South Dakota, Minnesota, and North Dakota and forms the border between the latter two. The basin has lost much of the natural environment that existed in early settlement times, and flooding has repeatedly caused economic and human hardship. Major flood events totaling billions of dollars in damages have occurred in 1826, 1852, 1893, 1897, 1914, 1919, 1950, 1974, 1975, 1978, 1979, 1985, 1989, 1996, 1997, 2001, 2006, 2009, 2010, and 2011. Additional floods with substantial documented damages occurred on tributaries in other years. Drainage, river modifications, and land use changes (including those for enhancement of agriculture) have adversely affected the natural ecosystems. The basin's water resources issues have been the focus of several watershed planning and management initiatives by the International Red River Board and Red River Basin Commission. Studies will address flood damage reduction and ecosystem restoration. Federal agencies, state agencies in Minnesota, North Dakota, and South Dakota, local units of government, non-profit environmental organizations, Canadian interests, business and agricultural representatives, and citizens participating in support of these initiatives see this study as critical to continued basin planning and implementation. The initial task in the basin-wide watershed study is development of a digital elevation model using LIDAR data, followed by the development of a decision support system and watershed management plan. The study will build models and develop tools to assist local governments in managing the watershed. The study is authorized by resolution of the Senate Committee on Public Works, 30 September 1974.

Fiscal Year 2013 funds will be used for continuing progress on the updated Decision Support System, hydrologic model development, and the Comprehensive Watershed Management Plan. Funds requested for Fiscal Year 2014 will be used to continue progress on the updated Decision Support System and the comprehensive watershed management plan, and if approved, any follow-on feasibility studies. The estimated cost of the feasibility phase is \$18,560,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. The study is currently being re-scoped for compliance with the 3x3x3. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$19,860,000	<u>3/</u>
Reconnaissance Phase (Federal)	1,300,000	
Feasibility Phase (Federal)	9,280,000	
Feasibility Phase (Non-Federal)	9,280,000	

The feasibility study completion date is TBD.

- 1/ Estimated Unobligated "Carry-in" funding: As of the date this J-Sheet was prepared, the total dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study is \$0. This amount will be used to perform work on the study as follows: N/A
- 2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
- 3/ Excludes costs for Wild Rice River, MN; Roseau, MN; Fargo, ND-Moorhead, MN and Upstream; and Fargo, ND-Moorhead, MN Metro; feasibility studies.
- 4/ \$75,000 increase in FY2012 Allocation due to funding of \$400,000 received from feasibility study of Fargo, ND-Moorhead, MN Metro and funding of \$325,000 reallocated to feasibility study of Valley City, ND.

\$4,000 rescinded from the project in 2011.

\$0 rescinded from the project in 2012.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account in N/A.

CONSTRUCTION

ILLINOIS

APPROPRIATION TITLE: Construction – Channels and Harbors (Flood Risk Management)

PROJECT: Chain of Rocks Canal, Mississippi River, Illinois, (Deficiency Correction) (Completion)

LOCATION: The Chain of Rocks Canal is located on the Mississippi River adjacent to river miles 184 to 194.4 in Madison County, Illinois.

DESCRIPTION: The recommended plan for deficiency correction involves the installation of relief wells and construction of berms and a pump station. All work is programmed.

AUTHORIZATION: The original project was authorized by the River and Harbor Act of 2 March 1945.

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 0.9 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 7 3/8 percent (FY 1999).

BASIS OF BENEFIT-COST RATIO: Based on the Level 1 Economic Reevaluation of the Chain of Rocks Canal Design Deficiency Report approved July 2011, at October 2011 price levels.

SUMMARIZED FINANCIAL DATA 1/

		STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
		Entire Project	94	FY 2014
Actual Federal Cost	Original Project	\$59,260,000		PHYSICAL DATA
Actual Non-Federal Cost		0		The proposed plan provides for correcting underseepage deficiencies on the nine-mile long levee, installing new relief wells, replacing nonfunctional relief wells, utility relocations landside of the levee, adding fill to berms and filling in low areas, constructing a 155 cfs pump station, and constructing wetland mitigation features.
Cash Contributions	\$ 0			
Other Costs	0			
Total Original Project Cost		\$59,260,000		

Mississippi Valley Division

St. Louis District

Chain of Rocks Canal, Mississippi River, IL
(Deficiency Correction)

SUMMARIZED FINANCIAL DATA (CONTINUED)

ACCUM
PCT OF EST
FED COST
(Remedial Work Only)

Remedial Work

Estimated Federal Cost	\$60,131,000		
Estimated Non-Federal Cost	\$0		
Cash Contributions	0		
Other Costs	0		
Total Estimated Remedial Cost	\$60,131,000		
Total Estimated Project Cost	\$119,391,000		
Allocations to 30 September 2010	\$ 46,051,000		
Allocation for FY 2011	7,415,000		
Allocation for FY 2012	3,265,000	^{1/}	
Conference Allowance for FY 2013	3,000,000	^{2/}	
Allocation for FY 2013	3,000,000		
Allocations through FY 2013	59,731,000	^{3/}	99
Estimated Carry-in Funds	0	^{4/}	
Budget Amount for FY 2014	400,000		
Programmed Balance to Complete after FY 2014	0		
Unprogrammed Balance to Complete after FY 2014	0		

1/ Additional funding in the amount of \$1,245,000 was received via the FY2012 Work Plan.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Includes ARRA (\$9,912,000).

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: This project is receiving a higher funding priority in the budget than its remaining benefit-remaining cost ratio would normally allow because it addresses significant risk to human safety in accordance with the Army Corps of Engineers performance-based guidelines for the construction account. The Chain of Rocks Canal Levee System consists of a dual line of levees running parallel to the canal constructed as part of the Chain of Rocks Canal, Illinois, navigation project. The operation and maintenance of these levees is a 100 percent Federal responsibility. The eastern line of this levee system serves as an integral part of the main line levee protection to the East St. Louis and vicinity area. The east levee has demonstrated inadequate underseepage performance during past floods. Quick conditions and sand boils developed on the landside of the levee during high river stages. The original design assumptions related to the coefficients of permeability for the aquifer and top stratum materials were incorrect. The relief well system was found to be deficient. The levee, as originally designed, relies on the impoundment of water against the landside toe of the levee in order to maintain levee stability; however, development over the last 40 years has prevented effective use of this method. Correction of the deficiencies will assure the integrity of the levee system and help to provide urban level protection for the East St. Louis metropolitan area. Failure of the levee would affect a population of approximately 250,000 mainly low income residential neighborhoods and a heavily industrialized area with property values of approximately \$1.4 billion.

The Budget includes funding primarily to address a significant risk to human safety. The Corps made this determination based on many factors such as the likelihood and magnitude of the potential flooding, the number of people living in the flood plain, the likely warning time, the availability of evacuation routes, and site-specific engineering factors. This project, in addition to preventing damages to property, is effective in reducing a high risk to life for the population in the project area. That risk must be considered in evaluating the project justification in addition to economic analyses. The life safety hazard index is depth 22 feet, warning time 24 hours, and population affected is 250,000. The average annual damages without project are estimated at \$2,649,000 and \$2,000 with the project.

Average annual benefits for the deficiency correction are as follows:

Annual Benefits	Amount
Flood Damage Reduction	\$ 2,618,000
Navigation	29,000
Total	\$ 2,647,000

FISCAL YEAR 2013: Unobligated carryover funds will be used as follows:

Continue Relief Well Construction	1,260,000
Continue turf establishment for North Berms Ditch work	50,000
Mitigation	100,000
Planning, Engineering and Design	450,000
Construction Management	200,000
Total	\$2,060,000

FISCAL YEAR 2013: Funds will be used as follows:

Relief Well Construction and Ditching	2,190,000
Maintenance During Construction	15,000
Mitigation	25,000
Planning, Engineering and Design	470,000
Construction Management	300,000
Total	\$3,000,000

FISCAL YEAR 2014: The requested amount will be used to complete O&M manuals and project closeout. Funds will be applied as follows:

Planning, Engineering, and Design	400,000
Total	\$400,000

NON-FEDERAL COST: The project is 100 percent Federal.

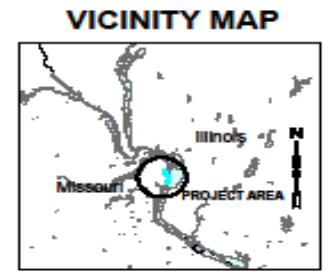
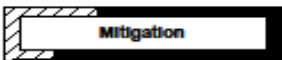
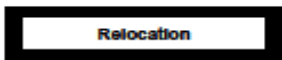
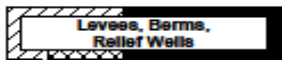
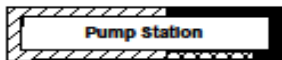
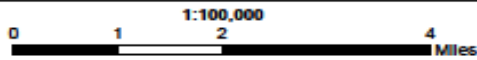
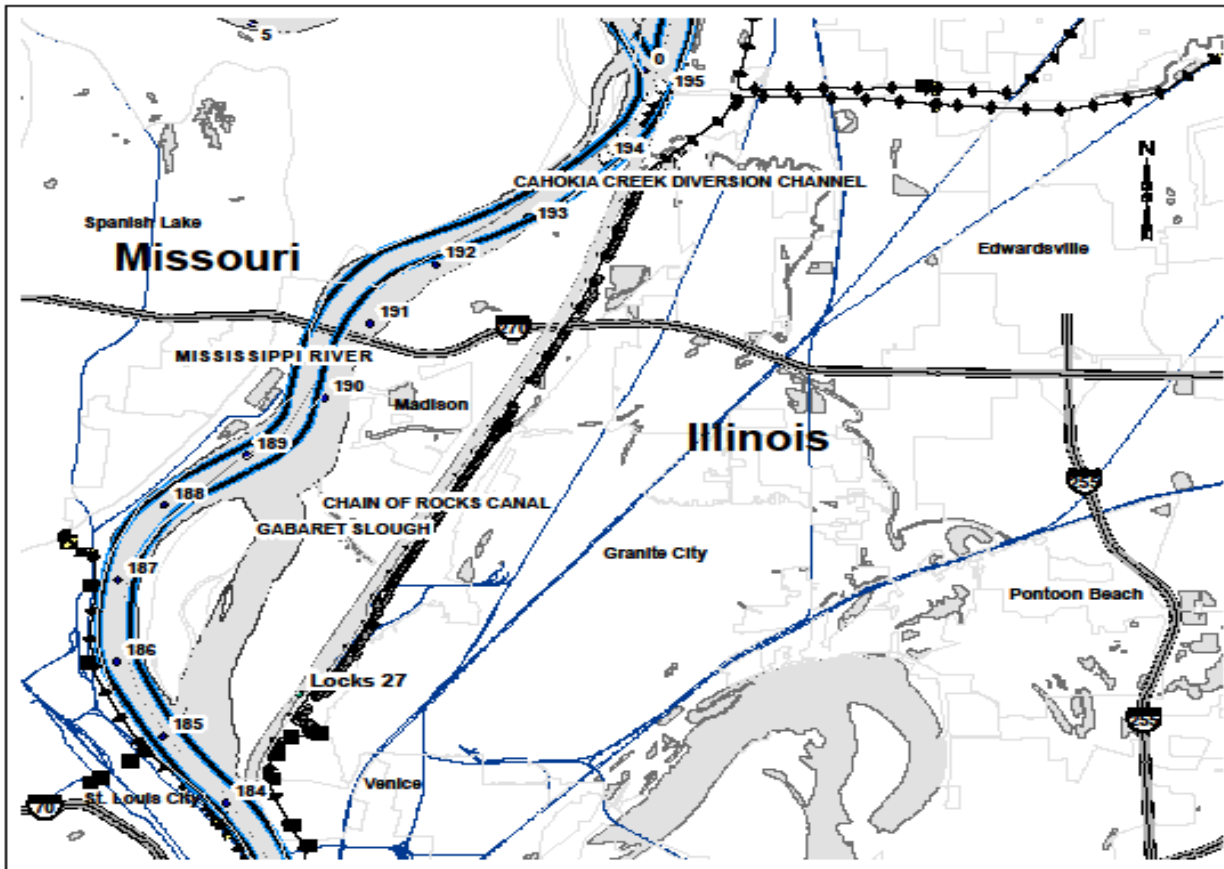
STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$60,131,000 is an increase of \$831,000 from the latest estimate (\$59,300,000) presented to Congress (FY 2013). Post contract award costs reflect an increase in cost due to the analysis of requirements for south berms relief wells and ditch work as well as increases in construction management and maintenance during construction to support these contracts. This change includes the following items:

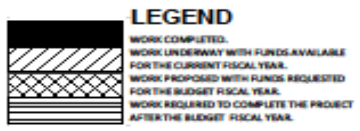
Item	Amount
Price Escalation on Construction Features	(\$704,000)
Post Contract Award and Other Estimating (including Contingency) Adjustments	1,535,000
Total	\$831,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment resulted in a Finding of No Significant Impact (FONSI); it was signed 21 May 1996. A second FONSI for revised plans was signed 14 August 2002.

OTHER INFORMATION: Previous funding included the actual cost of \$59,260,000 for the construction of the original project, which was completed in Fiscal Year 1953. Funds to initiate construction for the remedial work were appropriated in Fiscal Year 1999. The deficiency report documented a need for a pumping station to handle 155 cubic feet per second in interior flows. Without this pump station, there is no means of handling the additional flows from newly installed relief wells. Fish and Wildlife costs are \$2,057,000.



1:6,000,000



MAP SYMBOLS

- ◆ Levee / Floodwall
- Channels
- Interstate_Highway
- US_Highway
- Pump Station
- Relief Well

**CHAIN OF ROCKS CANAL,
MADISON COUNTY
MISSISSIPPI RIVER, ILLINOIS**
U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction – Local Protection (Flood Risk Management)

PROJECT: East St. Louis, Illinois (Rehabilitation) and (Deficiency Correction) (Continuing)

LOCATION: The project is located in St. Clair and Madison Counties, Illinois, along the left bank of the Mississippi River between river miles 175 and 195 above the Ohio River.

DESCRIPTION: The rehabilitation project consists of the rehabilitation or closure of 21 small gravity drains, 10 large gravity drains (gatewells), 20 closure structures, and 300 relief wells; minor floodwall and levee repair work; rehabilitation of 12 pumping stations, 3 drainage control structures, and 6 channel segments; and replacement of 3 bridge structures and abandonment and removal of 4 bridge structures. All work, except bridges, is programmed. The bridge work, which is unprogrammed, was performed at 100 percent non-Federal costs. A Limited Reevaluation Report (LRR) that addresses design deficiencies in underseepage and through seepage controls was approved August 2010. These deficiencies manifested during the 1993, 1995, and 2008 floods. Deficiency corrections are required for a segment of levee that is adjacent to a proposed EPA Superfund site and other hazardous and toxic waste sites. A supplement to the LRR that addressed remediation features using berm designs that follow current criteria as specified in Engineering Technical Letter 1110-2-569 was approved 28 June 2011. The deficiency correction project consists of 305 new relief wells, grouting 312 existing wood stave relief wells, ditching and pipe collector systems, a seepage pump station, a lift station, a variable frequency drive, seepage berms, cutoff walls, riverside clay blanket, and environmental and archeological mitigation work.

AUTHORIZATION: Flood Control Act of 1936 (PL 74-738) for Deficiency Correction project; Energy and Water Development Appropriations Act of 1988 (PL 100-202) for Rehabilitation project.

REMAINING BENEFIT-REMAINING COST RATIO: 11.6 to 1 at 7 percent (rehabilitation project); 1.1 to 1 at 7 percent (deficiency correction project).

TOTAL BENEFIT-COST RATIO: 6.9 to 1 at 7 percent (rehabilitation project); 1.1 to 1 at 7 percent (deficiency correction project).

INITIAL BENEFIT-COST RATIO: 5.6 to 1 at 8 7/8 percent (FY 1988) (rehabilitation project) and 1.7 at 4 percent (FY 2012) (deficiency correction).

BASIS OF BENEFIT-COST RATIO: Benefits for the rehabilitation project are from the Supplemental Project Report, completed March 1999. Benefits for the deficiency correction project are from the Level 4 Limited Reevaluation Report (LRR) and Environmental Assessment Design Deficiency Corrections Report, East St. Louis, approved Illinois Flood Protection Project 31 August 2010 and Level 4 LRR Supplement approved 28 June 2011.

Mississippi Valley Division

St. Louis District

East St. Louis, IL
(Rehabilitation and Deficiency Correction)

1 May 2013

MVD-44

SUMMARIZED FINANCIAL DATA	ACCUM		Deficiency Correction	ACCUM		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
	Rehabilitation	PCT OF EST FED COST		PCT OF EST FED COST	FED COST			
Estimated Federal Cost	\$42,523,000		\$80,500,000		Entire Project	30	TBD	
Programmed Construction	42,523,000		80,500,000		Rehabilitation	98	TBD	
Unprogrammed Construction	0		0		Deficiency Correction	0	TBD	
Estimated Non-Federal Cost	18,107,000		61,100,000					
Programmed Construction					PHYSICAL DATA:			
Cash Contributions (Rehab)	10,323,000 ^{1/}				Rehabilitation			
Other Costs (Rehab)	3,709,000				Floodwall and Levee Work			
Cash Contributions	40,200,000				Small Gravity Drains		21	
(Deficiency Correction)					Large Gravity Drains		10	
Other Cost	3,100,000				Closure Structures		20	
(Deficiency Correction)					Relief Wells		300	
Estimated Non-Federal Cost					Pumping Stations		12	
Unprogrammed Construction					Drainage Control Structures		3	
Cash Contributions		0		0	Bridge Replacements		3	
(Rehabilitation / Deficiency Correction)					Bridge Abandonment and Removal		4	
Other Costs					Channels		6	
(Rehabilitation)	4,075,000						segments	
(Deficiency Correction)	17,800,000				Deficiency Correction			
Total Estimated Programmed Construction Cost	56,555,000		123,800,000		Relief Wells		617	
Total Estimated Unprogrammed Construction Cost	4,075,000		17,800,000		Seepage Berms		5,770 linear feet	
Total Estimated Project Cost	60,630,000		141,600,000		VFD Pump Upgrade		1	
Allocations to 30 September FY 2010	40,461,000		0		61 cfs pump station		1	
Allocation for FY 2011	998,000		0		7 cfs lift station		1	
Allocation for FY 2012	658,000		850,000		Slurry Trench Cutoff Wall		17,340 linear feet	
Conference Allowance for FY 2013	0 ^{2/}		1,290,000 ^{2/}		Shallow Cutoff Wall		2,640 linear feet	
Allocation for FY 2013	0		1,290,000		Clay Filled Cutoff Trench		3,640 linear feet	
Allocation through FY 2013	42,117,000	99	2,140,000	3				
Estimated Carry-in Funds	0 ^{3/}		0 ^{3/}					
Budget Amount for FY 2014	0	99	12,855,000	18				
Programmed Balance to Complete after FY 2014	406,000		65,505,000					
Unprogrammed Balance to Complete After FY 2014	0		0					
Mississippi Valley Division			St. Louis District				East St. Louis, Illinois	
							(Rehabilitation and Deficiency Correction)	

^{1/}A cash contribution of \$13,356,000 is partially offset by a credit of \$3,033,000 for work-in-kind on completed work.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/}Estimated unobligated Carry-in Funding: As of the date this justification was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

JUSTIFICATION: The original project, authorized by the Flood Control Act of 1936, provides protection for 85,000 acres consisting of business, industrial, residential, and metropolitan areas, including East St. Louis, Granite City, Madison, Venice, Brooklyn, Fairmont City, Sauget, and Cahokia, Illinois. The urban design levee was designed to provide flood protection from the Mississippi River to a flood stage of 52 feet on the St. Louis, Market Street gage. The project protects the largest urbanized Mississippi River floodplain north of New Orleans. The rehabilitation project was authorized by the Energy and Water Development Appropriations Act of 1988. As a result of failure of a deteriorated roller gate, localized flooding occurred in 1986 leading to the evacuation of 1,200 residents and causing an estimated \$35,000,000 in property damage. The need for extensive rehabilitation work was confirmed during preparation of a General Design Memorandum for the project during Fiscal Year 1990. Because the levee system protects heavy industry (including chemical manufacturing facilities and steel mills) as well as hazardous/toxic chemical disposal sites (Sauget Area 1 Superfund Site/Sauget Area 2 Superfund site), failure of the levee could create an environmental disaster as well as adversely impact the economy. Flood events occurred in 1973, 1995, 1993, and 2008. 1993 was the flood of record, with an expected frequency of occurrence of once in 300 years. The design frequency against which flood risk reduction is to be provided is 500 year. This project, in addition to preventing damages to property, is effective in reducing a high risk to life for the populations in the project area. The life safety hazard index is: depth 22 feet, warning time 24 hours, and population affected 250,000. The average annual benefits, all flood damage reduction, are \$30,159,000 for the rehabilitation portion of the project. The average annual damages without the project are estimated at \$12,585,000 and \$11,000 with the project for deficiency correction. The average annual benefits, all flood damage reduction, are \$12,574,000 for the deficiency correction portion of the project.

FISCAL YEAR 2013: Unobligated carry-in funds will be used as follows:

Reconstruction:

Construct relief wells/collector system	\$ 102,000
Planning, Engineering, and Design	626,000
Construction Management	58,000
Total	\$786,000

Deficiency Correction:

Construct relief wells	\$ 100,000
Planning, Engineering, and Design	710,000
Construction Management	000
Total	\$810,000

Mississippi Valley Division

St. Louis District

East St. Louis, IL
(Rehabilitation and Deficiency Correction)

FISCAL YEAR 2013: Current year funds are being applied on deficiency correction as follows:

Construct relief wells	\$ 604,000
Planning, Engineering, and Design	592,000
Construction Management	94,000
Total	\$1,290,000

FISCAL YEAR 2014: The budget amount will be used on the deficiency correction project to construct new relief wells and cutoff wall required for underseepage control and for planning, engineering, and design, and construction management. Funds will be applied as follows:

Construct 40 Relief Wells and Grout 27 Existing Wells	\$ 912,000
Construct Slurry Trench Cutoff Wall	8,500,000
Planning, Engineering, and Design	2,600,000
Construction Management	843,000
Total	\$12,855,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$ 3,822,000	
Pay 23.9 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103(m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsor's work-in-kind credit based on Section 215 of the Flood Control Act of 1968.	53,556,000	\$ 786,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for construction of the project.	21,829,000	
Total Non-Federal Costs	\$79,207,000	\$ 786,000

Local interests are also required to operate and maintain all works after completion.

Mississippi Valley Division

St. Louis District

East St. Louis, IL
(Rehabilitation and Deficiency Correction)

STATUS OF LOCAL COOPERATION: The local sponsor, the Metro East Sanitary District, is strongly supportive of the project. Three Project Cooperation Agreements (PCA) were executed for this project - November 1989, 11 December 1990, and 11 March 1992. Amendment No. 1 to the third PCA, crediting the local sponsor for costs of work-in-kind (Clearing & Excavation of Drainage Channels), was executed on 9 August 1994. Amendment No. 2, executed on 2 September 1997, allows the Corps to award a contract for the previously identified work-in-kind and adds mitigation as a project cost feature. A Third Party Agreement, executed in August 1999 between Metro East Sanitary District and Canteen Creek Drainage District, eliminated the requirement for a fourth PCA for this project. In a financial document dated 19 May 1999, the non-Federal sponsor indicated they are financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. In order to restore the authorized level of protection to the levee, additional work will be needed to address critical underseepage and through-seepage problems that manifested themselves during the floods of 1993, 1995 and 2008. The project sponsor has been notified that these problems are the result of design deficiency issues that have been addressed in the LRR and Supplemental LRR. Deficiency correction project costs resulting from the LRR will be maintained separately from the East St. Louis rehabilitation project costs. The Design Agreement for the deficiency correction project was executed 20 December 2012. The Project Partnership Agreement for the deficiency correction project is scheduled to be executed in August 2013.

COMPARISON OF FEDERAL COST ESTIMATES: The current total Federal cost estimate for deficiency correction and rehabilitation of \$123,023,000 is an increase of \$562,000 from the latest estimate of \$122,461,000 submitted to Congress (FY 2013). This change is associated with the rehabilitation project cost estimate and includes the following items:

Price Escalation on Construction Features	\$386,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	176,000
Total	\$562,000

The current Federal cost estimate of \$80,500,000 for the deficiency correction project is the same as the last estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The project consists of rehabilitation of existing facilities and, for the major part of the project, will not affect environmental conditions except for short-term localized impacts. An environmental assessment and Finding of No Significant Impact was signed by the District Commander on 1 August 1991. An environmental assessment and Finding of No Significant Impact for the deficiency correction project supplement was signed by the District Commander on 16 May 2011.

OTHER INFORMATION: Funds to initiate construction of the rehabilitation project were appropriated in Fiscal Year 1988. Funds to initiate construction for the deficiency correction project were appropriated in Fiscal Year 2012. Fish and Wildlife mitigation costs are \$19,000 for rehabilitation project. Fish and Wildlife mitigation costs are estimated at \$879,000 for deficiency correction project.

As a result of the drainage ditch clearing and excavation, mitigation was approved as a project cost per amendment Number 2 to the third PCA and was accomplished on project lands.

Mississippi Valley Division

St. Louis District

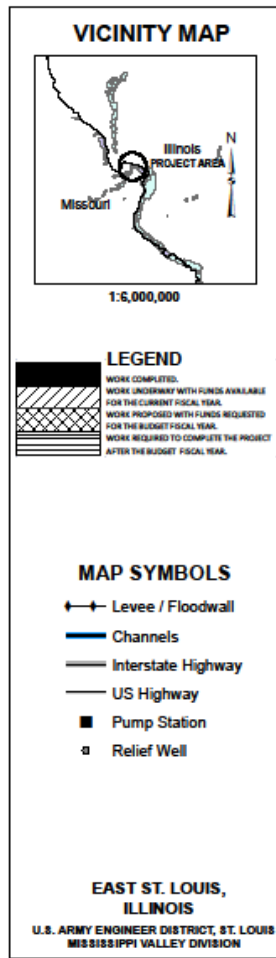
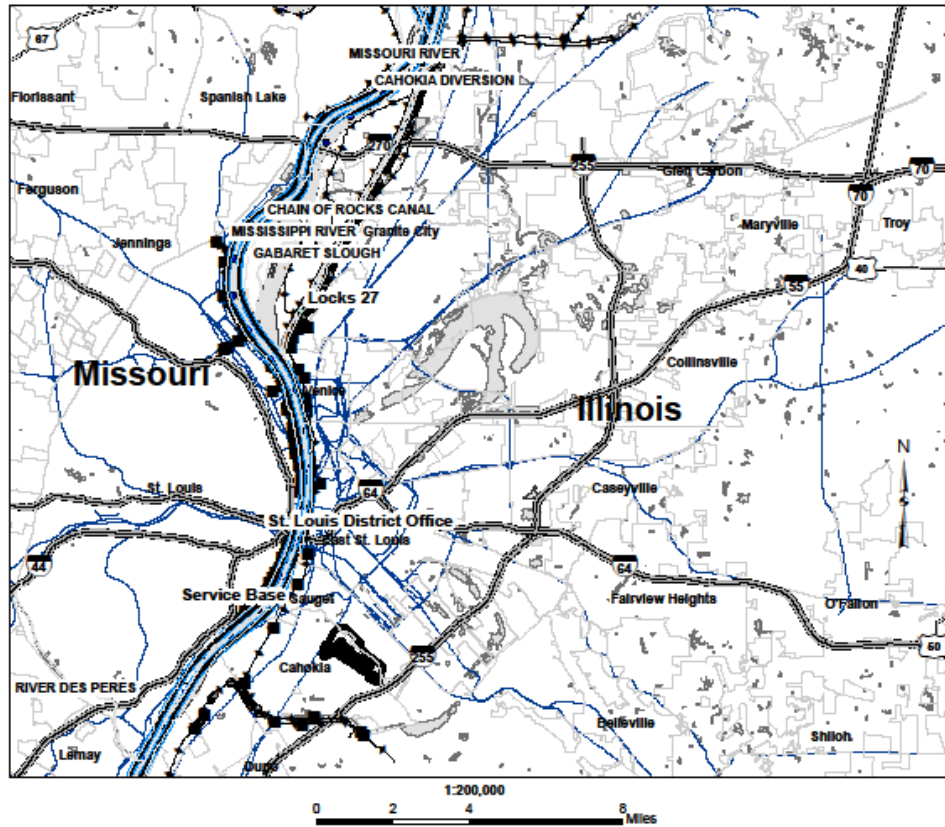
East St. Louis, IL
(Rehabilitation and Deficiency Correction)

Physical completion of the rehabilitation project is largely dependent on the need for low river stages to complete the North Pump Station work. Remaining construction work includes construction of relief wells/collector system and is expected to complete September 2013. The FY 2013 justification sheet reflected 20 August 2010 as the approved date of the LRR for deficiency corrections; the correct date is 31 August 2010.

Breakdown of FY 2013 allocation (\$1,290,000) for deficiency correction reflects a change in projected costs due to recent reanalysis of the work scheduled for FY 2013.

The FY 2013 justification sheet reflected 1.0 as the deficiency correction BCR at 7%; the correct BCR at 7% is 1.1.

The FY 2013 justification sheet reflected \$122,461,000 for the total estimated Federal cost; it should have been \$123,023,000. The total estimated non-Federal cost reflected was \$78,904,000; it should have been \$79,207,000. The total estimated cost reflected was \$201,365,000; it should have been \$202,230,000.



Mississippi Valley Division

St. Louis District

East St. Louis, IL
(Rehabilitation and Deficiency Correction)

APPROPRIATION TITLE: Construction – Major Rehabilitation – Locks and Dams (Navigation)

PROJECT: Illinois Waterway, Lockport Lock and Dam, Illinois (Major Rehabilitation) (Completion)

LOCATION: The project is located within a three mile reach of the Lockport Lock Pool of the Illinois Waterway (River Mile 291.0 - 294.1) at Lockport, Illinois. As part of the Chicago Sanitary and Ship Canal (CSSC), which extends from the Chicago River to the Illinois Waterway, the structures extend up river from the Lockport Lock.

DESCRIPTION: This section of the CSSC is a perched pool sitting 38 feet above the Des Plaines River on the right descending bank and Deep Run Creek on the left descending bank. The Lockport Pool contains several major features that are located on this lower reach of the CSSC, a component of the Illinois Waterway System. The Approach Dike is a high hazard dam and is constructed of limestone cement core wall and non-homogeneous materials dating back as far as the early 1900's, which has deteriorated where its function as a seepage cutoff is limited. The concrete Canal Wall of the CSSC is in an advanced state of concrete deterioration that could affect wall stability. The Controlling Works primarily function as a flood control feature for the CSSC navigation pool. The Controlling Works rehabilitation involves gate bay sub-structure repairs and embankment Reconstruction. The Lockport powerhouse structure and dam retains the navigation pool. The key powerhouse structure components, including the Forebay Wall, are deteriorated and require rehabilitation. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 5.3 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.6 at 5-1/8 percent.

BASIS OF BENEFIT-COST RATIO: The Lockport Pool Rehabilitation Evaluation Report, dated March 2004. Cost estimate is as of May 2012. An economic update will not be prepared as this project is substantially complete and budgeted for completion in FY 2014.

SUMMARIZED FINANCIAL DATA		PHYSICAL STATUS: (1 January 2013)	COMPLETE	PERCENT SCHEDULE	COMPLETION
Estimated Federal Cost	\$130,385,000	Entire Project	80%	TBD	
General Appropriations	115,385,000				
Inland Waterways Trust Fund	15,000,000				
Estimated Non-Federal Cost	0				
Total Estimated Project Cost	\$130,385,000				

PHYSICAL DATA			
Lock – 600 feet long x 110 feet wide.			
	GENERAL APPROPRIATIONS	INLAND WATERWAYS TRUST FUND	ACCUM PCT OF EST FED COST
Allocations to 30 September 2010	\$ 110,090,000 ^{1/}	\$ 0	
Allocation for FY 2011	(222,000) ^{2/}	0	
Allocation for FY 2012	5,517,000 ^{3/}	0	
Conference Allowance for FY 2013	0	\$ 3,600,000 ^{4/}	
Allocation for FY 2013	\$ 0	\$ 3,600,000	
Allocations through FY 2013	\$ 115,385,000 ^{5/}	3,600,000	89%
Estimated Carry-in Funds	\$ 2,000,000 ^{6/}	0	
Budget for FY 2014	\$ 0	\$ 11,400,000	100%
Programmed Balance to Complete after FY 2014	0	0	
Unprogrammed Balance to Complete after FY 2014	0	0	

^{1/} Reflects allocations from ARRA, General appropriations and the Dam Safety and Seepage/Stability Correction Program.

^{2/} Reflects reprogramming of \$2,000 of ARRA and \$220,000 of Construction.

^{3/} Includes reprogramming of \$325,000.

^{4/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{5/} Includes ARRA of \$89,009,657 in FY 2009; (\$31,051,657) in FY 2010; (\$2,260) in FY 2011, and \$1,416,700 in FY 2012.

^{6/} Estimated "Carry-in" funding: As of the date this j-sheet was prepared, the total unobligated dollars estimated to be carried in from prior appropriations for use on this project effort is \$2,000,000. This amount will be used to perform work on the project as follows: Closeout contracts for Canal Wall replacement and Controlling Works repair, design and award contract for partial repair of Forebay Wall.

JUSTIFICATION: The CSSC construction began in 1892 and opened in 1900 allowing water from Lake Michigan, to flow through the Chicago River and into the Des Plaines River at Lockport. An extension was added in 1907 including the Lockport lock, Lockport powerhouse, the lock approach dike, the controlling works, and the concrete guide walls. The Metropolitan Water Reclamation District of Greater Chicago (MWRD), through Congressional action, transferred the maintenance responsibilities for the Lockport Upper Pool retaining structures to USACE in 1984. The CSSC has been in service for over 100 years, and the original Approach Dike was built with a lime cement core wall and non-homogeneous materials, to cut off seepage through the dike, to a height matching river levels in the early 1900's. A cutoff wall to stabilize this embankment was completed as part of the current rehabilitation in FY 2009. The CSSC is perched above surrounding ground levels and can exceed 38 feet in depth. A concrete canal wall separates the CSSC from Deep Run Creek on the left descending bank. This concrete wall was built in stages, and the lower wall area is deteriorating at its key connection to the upper wall. This wall is continually subject to barge strikes and normal freeze-thaw deterioration. Like the dike, loss of one wall section could mean complete loss of pool and a halt to navigation. A contract was awarded in FY 2009 to rehabilitate a 2-mile segment of this and was substantially complete in July 2012. Rehabilitation of the Controlling Works was substantially complete as of September 2012. The powerhouse Forebay Wall, in the Approach Dike Reach, was identified by a Dam Safety Probable Failure Modes Analysis as a credible seepage concern in FY 2011 and needs to be addressed. This component of the Lockport Pool was completed in 1907, and is similar construction to the Canal Wall that collapsed during construction in 2011. Once completed, repair of this Forebay Wall will allow improvement of the Dam Safety Action Classification (DSAC) rating for Lockport Pool. The current DSAC rating is 2, indicating unsafe or potentially unsafe dam conditions.

The powerhouse, controlling works, and dam were all built about the same time and are subject to the same types of deterioration. While the District is only responsible for the base and support structures under the 1984 Congressional action, loss of the base structures could mean total loss of pool and a halt to navigation. These factors affect the District's ability to maintain the safety, reliability, and design service level of these facilities. The average annual benefits are \$16,098,000 for navigation.

Lock tonnage figures for the last twelve years are as follows:

Year	Tonnage	Year	Tonnage	Year	Tonnage	Year	Tonnage
2011	10,552,834	2008	12,460,893	2005	16,929,707	2002	16,872,206
2010	9,853,988	2007	13,507,517	2004	17,341,066	2001	15,970,297
2009	10,240,591	2006	17,259,650	2003	15,310,005	2000	16,788,986

FISCAL YEAR 2013: The total unobligated dollars are being used as follows:

Design and award contract for partial repair of Forebay Wall	\$ 3,800,000
Total	\$ 3,800,000

FISCAL YEAR 2013: The current amount will be applied as follows:

Contract Administration and Closeout (Canal Wall, Controlling Works)	\$ 75,000 ^{1/}
Design and award contract for partial repair of Forebay Wall	\$ 3,525,000 ^{2/}
Total	\$ 3,600,000

^{1/}Contract Administration amount has decreased due to contract completion in FY13.

^{2/}Contract design and award amount has increased due to site conditions discovered during detail design.

FISCAL YEAR 2014: The budget amount plus anticipated FY 2013 carry-in of \$2,000,000 will be used for the Forebay Wall contract and the associated contract management. Funds will be applied as follows:

Award contract for complete repair of Forebay Wall	\$11,000,000
Administer contracts	\$ 2,400,000
Total	\$13,400,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction is to be derived from the Inland Waterways Trust Fund (IWTF). However, the American Reinvestment and Recovery Act of 2009 provided an exemption from withdrawing funds allocated under that Act from IWTF. Also, in the 2009 Energy and Water Development Appropriations Act, the Congress funded work on this project entirely from the General Fund. FY 2013 and FY 2014 funds will be drawn entirely from IWTF to help balance previously appropriated regular construction funds.

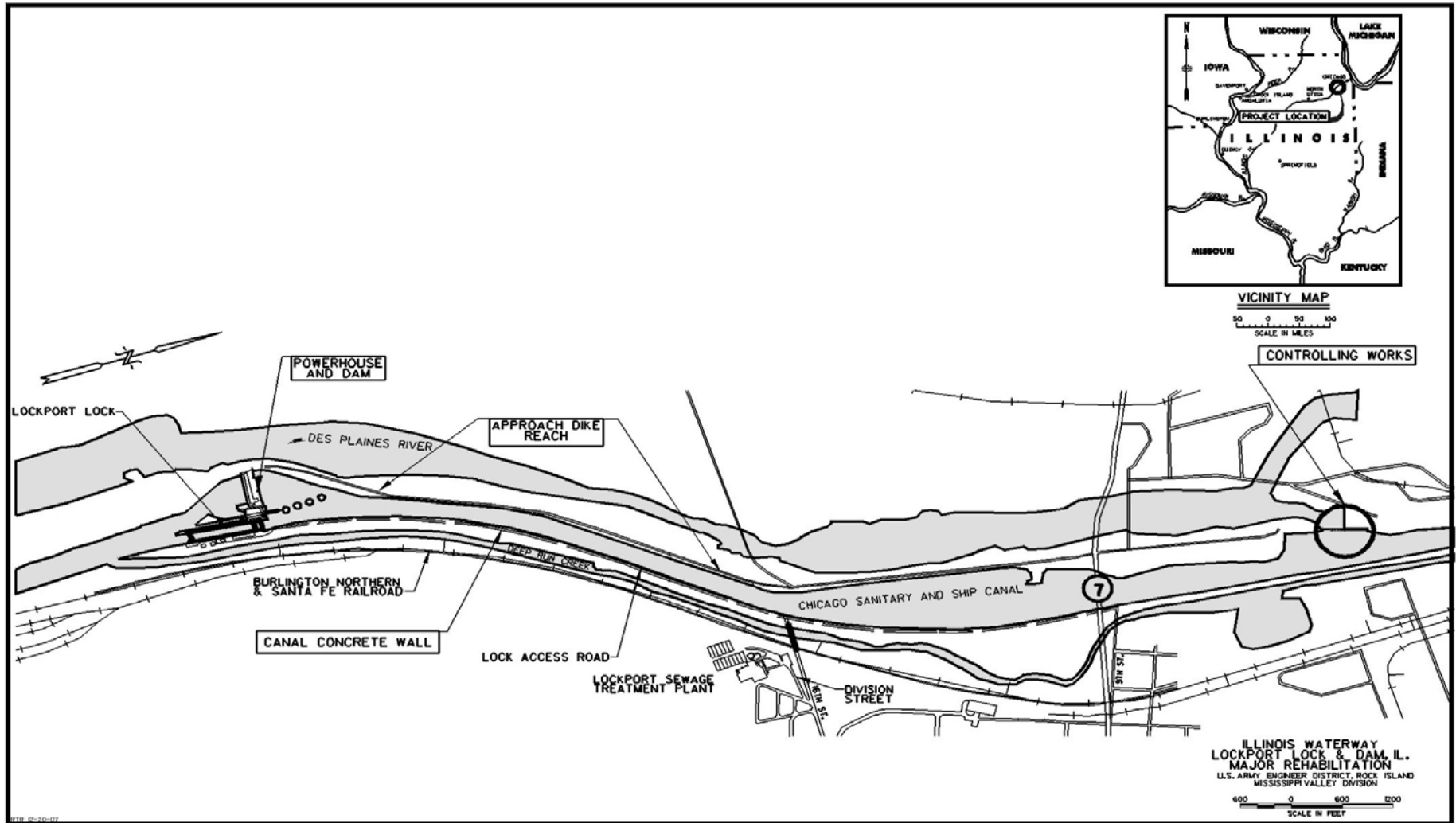
STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$130,385,000 is an increase of \$11,725,000 from the latest estimate (\$118,660,000) presented to Congress (FY 2013). The increase includes additional work needed to improve the reliability of the Lockport Powerhouse Forebay wall against probable failure.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was completed and a Finding of No Significant Impact was signed on 19 May 2004.

OTHER INFORMATION: Operations and Maintenance funds were allocated to initiate and complete the Rehabilitation Evaluation Report. Project was approved to be included in the Dam Safety and Seepage/Stability Correction Program and allocated \$4,700,000 in FY 2006 for PED and construction and FY 2007 funds from the Construction Appropriation. The Lockport Upper Pool Project is currently rated as a DSAC II facility, defined as a dam that has confirmed (unsafe) or unconfirmed (potentially unsafe) dam safety issues.

The FY 2013 use of funds is different than presented to Congress in FY 2013. The Contract Administration amount has decreased due to contract completion in FY 2013. Contract design and award has increased due to site conditions discovered during detail design.



APPROPRIATION TITLE: Construction – Local Protection (Flood Risk Management)

PROJECT: Wood River Levee, Illinois – Deficiency Correction and Reconstruction (Continuing)

LOCATION: The Wood River Levee Project is located in Madison County, Illinois, along the left bank of the Mississippi River between river miles 195 and 203 above the Ohio River. The study area lies in the Mississippi River flood plain of Madison County, Illinois, just upstream of the City of East St. Louis.

DESCRIPTION: The deficiency correction portion of the project includes replacing/modifying 253 existing relief wells and 154 new relief wells. It includes replacing 163 of 170 of the existing relief wells, filling 83 non-functional existing obsolete relief wells with grout, and installing 154 new relief wells under the existing project authorization. The project to correct deficiencies also includes ditching and pipe collector systems; the addition of two 25 cubic feet per second pump stations; one 20 cubic feet per second pump station; 815 linear feet of seepage berm, 1,010 linear feet of landside clay fill, 2,910 linear feet of slurry trench cutoff wall at the riverside levee toe and to bedrock (140 feet deep), 1,060 linear feet of slurry trench cutoff wall (100 feet deep) at the riverside levee toe, 2,875 linear feet of slurry trench cutoff wall (25 ft deep) at the riverside toe, environmental and archeological mitigation work, utility relocations, 9.88 acres flowage easement area, easements for berms, relief wells, slurry trench cutoff wall staging areas and equipment access areas along the levee, disposal areas for material excavated for the slurry trench cutoff walls, and wetland and bottomland hardwood mitigation areas. The reconstruction portion of the project includes the lining or replacement of 38 gravity drains, the rehabilitation of 7 pump stations including pump rehabilitation and structural updates, and the rehabilitation of 26 gates and gate closure structures.

AUTHORIZATION: (Deficiency Correction) Section 4 of Flood Control Act of 1938; (Reconstruction) Section 1001(20) of WRDA 2007. Cost sharing for Deficiency Correction and Reconstruction consistent with Section 103 of Water Resources Development Act (WRDA) of 1986 as amended by Section 202 of WRDA 1996.

REMAINING BENEFIT-REMAINING COST RATIO: (See Basis of Benefit-Cost Ratio.)

TOTAL BENEFIT-COST RATIO: (See Basis of Benefit-Cost Ratio.)

INITIAL BENEFIT-COST RATIO: (See Basis of Benefit-Cost Ratio.)

BASIS OF BENEFIT-COST RATIO:

Deficiency correction – Benefits are based on the Level 4 General Reevaluation Report (GRR) dated March 2006 at October 2005 price level and the Level 4 Limited Reevaluation Report (LRR) for Design Deficiency Corrections, approved 31 August 2011 at May 2011 price level. The initial benefit to cost ratio is 3.6 to 1 at 4 7/8 percent (FY 2008). The current benefit to cost ratio from the approved LRR for Design Deficiency Corrections is 3.1 to 1 at 7 percent. The remaining benefit-remaining cost ratio is 3.1 to 1 at 7 percent.

Reconstruction – Benefits are based on the Level 4 GRR dated March 2006 at October 2005 price level and updated in the Post-Authorization Change Report (PACR) dated 23 August 2012 (scheduled for approval in FY 2013). The initial benefit to cost ratio is 3.4 to 1 at 4 5/8 percent (FY 2010). The current benefit to cost ratio from the PACR is 2.3 to 1 at 7 percent. The remaining benefit-remaining cost ratio is 1.2 to 1 at 7 percent.

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

1 May 2013

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SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
<u>Project Summary</u>					
Estimated Federal Costs	\$62,361,000		<u>Deficiency Correction</u>		
Estimated Non-Federal Costs	\$33,040,000		Entire Project	10	TBD
Cash Contributions	\$28,254,000				
Other Costs	4,786,000		<u>Reconstruction</u>		
Total Estimated Project Costs	95,401,000		Entire Project	93	TBD
<u>Deficiency Correction</u>					
Estimated Federal Cost	\$45,590,000		PHYSICAL DATA:		
Estimated Non-Federal Cost	24,009,000		<u>Deficiency Correction</u>		
Cash Contributions	\$19,223,000		Relief Wells – Existing		253
Other Costs	4,786,000		Relief Wells – New		154
Total Deficiency Correction	\$69,599,000		Pump Stations		3
Allocations to 30 September FY 2010	\$7,476,000		Dams		2
Allocation for FY 2011	968,000		Slurry Trench cutoff wall	6,845 linear feet	
Allocation for FY 2012	212,000	^{1/}	Landside Clay fill	1,010 linear feet	
Conference Allowance for FY 2013	4,202,000	^{2/}	Seepage Berm	815 linear feet	
Allocation for FY 2013	3,961,000	^{3/}	<u>Reconstruction</u>		
Allocation through FY 2013	12,617,000	^{4/} 28	Closure Structures		26
Estimated Carry-in Funds	0	^{6/}	Gravity drains		38
President's Budget for FY 2014	20,860,000	73	Pump Stations		7
Programmed Balance to Complete after FY 2014	12,113,000				

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

1 May 2013

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Reconstruction

Estimated Federal Cost	\$16,771,000		
Estimated Non-Federal Cost	9,031,000		
Cash Contributions	9,031,000		
Other Costs	0		
Total Reconstruction	\$25,802,000		
Allocations to 30 September FY 2010	\$12,520,000		
Allocation for FY 2011	2,231,000		
Allocation for FY 2012	394,000	^{1/}	
Conference Allowance for FY 2013	0	^{2/}	
Allocation for FY 2013	0		
Allocation through FY 2013	15,145,000	^{4,5/}	90
Estimated Carry-in Funds	0	^{6/}	
President's Budget for FY 2014	0		90
Programmed Balance to Complete after FY 2014	1,626,000		

^{1/} Reflects revocation of \$207,000 in ARRA funds.

^{2/} At the time this justification sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/} Reflects revocation of \$241,000 in ARRA funds.

^{4/} Includes American Recovery and Reinvestment Act funds of \$13,935,000.

^{5/} PED costs of \$1,231,000 are included in this amount.

^{6/} Estimated unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: The levee district is protected by an urban design levee, across the Mississippi River from St. Louis and St. Charles counties in Missouri. This existing system includes approximately 21 miles of main line levee, 170 existing relief wells of which 7 are wells installed in 1985 and are not part of the deficiency correction, 26 closure structures, 41 gravity drains of which 3 have been fixed due to emergency, 7 pump stations, and two low water dams. It provides flood protection for residential, commercial, and industrial structures located within a 21.4 square mile area. There are approximately 12,700 acres of bottomland within the district and 4,700 acres of hill land tributary to the levee units. The design frequency against which flood risk reduction is to be provided is 500 year. The maximum flood of record occurred in 1993 when the St. Louis gage recorded 49.58 feet which was approximately a 200-year flood at the Wood River levee. River stage exceeds flood stage in approximately three out of every four years at the Wood River levee. The most recent flood was in 2002 which was approximately 11 feet over flood stage and was about a 10-year flood. For the design event and the without project condition, the average depth and velocity affecting most of the area is 22 feet and 2 feet per second, respectively. In the event of a design flood, overtopping would occur and average warning time is estimated to be 24 hours; however, in case of catastrophic event occurrence (underseepage failure), estimated warning time is less than 6 hours. The limiting factor to leave most of the benefit area is several dozen roads. Certain reaches of the levee system could become unstable during high water events. Levee reaches where problems were identified during the 1993 flood will worsen, while new reaches will begin to demonstrate additional underseepage issues and additional problems. Depending on the level and type of failure experienced there is a potential for the loss of pool at Melvin Price Lock and Dam resulting in a stoppage of river navigation. A catastrophic failure on the Upper Wood River Levee could impact the Lower Wood River Levee, while the Lower Wood River Levee could impact the downstream

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

levee (East St. Louis), potentially affecting an additional 200,000 residents and potentially producing an additional billion dollars in damage. The levee protects in this area a significant amount of industrialization including the region's largest oil refinery (10th largest U.S. refinery of gasoline, jet and diesel fuel), chemical manufacturing, steel manufacturing, and ammunitions production, and protects a residential population of approximately 20,000 in the urban areas. Failure of the levee at the refineries or the other heavy industrial areas adjacent to the system could create an environmental disaster whose recovery costs are projected to be a minimum of \$125,000 per acre not accounting for relocation costs, loss of agricultural lands and damages to the river and surrounding ecosystems. An actual levee failure would result in a major catastrophe; with potential loss of life to thousands of residents in the immediate vicinity, billions of dollars in property damages and potential environmental contamination from oil, oil byproducts and chemicals used in the oil refinement and petrochemical industries adjacent to the levee. Development is expected to continue on the interior as a major Interstate Highway has recently opened in the levee district. The connection that this new highway makes to the regional interstate system increases the likelihood of future development in the project area. At current estimates, levee failure and flooding of the area would cause approximately \$1,500,000,000 in economic damages to residential, commercial and industrial buildings and would shut down transport between Illinois and Missouri at St. Louis as bridge approaches could be submerged. The average annual benefits for the deficiency correction portion of the project, flood control and navigation, are \$13,026,000. The average annual benefits for the reconstruction portion, all flood control, are estimated at \$4,681,300.

FISCAL YEAR 2013: Unobligated carryover funds will be used as follows:

Deficiency Correction	
Initiate Construction of Relief Wells	\$50,000
Planning, Engineering, and Design	93,000
Construction Management	100,000
Total	\$243,000
Reconstruction	
Complete Pump Station and Closure Work	\$127,000
Complete Post Authorization Change Report (PACR)	36,000
Planning, Engineering, and Design	115,000
Construction Management	100,000
Total	\$378,000

FISCAL YEAR 2013: The current amount is being applied as follows:

Deficiency Correction	
Initiate Slurry Trench Cutoff Wall, Reach 1 & 2	\$ 912,000
Initiate Slurry Trench Cutoff Wall, Reach 5	650,000
Initiate Relief Wells	430,000
Initiate Seepage Berms	463,000
Planning, Engineering, and Design	1,579,000
Construction Management	168,000
Total	\$4,202,000

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

FISCAL YEAR 2014: The budget amount will be used to award a contract for relief wells to control underseepage, continue construction of a cutoff wall to control underseepage, prepare a report incorporating local sponsor's 100-year FEMA accreditation project, and for planning, engineering, and design and construction management, funds will be applied as follows:

Deficiency Correction	
Complete Slurry Trench Cutoff Wall, Reach 1 & 2	\$ 1,274,000
Continue Slurry Trench Cutoff Wall, Reach 5	11,782,550
Continue Relief Wells	3,121,480
Continue Seepage Berms	810,000
Planning, Engineering, and Design	1,949,920
Construction Management	1,922,050
Total	\$20,860,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
<u>Deficiency Correction</u>		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$3,632,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	1,154,000	
Pay 35 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 35 percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay, but no less than 5 percent of the costs allocated to flood risk management and bear all cost of operation, maintenance, repair, rehabilitation and replacement of flood risk management features.	\$19,223,000	
Total Deficiency Correction Non-Federal Costs	\$24,009,000	\$243,000

Local interests are also required to operate and maintain all works after completion.

Reconstruction

Pay 35 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 35 percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay, but no less than 5 percent of the costs allocated to flood risk management and bear all cost of operation, maintenance, repair, rehabilitation and replacement of flood risk management features.

\$9,031,000

Total Reconstruction Non-Federal Costs

\$9,031,000

\$185,000

Total Wood River Levee Non-Federal Costs

\$33,040,000

\$428,000

Local interests are also required to operate and maintain all works after completion.

STATUS OF LOCAL COOPERATION: The Wood River Drainage and Levee District is the local sponsor for the project. The Project Partnership Agreement (PPA) was executed on 30 June 2008 in support of the GRR, which dealt with issues involving the reconstruction and design deficiency portions of the project. The Design Agreement for the deficiency corrections was executed on 28 November 2012. The PPA for new deficiency corrections is tentatively scheduled for execution in FY 2013.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$62,361,000 is an increase of \$15,362,000 from the latest estimate (\$46,999,000) submitted to Congress (FY 2013). Other Information paragraph explains error in last year's comparison and this year's data. This change includes the following items:

Price Escalation on Construction Features	\$1,801,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	13,561,000
Total	\$15,362,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was completed in July 2005. A Finding of No Significant Impact was signed on 23 March 2006. An environmental assessment for the deficiency correction project was completed in July 2011. A Finding of No Significant Impact was signed on 31 August 2011 for the deficiency correction project.

OTHER INFORMATION:

Deficiency correction - Funds to initiate preconstruction engineering and design were appropriated in FY 2000 and construction funds were appropriated in FY 2008. The current approved GRR recommended that the project requires no mitigation. Based on the approved LRR, mitigation construction costs are estimated to be \$114,000.

Reconstruction – Funds to initiate construction were appropriated in FY 2009. The current approved GRR recommended that the project requires no mitigation. The PACR recommends that the project requires no mitigation.

Mississippi Valley Division

St. Louis District

Wood River Levee, IL
(Deficiency Correction and Reconstruction)

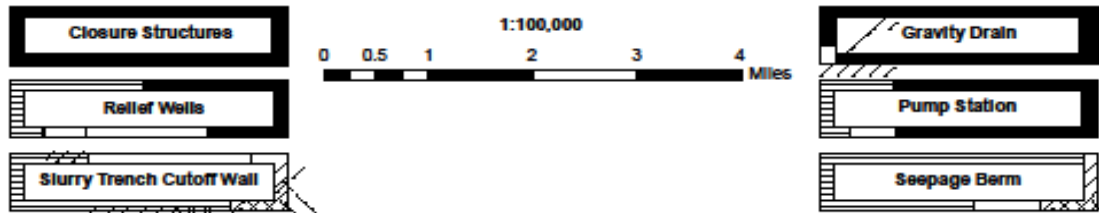
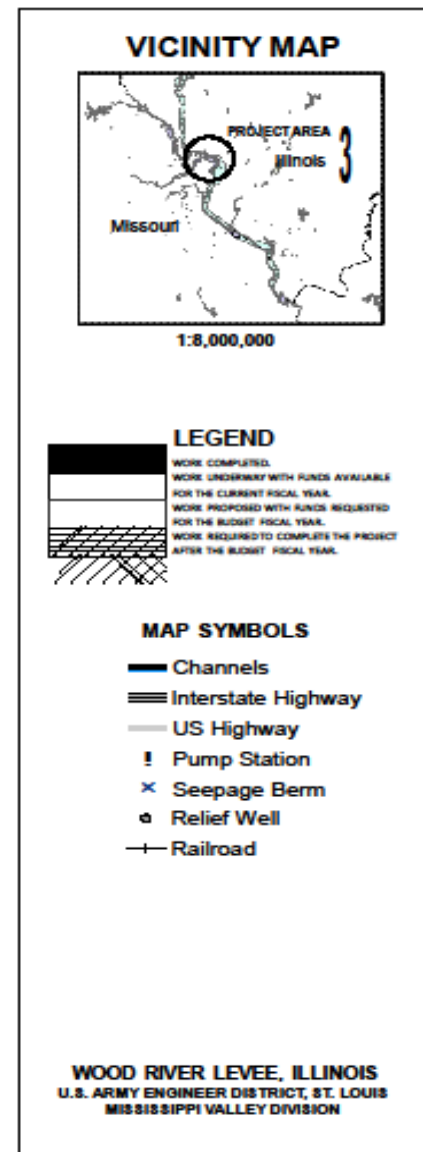
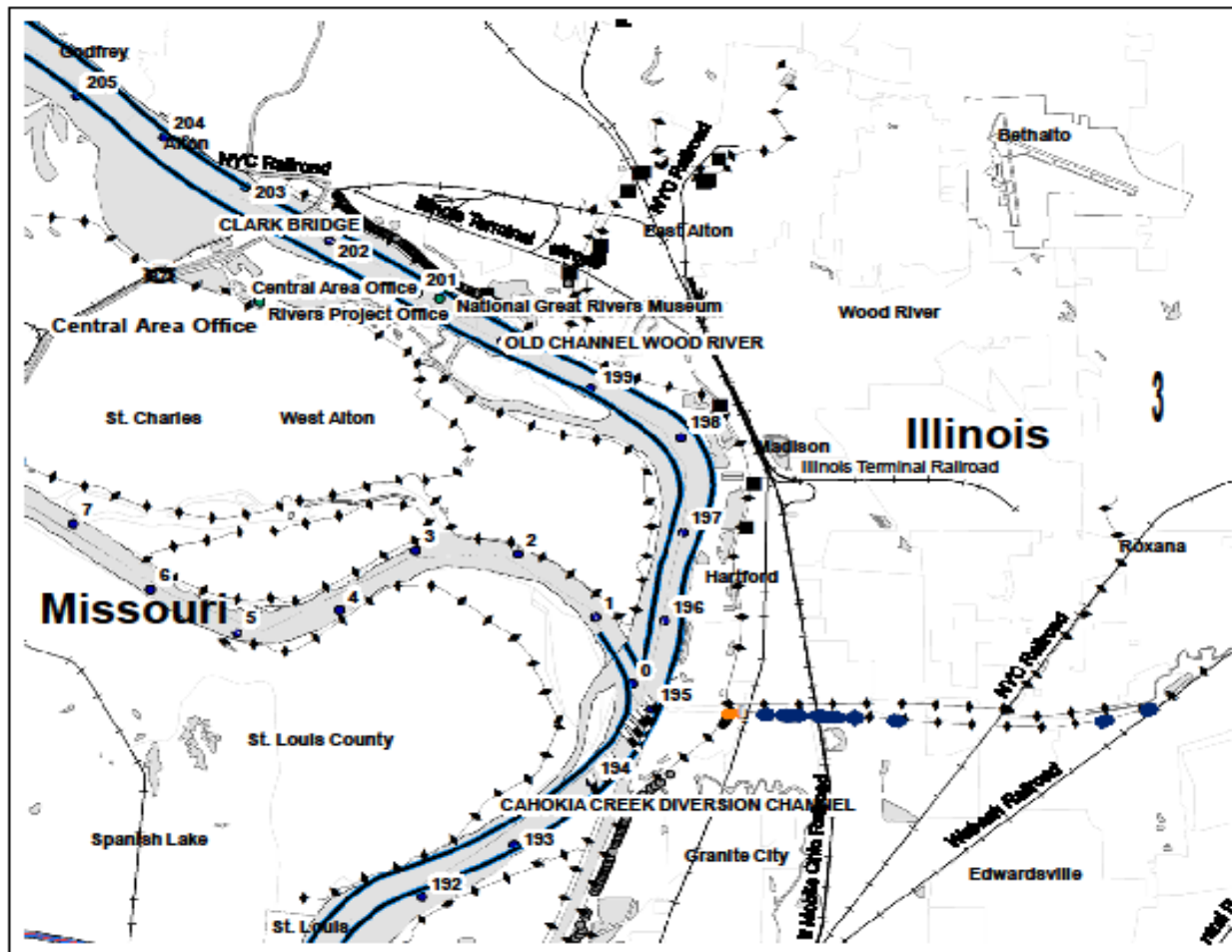
1 May 2013

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The FY 2013 justification erroneously reflected \$46,999,000 as the Federal cost estimate; it inadvertently omitted the original deficiency correction effort addressed in the March 2006 GRR. As a result, last year's comparison should have reflected an increase of \$32,807,000 (\$1,267,000 price escalation and \$31,540,000 post contract award costs), which includes \$29,317,000 for the federal cost of design and construction of additional needed under seepage measures included in the 31 August 2011 approved LRR and \$2,223,000 for reconstruction). Had last year's comparison been reflected correctly, this year's comparison would have reflected an increase of \$5,127,000 (from \$57,234,000 to \$62,361,000) for price escalation increases of \$554,000 and post contract award adjustments of \$4,573,000. The total cost estimate of the reconstruction portion of the project exceeds the Section 902 limit of \$23,414,000; a PACR has been prepared and is pending approval. No funds are being requested in FY 2014 for reconstruction, pending additional authorization. The total project cost estimate is based on a completed PACR.

Correction of performance problems that resulted from deficiencies (relief wells) would not require further authorization. Deficiency correction and reconstruction project features will be cost shared 65 percent Federal and 35 percent non-Federal in accordance with Section 103 of WRDA 1986, as amended by Section 202 of WRDA 1996.

Breakdown of FY 2013 allocation (\$4,202,000) reflects redirection of funds to the approved deficiency correction underseepage LRR measures. This is due to Section 902 constraints associated with the reconstruction effort.



Mississippi Valley Division

St. Louis District

Wood River Levee, IL
 (Deficiency Correction and Reconstruction)

1 May 2013

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APPROPRIATION TITLE: Construction – Environmental Mitigation, Restoration, and Protection

PROJECT: Upper Mississippi River Restoration, Illinois, Iowa, Minnesota, Missouri, and Wisconsin (Continuing)

LOCATION: The project is authorized for those river reaches having commercial navigation channels on the Upper Mississippi River, Illinois River, Minnesota River, St. Croix River, and Kaskaskia River in the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The following counties are included: (Illinois) Jo Daviess, Carroll, Whiteside, Rock Island, Mercer, Henderson, Hancock, Adams, Pike, Calhoun, Jersey, Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, Pulaski, Brown, Cass, Schuyler, Fulton, Mason, Peoria, Tazewell, Woodford, Marshall, Putnam, Bureau, LaSalle, Grundy, Will; (Iowa) Allamakee, Clayton, Dubuque, Jackson, Clinton, Scott, Muscatine, Louisa, Des Moines, Lee; (Wisconsin) St. Croix, Pierce, Pepin, Buffalo, Trempealeau, La Cross, Vernon, Crawford, Grant; (Minnesota) Anoka, Hennepin, Scott, Dakota, Ramsey, Washington, Goodhue, Wabasha, Winona, Houston; (Missouri) Clark, Lewis, Marion, Ralls, Pike, Lincoln, St. Charles, St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi.

DESCRIPTION: The purpose of the Upper Mississippi River Restoration program is to address adverse impacts to the aquatic ecosystem of the Upper Mississippi River, which were caused by many factors; these include population growth and more intensive land use within the watershed, and changes in the river due to construction and maintenance of the inland navigation system. Habitat rehabilitation and enhancement projects are effectively preserving and improving fish and wildlife habitat on the Upper Mississippi River System (UMRS). Projects completed to date have been designed to counteract the effects of backwater sedimentation through dike construction to limit sedimentation of prime habitat and dredging to restore aquatic habitat; provide water level control and optimal food growth for waterfowl; create islands to decrease wind generated disturbances, thereby reducing turbidity; alter the flow of water to side channels and backwaters to decrease flows of sediment-laden water during high water and to increase dissolved oxygen levels during low water; increase the diversity and abundance of mast (nut) producing trees and prairies to benefit wildlife. Long-Term Resource Monitoring provides scientific information for more informed management of the UMRS ecosystem. Ninety-seven percent of authorized Upper Mississippi River Restoration appropriations have been used to design and construct habitat rehabilitation and enhancement projects and for Long-Term Resource Monitoring. Recreation development is also an authorized program element, although not a current program focus.

AUTHORIZATION: Fiscal Year 1985 Supplemental Appropriations Act, P.L. 99-88; Water Resources Development Act (WRDA) of 1986, PL 99-662, Section 1103; WRDA of 1990, P.L. 101-640, Section 405; WRDA of 1992, P.L. 102-580, Section 107; WRDA of 1999, P.L. 106-53, Section 509; and the WRDA of 2007, P.L. 110-114, Section 3177.

REMAINING BENEFIT-REMAINING COST: The remaining benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms. Projects within the Upper Mississippi River Restoration project are selected for design and construction based on continued assessment of habitat restoration and enhancement opportunities as determined by the involved Federal and non-Federal partners.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

BASIS OF BENEFIT-COST RATIO: The basis for the benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM	PCT OF EST	FED COST
Estimated Federal Cost		\$ 925,783,000		
Estimated Non-Federal Cost		12,549,000		
Cash Contribution	\$ 12,549,000			
Other Costs	0			
Total Estimated Project Cost		\$ 938,332,000		
Allocations to 30 September 2010		\$383,724,000	<u>1/</u>	
Allocations for FY 2011		\$ 19,408,000		
Allocation for FY 2012		17,466,000	<u>2/</u>	
Conference Allocation for FY 2013		17,880,000	<u>3/</u>	
Allocation for FY 2013		17,880,000		
Allocations through FY 2013		438,478,000	<u>4/</u>	47
Estimated Unobligated Carry-in Funds		0	<u>5/</u>	
Budget for FY 2014		31,968,000		51
Programmed Balance to Complete After FY 2014		455,337,000		
Unprogrammed Balance to Complete After FY 2014		0		

1/ Allocations include Supplemental Appropriations as well as American Recovery and Reinvestment Act (ARRA) funds.

2/ Funding in the amount of (\$315,000) (ARRA) and (\$5,600) (Supplemental Appropriations) was returned in FY 2012.

3/ At the time this justification sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

4/ Includes ARRA funding of \$14,847,000 in FY 2009; (\$918,000) in FY 2010; (\$8,000) in FY 2011; and (\$315,000) in FY 2012.

5/ Estimated unobligated "Carry-in" funding: As of the date this justification sheet was prepared, the total dollars estimated to be carried in from prior appropriations for use on this project effort is \$0. This amount will be used to perform the project as follows: N/A.

STATUS:		PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Long Term Resource Monitoring		NA	NA
Economic Impacts of Recreation Study		100	(Sep 92)
Traffic Monitoring		100	(Sep 90)
Habitat Rehabilitation and Enhancement Projects (Construction)			
Angle Blackburn, MO	ST. LOUIS DISTRICT	0	Deferred
Batchtown Mgt. Area, IL	ST. LOUIS DISTRICT	88	(Aug 17)
Calhoun Point, IL	ST. LOUIS DISTRICT	100	(Aug 11)
Clarence Cannon NWR, MO	ST. LOUIS DISTRICT	7	TBD
Clarksville Refuge, MO	ST. LOUIS DISTRICT	100	(Apr 90)
Cuivre Island, MO	ST. LOUIS DISTRICT	100	(Jul 99)
Dresser Island, MO	ST. LOUIS DISTRICT	100	(Sep 91)
Establishment Chute, MO	ST. LOUIS DISTRICT	0	Deferred
Godar Wetland Complex, IL	ST. LOUIS DISTRICT	2	TBD
Glades Wetland Complex, IL	ST. LOUIS DISTRICT	2	TBD
Jefferson Barracks Side Channel, IL	ST. LOUIS DISTRICT	0	Deferred
Harlow Island, MO	ST. LOUIS DISTRICT	1	TBD
Least Tern, MO	ST. LOUIS DISTRICT	22	Deferred
Norton Woods, MO	ST. LOUIS DISTRICT	0	Deferred
Pharrs Island, MO	ST. LOUIS DISTRICT	100	(Jun 92)
Piasa & Eagle Nest Island, IL	ST. LOUIS DISTRICT	3	TBD
Pool 24 Islands, MO	ST. LOUIS DISTRICT	2	TBD
Pools 25 and 26, MO	ST. LOUIS DISTRICT	40	(Sep 16)
Reds Landing, IL	ST. LOUIS DISTRICT	2	TBD
Rip Rap Landing, IL	ST. LOUIS DISTRICT	8	TBD
Salt Lake/Ft Chartres S.C., IL	ST. LOUIS DISTRICT	7	TBD
Stag & Keaton Is., MO	ST. LOUIS DISTRICT	100	(Sep 98)
Stump Lake, IL	ST. LOUIS DISTRICT	100	(Nov 98)
Schenimann, MO	ST. LOUIS DISTRICT	15	TBD
Stone Dike Alteration, IL/MO	ST. LOUIS DISTRICT	10	Deferred
Swan Lake, IL	ST. LOUIS DISTRICT	98	(Dec 15)
Ted Shanks, MO	ST. LOUIS DISTRICT	20	(Oct 22)
West Alton Missouri Islands	ST. LOUIS DISTRICT	2	TBD
Wilkinson Island, IL	ST. LOUIS DISTRICT	5	TBD

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

STATUS:
(Continued)

PERCENT
COMPLETE

PHYSICAL
COMPLETION
SCHEDULE

Andalusia Refuge, IL	ROCK ISLAND DISTRICT	100	(Dec 94)
Banner Marsh, IL	ROCK ISLAND DISTRICT	100	(Dec 03)
Bay Island, MO	ROCK ISLAND DISTRICT	100	(Nov 94)
Beaver Island, IA	ROCK ISLAND DISTRICT	3	TBD
Bertom Lake, WI	ROCK ISLAND DISTRICT	100	(Jun 92)
Big Timber, IA	ROCK ISLAND DISTRICT	100	(Jun 95)
Boston Bay, IL	ROCK ISLAND DISTRICT	1	TBD
Brown's Lake, IA	ROCK ISLAND DISTRICT	100	(Sep 94)
Chautauqua Refuge, IL	ROCK ISLAND DISTRICT	100	(Dec 03)
Cottonwood Island, MO	ROCK ISLAND DISTRICT	100	(Dec 99)
DeLair Division, IL	ROCK ISLAND DISTRICT	1	TBD
Fox Island, MO	ROCK ISLAND DISTRICT	80	(Apr 15)
Gardner Div., IL	ROCK ISLAND DISTRICT	100	(Jan 98)
Huron Island, IA	ROCK ISLAND DISTRICT	25	(May 17)
Keithsburg Division, IL	ROCK ISLAND DISTRICT	1	TBD
Lake Odessa, IA	ROCK ISLAND DISTRICT	100	(Sep 11)
Pool 11 Islands, WI/IA	ROCK ISLAND DISTRICT	100	(Sept 07)
Pleasant Creek, IA	ROCK ISLAND DISTRICT	100	(Jan 03)
Monkey Chute, MO	ROCK ISLAND DISTRICT	100	(Aug 89)
Peoria Lake, IL	ROCK ISLAND DISTRICT	100	(Sep 97)
Peosta Channel, IA	ROCK ISLAND DISTRICT	0	Deferred
Pool 12 Overwintering IA/IL	ROCK ISLAND DISTRICT	27	(Sep 19)
Potters Marsh, IL	ROCK ISLAND DISTRICT	100	(Jun 18)
Princeton, IA	ROCK ISLAND DISTRICT	100	(Dec 01)
Rice Lake, IL	ROCK ISLAND DISTRICT	60	(Sep 15)
Smith's Creek, IA	ROCK ISLAND DISTRICT	9	Deferred
Snyder Slough, WI	ROCK ISLAND DISTRICT	1	TBD
Spring Lake, IL	ROCK ISLAND DISTRICT	100	(Sep 01)
Steamboat Island, IA	ROCK ISLAND DISTRICT	1	TBD
Turkey Island, IA/WI	ROCK ISLAND DISTRICT	1	TBD

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

1 May 2013

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STATUS:
(Continued)

PHYSICAL
COMPLETE

PHYSICAL
COMPLETION
SCHEDULE

Ambrough Slough, WI	ST. PAUL DISTRICT	100	(Sep 04)
Bass Ponds, MN	ST. PAUL DISTRICT	0	TBD
Blackhawk Park, WI	ST. PAUL DISTRICT	100	(Nov 90)
Bussey Lake, IA	ST. PAUL DISTRICT	100	(Jun 96)
Capoli Slough, WI	ST. PAUL DISTRICT	30	(Sep 14)
Clear Lake, MN	ST. PAUL DISTRICT	0	TBD
Cold Springs, WI	ST. PAUL DISTRICT	100	(Aug 94)
Conway Lake, IA	ST. PAUL DISTRICT	45	TBD
East Channel, WI, MN	ST. PAUL DISTRICT	100	(Jun 97)
Finger Lakes, MN	ST. PAUL DISTRICT	100	(Jul 94)
Guttenberg Waterfowl Ponds, IA	ST. PAUL DISTRICT	100	(Oct 90)
Harpers Slough, IA	ST. PAUL DISTRICT	15	TBD
Indian Slough, WI	ST. PAUL DISTRICT	100	(Jun 94)
Island 42, MN	ST. PAUL DISTRICT	100	(May 87)
Lake Onalaska, WI	ST. PAUL DISTRICT	100	(Jul 90)
Lake Winneshiek, WI	ST. PAUL DISTRICT	18	TBD
Lansing Big Lake, IA	ST. PAUL DISTRICT	100	(Nov 94)
Lock & Dam 3 Fish Passage, MN/WI	ST PAUL DISTRICT	18	TBD
Long Lake, WI	ST. PAUL DISTRICT	100	(May 00)
Long Meadow Lake, MN	ST. PAUL DISTRICT	100	(Nov 06)
Lower Pool 10 Islands & Backwater Complex, IA	ST. PAUL DISTRICT	1	TBD
McGregor Lake, WI	ST. PAUL DISTRICT	1	TBD
Miss. River Bank Stabilization, MN/WI	ST. PAUL DISTRICT	100	(Sep 99)
North & Sturgeon Lakes, MN	ST PAUL DISTRICT	2	TBD
Peterson Lake, MN	ST. PAUL DISTRICT	100	(Jun 96)
Polander Lake, MN	ST. PAUL DISTRICT	100	(Nov 00)
Pool 8 Isl, Phase I, WI	ST. PAUL DISTRICT	100	(Jun 93)
Pool 8 Isl, Phase II, WI	ST. PAUL DISTRICT	100	(Sep 99)
Pool 8 Isl, Phase III, WI	ST. PAUL DISTRICT	100	(Jul 12)

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

1 May 2013

MVD-69

STATUS: (Continued)		PHYSICAL COMPLETE	PHYSICAL COMPLETION SCHEDULE
Pool 9 Island, WI	ST. PAUL DISTRICT	100	(Jun 95)
Pool Slough, IA	ST. PAUL DISTRICT	100	(Apr 07)
Rice Lake, MN	ST. PAUL DISTRICT	100	(Nov 98)
Small Scale Drawdown, WI	ST. PAUL DISTRICT	100	(Sep 97)
Spring Lake Peninsula, WI	ST. PAUL DISTRICT	100	(Nov 94)
Spring Lake Islands, WI	ST. PAUL DISTRICT	100	(Jul 06)
Trempealeau NWR, WI	ST. PAUL DISTRICT	100	(Sep 99)
Weaver Bottoms, MN	ST. PAUL DISTRICT	0	TBD
Whitewater River, MN	ST. PAUL DISTRICT	2	Deferred
Recreation		0	Unscheduled
Habitat Needs Assessment		100	(Sep 00)

JUSTIFICATION: Implementation of the Upper Mississippi River Restoration project is essential to the continued viability of the ecosystem of the Upper Mississippi River and important to the long-term public acceptance and support of Upper Mississippi River System (UMRS) navigation activities. Habitat rehabilitation and enhancement projects help reduce the negative effects of navigation features on the system's backwater and side channels. Projects are selected for design and construction based on continued assessment of habitat restoration and enhancement opportunities as determined by the involved Federal and non-Federal partners and following the project sequencing process adopted in 2003. Long-Term Resource Monitoring provides data to indicate trends in key environmental parameters, analyzing sedimentation and other UMRS resource problems, and producing a spatial information database. An Economic Impacts of Recreation Study has been conducted to enable Federal and non-Federal management decisions to better consider impacts on recreation and the consequent changes in recreation-related expenditures in the local and regional economies.

FISCAL YEAR 2013: The Total unobligated dollars are being used as follows:

PROJECT	DISTRICT	AMOUNT	STATUS
Ted Shanks, MO	ST. LOUIS DISTRICT	11,000	Continue Construction
Pool 12, IL	ROCK ISLAND DISTRICT	337,000	Initiate Construction
Capoli Slough, WI	ST. PAUL DISTRICT	420,000	Continue Construction
Total		768,000	

FISCAL YEAR 2013: The requested amount will be used to continue design on multiple projects, initiate planning on three new projects, initiate construction on one project and to continue monitoring and other restoration-related activities, as follows:

PROJECT	DISTRICT	AMOUNT	STATUS
Batchtown Mgmt Area, IL	ST. LOUIS DISTRICT	250,000	Continue Construction
Clarence Cannon, NWR, MO	ST. LOUIS DISTRICT	175,000	Continue Design
Piasa and Eagles Nest Islands, IL	ST. LOUIS DISTRICT	200,000	Continue Design
Pool 25 and 26, MO	ST. LOUIS DISTRICT	400,000	Continue Construction
Red's Landing, IL	ST. LOUIS DISTRICT	105,000	Continue Design
Rip Rap Landing, IL	ST. LOUIS DISTRICT	350,000	Continue Design
Swan Lake, IL	ST. LOUIS DISTRICT	150,000	Continue Construction
Ted Shanks, MO	ST. LOUIS DISTRICT	1,201,000	Continue Construction
Schenimann, MO	ST. LOUIS DISTRICT	25,000	Continue Design
Wilkinson Island, IL	ST. LOUIS DISTRICT	25,000	Continue Design
Beaver Island, IA	ROCK ISLAND DISTRICT	250,000	Continue Design
Huron Island, IA	ROCK ISLAND DISTRICT	300,000	Continue Design
Rice Lake, IL	ROCK ISLAND DISTRICT	200,000	Continue Construction
Pool 12, IL	ROCK ISLAND DISTRICT	3,591,000	Initiate Construction
Boston Bay, IL	ROCK ISLAND DISTRICT	100,000	Continue Design
Steamboat Island, IA	ROCK ISLAND DISTRICT	50,000	Continue Design
Illinois River	ROCK ISLAND DISTRICT	50,000	Initiate Planning
DeLair Division, IL	ROCK ISLAND DISTRICT	50,000	Initiate Planning
Turkey Island, IA/WI,	ROCK ISLAND DISTRICT	50,000	Initiate Planning
Capoli Slough, WI	ST. PAUL DISTRICT	3,100,000	Continue Construction
Harpers Slough, IA	ST. PAUL DISTRICT	330,000	Complete Design/Initiate Construction
Conway Lake, IA	ST. PAUL DISTRICT	250,000	Continue Design
North/Sturgeon Lake, MN	ST. PAUL DISTRICT	250,000	Continue Design
Lake Winneshiek, WI	ST. PAUL DISTRICT	150,000	Continue Design
Regional Project Sequencing		75,000	

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

Habitat Evaluation/Monitoring	200,000
Public Outreach	50,000
Model Certification/Regional HREP	150,000
Long Term Resource Monitoring	5,379,000
Adaptive Management	100,000
Regional Program Management	324,000
Total	17,880,000 <u>1/</u>

1/ FY12 funds in the amount of \$600,000 were reallocated from St. Louis District to St. Paul District. This reallocation resulted in changes to the FY13 individual project distribution amount.

FISCAL YEAR 2014: The requested amount will be used to continue design and construction on multiple projects under way in FY 2013 and continue monitoring and other restoration-related activities, as follows:

PROJECT	DISTRICT	AMOUNT	STATUS
Batchtown Mgmt Area, IL	ST. LOUIS DISTRICT	500,000	Continue Construction
Clarence Cannon, NWR, MO	ST. LOUIS DISTRICT	400,000	Continue Design
Piasa and Eagles Nest Islands, IL	ST. LOUIS DISTRICT	285,000	Continue Design
Pool 25 and 26, MO	ST. LOUIS DISTRICT	450,000	Continue Construction
Red's Landing, IL	ST. LOUIS DISTRICT	200,000	Continue Design
Rip Rap Landing, IL	ST. LOUIS DISTRICT	450,000	Continue Design
Swan Lake, IL	ST. LOUIS DISTRICT	200,000	Continue Construction
Ted Shanks, MO	ST. LOUIS DISTRICT	5,120,000	Continue Construction
Schenimann, MO	ST. LOUIS DISTRICT	25,000	Continue Design
Wilkinson Island, IL	ST. LOUIS DISTRICT	25,000	Continue Design
Beaver Island, IA	ROCK ISLAND DISTRICT	325,000	Continue Design
Huron Island, IA	ROCK ISLAND DISTRICT	2,225,000	Continue Construction
Rice Lake, IL	ROCK ISLAND DISTRICT	245,000	Continue Construction
Pool 12, IL	ROCK ISLAND DISTRICT	8,035,000	Continue Construction
Boston Bay, IL	ROCK ISLAND DISTRICT	150,000	Continue Design
Steamboat Island, IA	ROCK ISLAND DISTRICT	50,000	Continue Design
Capoli Slough, WI	ST. PAUL DISTRICT	2,400,000	Complete Phase and Construction
Harpers Slough, IA	ST. PAUL DISTRICT	3,500,000	Complete Phase/Continue Construction
Conway Lake, IA	ST. PAUL DISTRICT	100,000	Continue Design
North/Sturgeon Lake, MN	ST. PAUL DISTRICT	300,000	Continue Design
Mississippi Valley Division	Rock Island District		Upper Mississippi River Restoration, IL, IA, MN, MO, and WI

Lake Winneshiek, WI	ST. PAUL DISTRICT	127,000	Continue Design
Regional Project Sequencing		75,000	
Habitat Evaluation/Monitoring		750,000	
Public Outreach		50,000	
Model Certification/Regional HREP		150,000	
Long Term Resource Monitoring		5,226,000	
Adaptive Management		155,000	
Regional Program Management		450,000	
Total		31,968,000	

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 and amended by Section 107(b) of the Water Resources Development Act of 1999, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 25 percent of the first costs allocated to fish and wildlife enhancement for the following projects:		
Baldwin Backwater, IL	\$ 624,000	
Banner Marsh, IL	1,780,000	
Batchtown, IL	146,000	
Blackhawk Park, WI	77,000	
Bussey Lake, IA	162,000	
Cuivre Island, MO	479,000	
Osborne Channel, IL	190,000	
Peoria Lake, IL	42,000	
Princeton, IA	54,000	
Swan Lake, IL	262,000	
Subtotal	\$ 3,816,000	\$ 0

Pay 35 percent of the first costs allocated to fish and wildlife enhancement for the following projects:

Alton Pool		\$ 231,000
Mississippi Valley Division	Rock Island District	Upper Mississippi River Restoration, IL, IA, MN, MO, and WI

Ambrough Slough, WI	166,000	
KasKasKia Oxbows	350,000	
Pool Slough, IA, MN	175,000	
Rice Lake, IL	7,280,000	
Smith Creek, IA	300,000	
Rip Rap Landing	231,000	
Subtotal	\$ 8,733,000	\$ 0
Pay 50 percent of the first costs allocated to recreation projects.	0 ^{1/}	
Total Non-Federal Construction Costs	\$ 12,549,000	\$ 0

^{1/} No recreation projects scheduled.

The non-Federal sponsors have agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: A Project Agreement is required only for projects that are not located on lands managed as a national wildlife refuge.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$925,783,000 is an increase of \$149,588,000 from the latest estimate (\$776,195,000) presented to Congress (FY 2013). Costs increased due to the approval of additional fact sheets and increased costs resulting from updates and inflation.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: National Environmental Policy Act compliance is accomplished prior to implementation of each individual project.

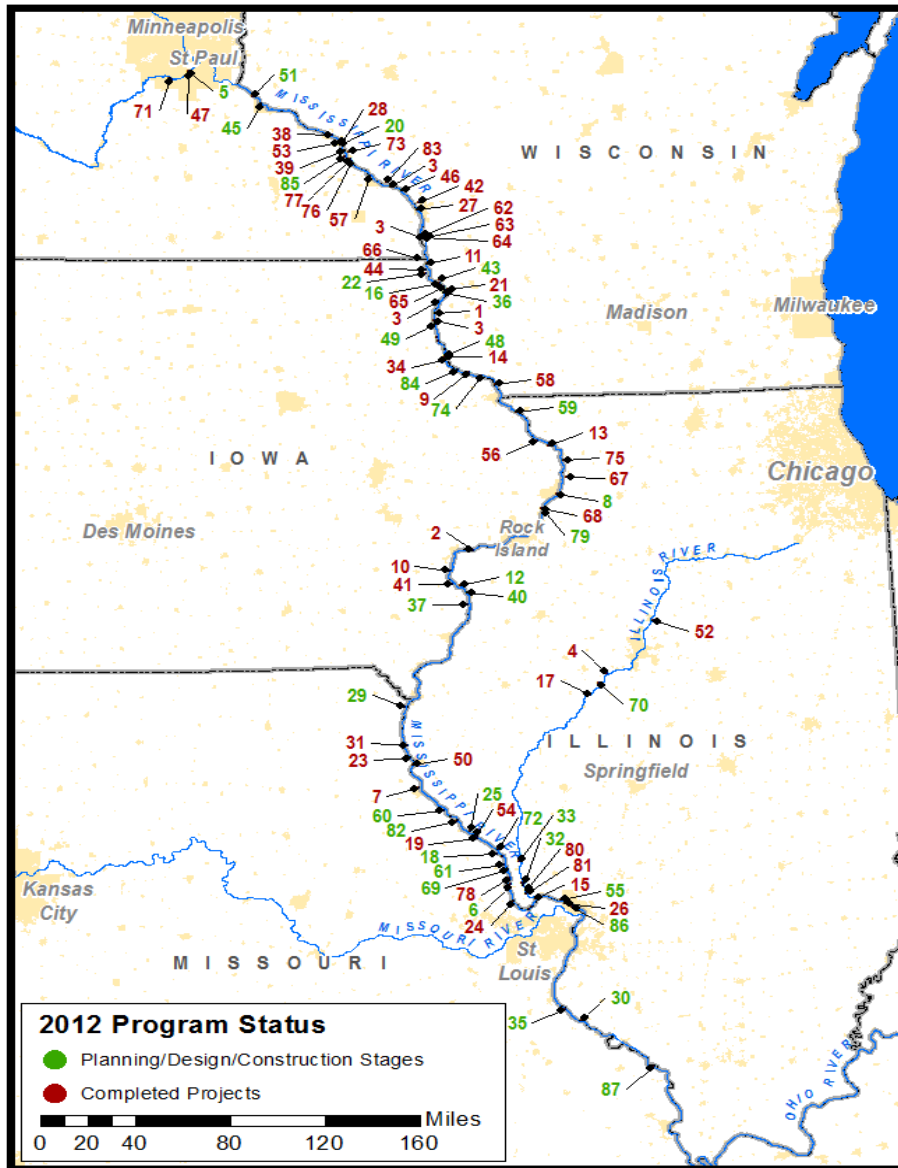
OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985. The Water Resources Development Act of 1999, P.L. 106-53, amends the previous authority to increase annual appropriation limits available to the project; requires submission of a report to Congress on a 6 year cycle which began in December 2004 to evaluate projects, accomplishments, systemic habitat needs, and identifies any needed changes to the project authorization; and authorized an independent technical review committee through FY 2009. To date the program has received \$4,987,732 in Supplemental Appropriations due to flood damages at Odessa Habitat site and \$13,606,537 of American Recovery and Reinvestment Act (ARRA) funds.

This project was authorized in Section 1103, WRDA 1986 as amended in Section 405, WRDA 1990, Section 107, WRDA 1992, and Section 509, WRDA 1999, Section 3177, WRDA 2007 as the Upper Mississippi River System Environmental Management Program (Section 3177, WRDA 2007). Since 2006, this program has been budgeted and funds appropriated under the name Upper Mississippi River Restoration, IL, IA, MN, MO, WI.

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI



Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

1 May 2013

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EMP HREP Projects	Site Ref.	EMP HREP Projects	Site Ref.
Ambrough Slough	1	Long Meadow Lake	47
Andalusia Refuge	2	Lower Pool 10 Island and Backwater Complex	48
Banner Marsh	4	Mcgregor Lake	49
Bass Ponds, Marsh, and Wetland	5	Mississippi River Bank Stabilization	3
Batchtown	6	Monkey Chute	50
Bay Island	7	North and Sturgeon Lakes	51
aver Island	8	Peoria Lake	52
Bertom Mccartney Lakes	9	Peterson Lake	53
Big Timber	10	Pharrs Island	54
Blackhawk Park	11	Piasa - Eagle's Nest Islands	55
Boston Bay	12	Pleasant Creek	56
Brown's Lake	13	Polander Lake	57
Bussey Lake	14	Pool 11 Islands-Mud Lake	58
Calhoun Point	15	Pool 11 Islands-Sunfish Lake	58
Capoli Slough	16	Pool 12 Overwintering	59
Chautauqua Refuge	17	Pool 24 Islands	60
Clarence Cannon	18	Pool 25 and 26 Islands	61
Clarksville Refuge	19	Pool 8 Islands Phase I	62
Clear Lake (Finger Lake) Dredging	20	Pool 8 Islands Phase II	63
Cold Springs	21	Pool 8 Islands Phase III	64
Conway Lake	22	Pool 9 Islands	65
Cottonwood Island	23	Pool Slough	66
Cuivre Island	24	Potters Marsh	67
Delair Division	25	Princeton Refuge	68
Dresser Island	26	Red's Landing Wetlands	69
East Channel	27	Rice Lake-IL	70
Finger Lakes	28	Rice Lake-MN	71
Fox Island	29	Rip Rap Landing	72
Gardner Division (Long Island Division)	31	Salt Lake/Ft Chartres Side Channel	30

Mississippi Valley Division

Rock Island District

Upper Mississippi River Restoration,
IL, IA, MN, MO, and WI

Glades Wetlands	32		Schenimann Chute	88
Godar Refuge	33		Small Scale Drawdown	73
Guttenberg Waterfowl Ponds	34		Snyder Slough Backwater Complex	74
Harlow Island	35		Spring Lake	75
Harpers Slough	36		Spring Lake Islands	76
Huron Island	37		Spring Lake Peninsula	77
Indian Slough	38		Stag and Keaton Islands	78
Island 42	39		Steamboat Island	79
Keithsburg Division	40		Stump Lake	80
Lake Odessa	41		Swan Lake	81
Lake Onalaska	42		Ted Shanks	82
Lake Winneshiek	43		Trempeleau	83
Lansing Big Lake	44		Turkey River Bottoms Delta and Backwater Complex	84
Lock & Dam 3	45		Weaver Bottoms	85
Long Lake	46		West Alton Tract	86
			Wilkinson Island	87

LOUISIANA

APPROPRIATION TITLE: Construction, Channels and Harbors (Navigation)

PROJECT: Calcasieu River and Pass, LA (Dredged Material Disposal Facility) (Resumption)

LOCATION: The 68-mile channel is located in southwest Louisiana and extends from the Gulf of Mexico to Lake Charles, Louisiana. The project is authorized at - 40x400 feet inland and - 42x800 feet in the bar channel.

DESCRIPTION: The project will either design new dredged material disposal facilities, perform major rehabilitation of existing confined disposal facilities or construct new dredged material disposal facilities and beneficial use disposal areas to create additional disposal capacity IAW the approved 2010 Dredge Material Management Plan.

AUTHORIZATION: River and Harbor Act of 24 July 1946, as amended, CH 594-PL525, River and Harbor Act of 1960, PL86-645, dated Jul 14, 1960, River and Harbor Act of October 23, 1962, House Document 582

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Not applicable.

INITIAL BENEFIT - COST RATIO: Not applicable.

BASIS OF BENEFIT: Not applicable.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (10 Oct 2012)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$188,335,000		Construction Portion of Project	0%	TBD
Estimated Non-Federal Cost	\$62,778,000				
Cash Contributions	\$40,367,000				
Other Cost	\$22,411,000				
Total Estimated Project Cost	\$251,113,000				
Allocations to 30 September 2010	\$ 2,168,000				
Allocation for FY 2011	\$(2,155,000)				
Allocation for FY 2012	\$0				
Conference allocation for FY 2013	\$0				
Allocation for FY 2013	\$0				
Allocation through FY 2013	\$13,000	1/ 2/	0%		
Estimated Carry-in Funds	\$0	3/			
Budget for FY 2014	\$10,543,000		6%		
Programmed Balance to Complete After FY 2014	\$177,779,000				
Unprogrammed Balance to Complete After FY 2014	\$0				

1/ \$1,855,239 rescinded from the project in FY 2011.

2/ \$300,000 transferred to HQ for the Mississippi River Flood in FY 2011.

3/ Estimated unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

PHYSICAL DATA: The project will include new dredged material disposal facilities; perform major rehabilitation of existing confined disposal facilities or construct new dredged material disposal facilities and beneficial use disposal areas to create additional disposal capacity IAW the approved 2010 Dredge Material Management Plan.

JUSTIFICATION: Currently, the project does not have the adequate dredged material disposal capacity needed to maintain the channel to authorized dimensions. The gross 20-year dredging capacity required to maintain the channel is approximately 97 million cubic yards, while the existing confined disposal capacity is only five million cubic yards. Existing discharge sites are at or near capacity, and past maintenance have resulted in substantial erosion of discharge facilities into adjacent water bodies. As a result, it has become necessary to reduce channel widths in some reaches.

The Calcasieu Ship Channel supports a thriving commercial navigation industry. The tonnage of commodities handled at the ship channel's docks makes the Port of Lake Charles the 14th largest seaport in the U.S. and the 3rd largest Strategic Petroleum Reserve facility. The Port of Lake Charles is also the 3rd largest export port in the country. Calcasieu River is very important to the nation's energy resources. It services two major refineries, 2 LNG facilities plus many other facilities requiring the deep draft channel.

Since 1932, Louisiana has lost 1.2 million acres of coastal wetlands from the combined impact of natural processes and human intervention. In Southwestern Louisiana, a primary resource for restoring coastal wetlands is dredged material. The Calcasieu DMMP designates 9,550 acres of eroded and subsided coastal wetlands for the beneficial use of material.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate construction of the DMMP	\$10,543,000
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NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area.	\$22,411,000	
Provide during the period of construction a cash contribution equal to 25 percent of total project cost allocated to building navigation features.	\$40,367,000	
Modify or relocate utilities, roads, bridges (except railroad bridges) where necessary for the construction of the project.	N/A	
Pay all cost allocated to operation, maintenance, repair, rehabilitation, and replacement of the project features.		
Total Non-Federal Cost	\$ 62,778,000	

Non federal cost share for construction of navigation features will be 25% of total construction cost plus LERRD's. However, above statements are subject to change pending the signing of the PPA.

STATUS OF LOCAL COOPERATION: The Lake Charles Harbor and Terminal District is the Local Sponsor for this project. A Letter of Intent, dated November 19, 2010 was provided. Negotiations have begun on the Project Partnership Agreement (PPA). Execution of PPA is expected in FY 2014.

COMPARISON OF FEDERAL COST ESTIMATE: The Federal project cost estimate of \$188,355,000 is an increase of \$109,169,000 from the last estimate (\$79,166,000) reported to Congress (FY 2013). The cost shown in the FY2013 Justification sheet of \$79,166,000 is a first cost in FY2008 price levels and was inadvertently used in that submission. In preparation of the FY 2014, the fully funded cost to the mid-point of construction was updated to \$188,335,000. This correction and the resulting price level increases related to inflation from 2008 to 2012 are the cause for this significant change in cost estimate.

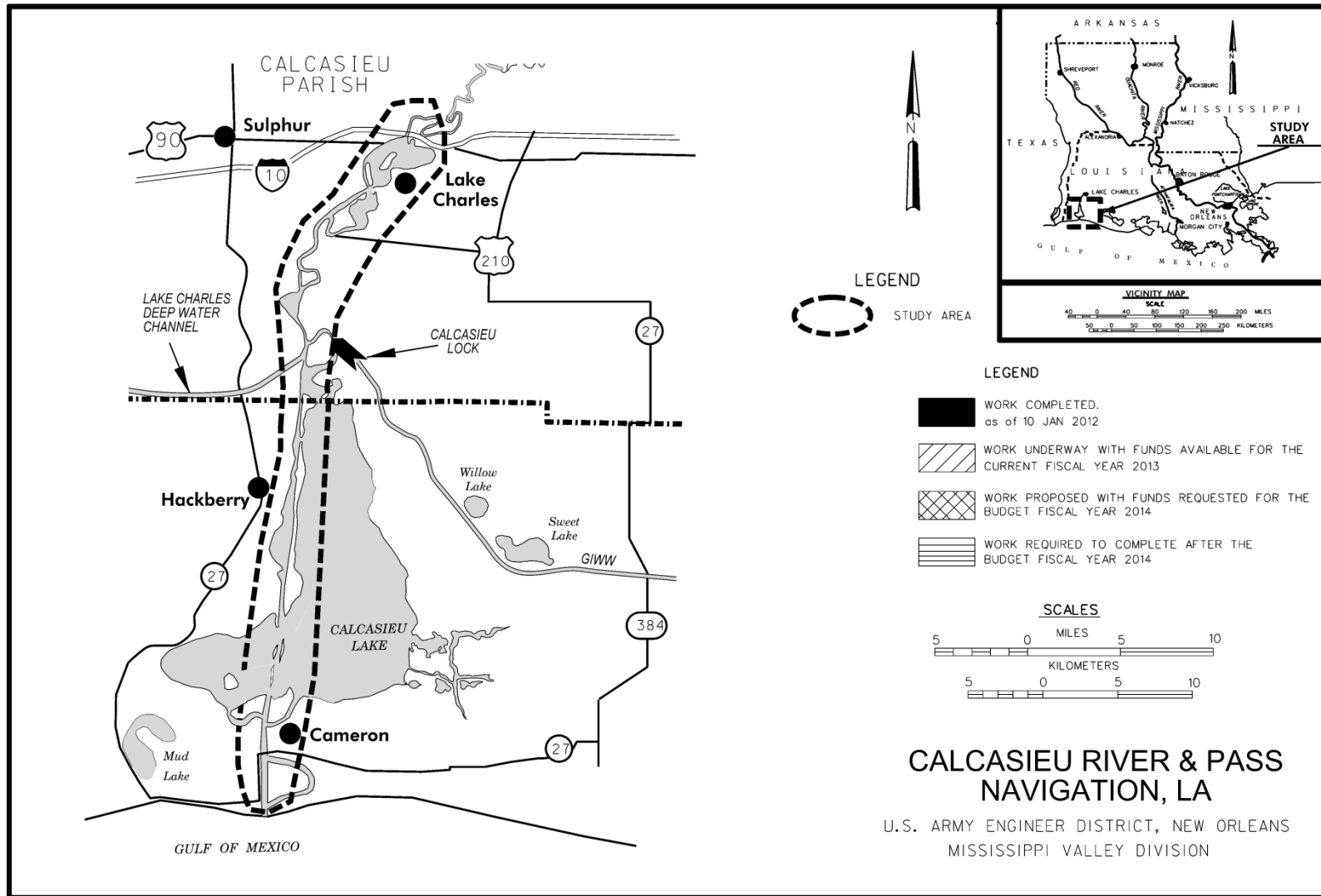
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with EPA on 15 December 2010.

OTHER INFORMATION: Construction funds allocated in FY's 2007 and 2008. The Calcasieu River and Pass Dredged Material Management Plan was approved on 16 December 2010.

Mississippi Valley Division

New Orleans District

Calcasieu River and Pass,
Dredged Material Disposal Facility, LA



APPROPRIATION TITLE: Construction, Ecosystem Restoration

PROJECT: Louisiana Coastal Area, Ecosystem Restoration, Louisiana (New)

LOCATION: The project Louisiana Coastal Area (LCA) includes the Louisiana coastal area from Mississippi to Texas, that includes the following Louisiana parishes in the study area: Ascension, Assumption, Calcasieu, Cameron, Iberia, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, and Vermilion.

DESCRIPTION: The project's primary purpose is to restore the Louisiana wetland coastal area through the beneficial use of dredged material, river diversion of sediment and water, head land and barrier island restoration, and coastal protection efforts. The Louisiana coastal plain contains one of the largest expanses of coastal wetlands in the contiguous United States (U.S.), and has experienced 90 percent of the total coastal marsh loss in the Nation. The coastal wetlands, built by the deltaic processes of the Mississippi River, contain diverse coastal habitats that range from narrow natural levee and beach ridges to expanses of forested swamps and freshwater, intermediate, brackish, and saline marshes. These unique habitats are hydrologically connected to each other, upland areas, the Gulf of Mexico, and migratory routes of species, including birds and fish. Taken as a whole, these habitats combine to make Louisiana's wetlands among the Nation's most productive and ecologically-significant natural assets. Additionally, Louisiana's coastal wetlands have also been a center for culturally diverse social development.

AUTHORIZATION: WRDA 2007, Title VII (Public Law 110-114).

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT - COST RATIO: The total benefit-cost-ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFITS: Benefits are based on the Report of the Chief of Engineers (dated 31 January 2005) on Louisiana Coastal Area, Ecosystem Restoration Feasibility Study; the Report of the Chief of Engineers (dated 30 December 2010), LCA Ecosystem Restoration, Six Projects Authorized by Section 7006(e)(3) of WRDA 2007; and the Report of the Chief of Engineers (dated 22 June 2012), LCA Ecosystem Restoration, Barataria Basin Barrier Shoreline Restoration Project, Louisiana.

SUMMARIZED FINANCIAL DATA – Total Project			ACCUM PCT of EST FED COST	STATUS (1 October 2012)	PCT CMPL	PHYSICAL COMPETITION SCHEDULE
Estimated Federal Cost		\$2,112,144,000		Beneficial Use Dredge Matl	0	
Programmed	\$ 1,455,482,000			Demonstration Projects	0	
Un-Programmed	\$656,662,000 ^{1/}			Amite River Diversion	0	
Estimated Non-Federal Cost		\$ 1,137,307,000		Convey Atchafalaya River	0	
Programmed: Cash	\$ 783,721,000			Houma Navigation Canal	0	
Other	\$			Convent LA & Blind River	0	
Un-Programmed: Cash	\$353,586,000 ^{1/}			Terrebonne Basin	0	
Other	\$			Barataria Basin Shoreline Rest	0	
Total Estimated Project Programmed Cost		\$2,239,203,000		Houma Navigation Canal	0	
Total Estimated Project Un-Programmed Cost		\$1,010,248,000		Convent LA & Blind River	0	
Total Estimated Project Cost		\$ 3,249,451,000		Terrebonne Basin	0	
Allocations to 30 September 2010		0		Barataria Basin Shoreline Rest	0	
Allocations for FY 2011		0		Caillou Lake & Gulf	0	
Allocations for FY 2012		0		Point Au Fer island	0	
Conference Allowance for FY 2013		0		Mod to Caernarvon	0	
Allocations through 2013		0		Mod to Davis Pond	0	
Estimated Carry-in Funds		0		Bayou Lafourche	0	
Budget for FY 2014		1,000,000		Diversion at Myrtle Grove	0	
Programmed Balance to Complete After FY 2014		1,454,482,000		Hope Canal	0	
Un-Programmed Balance to Complete After FY 2014		656,662,000		Mississippi R. Gulf Outlet-Env Rest	0	
				Diversion at White's Ditch	0	
				Total Project	0	

1/ Medium Diversion at White Ditch, Barataria Basin Barrier Shoreline, and Terrebonne Basin Barrier Shoreline – requires additional authorization; the unprogrammed cost of \$1,010,248,000 is the difference between the Fully Funded Authorized cost of \$576,497,000 and the Fully Funded project cost of \$1,586,745,000 based upon the project cost reflected in the 2010 Chief's Report.

PHYSICAL DATA:

Pumping Stations & Siphon Facility	Adjustable Weirs
Sediment Traps	Land Bridge Creation
Dredging	Breakwaters
Dredged Material	Diversion Structure
Bank Stabilization	Conveyance Channel
Monitoring Stations	Groins

JUSTIFICATION:

Louisiana's coastal wetland provide nationally significant habitat to migratory bird species, protect an internationally significant commercial-industrial complex from storm-driven waves and tides, and support commercial and recreational fishing activities. However, natural land building process limitations, saltwater intrusion, subsidence, and sea level rise have led to the degradation of Louisiana's coastal wetlands. This threatens the environmental, economic, and social benefits provided to the region. This project seeks to restore Louisiana's coastal wetlands to preserve these benefits. The below details further explain the value and history of the Louisiana wetlands to be restored through this construction program.

The coastal wetlands of Louisiana provide nationally significant habitat to migratory bird species. Approximately 70 percent of all waterfowl migrating through the U.S. use the Mississippi and Central flyways, which pass over these wetlands. These wetlands are habitat to the more than 5 million birds wintering in Louisiana and for neo-tropical migratory songbirds and other avian species that use them as stopover habitat. Additionally, coastal Louisiana provides crucial nesting habitat for many water bird species, such as the endangered brown pelican.

In addition to their bird habitat, Louisiana's coast wetland and barrier island systems enhance protection of an internationally significant commercial-industrial complex from storm-driven waves and tides. Commercial navigation interests in Louisiana include the Port of South Louisiana, which handles more tonnage than any other port in the Nation, and the most active segment of the Nation's Gulf Intracoastal Waterway (GIWW) (Waterborne Commerce Statistics Center (WCSC) 2002). Louisiana produces high amounts of fossil fuels. In 2000, Louisiana led the Nation in oil production, with 592 million barrels of oil and condensate, (including the outer continental shelf (OCS) produced, valued at \$17 billion, and was second nationally in natural gas production with \$1.3 billion worth produced (excluding OCS and casing head gas) (Louisiana Department of Natural Resources [LDNR] 2003a). In addition to producing large amounts of fossil fuels, Louisiana moves and refines even larger amounts, with nearly 34 percent of the Nation's natural gas supply and over 29 percent of the Nation's crude oil supply moving through the state and connections to nearly 50 percent of U.S. refining capacity (LDNR 2003a).

Coastal Louisiana is home to over 2 million people, representing 46 percent of the state's population. Investments in facilities, supporting service activities, and urban infrastructure represent a total capital investment in the Louisiana coastal area of approximately \$100 billion. Excluding Alaska, Louisiana produced the Nation's highest commercial marine fish landings (excluding mollusk landings such as clams, oysters, and scallops) with an annual value of about \$284 million (National Marine Fisheries Service (NMFS) 2009). Annual data from the Louisiana Department of Wildlife and Fisheries show expenditures on recreational fishing (trip and equipment) in Louisiana to be nearly \$1.7 billion, and hunting expenditures were valued at \$975 million (2006).

Louisiana's coastal wetlands were built by deltaic processes through which the Mississippi River transported enormous volumes of sediment and water. This sediment was eroded from the Mississippi River Basin lands and carried through the river to eventually be deposited at the river's mouth forming the delta. For the last several thousand years, deltaic processes that built land resulted in a net increase of more than four million acres of coastal wetlands. In addition, processes created an extensive skeleton of higher natural levee ridges along the past and present Mississippi River channels, distributaries, and bayous in the Deltaic Plain and beach ridges of the Chenier Plain. The landscape created by these deltaic processes gave rise to one of the most productive ecosystems on Earth.

Today, however, most of the Mississippi River's fresh water, nutrients, and sediment, flow directly into the Gulf of Mexico, largely bypassing the coastal wetlands. Deprived of land building sediment, the wetlands are damaged by saltwater intrusion and other factors associated with sea level change and land subsidence, and will eventually convert to open water. Deprived of nutrients, the plants that define the surface of the coastal wetlands die off. Once the coastal wetlands are denuded of vegetation, the substrate is left exposed to the erosive forces of waves and currents, especially during tropical storm events. The loss of coastal wetlands has been well documented over time. Since the 1930s, coastal Louisiana has lost more than 1.2 million acres (485,830 ha) (Barras et al. 2003; Barras et al. 1994; and Dunbar et al. 1992). As recently as the 1970s, the loss rate for Louisiana's coastal wetlands was as high as 25,200 acres per year (10,202 ha per year). The rate of loss from 1990 to 2000 was about 15,300 acres per year (6,194 ha per year), mainly due to the residual effects of past human activity (Barras et al. 2003). It was estimated in 2000 that coastal Louisiana would continue to lose land at a rate of approximately 6,600 acres per year (2,672 ha per year) over the next 50 years. It is estimated that an additional net loss of 328,000 acres (132,794 ha) may occur by 2050, which is almost 10 percent of Louisiana's remaining coastal wetlands (Barras et al. 2003). The cumulative effects of human and natural activities in the coastal area have severely degraded the deltaic processes and shifted the coastal area from a condition of net land building to one of land loss.

Project descriptions for FY 2014:

These projects are part of the LCA portfolio and will be in a position to execute construction in FY 2014.

Beneficial Use of Dredged Material Program (BUDMat) provides the framework, process and procedures for selecting, funding and implementing projects over a 10-year period that could create an estimated 21,000 acres of coastal wetlands over the 10-year life of the program. Dredged material will be acquired from maintenance activities of Federal waterways. Plaquemines Parish government, LA has passed a resolution to enter into a Design Agreement in FY 2013. FY 2014 funds would be used to negotiate and execute a PPA agreement.

Barataria Basin Barrier Shoreline – Funds would be used to negotiate and execute a PPA agreement. The Barataria Basin Barrier Shoreline restoration project (BBBS) is a barrier island restoration project situated between the west bank of the Mississippi River at the active delta and the eastern shore of Terrebonne Bay. The Recommended Plan for this project restores and protects the shorelines, dunes, and marshes of the Caminada Headland and Shell Island. The initial construction of the barrier shorelines will restore or create 2,849 acres of beach, dune, and marsh habitats. On the Caminada Headland, approximately 880 acres of beach and dunes and 1,186 acres of marsh will be restored or created. Shell Island will be restored to its pre-Hurricane Bob (1979) configuration and create or restore 317 acres of beach and dune and 466 acres of marsh. The Recommended Plan will include re-nourishment of the Caminada Headland and Shell Island, sustaining the benefits created by the project construction. Over each 10 year period, a minimum of 3.9 million cubic yards of material will be returned. To construct the full National Ecosystem Restoration (NER) plan additional authorization is required. The construction of Caminada Headland is a separable element within the existing authorized cost. These funds would be used for the Caminada separable element. The State of Louisiana will use exclusively state funds to build approximately 5 miles of beach and dune features of this restoration project. The remaining beach and dune features, as well as all marsh restoration features complete the Caminada Headlands element of the BBBS project and are to be constructed with Federal/state cost-shared funds. Completion of the project will result in: restoring/protecting water and sediment dynamics impacting the landscape features affecting thousands of coastal wetland acres of the Barataria Basin and their dependent flora and fauna to include the habitats of migratory waterfowl, threatened and endangered species, as well as Federal and state refuges and management areas.

Small Diversion at Convent / Blind River - Project is located approximately equidistant between Baton Rouge and New Orleans, Louisiana within the Maurepas Swamp, one of the largest remaining cypress swamps in coastal Louisiana. The recommended plan (Alternative 2), which is also the national ecosystem restoration plan, will reintroduce the natural periodic, nearly annual flooding by the Mississippi River to the Maurepas Swamp and Blind River that was cut off by construction of the Mississippi River and Tributaries (MR&T) flood control system. The project consists of a 3,000 cubic feet per second (cfs) capacity gated box

culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Romeville, Louisiana. The project will restore freshwater, nutrients, and sediment input from the Mississippi River and improve habitat function by 6,421 average annual habitat units over a total of 21,369 acres of bald cypress-tupelo swamp. The project would improve habitat for many fish and wildlife species including migratory birds, bald eagles, alligators, gulf sturgeon, and the manatee. PED for the Small Diversion at Convent / Blind River project is scheduled for completion in FY 2014.

These projects are part of the LCA portfolio but are not currently scheduled for construction in FY 2014:

Demonstration Projects are designed to resolve critical areas of scientific or technological uncertainty related to the implementation of the restoration plan, and in the future, the comprehensive plan.

Medium Diversion at White's Ditch project provides for a medium diversion from the Mississippi River into the central River aux Chenes area using a controlled structure to provide additional freshwater, nutrients, and fine sediment to the area. The additional freshwater would facilitate organic sediment deposition, improve biological productivity, and prevent further deterioration of the marshes. Additional authorization will be required prior to initiating construction as the recommended plan exceeds the authorized project cost.

Medium Diversion at Myrtle Grove with Dedicated Dredging project consists of diverting 2,500 to 15,000 cfs from the Mississippi River into the Barataria Basin through a box culvert system and using two million cubic yards of Mississippi River material annually for several years to create marsh wetlands. As authorized, this project is expected to deliver benefits in the range of 11,500 acres and would benefit essential fish habitat, threatened/endangered species and colonial nesting birds. The Feasibility Cost Share Agreement was enacted May 2010.

Projects that are part of the LCA portfolio, however, the State of Louisiana does not intend to pursue a partnership at this time. No work is anticipated to be performed in FY 2014:

Amite River Diversion Canal Modification restoration project includes portions of the Maurepas Swamp adjacent to the Amite River Diversion Canal which connects and diverts flows from the Amite River to the lower Blind River near Lake Maurepas. The Amite River Diversion Canal recommended plan (Alternative 33-Chief of Engineers Report dated 30 December 2010) will restore the most degraded portion of the Maurepas Swamp within the study area by restoring the natural hydrology modified by the construction of the Amite River Diversion Canal and from the resulting impoundment of water, lack of freshwater, sediment and nutrients and surge-related saltwater intrusion. The project includes the creation of three gaps and delivery channels through the north bank of the Amite River Diversion Canal. The recommended plan is an implementable increment of the NER plan, meets the LCA Program and project objectives, and is within the cost and scope of the authorization contained in Section 7006(e)(3) of WRDA 2007. The NER plan would create gaps on both the north and south bank of the Amite River Diversion Canal along with delivery channel, gaps in the railroad grade and vegetative plantings benefiting 3,881 acres of swamp. The NER plan also includes all the areas addressed by the recommended plan and an additional area that is expected to need restoration in the next 20 years. The NER plan would provide 1,602 average annual habitat units. The recommended plan will improve habitat function by 679 average annual habitat units over the 50-year period of analysis and benefit approximately 1,602 acres of existing freshwater swamp.

Convey Atchafalaya River Water to Northern Terrebonne Marshes / Multipurpose Operation of the Houma Navigation Canal Lock restoration project is located in coastal Louisiana south of Houma, between the Atchafalaya River and Bayou Lafourche. These two projects are hydrologically linked and subsequently have been analyzed and are presented as a combined project. The Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of the Houma Navigation Canal Lock recommended plan (Alternative 2-Chief of Engineers Report dated 30 December 2010), which is also the NERplan, will reduce the current

trend of marsh degradation in the project area resulting from subsidence, sea level rise, erosion, saltwater intrusion, and lack of sediment and nutrient deposition. The project consists of elimination of GIWW flow constrictions and construction of flow management features in the interior portions of the project area.

The project consists of construction of 56 structures and other water management features and also includes the multipurpose operation of the proposed Houma Navigation Canal Lock, if and when constructed. The lock complex would be closed and operated more frequently in order to maximize distribution of freshwater into wetlands downstream of the lock and minimizing saltwater intrusion upstream of the lock. The project would improve habitat function by approximately 3,220 average annual habitat units. The project would improve habitat for fish and wildlife species including migratory birds, estuarine fish and shell fish. Benefits include the reduction of projected existing wetland loss by approximately 9,655 acres over the 50-year period of analysis.

Terrebonne Basin Barrier Shoreline Restoration project is located in Terrebonne Parish, which is 30 miles south of the city of Houma, Louisiana and includes the Isles Dernieres and the Timbalier Islands. These barrier islands have undergone significant reductions in size due to natural processes and human actions including lack of sediment, storm-induced erosion and breaching, subsidence, sea level rise and hydrologic modifications such as navigation and oil and gas canals. The project will reintroduce sediment to the coastal sediment transport system through the restoration of Raccoon Island with 25 years of advanced fill and construction of a terminal groin. The project also includes restoration of Whiskey and Trinity Islands with five years of advanced fill and restoration of Timbalier Island with 25 years of advanced fill. The project consists of restoration of four islands (Whiskey, Raccoon, Trinity, and Timbalier), improving habitat function by 2,833 average annual habitat units by adding 3,283 acres to the islands for a total size of 5,840 acres. The restored acreage would include 472 acres of dune, 4,320 acres of supratidal habitat, and 1,048 acres of intertidal habitat and ensure the geomorphic and hydrologic form and ecological function of the majority of the estuary over the period of analysis. Additional authority is needed to raise the total project cost to allow the entire project's implementation. The Whiskey Island component can be implemented under the existing authority provided in Section 7006(e)(3) of WRDA 2007(Chief of Engineers Report dated 30 December 2010). The Whiskey Island component includes renourishment every 20 years to maintain the constructed features. Restoration of the one island will increase habitat function by 678 average annual habitat units by restoring a total of 1,272 acres on the island, including 65 acres of dune, 830 acres of supratidal habitat, and 377 acres of intertidal habitat. The Whiskey Island component is an implementable increment of the NER plan.

Land-bridge between Caillou Lake and the Gulf of Mexico project would maintain the natural hydrologic barrier between the Gulf and Caillou Lake and associated Terrebonne Basin wetlands as well as allow increased freshwater influence from the Atchafalaya River waters flowing eastward into Four League Bay. The project includes armoring the Gulf shoreline and rock armoring or marsh creation to plug and fill broken marsh to preserve the land bridge's integrity and increase freshwater influences. Coastal marsh and habitat crucial to migratory birds would be protected. The bald eagle and essential fish habitat would also benefit. Subsidence, storm damage, increased tidal influence, and lack of sediment inputs have resulted in wetland loss, habitat conversion, and ecosystem degradation. These habitat losses have had a direct adverse impact on wildlife and fisheries resources and State-designated Public Oyster Seed Reservations. The bald eagle and essential fish habitat would also benefit. Essential fish habitat is defined as waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Act), specific to Federally managed species. The project would maintain the separation between Caillou Lake and the Gulf of Mexico and Bay Voisin and the Gulf of Mexico, maintain the estuarine gradient, reduce the marine influences on Caillou Lake and Bay Voisin, and reverse the trend of deterioration in the associated wetlands and wildlife habitat. It will create and nourish approximately 1,588 acres of saline marsh and install 29,000 linear feet (8,839 m) of shoreline protection to increase the stability of the land bridge separating Caillou Lake from the Gulf of Mexico and of the stability of the critical land bridge separating Bay Voisin and the Gulf of Mexico.

Gulf Shoreline at Point Au Fer Island project provides for stabilizing the Gulf shoreline of this island, thereby precluding the formation of direct connections between the Gulf and Four League Bay, a situation that would lead to increasing salinities of island and inland coastal wetlands influenced by Atchafalaya River

water. Protecting this island also protects habitat crucial to migratory birds, and provides storm surge protection to the southwestern corner of the Terrebonne Bay wetland system.

Modification of Caernarvon Diversion project will increase wetland creation and protection outputs for this existing structure through changes in the structure's operation. Currently, the structure operates on average at about one-half capacity to maintain salinity gradients. The wetlands of St. Bernard and Plaquemines Parishes suffered extensive losses from Hurricane Katrina and will directly benefit from the added sediments and freshwater introduced from the Mississippi River by increasing the freshwater introduction volume. The bald eagle and essential fish habitat are also expected to benefit.

Modification of Davis Pond Diversion project will increase wetland creation and protection outputs for this existing structure through changes in the structure's operation. The structure, operating on average at about one-half capacity, maintains salinity gradients in the central Barataria Basin. In addition to wetland creation, the freshwater wetlands of the upper Barataria Basin will be directly benefitted by the added sediments and freshwater introduced from the Mississippi River. The bald eagle and essential fish habitat are also expected to benefit.

Projects that are part of the LCA portfolio; however, Feasibility studies have not been initiated:

Small Bayou Lafourche Reintroduction project consists of increasing channel flows by introducing 1,000 cfs of Mississippi River water into the Bayou at Donaldsonville to mimic the actions of a river crevasse. Dredging and bank stabilization would be required to control water levels and maintain bank stability and a sediment trap. Weirs are also features of the project. Projections are that 2,500 acres of coastal marsh would be protected, thousands of acres would benefit as would the bald eagle and essential fish habitat.

Small Diversion at Hope Canal is expected to enhance approximately 36,000 acres of Maurepas Swamp wetlands primarily by introducing approximately 5,000 cfs from the Mississippi River. Project includes two box culverts; a receiving pond reinforced with riprap; and a 50-foot wide, and a 10-foot deep outflow channel roughly 27,500 feet long that will run from the river to U.S. Interstate 10.

Mississippi River Gulf Outlet Environmental Restoration (which is separate from WRDA 2007 Section 7013) involves the construction of shoreline protection measures such as rock breakwaters along the north bank of the Mississippi River Gulf Outlet and along important segments of the southern shoreline of Lake Borgne. Additional ecosystem restoration features including marsh creation, freshwater introduction, barrier island restoration, and channel modification would be investigated to develop a suite of measures to stabilize and maintain important estuarine components. Pursuant to WRDA 2007 Implementation Guidance for Section 7006, the Section 7006 study is held in abeyance pending completion of the supplemental report under Section 7013 of WRDA 2007. Section 7013 report is in review.

FISCAL YEAR 2014: Funding of \$1,000,000 will be used to negotiate and execute PPA agreements for BUDMat and BBBS.

NON-FEDERAL COST: In accordance with the cost sharing reflected in the Water Resources Development Act of 2007; Chief's Report dated 30 Dec 2010; and Chief's Report dated 22 June 2012, the non-Federal sponsor must comply with the requirements listed below:

Provide all lands, easement, relocations, rights-of-way, and disposal areas (LERRD's) equal to 35 percent of the total project cost. Cash must be provided to make up the difference between LERRD's and 35 percent total project cost.

Requirements for Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Barataria Basin Barrier Shoreline Restoration	163,805,000	500,000
Small Diversion at Convent/Blind River	43,953,000	2,754,000
Beneficial Use of Dredged Material Program	51,399,000	
Demonstration Projects	35,000,000	
Amite River Diversion Canal Modification	3,048,000	10,000
Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose	104,865,000	73,000
Operation of Houma Navigation Canal Lock		
Terrebonne Basin Barrier Shoreline Restoration	245,262,000	6,900,000
Land-bridge between Caillou Lake and the Gulf of Mexico	25,044,000	745,000
Gulf Shoreline at Point Au Fer Island	18,641,000	644,000
Modification of Caernarvon Diversion	11,992,000	0
Modification of Davis Pond Diversion	31,849,000	0
Small Bayou Lafourche Reintroduction	57,886,000	1,400,000
Medium Diversion at White's Ditch	146,293,000	120,000
Medium Diversion at Myrtle Grove with Dedicated Dredging	123,346,000	120,000
Small Diversion at Hope Canal	28,368,000	120,000
Mississippi River Gulf Outlet Environmental Restoration	46,556,000	711,000
Total	1,137,307,000	14,097,000

STATUS OF LOCAL COOPERATION: The State of Louisiana has expressed continued support for the LCA Program moving forward. The State is currently in the process of assessing all on-going and planned coastal ecosystem restoration studies and projects, including LCA projects, to ensure alignment with the State's 2012 Master Plan. Individual PPAs between the Federal Government and the State of Louisiana will be executed for each project that will move into Construction. Final preparation of the PPA for the BBBS shoreline restoration project is scheduled for completion in FY 2014. The State has indicated its intent to continue advancement of the Medium Diversion at Myrtle Grove Feasibility Study, the Mississippi River Hydro/Delta Management Study, and the Demonstration Program projects within the LCA program. However, the path forward the State will pursue more closely aligns with the recently released 2012 State Master Plan. Accordingly, the State of Louisiana has indicated its intent to pursue four of the LCA 6 projects outside of the LCA Program: Amite River Diversion Canal Modification; Terrebonne Basin Barrier Shoreline Restoration; and Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of Houma Navigation Canal Lock; with development of the Medium Diversion at White Ditch and Small Diversion at Convent/Blind River projects continuing within the LCA program. Additionally, the State has also requested suspension of the LCA 4 projects: Land Bridge between Caillou Lake and the Gulf of Mexico, Gulf Shoreline at Point au Fer Island, Modification of Caernarvon Diversion, and Modification of Davis Pond Diversion.

Preliminary discussions have initiated with Plaquemines Parish government regarding their participation in the BUDMat program and Plaquemines Parish government recently passed a resolution to enter into a Design Agreement for Beneficial Use of Dredged Material

COMPARISON OF FEDERAL COST ESTIMATES: The Federal project cost estimate of \$2,112,144,000 is an increase of \$683,301,000 from the latest cost estimate of \$1,428,843,000 presented to Congress (FY 2013) due to refined cost estimates for completed studies, inflation factors, and including the fully funded cost of the unauthorized projects or separable elements. The current Federal Cost estimate is based on the fully funded cost estimates dated 1 October 2012.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Record of Decision for the Programmatic Environmental Impact Statement for the Beneficial Use of Dredged Material Program (BUDMat) was signed on 13 August 2010.

A Record of Decision for the following LCA Six Projects Authorized by WRDA 2007 Section 7006(e) was signed 12 April 2011: Small Diversion at Convent/Blind River; Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of Houma Navigation Lock; Medium Diversion at White Ditch; Amite River Diversion Canal Modification; and Terrebonne Basin Barrier Shoreline Restoration.

A Barataria Basin Barrier Shoreline Project Integrated Report completed state and agency review May 2012, Chief of Engineers Report signed 22 June 2012, awaiting signature of the ROD.

All subsequent environmental documentation associated with the work planned will be completed prior to initiation of construction.

OTHER INFORMATION: PED for the near-term program was initiated in FY 2012. Medium Diversion at White Ditch will require additional authorization prior to initiating construction as the recommended plan exceeds the authorized project cost. There is not a constructible feature of the project that can be completed within the cost authorized in WRDA 2007. Terrebonne Basin Barrier Shoreline and Barataria Basin Barrier Shoreline projects require additional authorization; however there is a constructible feature within the cost authorized in WRDA 2007.

STATUS SUMMARY(as of 14 January 2013)

Active	
Beneficial Use of Dredged Material Program	Feasibility Complete: ROD signed 13 Aug 2010, developing Design Agreement
Demonstration Projects Program	Developing Program Implementation Plan
Medium Diversion at Myrtle Grove with Dedicated Dredging	Feasibility study continues
Barataria Basin Barrier Shoreline Restoration	Developing Design Agreement
Small Diversion at Convent Blind River	In PED
Medium Diversion at White's Ditch	In PED
Suspended (In close –out)	
Amite River Diversion Canal Modification	Suspended by state's letter dated 20 Aug 2012
Convey Atchafalaya River Water to Northern Terrebonne Marshes	Suspended by state's letter dated 20 Aug 2012
Houma Navigation Canal	Suspended by state's letter dated 20 Aug 2012
Terrebonne Basin Barrier Shoreline Restoration	Suspended by state's letter dated 20 Aug 2012
Suspended	
Landbridge between Caillou Lake and the Gulf of Mexico	Suspended by state's letter dated 16 Oct 2012
Gulf Shoreline at Point au Fer island	Suspended by state's letter dated 16 Oct 2012
Modification of Caernarvon Diversion	Suspended by state's letter dated 16 Oct 2012
Modification of Davis Pond Diversion	Suspended by state's letter dated 16 Oct 2012
Feasibility studies never initiated	
Hope Canal	
Bayou Lafourche	
Mississippi River Gulf Outlet Environmental Restoration	Sec. 7006 held in abeyance pending completion of the Sec. 7013 supplemental study
OTHER	
Mississippi River Gulf Outlet Environmental Restoration	Pursuant to WRDA 2007 Section 7013: Production of a supplemental report proceeding separately from Section 7006 - Section 7013 report in review

For programmed work only; remaining work is un-programmed pending decision to construct these features.

Updated cost estimates: effective date 1 October 2012	Estimated Federal Cost \$	Estimated Non-Federal Cost \$	Total Estimated Cost (Fully Funded) \$	Programmed Balance to Complete \$	Un-Programmed Balance to Complete \$
Barataria Basin Barrier Shoreline Restoration	\$304,209,000	\$163,805,000	\$468,014,000	\$328,303,000	\$139,711,000
Small Diversion at Convent/Blind River	\$81,628,000	\$43,953,000	\$125,581,000	\$125,581,000	\$0
Beneficial Use of Dredged Material Program (BUDMat)	\$95,455,000	\$51,399,000	\$146,854,000	\$146,854,000	\$0
Demonstration Projects	\$65,000,000	\$35,000,000	\$100,000,000	\$100,000,000	\$0
Amite River Diversion Canal Modification	\$5,662,000	\$3,048,000	\$8,710,000	\$8,710,000	\$0
Convey Atchafalaya River Water to Northern Terrebonne Marshes/Multipurpose Operation of Houma Navigation Canal Lock	\$194,748,000	\$104,865,000	\$299,613,000	\$299,613,000	\$0
Terrebonne Basin Barrier Shoreline Restoration	\$455,488,000	\$245,262,000	\$700,750,000	\$124,842,000	\$575,908,000
Land-bridge between Caillou Lake and the Gulf of Mexico	\$46,511,000	\$25,044,000	\$71,555,000	\$71,555,000	\$0
Gulf Shoreline at Point Au Fer Island	\$34,618,000	\$18,641,000	\$53,259,000	\$53,259,000	\$0
Modification of Caernarvon Diversion	\$22,272,000	\$11,992,000	\$34,264,000	\$34,264,000	\$0
Modification of Davis Pond Diversion	\$59,147,000	\$31,849,000	\$90,996,000	\$90,996,000	\$0
Small Bayou Lafourche Reintroduction	\$107,503,000	\$57,886,000	\$165,389,000	\$165,389,000	\$0
Medium Diversion at White's Ditch	\$271,688,000	\$146,293,000	\$417,981,000	\$123,352,000	\$294,629,000
Medium Diversion at Myrtle Grove with Dedicated Dredging	\$229,070,000	\$123,346,000	\$352,416,000	\$352,416,000	\$0
Small Diversion at Hope Canal	\$52,683,000	\$28,368,000	\$81,051,000	\$81,051,000	\$0
Mississippi River Gulf Outlet Environmental Restoration	\$86,462,000	\$46,556,000	\$133,018,000	\$133,018,000	\$0

MISSOURI

APPROPRIATION TITLE: Construction – Channels and Harbors (Navigation)

PROJECT: Mississippi River between the Ohio and Missouri Rivers (Regulating Works), Missouri and Illinois (Continuing)

LOCATION: The project involves improvement of the Mississippi River from the mouth of the Ohio River to the mouth of the Missouri River at river mile 195 above the mouth of the Ohio River. The project covers the following counties: (Missouri) St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi; (Illinois) Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, and Pulaski.

DESCRIPTION: The project consists of a navigation channel 9 feet deep and not less than 300 feet wide with additional width in bends, from the mouth of the Ohio River to the mouth of the Missouri River, a distance of approximately 195 miles. Project improvements are achieved by means of dikes, revetment, construction dredging, and rock removal. All work is programmed.

AUTHORIZATION: River and Harbor Acts of 1910, 1927, and 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 33.6 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 18.6 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 7.2 to 1 at 2.5 percent (FY 1961).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Regulating Works Project – Mississippi River between Ohio and Missouri Rivers Level 2 – Benefit Update Report, approved 28 October 2011, at October 2011 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$375,000,000		Entire Project	85	TBD
Estimated Non-Federal Cost	0				
Cash Contributions	0				
Other Cost	0				
PHYSICAL DATA					
Total Estimated Project Cost	\$375,000,000		195 miles of navigation channel Ohio River to mouth of Missouri River 9 feet deep x 300 feet wide		
Allocations to 30 September 2010	\$250,895,000				
Allocation for FY 2011	4,453,000				
Allocation for FY 2012	1,487,000	^{1/}			
Conference Allowance for FY 2013	7,938,000	^{2/}			
Allocation for FY 2013	7,893,000	^{3/}			
Allocations through FY 2013	264,728,000	^{4/}	71		
Estimated Unobligated Carry-in Funds	0	^{5/}			
Budget Amount for FY 2014	49,690,000		84		
Programmed Balance to Complete After FY 2014	60,582,000				
Unprogrammed Balance to Complete After FY 2014	0				

^{1/}Reflects revocation of \$5,687,000 in ARRA funds.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/}Reflects revocation of \$44,000 in ARRA funds.

^{4/}Includes ARRA funds of \$18,481,000.

^{5/}Estimated unobligated "Carry-in" Funding: As of the date of this justification sheet the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: The Mississippi River between the Ohio and Missouri Rivers is a major artery of the inland waterway system. Commerce in this reach has increased from 4,500,000 tons in 1945 to 102,967,673 tons in 2010 worth approximately \$15 billion. Commerce is expected to increase to 167,000,000 tons by the year 2020; therefore, it is essential that construction of project works be continued at a rate which will insure 9-foot channel depths for a year-round navigation season. The ten year average (2002-2011) tonnage is 107,937,578. The average annual benefits, all navigation, are \$5,018,392,000.

FISCAL YEAR 2013: Unobligated carryover will be used as follows:

Planning, Engineering, and Design	\$214,000
Total	\$214,000

FISCAL YEAR 2013: The current amount is being applied as follows:

Initiate and complete Rock Removal Phase 1	\$7,000,000
Planning, Engineering, and Design	200,000
Construction Management	738,000
Total	\$7,938,000

FISCAL YEAR 2014: The budget amount will be used for the following: Rock Removal Phase 2 (remove rock pinnacles from the river bed), Dogtooth Bend, Phase 5 contract (construct river training structures and revetments); Eliza Point-Greenfield Bend Phase 3; (construct river training structures and revetments); Grand Tower Phase 5; (construct river training structures and revetments); Mosenthein-Ivory Landing Phase 4 contract (construct river training structures and revetments); planning, engineering and design for FY 2015 contracts, continue Environmental Assessment and/or Supplemental Environmental Impact Statement; and engineering during construction; and construction management for FY 2014. Funds will be applied as follows:

Rock Removal Phase 2 Contract	\$30,000,000
Initiate and Complete Dogtooth Bend Phase 5 Dike and Revetment Contract	2,800,000
Initiate and Complete Eliza Point-Greenfield Bend Phase 3 Dike and Revetment Contract	1,000,000
Initiate and Complete Grand Tower Phase 5 Dike and Revetment Contract	4,000,000
Initiate and Complete Mosenthein-Ivory Landing Phase 4 Dike and Revetment Contract	4,200,000
Continue bank line stabilization through tree planting at Thompson Bend Riparian Corridor	180,000
Program EA/Supplemental EIS completion	2,000,000
Planning, Engineering, and Design	2,510,000
Construction Management	3,000,000
Total	\$49,690,000

NON-FEDERAL COST: None.

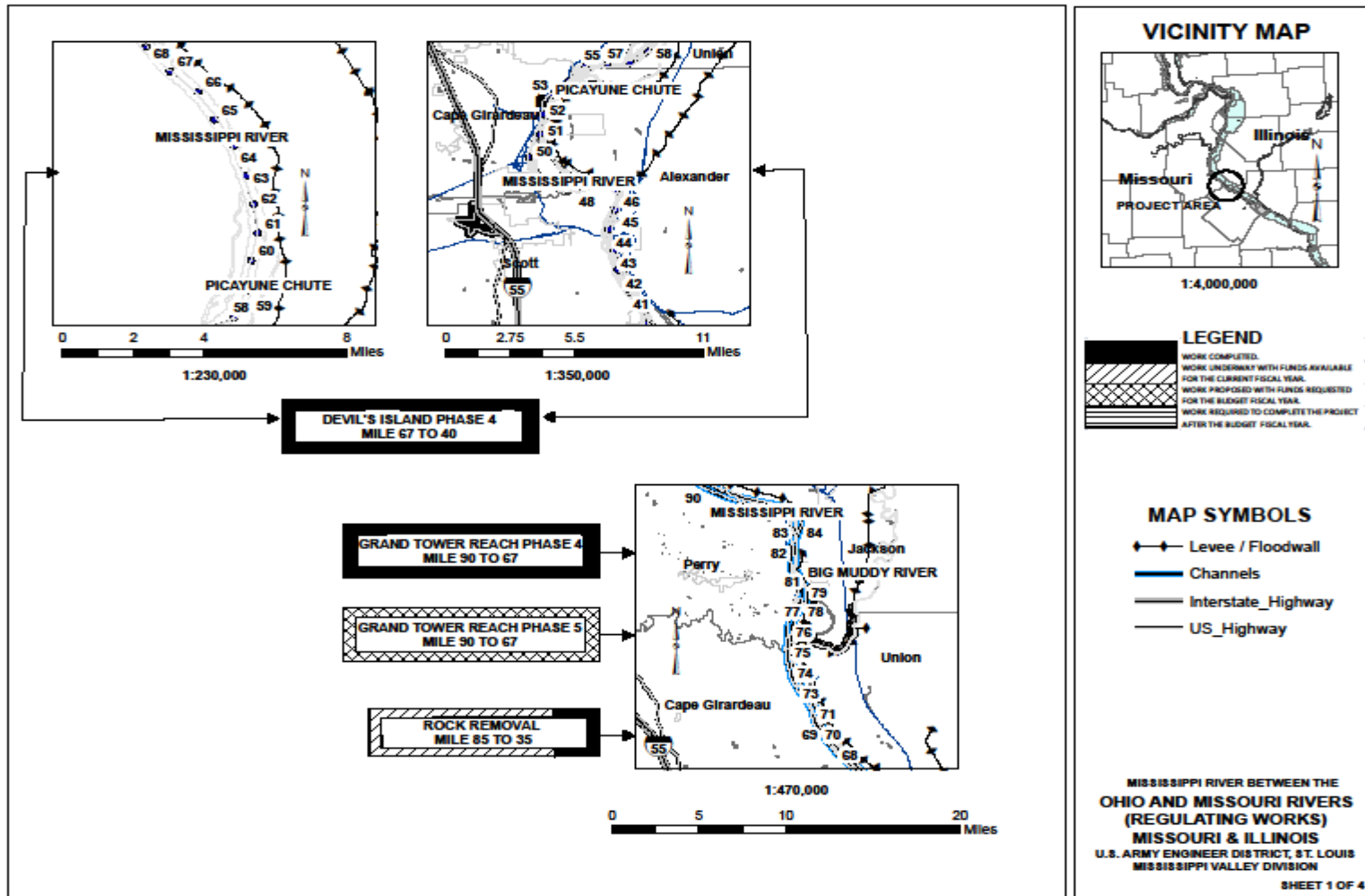
STATUS OF LOCAL COOPERATION: Not applicable.

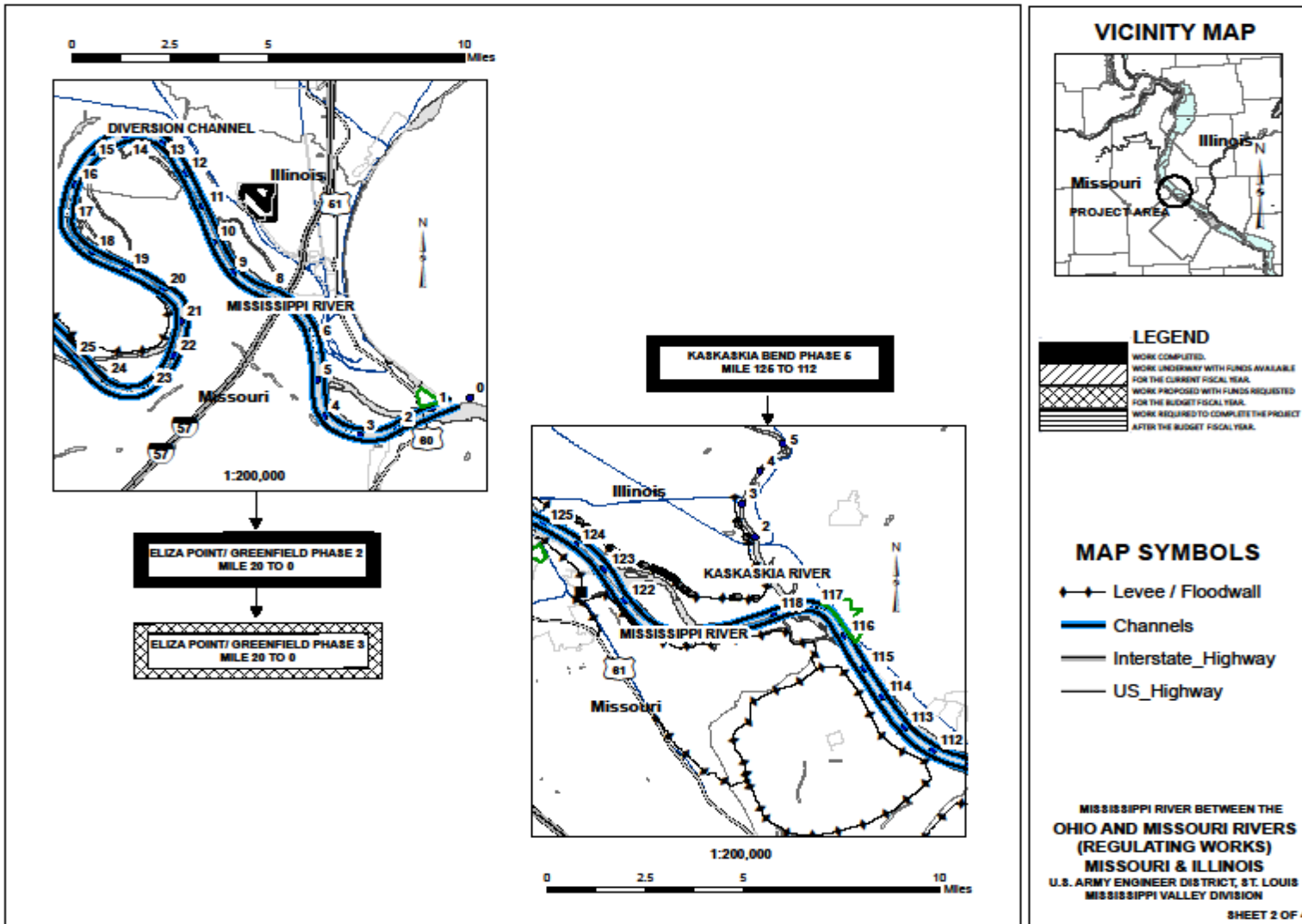
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$375,000,000 is an increase of \$52,000,000 from the latest estimate (\$323,000,000) presented to Congress (FY 2013). Post contract award costs reflect an increase due to the recent reanalysis of requirements for rock removal and associated labor requirements as well as increases in engineering and design for model studies for future work and for further environmental analysis. This change includes the following items:

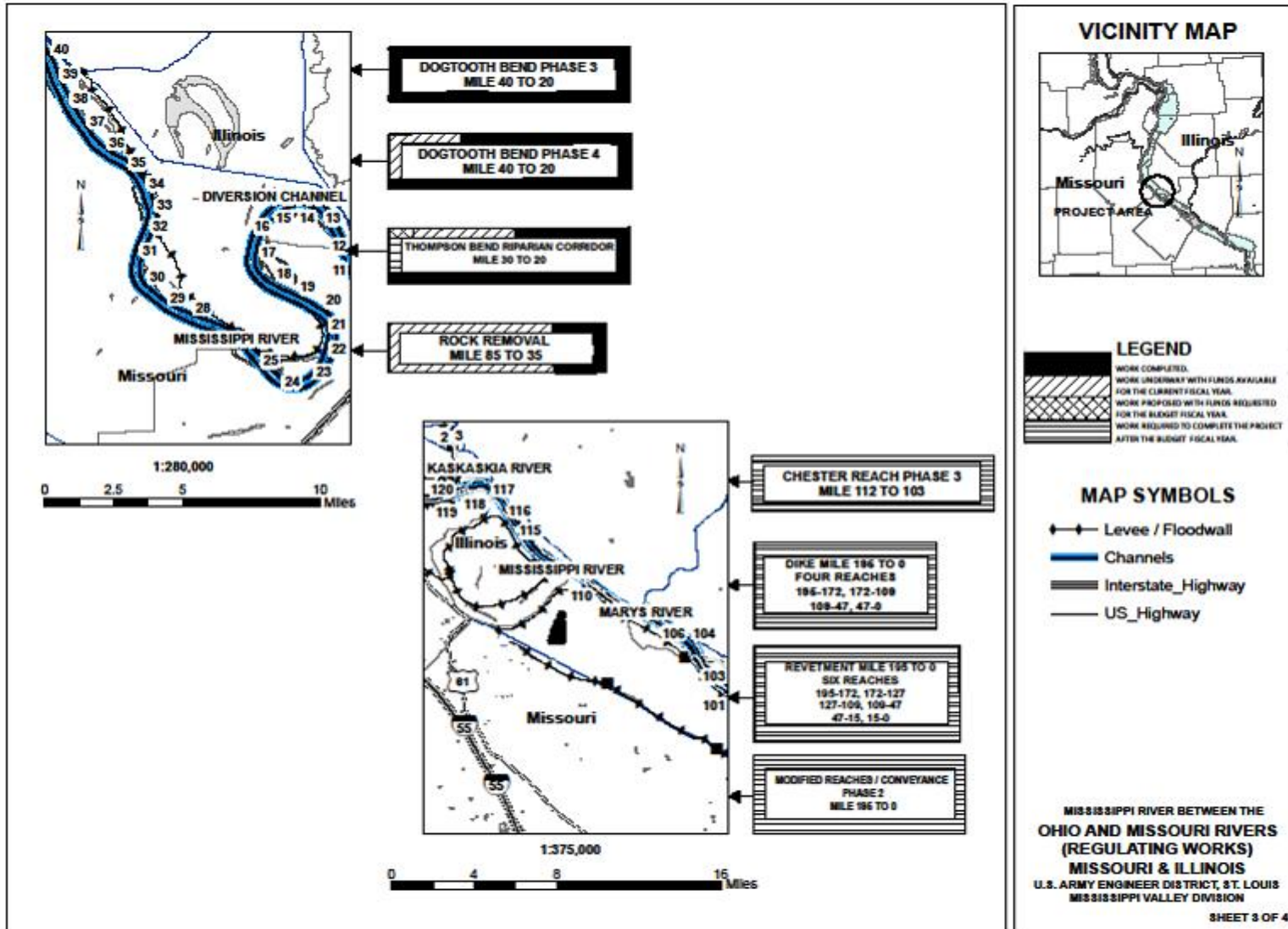
Item	Amount
Price Escalation on Construction Features	\$2,641,000
Post Contract Award and Other Estimating (including Contingency) Adjustments	49,359,000
Total	\$52,000,000

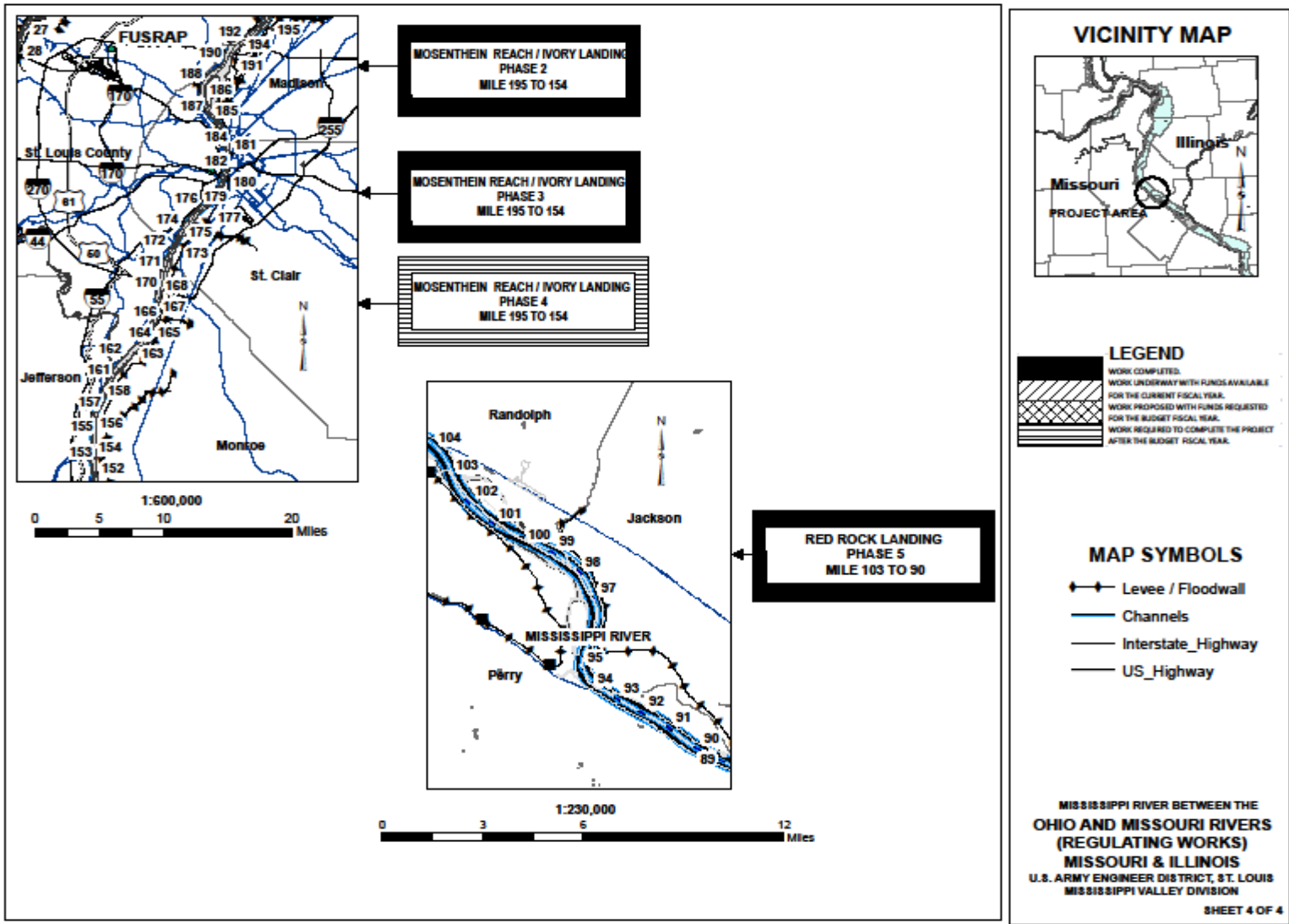
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Council on Environmental Quality on 8 April 1976 and published in the Federal Register on 23 April 1976. An Environmental Analysis was completed for the Rock Removal and Finding of No Significant Impact signed on 28 October 1988. MVS is currently engaged in completing an Environmental Assessment (EA) of the Middle Mississippi Regulating Works Program. The scope of work for the EA is being finalized with a tentative scheduled completion of FY 2014 which could result in the need for a supplemental EIS.

OTHER INFORMATION: Planning was initiated prior to 1910, and construction was initiated in 1910. This project requires no mitigation. Due to the low water event, the pinnacle rock removal was prioritized in FY 2013.









APPROPRIATION TITLE: Construction – Local Protection (Flood Risk Management)

PROJECT: Monarch-Chesterfield, Missouri (Continuing)

LOCATION: The project is located in westernmost St. Louis County, Missouri within the boundaries of the City of Chesterfield. The levee system is located along the right bank of the Missouri River between river miles 46.0 and 38.5.

DESCRIPTION: The existing private levee system is 11.5 miles long and protects approximately 4,700 acres from the 1 percent annual chance of exceedance (100-year event). During the Great Flood of 1993, the existing levee failed causing flood damages in excess of \$200,000,000. The project consists of raising the existing levees on the Missouri River and Bonhomme Creek to provide protection from a .2 percent annual chance of exceedance (500-year event) along with relief wells, a sheet pile cutoff, and berms to control underseepage. Other features include roadways, railroad and roadway closure structures, retaining walls, relocations, pumping stations with gravity structures, and environmental mitigation features. All work is programmed.

AUTHORIZATION: The Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 13.6 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 3.8 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 5 5/8 percent (FY 2004).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Level 2 Economic Reevaluation on the Chesterfield Flood Control Feasibility Study approved 28 June 2011 at 2011 price level.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	PHYSICAL STATUS (1 Jan 2013)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost	\$61,421,000	Entire Project		63	TBD
Estimated Non-Federal Cost	33,071,000				
Cash Contributions	\$ 4,725,000				
Other Costs	28,346,000				
Total Estimated Project Cost	\$94,492,000				
Allocations to 30 September 2010	21,723,000				
Allocation for FY 2011	6,460,000				
Allocation for FY 2012	1,936,000 ^{1/}				
Conference Allowance for FY 2013	2,340,000 ^{2/}				
Allocation for FY 2013	2,151,000 ^{3/}				
Allocations through FY 2013	32,270,000 ^{4/}	53			
Estimated Carry-in Funds	0 ^{5/}				
Budget Amount for FY 2014	2,000,000	56			
Programmed Balance to Complete after FY 2014	27,151,000				
Unprogrammed Balance to Complete after FY 2014	0				

PHYSICAL DATA

Levee:	11.5 miles
Pump Stations:	4 (222 cfs; 44.5 cfs; 133.5 cfs; 273.5 cfs)
Large Gravity Drains:	8
Relief Wells:	33
Mitigation features:	12.94 acres
Sheetpile cutoff wall:	1,100 feet long by 50 feet deep
Berms:	150 to 300 feet wide 5 to 15 feet thick
Road closure structures:	2
Railroad closure structures:	2

^{1/} Reflects revocation of \$315,000 in ARRA funds.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

^{3/} Reflects revocation of \$189,000 in ARRA funds.

^{4/} Includes ARRA \$11,344,000.

^{5/} Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: During the Great Flood of 1993 the levee system breached with approximately 8 feet of water covering the valley causing 250 businesses, comprising over 3,000,000 square feet of commercial development to close, 50 residences were evacuated, Interstate 64/U.S. Route 40 was closed for three weeks as were other transportation routes into the area, the Spirit of St. Louis Airport was closed for nearly three months, and the St. Louis County Correctional Institution was forced to evacuate inmates to temporary quarters for up to six months. Estimated flood damages totaled in excess of \$200,000,000. The present value of properties that will be protected by the project is \$1,800,000,000. Major flood events along the lower Missouri River occurred in 1951, 1973, 1986, 1993 and 1995, with 1993 being the largest flood in the last 50 years. The design frequency against which flood risk reduction is to be provided is 500 year. The life safety hazard index is 15 feet, warning time 12 hours for Missouri River and 1 hour for local streams, and population affected is 61,000. With an average annual cost of \$7,251,000, the average annual net benefit for this project is \$20,000,000. The average annual damages without the project are estimated at \$27,300,000 and \$49,000 with the project. The average annual benefits, all flood control, are \$27,251,000.

FISCAL YEAR 2013: The total unobligated dollars are being used as follows:

Construct Watershed 5 Relief Wells	\$ 816,000
Construct Levee Raise at Pump Station 7	492,000
Continue construction of Pump Station 5 and Centaur Road Closure	863,000
Planning, Engineering, and Design	700,000
Construction Management	66,000
Total	\$2,937,000

FISCAL YEAR 2013: The current amount is being applied as follows (see Other Information):

Continue construction of Watershed 5 Relief Wells	\$ 275,000
Continue construction of Levee Raise at Pump Station 7	700,000
Planning, Engineering, and Design	961,000
Construction Management	404,000
Total	\$2,340,000

FISCAL YEAR 2014: The requested amount will be used for plans and specifications for pump stations and gravity drain work and engineering during construction and construction management for previously awarded contracts. Funds will be applied as follows:

Planning, Engineering, and Design	\$1,676,000
Construction Management	324,000
Total	\$2,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way.	\$13,933,000	\$0
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	3,900,000	0
Pay 35 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 35 percent as determined under Section 103(m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay as reduced for credit allowed based on prior work (Section 104 of the Water Resources Development Act of 1986) as amended; and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	15,238,000	836,000
Total Non-Federal Costs	\$33,071,000	\$836,000

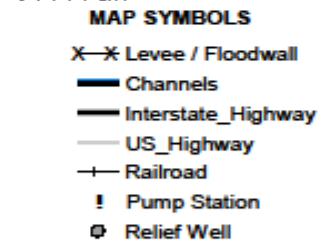
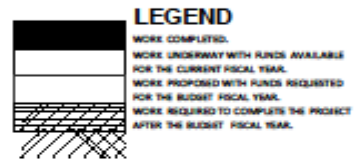
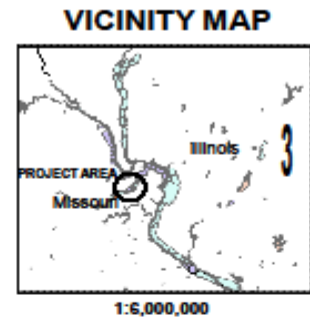
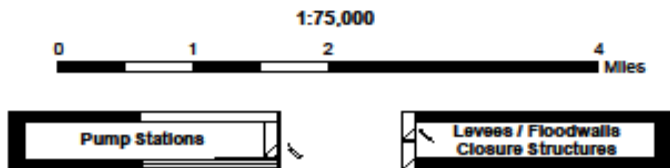
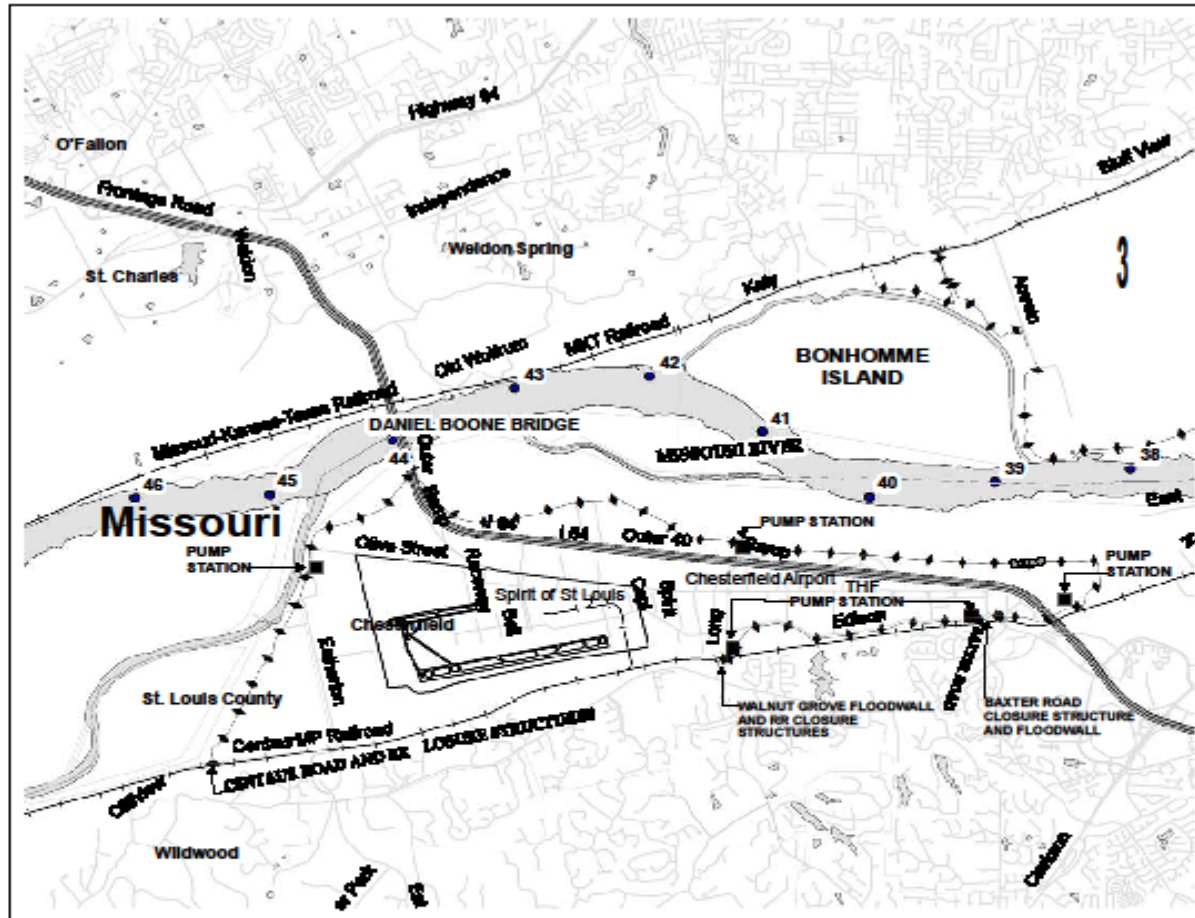
STATUS OF LOCAL COOPERATION: The local sponsor for this project is the Monarch-Chesterfield Levee District. The Project Cooperation Agreement was executed 1 February 2008. The local sponsor has received approval from the Assistant Secretary of the Army (Civil Works) for three credit applications of work. These applications included: 1) construction of three pump stations within the protected area, 2) levee improvement from Centaur Road to Interstate 64/U.S. 40, and 3) realignment of the levee near Boone's Crossing Interchange and levee improvement along the left bank of Bonhomme Creek. The Levee District has not been reimbursed for the credits.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$61,421,000 is the same as the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with EPA in October 2000 and published in the Federal Register on 9 November 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 2001. Funds to initiate construction were appropriated in FY 2004. Breakdown of FY 2013 amount (\$2,340,000) reflects updated estimates in work package costs based on recent site visit.

Fish and wildlife mitigation costs are estimated at \$470,000.



MONARCH-CHESTERFIELD, MISSOURI
 U.S. ARMY ENGINEER DISTRICT, ST. LOUIS
 MISSISSIPPI VALLEY DIVISION

OPERATIONS AND MAINTENANCE

Key to Abbreviations:

N = Navigation

FRM- = Flood Risk Management

RC = Recreation

H = Hydropower

ES = Environmental Stewardship

WS = Water Supply

ARKANSAS

O&M JUSTIFICATION SHEET

PROJECT NAME: Blakely Mountain Dam, Lake Ouachita, AR

AUTHORIZATION: Flood Control Act 1944, Section 10.

LOCATION AND DESCRIPTION: Blakely Mountain Dam, Lake Ouachita is located on the Ouachita River in Garland and Montgomery Counties, Arkansas, west of Hot Springs, Arkansas. The project consists of an earth-fill dam, power plant and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity of the lake is 2,768,000 acre-feet. The power plant has a generating capacity of 75,000 kilowatts. Twenty campgrounds and recreation areas are located on the project. Annual public visitation to the project is 4,500,000.

CONFERENCE AMT. FOR FY 2013: \$8,534,000 2/

BUDGETED AMOUNT FOR FY 2014: **M:** \$2,420,000 **O:** \$5,518,000 **T:** \$7,938,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$996,000 provides for minimal critical operation and maintenance of the dam including inspections and water control data collection. Blakely Mountain Dam has prevented over \$23,000,000 in flood damages since it was placed in operation.

RC: \$2,777,000 provides minimal operation and maintenance of recreation facilities.

H: \$4,026,000 provides for minimal critical operation and maintenance of the hydropower facilities and rehab of the power tunnel. In FY 2012, Blakely Mountain Power Plant generated 158,945 kilowatt-hours (1000) of hydroelectric power and since being placed in operation, has produced gross revenues of over \$74,000,000.

EN: \$114,000 provides for monitoring and surveying wildlife and other organisms listed as threatened or endangered, monitoring culturally significant sites for disturbances, taking protective measures to prevent disturbances, investigating and reporting disturbances of sites, forest management activities, monitoring exotic species infestations in Lake Ouachita and updating Lake Ouachita Master Plan.

WS: \$25,000 complete water reallocation studies

OTHER INFORMATION: Visitors to the lake spent \$18,620,000 in the immediate area in 2011, resulting in \$11,630,000 in direct sales to tourism-related firms. With multiplier effects, visitor spending resulted in \$16,240,000 in total sales, \$5,840,000 in total personal income and supported 324 jobs, boosting the local economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: DeGray Lake, AR

AUTHORIZATION: River and Harbor Act 1950, Section 101 and Water Supply Act of 1958, as amended by Federal Water Pollution Control Act of 1961.

LOCATION AND DESCRIPTION: DeGray Lake is located on the Caddo River in Clark and Hot Spring Counties, AR, northwest of Arkadelphia, AR. The project consists of an earth-fill dam, power plant and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity of the lake is 495,100 acre-feet. The power plant has a generating capacity of 68,000 kilowatts. There is a re-regulating pool below the main dam for water supply storage and pumped-storage power generation. Eighteen campgrounds and recreation areas are located on the project. Annual public visitation to the project is approximately 3,000,000.

CONFERENCE AMT. FOR FY 2013: \$6,881,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,043,000 O: \$4,594,000 T: \$5,637,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$35,000 provides for joint activities for road repair at small dike and paving channel road and Forestry Circle.

FRM: \$552,000 provides for minimal critical operation and maintenance of the dam including inspections and data collection road repair, and update EAP. DeGray Dam has prevented \$9,000,000 in flood damages since it was placed in operation.

RC: \$2,782,000 provides minimal operation and maintenance of recreation facilities.

H: \$1,906,000 provides for minimal critical operation and maintenance of the hydropower facilities, rehab of intake crane controls and repairs and refurbish intake cylinder gate. In FY 2012, DeGray Power Plant generated 85,040 kilowatt-hours (1000) of hydroelectric power and since being placed in operation, has produced gross revenues of over \$40,200,000.

EN: \$362,000 provides for minimal management of cultural and natural resources from further degradation. This includes boundary surveillance for encroachments, outgrant and land use request evaluations, surveillance of lands and waters to monitor and control invasive species such as hydrilla and the gypsy moth, selective timber thinning, prescribed burning activities, and the creation of fish and wildlife habitat.

WS: N/A

OTHER INFORMATION: Visitors to the lake spent \$15,630,000 in the immediate area in 2011, resulting in \$9,760,000 in direct sales to tourism-related firms. With multiplier effects, visitor spending resulted in \$13,630,000 in total sales, \$4,900,000 in total personal income and supported 272 jobs, boosting the local economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Helena Harbor, Phillips County, AR

AUTHORIZATION: River and Harbor Act of 1960, Sec. 107, as amended

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River (mile 663.0) at Helena in Phillips County, Arkansas. This is a slack-water harbor used primarily for the export of agricultural goods. The project provides for maintenance of the navigation channel for year-round access to barge transportation for the existing facilities. The approved channel dimensions are 9 feet deep by 450 feet wide by 3,200 feet long. The local interest is the city of Helena, AR.

CONFERENCE AMT. FOR FY 2013: \$ 74,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$26,000 O: \$0 T: \$26,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$26,000 – Funding provides for performance of minimal critical surveys. This information can be provided to the local interests to be used in the determination of the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 1,797.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Narrows Dam, Lake Greeson, AR

AUTHORIZATION: Flood Control Act 1944.

LOCATION AND DESCRIPTION: Narrows Dam/Lake Greeson is located on the Little Missouri River in Pike County, AR, north of Murfreesboro, AR. The project consists of a concrete dam, power plant and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity of the lake is 407,000 acre-feet. The power plant has a generating capacity of 25,500 kilowatts. There are 16 campgrounds and recreation areas on the project. Annual public visitation to the project is approximately 2,000,000.

CONFERENCE AMT. FOR FY 2013: \$4,659,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,079,000 O: \$3,762,000 T: \$5,841,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,158,000 provides for minimal critical operation and maintenance of the dam including inspections and data collection. Narrows Dam has prevented over \$9,700,000 in flood damages since it was placed in operation.

RC: \$1,705,000 provides minimal operation and maintenance of recreation facilities.

H: \$2,519,000 provides minimal critical operation and maintenance of the hydropower facilities. In FY 12, Narrows Power Plant generated 40,113 kilowatt-hours (1000) of hydroelectric power and since being placed in operation, has produced gross revenues of over \$29,600,000.

EN: \$459,000 provides for management of cultural and natural resources. It also enables the continuation of contracts or agreements for cultural resources surveys, testing, evaluation, analysis, protection, and work to prevent or mitigate damage or deterioration to those characteristics or attributes that contribute to their significance. Also, the participation of environmental stewardship partnership agreements with the Arkansas Game and Fish Commission, including large scale establishment of fish habitat and structure, establishment of native aquatic vegetation, and seeding of exposed shoreline during periods of low water.

WS: N/A

OTHER INFORMATION: Visitors to the lake spent \$7,300,000 in the immediate area in 2011, resulting in \$4,040,000 in direct sales to tourism-related firms. With multiplier effects, visitor spending resulted in \$5,210,000 in total sales, \$1,910,000 in total personal income and supported 133 jobs, boosting the local economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Osceola Harbor, AR

AUTHORIZATION: River and Harbor Act of 1960, Section 107, as amended; WRDA 2007, Sec. 3010

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River at mile 785.0 near Osceola, in Mississippi County, Arkansas. This is a slack-water harbor used primarily for the export of agricultural goods. The project provides for maintenance of a navigation channel for year-round access for barge transportation. The approved channel dimensions are 9 feet deep by 250 feet wide by 6,500 feet long, with a 250-foot radius turning basin at the upstream end. The local interest is the city of Osceola, AR.

CONFERENCE AMT. FOR FY 2013: \$13,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$15,000 T: \$15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 – Funding provides for performance of minimal critical surveys. This information can be provided to the local interests for their use in determining the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 486.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ouachita and Black Rivers, AR and LA

AUTHORIZATION: River and Harbor Act 1950 as modified by River and Harbor Act 1960.

LOCATION AND DESCRIPTION: The project for navigation on the Ouachita/Black Rivers extends 366 miles from the mouth of the Black River to Camden, Arkansas, and provides for a 9- by 100-foot navigation channel. The project also includes a diversion channel through Catahoula Lake near Jonesville, Louisiana, for ecological reasons.

CONFERENCE AMT. FOR FY 2013: \$7,507,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,711,000 O: \$6,075,000 T: \$9,786,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$8,289,000 provides for minimal critical operation and maintenance of locks and dams, minimal critical dredging, collection of data for water control and quality, inspections, and real estate management. Amount also includes a one-time cost of approximately \$2,000,000 for purchase and installation of a system for remote operation of tainter gates on two locks and dams.

FRM: \$14,000 provides for real estate management of the project lands leased to others in the Camden, AR area.

RC: \$1,420,000 provides for minimal operation and maintenance of recreation facilities.

H: N/A.

EN: \$63,000 provides for minimal natural resource management activities on the waterway including conservation and protection of soil, water, wetland, vegetation, waterfowl, fish, and wildlife.

WS: N/A.

OTHER INFORMATION: On 29 July 2012, the locking hours for the four locks and dams were changed from Full Service 24/7/365 to Reduced Service – Two Shifts Per Day. At Jonesville and Columbia Locks and Dams, locking hours are from 0500-1400 and 1700-0200. Felsenthal and H. K. Thatcher Locks and Dams have locking hours of 0500-1300 and 1700-0100. Reduction in funding for FY 2013 resulted in the shift of focus to maintenance of the locks vs. operation using savings realized from reduced lock operations. In 2010, 1,121,313 tons of cargo was shipped on the Ouachita and Black Rivers.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: White River, AR

AUTHORIZATION: The River and Harbors Act of 13 July 1892 authorized the original project. Maintenance was discontinued after FY 1951 due to a decline in traffic volume. Maintenance was resumed in FY 1961. The Office of the Chief of Engineers modified the project authority on 11 March 1968, per Section 107 of the 1960 River and Harbors Act.

LOCATION AND DESCRIPTION: This project is located on the White River from mile 9.8 to mile 255, near Newport, in Jackson County. The project provides for maintenance of the navigation channel with sufficient width and depth to accommodate existing commerce by snagging, dredging, and construction work. The existing authority is for 4.5 feet by 100 feet from mile 198 to 255 at 3.5 feet on the Newport gage; and 8 feet by 125 feet from mile 9.8 to 198 at 12 feet on the Clarendon gage, including a 5 feet minimum draft at low river stages. The local interest is the Arkansas Waterways Commission.

CONFERENCE AMT. FOR FY 2013: \$39,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$31,000 T: \$31,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$31,000 – Funding provides for performance of minimal critical surveys. This information can be provided to local interests for their use in determining the navigation capacity of the channel in the project area.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 115.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Yellow Bend Port, AR

AUTHORIZATION: River and Harbor Act of 1960.

LOCATION AND DESCRIPTION: Yellow Bend Port is an inland port located along the Mississippi River in Desha County, Arkansas. This project's purpose is to meet transportation needs for water-oriented industry in Desha and Chicot Counties in Arkansas.

CONFERENCE AMT. FOR FY 2013: \$3,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$3,000 T: \$3,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,000 - provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods. This is a high sediment harbor controlled by the rise and fall of the Mississippi River.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs for water-oriented industry for many small communities and farmers in the Arkansas Delta. The project was constructed in 1990 and has been maintained annually. In 2010, the port shipped 224,764 tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

ILLINOIS

O&M JUSTIFICATION SHEET

PROJECT NAME: Carlyle Lake, IL

AUTHORIZATION: FCA 1938, 1944, and 1958.

LOCATION AND DESCRIPTION: The project, completed in 1967, is located on Kaskaskia River, approximately 107 miles above its mouth, near community of Carlyle, Illinois. Portions of the project are situated in Clinton, Fayette, Bond, and Marion Counties. Carlyle Lake is the largest man-made lake in Illinois, with over 26,000 acres of water and 11,000 acres of public land. Lake provides flood control, water quality control and water supply to nearby communities; recreation; and fish and wildlife conservation. It is authorized to augment navigation flows downstream on the Kaskaskia River.

CONFERENCE AMT. FOR FY 2013: \$5,462,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,148,000 O: \$3,394,000 T: \$5,542,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,232,000 – Minimal critical operation and maintenance for flood risk management (FRM); critical dam maintenance, dam safety, water control and Real Estate costs for compliance management. Operate and maintain FRM features ensuring operational availability of critical FRM infrastructure.

RC: \$2,804,000 - Minimal operation and maintenance of recreation areas, facilities and programs, public health and safety, law enforcement agreements, use fees collection, and visitor center operations. Funds will be leveraged to maximize benefits regionally and nationally.

H: N/A

EN: \$466,000 - Minimal operation and maintenance of environmental stewardship program and features; environmental compliance, control of invasive species, cultural and natural resource protection, environmental stewardship on 37,543 acres of fee lands and waters, with 75 miles of boundary.

WS: \$40,000 - Annual recurring minimal operation and maintenance costs associated with water supply. Funding will ensure availability of water supply meeting contract requirements.

OTHER INFORMATION: FY 2012 project visitation was 2,844,000, generating recreation economic benefits estimated at \$67,601,000. Leveraged funds for FY 2012 were \$581,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Farm Creek Reservoirs, IL

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project includes two dry reservoirs (Fondulac and Farmdale) located on tributary streams to the Illinois Waterway upstream of Peoria, Illinois, providing flood control for East Peoria, Illinois.

CONFERENCE AMT. FOR FY 2013: \$457,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$216,000 O: \$96,000 T: \$312,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$309,000 – Funding provides for minimum critical maintenance of two dry reservoirs upstream of Peoria, Illinois. Funds would also provide for the Development of Dam Safety Program Implementation Actions to Reduce Probability and Consequences of Catastrophic Failure. Population at risk = 135,000.

RC: N/A

H: N/A

EN: \$3,000 – Funding provides for minimal operations and maintenance to reduce immediate degradation and loss of natural resource base to include land and water acres, as well as cultural and historic property management.

WS: N/A

OTHER INFORMATION: Regional FY2011 economic impacts are \$705,562 from an estimated 45,000 recreation visitations.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Illinois Waterway (MVR Portion), IL & IN

AUTHORIZATION: River and Harbor Acts 1927 and 1930

LOCATION AND DESCRIPTION: The project includes a total of 268 river miles of 9-foot commercial navigation channel from Chicago to LaGrange Lock and Dam, near Beardstown, Illinois; with 8 locks and 7 dams. The navigable portions of this river and the locks and dams that allow waterway traffic to move from one pool to another are integral parts of a regional, national, and international transportation network. The system is significant for certain key exports and the Nation's balance of trade. recreation facilities include a Visitor Center at Starved Rock Lock and Dam.

CONFERENCE AMT. FOR FY 2013: \$32,727,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$20,493,000 O: \$19,088,000 T: \$39,581,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$38,943,000 – Funding provides for minimal critical operations and maintenance at 8 lock and dams sites and the project office, critical fleet maintenance support service; dredging, water control, dredged material disposal, dam safety, and real estate management. FY2014 funds will also be used to procure upper and lower miter gates for Lagrange Lock.

FRM: N/A

RC: \$531,000 – Funding provides for minimal operation and maintenance of the visitor center at Starved Rock Lock and Dam. These funds support management of the recreation program and public visitation by providing safe recreation facilities, and visitor assistance and protection. FY2014 funds will also be used to procure and install solar panels and wind turbines for power at the Starved Rock Visitor Center.

H: N/A

EN: \$107,000 – Funding provides for annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and water quality control.

WS: N/A

OTHER INFORMATION: More than 580 manufacturing facilities, terminals and docks ship and receive goods on the Upper Mississippi River Basin, which includes the Illinois Waterway. Annually, the regional project generates an estimated \$1,000,000,000 of transportation cost savings compared to overland methods. This savings equates to approximately \$24 per ton.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Illinois Waterway (MVS Portion), IL & IN

AUTHORIZATION: River and Harbor Acts of 1927 and 1930

LOCATION AND DESCRIPTION: The portion of the Illinois Waterway within the boundaries of the St. Louis District extending from the mouth of the Illinois River at Grafton, Illinois, to the tail water of LaGrange Lock and Dam at mile 80.15. The project operates and maintains the nine-foot navigation channel by dredging, channel patrol, water management, environmental compliance, stewardship of lands and waters and river engineering. The project has stewardship responsibility for 16,000 acres of public lands.

CONFERENCE AMT. FOR FY 2013: \$1,832,000 2/

BUDGET FOR FY 2014: M: \$3,433,000 O: \$458,000 T: \$3,891,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,828,000 - Minimal critical operations and maintenance for the lower 80 miles of navigation channel to include water management, water quality, surveys, channel patrol, and only the most critical dredging needs.

FRM: N/A

RC: N/A

H: N/A

EN: \$63,000 - Minimal stewardship of 16,000 acres of land, management of outgrants, and coordination with environmental partners for conservation and restoration. Additionally, several flood damaged outgrant cabins will need to be removed and the land restored to public open space in coordination with Federal/State floodplain management goals. Current allocations are insufficient to meet this requirement.

WS: N/A

OTHER INFORMATION: The Illinois Waterway accounts for approximately 50% of the commercial commodity tonnage shipped south through St. Louis Harbor, 27.9M tons of commodities in FY 2011. As such, it is an important transportation corridor. Dredge planning and budgeting are complex due to river conditions and lack of channel training structures. Project has capability for construction of training structures at chronic dredging issue at miles 78-70. The lower Illinois River project lands and waters contain important Federal and State managed wildlife areas and heavily utilized recreational features. This area includes approximately 16,000 acres of Corps-owned land, six state conservation areas, and one state park. FY 2012 visitation was 152,655,189,399 visits, generating recreation economic benefits estimated at \$3,400,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Kaskaskia River Navigation, IL

AUTHORIZATION: Sec 101 of River and Harbor Act 1962, Sec 321 of Water Resources Development Act (WRDA) 1996 (Public Law (PL) 104-303), which added fish and wildlife and habitat restoration as project purposes, Sec 311 of WRDA 2000 (PL 106-541), which added recreation as a project purpose.

LOCATION AND DESCRIPTION: The project is located in south-central Illinois and empties into Mississippi River 118 miles above the Ohio River. The project consists of 36-mile navigation channel; one 600-foot lock; dam; dam with gated spillway; 2,901 acres fee and easement lands; 5,593 acres of flowage easement; three barge terminals; two marinas; four major recreation areas with boat ramps; and numerous minor access points. Authorized purposes are navigation, recreation, fish and wildlife, and habitat restoration.

CONFERENCE AMT. FOR FY 2013: \$1,902,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$313,000 O: \$1,615,000 T: \$1,928,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,623,000 - Minimal critical operation of the lock, operates the dam to maintain pool, provides limited water control operations, channel surveys, periodic inspection and assessment, and dredging of the mouth.

FRM: N/A

RC: \$164,000 - Provides for minimal operation and maintenance of recreation facilities, visitor center, and compliance with environmental regulations. Limited public safety operations with cooperative law enforcement agreement and visitor assistance patrols on lands/waters of 36-mile channel during peak use periods.

H: N/A

EN: \$141,000 - Supports RCurring environmental stewardship activities that provide protection of natural resources on 2,901 acres of project lands. Contribute to legal mandates under the Endangered Species Act, National Environmental Policy Act, Fish and Wildlife Coordination Act, Clean Water Act and Migratory Bird Treaty.

WS: N/A

OTHER INFORMATION - Commercial tonnage passing through lock is increasing with both generator units of the \$4 billion dollar Prairie State Energy Campus now on-line. The mine/power plant complex serves 8,500,000 customers. The power plant requires a million tons of limestone a year for the scrubbers, which come through the lock and up the channel to New Athens. Also, coal, scrap metal and fertilizer shipments are increasing. FY 2012 tonnage was 917,050 tons, up from 826,455 tons in 2011. KRPD and State of Illinois are currently developing a new grain terminal at Fayetteville. FY 2012 project visitation was 399,720 generating recreation economic benefits estimated at \$11,088,200.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Shelbyville, IL

AUTHORIZATION: Flood Control Acts of 1944 and 1958

LOCATION AND DESCRIPTION: The project provides flood control, water supply, recreation, conservation of fish and wildlife, and water quality control and augments navigation flows downstream on the Kaskaskia River. The lake extends northeastward to approximately river mile 275 through Shelby, Moultrie, Douglas, and Coles Counties.

CONFERENCE AMT. FOR FY 2013: \$5,412,000 2/

BUDGETED AMOUNT FOR FY 2014: **M:** \$2,149,000 **O:** \$3,562,000 **T:** \$5,711,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,357,000 - Minimal critical operation and maintenance for flood risk management; critical dam maintenance, FRM operations, dam safety, water control and RE cost for compliance management. Operate and maintain FRM features utilizing asset maintenance management program ensuring operational availability of critical FRM infrastructure and reduce high priority deferred maintenance. Maintain FRM assets, reducing risk of dam failure and assisting in ensuring operational availability of critical infrastructure. The Corps of Engineers "Screening Portfolio Risk Assessment (SPRA)" has classified the Lake Shelbyville Dam as Dam Safety Assessment Class 2 (DSAC-II). Implement sustainability measures at project maintenance building as outlined in sustainability package to reduce energy cost utilizing green technology.

RC: \$2,763,000 – Minimal operation and maintenance of recreation areas, facilities and programs; minimal operations and minor maintenance of recreation facilities, visitor assistance, public health and safety, law enforcement agreements, public access, use fees collection, and visitor center operations.

H: N/A

EN: \$551,000 - Minimal operation and maintenance of environmental stewardship program and features; environmental compliance, control of invasive species, cultural and natural resource protection.

WS: \$40,000 - Minimal operation of water supply program; dam operations for water supply, reporting requirements, coordination with external and internal partners and stakeholders.

OTHER INFORMATION: FY 2012 project visitation was 4,085,663 visits, generating recreation economic benefits estimated at \$88,487,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River Between Missouri River and Minneapolis (MVR Portion), IL

AUTHORIZATION: River and Harbor Acts 1927 and 1930

LOCATION AND DESCRIPTION: The project consists of a 314-river-mile reach of 9-foot commercial navigation channel from Guttenberg, Iowa, downstream to Saverton, Missouri. It includes 14 locks and 11 dams (L/Ds) at 12 sites from Lock 11 to Lock 22. The navigable portions of this river and the locks and dams that allow waterway traffic to move from one pool to another are integral parts of a regional, national, and international transportation network. Recreation facilities include 25 public recreation areas and the Visitor Center located at Lock & Dam 15.

CONFERENCE AMT. FOR FY 2013: \$56,758,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$34,181,000 O: \$29,558,000 T: \$63,739,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$60,573,000 – Funding provides for minimum critical operations and maintenance at 12 lock and dam sites and the project office, critical fleet maintenance support service; dredging, dredged material disposal, water control, periodic inspection, dam safety, and real estate management. FY2014 funds will also be used to construct bulkhead recesses and procure miter gates.

FRM: N/A

RC: \$2,281,000 – Funding provides for minimum operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, visitor assistance and protection, as well as functions that support recreation management by other lessees, agencies and partners. recreation facilities include 25 public recreation areas and the Visitor Center located at Lock & Dam 15.

H: N/A

EN: \$885,000 – Funding provides for annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and continuing Endangered Species responsibilities with USFWS.

WS: N/A

OTHER INFORMATION: More than 580 manufacturing facilities, terminals and docks ship and receive goods on the Upper Mississippi River Basin. Annually, the regional project generates an estimated \$1 billion of transportation cost savings compared to overland methods. The savings equates to around \$24 per ton. FY11 recreation fee receipts and lease revenues were \$952,000; and there were 11,908,000 visits.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

Rock Island District

Mississippi River between
Missouri River and Minneapolis
(MVR Portion), IL

1 May 2013

MVD-127

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River between Missouri River and Minneapolis (MVS Portion), IL

AUTHORIZATION: Rivers and Harbors Act of 1930, as amended by Public Resolution No. 10 (1932).

LOCATION AND DESCRIPTION: Project area extends from the mouth of the Missouri River at St. Louis upstream to Lock and Dam 22 tail water, includes 105 miles of river and 70,000 acres of public lands. Project provides a nine-foot navigation channel via a system of locks and dams; regulating works; dike and revetment; dredging; environmental compliance/stewardship, and recreational opportunities.

CONFERENCE AMT. FOR FY 2013: \$25,464,000 2/

BUDGETED AMOUNT FOR FY 2014: **M:** \$18,313,000 **O:** \$8,006,000 **T:** \$26,319,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$24,027,000 – Minimal critical operations and maintenance of project, including operation of Locks and Dams 24, 25, and Mel Price, navigation channel maintenance. Award IDIQ contract for multi-year goal of reducing risk associated with the dams at Locks 24 and 25 to include installation of chains and sprockets, repairs to bridge spans, and refurbishment of tainter gates.

FRM: N/A

RC: \$1,265,000 - Minimal critical operations and maintenance of 46 recreational access areas and the National Great Rivers Museum (NGRM) and conduct numerous outreach/educational programs. Continue work on Mississippi River Teacher Curriculum Guide and regional workshops; upgrade exhibits and implement Illinois esplanade plan at the NGRM; construct Eagle Viewing Platform (Lock 25); repair recreational areas damaged by debris from high water in 2011; in partnership with Missouri Audubon, upgrade eagle viewing facilities at Riverlands.

H: N/A

ES: \$1,027,000 - Basic stewardship of 70,000 acres of land, management of outgrants, and coordination with environmental partners for conservation and restoration. Complete restoration of flood damaged outgrant cabins to public open space in coordination with Federal/State floodplain management goals. Maintain project forest lands in accordance with Regional Systemic Forest Management Plan.

WS: N/A

OTHER INFORMATION: Total commercial commodities passing through project in FY 2011 was 57,298,134 tons. Unscheduled closures can impact the regional economy up to \$2,800,000 per day as well as significantly higher national and international secondary impacts. FY 2012 project visitation was 3,095,295, generating recreation economic benefits estimated at \$82,000,000. The NGRM, which has been open for 9 years with a steady increase in visitation, hosted 80,523 visitors in FY 2012 (decrease from FY 2011 due to heat and reduced school groups from lack of transportation funding).

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

Rock Island District

Mississippi River between
Missouri River and Minneapolis
(MVS Portion), IL

O&M JUSTIFICATION SHEET

PROJECT NAME: Rend Lake, IL

AUTHORIZATION: Flood Control Act 1962

LOCATION AND DESCRIPTION: The project is located near Benton, Illinois, in Franklin and Jefferson Counties. The project provides flood control, water supply, recreation, and conservation of fish and wildlife. The earth fill dam with an un-gated main and auxiliary spillway provides the necessary features to create Rend Lake and support the project's purposes. The earth dam is located on the Big Muddy River at mile 103.7 and two sub-impoundment dams are located on the upper arms of the lake.

CONFERENCE AMT. FOR FY 2013: \$5,487,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,494,000 O: \$4,087,000 T: \$5,581,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,187,000 - Minimal critical operation and maintenance costs of the earth embankment dam, 18,900 acre reservoir, monitoring of two sub-impoundment dams, 10 breakwaters, and maintenance and administration buildings to accomplish flood risk management mission in the Big Muddy Watershed. Funding provides for the structural safety and operational adequacy of the 10,600 foot main dam, 435 foot spillway, 800 foot auxiliary spillway, stilling basin and appurtenant structures.

RC: \$2,735,000 - Minimal operation and maintenances activities associated with recreation areas and recreation facilities at 15 federal recreation areas.

H: N/A

ES: \$619,000 - Minimal operation and maintenance costs for environmental stewardship activities that contribute to our legal mandates under Endangered Species Act, Forest Cover Act, National Environmental Protection Act, Fish and Wildlife Coordination Act, Clean Water Act and the Migratory Bird Treaty Act.

WS: \$40,000 – Minimal operation costs associated with the water supply functions which provide 109,000 acre feet of storage.

OTHER INFORMATION: FY 2012 project visitation was 3,672,000 visits generating recreation economic benefits estimated at \$85,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

IOWA

O&M JUSTIFICATION SHEET

PROJECT NAME: Coralville Lake, IA

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Coralville Lake is a multiple purpose project providing primary benefits in flood control and low-flow augmentation and secondary benefits in recreation, fish and wildlife management, forest management, and water quality improvement. Conservation pool is 4,900 acres; and the flood control pool is 24,800 acres with 475,000 acre-feet of storage. The dam is located on the Iowa River just upstream of Iowa City.

CONFERENCE AMT. FOR FY 2013: 4,235,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 853,000 O: \$ 3,515,000 T: \$ 4,368,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,661,000 – Funding provides for minimum critical operation and maintenance of the flood control works and related infrastructure, to reduce flooding downstream and related water control features. These funds support mission execution in preventing damages to properties and communities along the floodway. Critical dam safety programs and activities are also supported with these funds. Population at risk = 164,000.

RC: \$1,243,000 – Funding provides for minimal operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, visitor assistance and protection, as well as functions that support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$464,000 – Funding provides for minimal annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and water quality control.

WS: N/A

OTHER INFORMATION: Cumulative damages prevented are \$338,125,000. The project includes 24,591 acres of fee title lands and there are 11 recreation area sites. FY11 recreation fee receipts and lease revenues were \$526,000. Regional economic impact of 2011 project visitation is \$19,900,000 from an estimated 977,000 visits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Red Rock Dam and Lake Red Rock, IA

AUTHORIZATION: Flood Control Act of 1938, Public Law 75-761

LOCATION AND DESCRIPTION: Lake Red Rock is a multiple purpose project providing primary benefits in flood control and low-flow augmentation and secondary benefits in recreation, fish and wildlife management, forest management, and water quality improvement. Conservation pool is 15,600 acres which makes it Iowa's largest lake; and the storage volume is 1,750,400 acre-feet at flood pool level. The dam is located on the Des Moines River southeast of Des Moines, Iowa.

CONFERENCE AMT FOR FY 2013: \$4,579,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$946,000 O: \$3,775,000 T: \$4,721,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$3,013,000 – Funding provides for minimum critical routine operation and maintenance of the flood control works and related infrastructure, to reduce flooding downstream and related water control features. These funds support mission execution in preventing damages to properties and communities along the floodway. Critical dam safety programs and activities are also supported with these funds. Population at risk = 135,000.

RC: \$1,376,000 – Funding provides for minimal operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, visitor assistance and protection, as well as functions that support recreation management by other lessees, agencies and partners.

H: N/A

ES: \$332,000 – Funding provides for minimal annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and water quality control.

WS: N/A

OTHER INFORMATION: Cumulative damages prevented = \$1,104,997,000. The project includes 50,300 acres of fee title lands and there are 11 recreation area sites. FY11 recreation fee receipts and lease revenues were \$445,000. Regional economic impact of 2011 project visitation is \$11,900,000 from an estimated 597,000 visits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Saylorville Lake, Iowa

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Saylorville Lake is a multiple purpose project providing primary benefits in flood control and low-flow augmentation and secondary benefits in recreation, fish and wildlife management, forest management, and water quality improvement. Conservation pool is 5,950 acres; with a storage volume of 586,000 acre-feet at flood pool level. The dam is located about 11 miles northwest of Des Moines, Iowa, on the Des Moines River.

CONFERENCE AMT. FOR FY 2013: \$5,489,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,964,000 O: \$4,366,000 T: \$11,330,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$9,004,000 – Funding provides for routine operation and maintenance of the flood control works and related infrastructure, to reduce flooding downstream and related water control features. These funds support mission execution in preventing damages to properties and communities along the floodway. Critical dam safety programs and activities are also supported with these funds. Population at risk = 511,000. FY2014 funding also supports a contract to replace the non-functional Big Creek Lake Diversion Dam Gate.

RC: \$1,790,000 – Funding provides for operation and maintenance of day-use and overnight recreation areas, facilities and features. These funds support management of the recreation program and public visitation by providing safe recreation facilities, visitor assistance and protection, as well as functions that support recreation management by other lessees, agencies and partners.

H: N/A

EN: \$528,000 – Funding provides for annual stewardship activities to protect the health, sustainability and integrity of the public lands associated with the project. These activities include natural resource management practices, environmental evaluation and reviews, shoreline protection, cultural resource investigations, and water quality control.

WS: \$8,000 – Funding provides for performance of annual activities required for water supply contract administration and compliance.

OTHER INFORMATION: Cumulative damages prevented = \$324,534,000. The project includes 25,515 acres of fee title lands and there are 13 recreation area sites. FY11 recreation fee receipts and lease revenues were \$608,000. Regional economic impact of 2011 project visitation is \$23,500,000 from an estimated 1,250,000 visits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

KENTUCKY

O&M JUSTIFICATION SHEET

PROJECT NAME: Elvis Stahr (Hickman) Harbor, KY

AUTHORIZATION: River and Harbor Act of 1960, Sec. 107; WRDA 1988, Sec. 53(b)

LOCATION AND DESCRIPTION: This slack-water harbor is located near Hickman, Kentucky, in Fulton County and is used primarily for the export of agricultural products. The project provides for maintenance of an off-river harbor channel extending from the main channel (mile 922.0) of the Mississippi River along the city front to a point about 0.3 miles below the junction of Obion Creek and Bayou Du Chien. The approved channel dimensions are 9 feet deep, 250 feet wide and 5,800 feet long, with a 500 X 600 foot turning basin at its upstream end. The local interest is the city of Hickman, KY.

CONFERENCE AMT. FOR FY 2013: \$ 13,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$15,000 T: \$15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 – Funding provides for performance of minimal critical surveys. This information will be provided to local interests for their use in determining the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 843.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

LOUISIANA

O&M JUSTIFICATION SHEET

PROJECT NAME: Atchafalaya River, Bayous Chene, Boeuf and Black, LA

AUTHORIZATION: River and Harbor Act of 3 July 1968, 13 Aug 1068, Sec 101

LOCATION AND DESCRIPTION: The project is located in south central Louisiana. It provides for a 20-foot deep by 400-foot wide navigation channel.

CONFERENCE AMT. FOR FY 2013: \$8,547,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$8,382,000 O: \$530,000 T: \$8,912,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$8,912,000 - Minimal critical funds will be used to dredge critical reaches in Atchafalaya River Horseshoe, Bay and Bar. Perform channel condition surveys of the entire project and routine O&M. Coordinate and prepare environmental compliance consistency, and continue monitoring the effectiveness of Value Engineering Study alternatives to improve navigation and to alleviate unconsolidated fluid mud in the bar channel. Perform engineering and design, spec review, cost estimating for annual dredging contracts and for the rock dyke placement contract for the Crew Boat Cut bank protection and dredging. Continue working on the Dredged Material Management Plan (DMMP).

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Port of Morgan City - Tonnage rankings is #108 with 1,986,244 tons/yr (FY11). The Atchafalaya River, Bayous Chene, Boeuf and Black provide access to the Gulf of Mexico by the oil and gas industry, commercial fishing industry, supply boats and small ships. This project is high priority to local sponsor. Maintenance of Atchafalaya River will alleviate potential safety and environmental issues associated with potential maritime groundings and economic adversity to Morgan City.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Barataria Bay Waterway, LA

AUTHORIZATION: River and Harbor Act 2 March 1919

LOCATION AND DESCRIPTION: The project is located in southeast Louisiana. The navigation channel is 12 feet deep by 125 feet wide for 36.9 miles in the inland and bay channel reaches, and 15 feet deep by 250 feet wide for the 3.1 mile bar channel. The channel provides maritime accessibility to the Gulf of Mexico for industries located along the waterway. An ancillary benefit to channel maintenance is the 100% beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

CONFERENCE AMT. FOR FY 2013: \$92,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$264,000 T: \$264,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$264,000 – Minimal critical funds to be used for project management, for Hydrographic surveys, to prepare for future dredging operations, to collect and disseminate water level data, to change benchmarks, to reset gauges from NGVD to NAVD and to review permit applications.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Barataria Bay Waterway connects the Gulf Intracoastal Waterway system to natural gas, oil and sulfur production sites and to commercial fishing areas within Barataria Bay and the Gulf of Mexico. Past loss of project dimensions has caused economic hardships and incidents of vessel groundings for commercial fishing and petro-chemical industries. The involved industries are often forced to delay deliveries and increase their transit costs by light-loading vessels when utilizing the varying, deficient channel.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Bodcau Dam and Reservoir, LA

AUTHORIZATION: Flood Control Act (FCA) of 28 June 1938, H.D. 378, 74 Congress 2d Session, FCA 22 June 1936, modified by Act of 28 June 1939.

LOCATION AND DESCRIPTION: Bodcau Bayou Dam and Reservoir is a single purpose flood control reservoir located on Bayou Bodcau, a tributary of the Red River. recreation and natural resource stewardship are important secondary uses of project lands at Bodcau.

CONFERENCE AMT. FOR FY 2013: \$1,041,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,204,000 T: \$1,204,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$667,000 provides for minimal critical operation and maintenance of the dam, dam safety data gathering, water control/quality analysis and collection and real estate management and repair of five slides. Bayou Bodcau Dam was classified as a DSAC III rating in 2008 as part of the Corps-wide dam safety initiative. Bayou Bodcau Dam has prevented \$68,000,000 in flood damages since it was placed in operation.

RC: \$380,000 provides for minimal operation and maintenance of recreation areas.

H: N/A.

EN: \$157,000 provides conservation and protection of soil, water, wetland, vegetation, waterfowl, fish and state and federal endangered and threatened species of approximately 33,000 acres of fee owned property. Primary activities include forest management, wildlife management, oversight and management of mitigation areas, wildland fire protection, operational management plan update, and historic property management.

WS: N/A.

OTHER INFORMATION: Bayou Bodcau Dam was classified as DSAC III in 2008 as part of the Corps-wide dam safety initiative. Guidance indicates that the dam must be remediated to DSAC IV prior to any modifications being made to the dam or its functions that increase risk. The Bossier Parish Feasibility study initially focused on modification to the dam and its operation. However, due to high projected costs, the non-federal sponsors requested that the study's scope be widened to include other flood risk management alternatives in addition to only dam modification. Further investigations into other alternatives have resulted in termination of the study. Project visitation is over 250,000 per year. Visitors to the project spent \$3,990,000 in the immediate area in 2011, resulting in \$2,490,000 in direct sales to tourism-related firms. These sales generated \$890,000 in direct personal income and supported 55 direct jobs, boosting the local economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

Vicksburg District

Bayou Bodcau Dam and
Reservoir , LA

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Lafourche and Lafourche Jump Waterway, LA

AUTHORIZATION: River and Harbor Act 30 August 1935 and 14 July 1960

LOCATION AND DESCRIPTION: The project is located in Southeast Louisiana in Lafourche Parish. Bayou Lafourche is a 36.3-mile navigation channel in Lafourche Parish from LaRose, Louisiana, to Belle Pass in the Gulf of Mexico. Channel dimensions are 6 feet deep by 60 feet wide from Mile 35 to Mile 21.9, 9 feet deep by 100 feet wide from Mile 21.9 to Mile 13.0, 12 feet deep by 125 feet wide from Mile 13.0 to Mile 3.4, 24 feet deep by 300 feet wide from Mile 3.4 to Mile 0.0 (Port Fourchon Reach), and 26 feet deep by 300 feet wide from Mile 0.0 to Mile (-1.3) (Belle Pass). A major facility along this project is Port Fourchon. It is a multi-use facility equipped to serve approx. 250 companies involved with offshore oil, container/breakbulk shipping, trucking, commercial fishing and recreational industries. In support of the vast majority of Gulf deepwater platforms, approx. 275 large supply vessels traverse the Port Fourchon channel on a daily basis. The port performs oil rig refurbishments and has heavy lifting capabilities for deep water vessels.

CONFERENCE AMT. FOR FY 2013: \$1,089,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$881,000 O: \$172,000 T: \$1,053,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,053,000 – Minimal critical funds will be used for project management, for channel maintenance dredging, to perform Hydrographic surveys, for the preparation of Environmental Assessments for wetland development/restoration sites, to collect and disseminate water level data, to reset gauges from NGVD to NAVD, to review permit applications and to provide right-of-entry to dredged material disposal areas.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Port Fourchon is a multi-use facility which services deepwater projects that account for about 90% of the Gulf of Mexico's deepwater oil production. The port also serves as the land base for the Louisiana Offshore Oil Port which handles approx. 15% of the nation's foreign oil imports and is connected to 45%-50% of U.S. refining capacity. Port Fourchon plays a direct role in furnishing about 18% of the U.S. oil supply. An ancillary benefit to channel maintenance is the (100%) beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Pierre, LA

AUTHORIZATION: Flood Control Act 1946.

LOCATION AND DESCRIPTION: The project provides for flood control by channel improvement and enlargement of Ockley Drive Ditch and segments of Bayou Pierre in the vicinity of Shreveport, Louisiana.

CONFERENCE AMT. FOR FY 2013: \$24,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$23,000 O: \$0 T: \$23,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$23,000 provides for critical minimal operation and maintenance for flood damage reduction. The project provides for flood control by channel improvement and enlargement of Ockley Drive Ditch and segments of Bayou Pierre in the vicinity of Shreveport, Louisiana.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Segnette Waterway, LA

AUTHORIZATION: River and Harbor Act 3 Sept 1954

LOCATION AND DESCRIPTION: The project is located in Southeast Louisiana in Jefferson Parish - a 12.2-mile navigation channel from Westwego, Louisiana, to the Gulf Intracoastal Waterway. Channel dimensions are 6-feet deep by 60-feet wide for the entire channel length. The channel provides maritime accessibility to the Gulf of Mexico for industries located along the waterway.

CONFERENCE AMT. FOR FY 2013: \$15,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$63,000 T: \$63,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$63,000 – Minimal critical funds to be used for project management, for Hydrographic surveys, for dredging preparation efforts, to review permit applications, and to ensure the outgrant/consent program is followed.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Bayou Segnette Waterway connects the Gulf Intracoastal Waterway to the Gulf of Mexico for oil and gas production supply companies and serves as an access channel for local hunters and the crab and recreational fishing industries.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Teche, LA

AUTHORIZATION: River and Harbor Act 26 June 1934 and prior RHA's

LOCATION AND DESCRIPTION: The project is located in south central Louisiana in St. Mary Parish. The project is primarily a shallow draft navigation project.

CONFERENCE AMT. FOR FY 2013: \$135,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$90,000 O: \$75,000 T: \$165,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$165,000 – Minimal critical funds will be used for Hydrographic surveys, right-of-entry for dredged material disposal, to change benchmarks and reset gauges from NGVD to NAVD, and waterway debris removal.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Bayou Teche provides access for the sugar industries in New Iberia, and for a multitude of other industries. Surveys allow locals to safely navigate the navigation channel.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Teche and Vermilion River, LA

AUTHORIZATION: FCA of 18 August 1941. Reclassified as an "Operations and Maintenance, General" project under the category "Navigation" by authority of the Office, Chief of Engineers, in 1st endorsement, 23 April 1956, on letter of the Division Engineer, U.S. Army Engineer Division, Lower Mississippi Valley, 6 March 1956, subject, "Classification of the Mermentau River and Bayou Teche and Vermilion River, Operation and Maintenance, General Projects".

LOCATION AND DESCRIPTION: The project is located in southwest Louisiana. The project is a multi-purpose project providing navigation and flood control to several parishes in southwest Louisiana.

CONFERENCE AMT. FOR FY 2013: \$17,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$ 15,000 T: \$ 15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 Minimal critical funds will be used to perform Hrographic surveys and to change vertical datum from NGVD to NAVD.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Bayou Teche and Vermilion provides local entities critical information regarding the channel. Activities can be done to prevent flooding in several parishes.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Caddo Lake, LA

AUTHORIZATION: Flood Control Act of 27 October 1965, S.D. 39, 89th Congress, 1st Session, PL 89-298, WRDA 1976, PL 94-587, 22 October 1976.

LOCATION AND DESCRIPTION: Caddo Lake is located in Caddo Parish, Louisiana, about 19 miles northwest of Shreveport, Louisiana, just upstream of the confluence of Black and Twelvemile Bayous.

CONFERENCE AMT. FOR FY 2013: \$216,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$207,000 T: \$207,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$154,000 provides for routine minimal critical operation and maintenance for flood damage reduction. The lake helps to provide upstream storage and for Shreveport/Bossier City, LA (over 200,000 population) the third largest city in Louisiana.

RC: \$53,000 provides for routine minimal operation and maintenance of recreation facilities. The lake has over 27,000 visitors annually. With multiplier effects visitor spending resulted in \$37,000 total sales, \$13,000 in total personal income, and supported eight jobs.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Calcasieu River and Pass, LA

AUTHORIZATION: River and Harbor Act of 24 July 1946, as amended, CH 594-PL525

LOCATION AND DESCRIPTION: The 68-mile channel is located in southwest Louisiana and extends from the Gulf of Mexico to Lake Charles, Louisiana. The project is authorized at 40x400 feet inland and 42x800 feet in the bar channel.

CONFERENCE AMT. FOR FY 2013: \$15,753,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$14,493,000 O: \$1,747,000 T: \$16,240,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$16,240,000 – Minimal critical funds will be used for dredging, to operate and maintain the Saltwater Barrier Control Structure, Hydrographic surveys, right-of-entry for dredged material disposal areas, to reduce encroachments, gather engineering data necessary for monitoring the stability of the Calcasieu River Saltwater Barrier, and to change vertical datum from NGVD to NAVD.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Calcasieu River services the Port of Lake Charles, the 14th largest seaport and 3rd largest exporting port in the US, as well as deep draft channel users, including 2 major refineries providing 4% of the nation's refining capacity and 2 LNG facilities, The region stores 1/3 of the nation's strategic petroleum reserve. The Calcasieu Saltwater Barrier, which passed 554,000 tons in 2011, prevents saltwater intrusion further upstream, preventing damage to agricultural and fragile wetlands, as well as being operated to prevent flooding upstream of the structure.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Freshwater Bayou, LA

AUTHORIZATION: River and Harbor Act of 14 July 1960, Sec 101

LOCATION AND DESCRIPTION: The project is located in south central Louisiana. Provides for a navigation channel of 12' x 125' from the GIWW at Mile 161.2 west of Harvey Lock to the Gulf of Mexico through Freshwater Bayou, with increased width to 250 feet in the Gulf approach and a lock near the Gulf of Mexico 84 feet wide by 600 feet long and 16 feet deep. The project services the offshore petroleum industry supply boats and the commercial fishing industry.

CONFERENCE AMT. FOR FY 2013: \$1,695,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$381,000 O: \$1,314,000 T: \$1,695,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,695,000 – Minimal critical funds will be used for dredging, the operation and minor maintenance of Freshwater Bayou Lock, Hydrographic surveys, for the gathering of engineering data essential for monitoring the stability of Freshwater Bayou Lock, to change benchmarks and reset gauges from NGVD to NAVD.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Freshwater Bayou Lock prevents saltwater intrusion in the Vermilion and Mermentau River basins, preventing damage to over 300,000 acres of agricultural land (primarily rice and crawfish), and wetlands, as well as being operated to prevent flooding in the basins. The lock and channel provide 24 hour service, 7 days a week to navigation interests, including commercial fishing vessels and offshore oilfield supply vessels, between the Gulf of Mexico and Intracoastal City. Freshwater Bayou lock often ranks first or second in the nation in the number of commercial lockages, and had 1,455,000 tons of cargo in 2011.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Gulf Intracoastal Waterway, LA

AUTHORIZATION: River and Harbor Act of 14 July 1946 and prior Acts

LOCATION AND DESCRIPTION: The Gulf Intracoastal Waterway (GIWW) crosses through all five states that comprise the Gulf of Mexico coastline, connecting Brownsville, Texas in the west to St. Mark, Florida in the east. The GIWW provides a protected passage for barge traffic to move vital commodities along the Gulf Coast.

CONFERENCE AMT. FOR FY 2013: \$19,929,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$14,584,000 O: \$9,940,000 T: \$24,524,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$24,050,000 – Minimal critical funds will be used for dredging, hired labor maintenance on 6 GIWW locks, dewater Algiers Lock, operating expenses for 6 GIWW locks, Hydrographic surveys, and to collect, manage, store and disseminate data from water level gauges.

FRM: \$425,000 Funds will provide minimal maintenance on the Algiers Levee and Pumping Stations

RC: \$49,000 – Minimal funds will provide for additional patrol at 25% for visitation, prepare project master plan and complete NEPA compliance. Funding will also be utilized to develop project interpretive exhibits for new lock office.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The GIWW is a vital waterway which links all of the Gulf Coast states via shallow draft navigation. Numerous refineries and plants which provide the nation with much of its petrochemicals and refined petroleum are located along the waterway. The waterway is also very important in exporting grain from the Midwest through ports along the Gulf Coast. The GIWW also serves as a platform and conduit for the exploration and delivery of oil and gas both offshore and onshore. Tonnage thru Calcasieu Lock, busiest GIWW lock tonnage-wise, was approximately 37 million tons in 2011 and has topped 50 million in past years. The Leland Bowman and Calcasieu locks are also both critical to the release of floodwaters and prevention of saltwater intrusion for the Mermentau River Basin.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Houma Navigation Canal, LA

AUTHORIZATION: River and Harbor Act of 4 Mar 1915, Sec 5

LOCATION AND DESCRIPTION: The Houma Navigation Canal is located in Terrebonne Parish, Louisiana, and extends a distance of 38 miles from the GIWW in Houma, to the Gulf of Mexico. The authorized project dimensions are 15' x 150' from the GIWW to the Bar Channel. The Bar Channel has dimensions of 18' x 300'. The channel provides maritime accessibility to the Gulf of Mexico for the commercial fishing and petrochemical fabrication/support industries that are located along the waterway. An ancillary benefit to channel maintenance is the beneficial use of dredged material in coastal Louisiana.

CONFERENCE AMT. FOR FY 2013: \$990,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,282,000 O: \$185,000 T: \$1,467,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,467,000 – Minimal critical funds will be used for project management, for dredging operations, to perform Hydrographic surveys, to reset gauges from NGVD to NAVD, to provide right of entry for dredged material disposal areas, to review permit applications and to collect, manage, store and disseminate water level data.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Houma Navigation Canal serves as a direct route to the Gulf of Mexico from the Gulf Intracoastal Waterway and ties the Port of Terrebonne with Port Fourchon. The Canal is utilized by (30) oil, gas and ship industrial fabrication facilities and by more than (250) energy-support businesses. The oil and gas industry fabrication facilities includes those that construct large oil production platforms and use the Houma Navigation Canal for transport to the Gulf of Mexico. Major sail-outs occur on a regular basis.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: J. Bennett Johnston Waterway, LA

AUTHORIZATION: River and Harbor Act 1968; Water Resources Development Act 1976; Supplemental Appropriations Act of 1984; Water Resources Development Act 1986, 1988, 1990, 1992, 1996; and Energy and Water Development Act 1994.

LOCATION AND DESCRIPTION: The project is located in central and northwest Louisiana and provides for 9- by 200-foot navigation extending about 236 miles from the Mississippi River through Old River and Red River to the vicinity of Shreveport, Louisiana. Five locks and adjacent dams provide a lift of approximately 141 feet. The project also provides for realigning the banks of the Red River from the Mississippi River to Shreveport by means of dredging, cutoffs, and training works and stabilizing its banks by means of revetments, dikes, and other methods.

CONFERENCE AMT. FOR FY 2013: \$8,434,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,878,000 O: \$6,917,000 T: \$8,795,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,697,000 provides for minimal critical operation and maintenance of the lock and dams, minimal critical dredging, collection of data for water control and quality, inspections and real estate management.

FRM: N/A

RC: \$1,080,000 provides for minimal operation and maintenance of recreation facilities.

H: N/A.

EN: \$18,000 provides for minimal protection and surveillance of mitigation of land and endangered species. Provides enhancement of habitat for neotropical migrant songbirds at project lock and dam sites. Activities include placement and maintenance of nesting boxes, habitat manipulation, and protection measures.

WS: N/A.

OTHER INFORMATION: In 2010, 8,270,090 tons were shipped along the J. Bennett Johnston Waterway.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Providence Harbor, LA

AUTHORIZATION: River and Harbor Act 1960.

LOCATION AND DESCRIPTION: Lake Providence Harbor is an inland harbor, located along the Mississippi River in East Carroll Parish, Louisiana.

CONFERENCE AMT. FOR FY 2013: \$17,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$11,000 O: \$4,000 T: \$15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 - provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs for water-oriented industry for many small communities and farmers in and around East Carroll Parish, Louisiana. The project was constructed in 1980 and has been maintained annually. In 2010, 1,348,703 tons were shipped through Lake Providence Harbor; an increase of over 700,000 tons from the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Madison Parish Port, LA

AUTHORIZATION: River and Harbor Act 1960.

LOCATION AND DESCRIPTION: Madison Parish Port is a fast-water, shallow draft port, located on the Mississippi River in Madison Parish, Louisiana.

CONFERENCE AMT. FOR FY 2013: \$5,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,000 O: \$2,000 T: \$4,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,000 provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs for water-oriented industry for many small communities and farmers in and around Madison Parish, Louisiana. The project was constructed in 1980 and has been maintained annually. In 2010, 734,557 tons were shipped through Madison Parish Port; more than twice the tonnage shipped during the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mermentau River, LA

AUTHORIZATION: R&H Act of 26 June 1934 and prior Acts, Ch. 756

LOCATION AND DESCRIPTION: Mermentau River is a multi purpose project located in southwest Louisiana. Functions of the project include navigation, flood control, and prevention of saltwater intrusion. Structures on the project maintain a balance between agriculture and flood control. These structures also serve an important role to the fishing and oil industry, allowing access in and out of the Mermentau River basin.

CONFERENCE AMT. FOR FY 2013: \$1,319,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,370,000 T: \$1,370,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,370,000 – Minimal critical funds will be used for the operation and maintenance of the Catfish Point and Schooner Bayou Control Structures, Hrographic surveys, to provide right-of-entry for dredged material disposal areas, foreshore dike construction/revetment work, to reduce encroachments, to gather engineering data necessary for monitoring the stability of structures, and to change vertical datum from NGVD to NAVD

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Mermentau River project prevents saltwater intrusion to 4.2 million acres of the Mermentau Basin, preventing damage to over 300,000 acres of agricultural land (primarily rice and crawfish), as well as fragile wetlands. The livelihood of many people depends heavily on the structures in the project (Catfish Point Control Structure and Schooner Bayou Control Structure), which also operates to lessen flooding to many residential properties in the basin. For 2011, the tonnage for Catfish Point Control Structure was 137,000 and for Schooner Bayou Control Structure was 8,000.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River, Baton Rouge to the Gulf of Mexico, LA

AUTHORIZATION: R&H Acts of 1945, Sec 2 and 23 Oct 1962, Sec 101; SAA of 1985, PL 99-88 and WRDA of 1986, Sec 201

LOCATION AND DESCRIPTION: The project currently provides a deep draft channel between Baton Rouge and the Gulf of Mexico in Southeast Louisiana. The 45-foot deep draft channel provides access to the largest port complex in the US.

CONFERENCE AMT. FOR FY 2013: \$81,670,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$78,895,000 O: \$5,179,000 T: \$84,074,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$84,074,000 – Minimal critical funds will be used for maintenance dredging from Baton Rouge to the Gulf of Mexico (Southwest Pass, New Orleans Harbor, Crossings between Baton Rouge and New Orleans), channel surveys, water management, environmental compliance and real estate activities. This will allow transit of deep-draft vessels carrying grain, coal, and other commodities to the Ports of South Louisiana, New Orleans, Plaquemines, and Baton Rouge (1st, 7th, 11th, and 13th leading ports in the nation) which collectively handle 420,046,473 tons of cargo per year making it the largest port complex in the US.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Loss of project dimensions would limit access to the #1 US port complex, cause significant economic loss and may cause environmental & safety hazards.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River Outlets at Venice, LA

AUTHORIZATION: River and Harbor Act of 1968, Sec 101

LOCATION AND DESCRIPTION The project is located in southeastern Louisiana and provides for (2) outlets (Baptiste Collette and Grand/Tiger Pass) from the Mississippi River in the vicinity of Venice, Louisiana. Both navigation channels have authorized channel dimensions of 14-foot deep by 150-foot wide (inland reach) and 16-foot deep by 250-foot wide (bar channel reach). The project serves the Venice Port Complex -- a multi-use facility that supports offshore petrochemical production/exploration efforts, the commercial fishing industry and recreational fishing and boating. The channel also provides the shortest access route to the Gulf of Mexico for the USCG Search and Rescue unit. An ancillary benefit to channel maintenance is the (100%) beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

CONFERENCE AMT. FOR FY 2013: \$1,423,000 2/

BUDGET FOR FY 2014: M: \$1,985,000 O: \$192,000 T: \$2,177,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,177,000 – Minimal critical funds will be used for project management, for dredging operations, for Hydrographic surveys, to extend and repair shoal-reducing rock jetties, for the preparation of Environmental Assessments for wetland development/restoration sites, to review permit applications, to collect, manage, store and disseminate water level data and to reset gages from NGVD to NAVD.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Baptiste Collette project channel serves approx. 40% of the offshore petrochemical production/exploration efforts in the eastern Gulf of Mexico from the Venice Port Complex. This area is one of the most prolific federal offshore producing areas, with an average annual oil production of about 200 million barrels. The Tiger Pass channel provides access to central Gulf of Mexico (GOM) Federal lease areas that account for 40%-50% of all Federal oil and gas production. On average, the channels are utilized daily by 25-30 petrochemical-industry vessels.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Removal of Aquatic Growth, LA

AUTHORIZATION: River and Harbor Act of 1958

LOCATION AND DESCRIPTION: The project provides for annual recurring maintenance control of water hyacinth and other invasive aquatic vegetation in federally maintained waterways and feeder water-bodies throughout south Louisiana. The project is required to maintain navigation for the shipping industry, the oil and gas industry, commercial fisheries and recreational users. Invasive aquatic vegetation growth can also affect flood control and lock operations.

CONFERENCE AMT. FOR FY 2013: \$ 200,000 2/

BUDGETED AMOUNT FOR FY 2014: M: 200,000 O: \$ 0 T: \$ 200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$200,000 - Minimal critical funds to be used to work with State applicators to identify and treat specific point sources (if State resources are available) and to handle inquiries and complaints from the public regarding the expansion of water hyacinth, alligator weed, common salvina and other noxious aquatic plants within District navigable waterways.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The District is tasked to maintain 95% of Federal waterway fairways clear for navigation and aquatic plant control is essential to meet this acceptable level of availability in the numerous channels affected by aquatic growth. During the 2012 growing season, the feeder and main navigation channels were clogged and bridge operations were adversely affected. The District received (21) local representative complaints and several congressional inquiries.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wallace Lake, LA

AUTHORIZATION: Flood Control Act of 22 June 1936, H.D. 378, 74th Congress.

LOCATION AND DESCRIPTION: Wallace Lake Dam is located on Cypress Bayou, a tributary of Bayou Pierre. The primary purpose of the project is flood control, with conservation and recreation as other benefits.

CONFERENCE AMT. FOR FY 2013: \$232,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$222,000 T: \$222,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$161,000 provides for minimal critical operation and maintenance of the operations of dam, water control/quality analysis, collection of data and evaluation and real estate management. The project has prevented over \$31,300,000 in flood damages since it was placed in operation.

RC: \$61,000 provides for minimal operation and maintenance of recreation facilities.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: Annual visitation is in excess of 15,000 visitors. With multiplier effects visitor spending resulted in \$200,000 total sales, \$7,000 in total personal income, and supported four jobs.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Waterway from Empire to the Gulf, LA

AUTHORIZATION: River and Harbor Act of 24 July 1946, Ch. 594 – PL 525.

LOCATION AND DESCRIPTION: The project is located in Plaquemines Parish. It consists of a 9.5 mile channel from the Dollut Canal to the Gulf of Mexico, with 9 foot by 80 foot dimensions. The channel provides maritime accessibility to the Gulf of Mexico for fishing industries located along the waterway. An ancillary benefit to channel maintenance is the 100% beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

CONFERENCE AMT. FOR FY 2013: \$9,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$17,000 T: \$17,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$17,000 – Minimal critical funds to be used for project management, for Hydrographic surveys and to review permit applications.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Empire Waterway connects the Mississippi River to the Gulf of Mexico for commercial and recreational fishing interests. The loss of project dimensions has caused economic hardships and incidents of vessel groundings. A deterioration of existing project jetties has caused land loss of a critical coastal barrier island (Pelican Island) and has increased channel shoaling.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Waterway from Intracoastal Waterway to Bayou Dulac, LA

AUTHORIZATION: River and Harbor Act of 23 Oct 1962, Sec 101

LOCATION AND DESCRIPTION: The project is located in Terrebonne Parish and consists of a 10-foot deep by 45-foot wide channel in Bayou LeCarpe from the Gulf Intracoastal Waterway via Bayou Pelton and Bayou Grand Caillou to Bayou Dulac with channel dimensions of 5-feet deep by 40-feet wide. The project provides accessibility to the Houma Nav. Canal/Gulf of Mexico for maritime industries located along the waterway. An ancillary benefit is the 100% beneficial use of dredged material in coastal Louisiana (all within the Federal Standard).

CONFERENCE AMT FOR FY 2013: \$38,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$41,000 O: \$25,000 T: \$66,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$66,000 – Minimal critical funds will be used for project management, for Hydrographic surveys, for preparations for future dredging contracts and for permit application reviews.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Waterway from the Intracoastal Waterway to Bayou Dulac, LA connects the Gulf Intracoastal Waterway with the Houma Navigation Canal and the ports of Terrebonne and Fourchon. The waterway is utilized by 35% of the area's (30) oil, gas and ship industrial fabrication facilities and (250) energy-support businesses to service oil and gas production in the Gulf of Mexico.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MINNESOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Bigstone Lake - Whetstone River, MN and SD

AUTHORIZATION: FCA 1965; RHA 1965

LOCATION AND DESCRIPTION: On Minnesota River near Ortonville and Odessa, MN, and Bigstone City, SD, at the outlet of Bigstone Lake and in Bigstone and Lac qui Parle Counties, MN, and Grant County, SD. The 1965 Flood Control Act authorized improvements for wildlife conservation and development, flood control, and recreation. The plan provided for a dam on the Minnesota River near Odessa, Minnesota, which has created a conservation pool of 2,800 acres for wildlife purposes. Upstream improvements include construction of bank protection and related work along the lower 6-mile reach of Whetstone River in South Dakota, modification of the existing dam and silt barrier at the outlet of Bigstone Lake, and channel improvement on the Minnesota River for three miles below the outlet control dam.

CONFERENCE AMT. FOR FY 2013: \$272,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$242,000 T: \$242,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$227,000 for minimal critical operation and maintenance, monitor dam and structures, complete water control data collection and analysis activities to meet minimum requirements for dam safety and provide design operation.

RC: N/A

H: N/A

EN: \$15,000 - Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: Highway 75 Dam is the main feature requiring COE O&M at the Bigstone Lake project. Located near Odessa, MN, this structure impounds water on the MN River to form the Bigstone National Wildlife Refuge operated by the US Fish & Wildlife Service. The project provides flood control benefits on the MN River mainstem in conjunction with the Lac qui Parle project downstream and has prevented over \$3,000,000 in damages since construction. The project through public access in several locations including the dam structure and embankment provides very high quality environmental focused outdoor recreation experiences for the public. Groups travel to this location from several hundred miles away for bird watching expeditions with focus on shorebirds.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

St. Paul District

Big Stone Lake and Whetstone River
(Highway 75 Dam), MN and SD

O&M JUSTIFICATION SHEET

PROJECT NAME: Lac qui Parle Lakes, Minnesota River, MN

AUTHORIZATION: FCA 1936

LOCATION AND DESCRIPTION: Works covered by this project lie along Marsh Lake and Lac qui Parle and the Minnesota River between head of Marsh Lake and Granite Falls, MN. The project was substantially completed by the Works Progress Administration and transferred from the State of Minnesota to the United States in September 1950. The project includes a main dam at the outlet of Lac qui Parle Lakes designed to control the Marsh Lake Reservoir. There is also a dam and diversion channel near Watson designed to divert Chippewa River floodwaters into Lac qui Parle Reservoir. The Corps of Engineers, in order to complete the project, improved the channel from Lac qui Parle Dam to Granite Falls and modified the Lac qui Parle and Chippewa Dam structures to secure improved operation. The dams had been in operation by the State of Minnesota for several years prior to the transfer.

CONFERENCE AMT FOR FY 2013: T: \$760,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$38,000 O: \$584,000 T: \$622,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$546,000 – Minimal Critical required to provide dam operations, maintenance, monitoring, and water control data collection and analysis necessary to meet minimum requirements for dam safety and provide design operation.

RC: \$53,000 – Minimal operation and maintenance of recreation/public use facilities; execute all directed programs, i.e. Visitor Assistance, Water Safety.

H: N/A

EN: \$23,000 – Support program to maintain and monitor habitat conditions in critical prairie pothole region, support North American Waterfowl Management Plan agreements and coordinate reservoir operations with Minnesota DNR and U.S. Fish and Wildlife Service. Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: The Lac qui Parle project consists of 4 water control structures on the Chippewa and Minnesota Rivers and is located near Montevideo, MN. It provides critical flood protection for Montevideo and areas downstream on the Minnesota and Chippewa Rivers. Since construction, the project has prevented over \$35,000,000 in damages.

Additionally, much of the water management activities in non flood situations directly support Minnesota Department of Natural Resources fisheries and wildlife management activities on Lac qui Parle Lake and adjoining lands. The project has parcels of federally owned land with virgin prairie untouched by plow on it near Marsh Lake Dam. In an area with very limited water access, the project has several locations suitable for public shore fishing. Annual economic impact to the local economy derived from Lac qui Parle project operations is estimated at almost \$10,000,000.

O&M JUSTIFICATION SHEET

(continued)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Minnesota River, MN

AUTHORIZATION: RHAs of 1892, 1909 and 1958

LOCATION AND DESCRIPTION: Minnesota River rises in Big Stone Lake, MN and SD, and flows southeasterly about 224 miles to Mankato, MN, thence northeasterly about 106 miles to join the Mississippi River opposite St. Paul, MN. The project consists of dredging and channel maintenance to provide channel of 9-foot depth below low control pool from the mouth at the Mississippi River confluence to river mile 14.7, one-half mile above the railway bridge at Savage, MN, and 4-foot depth from river mile 14.7 to 25.6 at Shakopee, MN.

CONFERENCE AMT. FOR FY 2013: T: \$ 275,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$232,000 O: \$0 T: \$232,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$232,000 – Continue annual navigation channel surveys and channel maintenance which includes dredging and snag removal as needed. Funding requested is sufficient to meet minimum legal responsibilities for environmental compliance, water control, and water analysis. Maintenance of channel will ensure long-term availability in a cost-effective manner.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Minnesota River, effectively the head of navigation for the Upper Mississippi River navigation project, is an essential component of the nation's transportation structure supporting commerce. This major agricultural tributary transports approximately one-fourth of the 16 million tons annually shipped in and out of the state of Minnesota. Several of the nation's largest agribusiness corporations (Cargill, Cenex, and Bunge) operate terminals on the Minnesota River and depend upon a reliable navigation system for movement of their commodities. The Minnesota Department of Transportation has indicated that this has an annual economic value in excess of \$362,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River between Missouri River and Minneapolis (MVP Portion), MN

AUTHORIZATION: RHA of 1930 (PL 71-520) and FCA of 1944 (PL 78-534)

LOCATION AND DESCRIPTION: The St. Paul District portion of the Upper Mississippi River extends from Minneapolis, MN, to Guttenberg, IA, and is located in or contiguous to the States of Minnesota, Wisconsin and Iowa. The St. Paul District operates and maintains 244 miles of 9-foot channel for navigation, 13 locks and dams, and 14 commercial or small boat harbors. The project includes a Corps developed and operated recreation area at Blackhawk Park located at river mile 670 below La Crosse, WI, and natural resource management for approximately 22,000 acres above normal pool elevation.

CONFERENCE AMT. FOR FY 2013: \$49,549,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$27,823,000 O: \$25,191,000 T: \$53,014,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$51,182,000 – Minimal critical operations and maintenance necessary for navigation, critical fleet maintenance support service, and dredging with upland disposal. Meet minimum legal responsibilities for environmental compliance, water control, and water analysis. Minimal maintenance of channel and lock and dam structures will ensure long-term availability in a cost-effective manner. Maintenance items include dredging of river channel by Dredge Goetz and mechanical dredging contractors; channel management structures; placement site maintenance; site unloading of dredged material and dewatering of locks to allow for winter maintenance activities.

FRM: N/A

RC: \$756,000 - Minimal operation and maintenance of recreation facilities. Execute all directed programs, i.e. water safety, fee program, visitor assistance, etc.

H: N/A

EN: \$1,076,000 – Perform maintenance at various sites in 22,000-acre resource base including reforestation, island erosion control and restoration of historic dredge placement sites. Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act. Execute Shoreline Management Program for over 600 structures.

WS: N/A

OTHER INFORMATION: The Mississippi River 9-foot channel is a major route for shipping commodities through the Midwest to and from the Gulf of Mexico. It is a major method of commerce in the United States, shipping grain, fuel, coal, other bulk commodities, and manufactured goods throughout the region and world markets. People all over the world depend on products that are transported up and down the Mississippi River. Annually, approximately 17,000,000 tons of cargo travels through the St. Paul District.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Orwell Lake, MN

AUTHORIZATION: RHA 1950; FCA 1950; FCA 1944; Fish and Wildlife Coordination Act of 1958

LOCATION AND DESCRIPTION: The Orwell Dam and Lake is located on the Otter Tail River near Fergus Falls, MN. The project was completed in 1953. It provides protection from floods during high water flows and, in conjunction with other reservoirs in the basin, provides increased flow during low water periods for water supply and pollution abatement at points in the Red River. The structure consists of an earth dam and concrete control works with a tainter gate. Most of the land, except for a part at the dam site, has been made available to the Minnesota Department of Natural Resources for wildlife conservation purposes. The area is managed for waterfowl and upland game and is open to public use for boating, fishing and other outdoor recreation.

CONFERENCE AMT. FOR FY 2013: \$500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$7,000 O: \$434,000 T: \$441,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$375,000 – Minimal critical operations and maintenance, monitor dam and structures, complete water control data collection and analysis activities necessary meet minimum requirements for dam safety and to provide design operation.

RC: \$51,000 - Minimal operation and maintenance of recreation/public use facilities. Execute all directed programs including Water Safety, Visitor Assistance.

H: N/A

EN: \$15,000 - Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: Orwell Lake located on the Ottetail River near Fergus Falls, MN provides access to the Ottetail River in the dam tailrace with very high quality fishery for this part of the state. The land base around Orwell Lake is leased to the State of MN and operated as Orwell Wildlife Management area considered by the MN DNR as one of the most productive they manage. Economic impact to the local economy resulting from operations at Orwell Lake is approx \$500,000,000 annually. Operation of Orwell Lake provides flood control benefits downstream on the Ottetail River and continuing on the Red River of the North after it intersects the Ottetail in Breckenridge, MN. The damages prevented since construction are estimated at approx \$700,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Red Lake Reservoir, MN

AUTHORIZATION: FCA 1944

LOCATION AND DESCRIPTION: Project is located 4.5 miles east of the west boundary of the Red Lake Indian Reservation in northwest Minnesota. The Flood Control Act of 1944 authorized improvements on the Red Lake-Clearwater River. Project features included about 27.5 miles of clearing, straightening, and enlarging of the Red Lake River channel between High Landing and a point 4.5 miles east of the west boundary of the Red Lake Indian Reservation. At that point a small concrete dam was built to restore the marshes for wildlife in the reservation between that dam and a point some three miles below the outlet of Red Lake. Also included were alterations of the 1931 existing control stop-log structure built by the Indian Service (Bureau of Indian Affairs) at the outlet of Lower Red Lake. Operation of Red Lake Dam was assumed by the Corps on 1 April 1951.

CONFERENCE AMT. FOR FY 2013: \$152,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$26,000 O: \$123,000 T: \$149,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$124,000 – Minimal critical routine dam and structure operations and maintenance, monitoring, and complete water control data collection and analysis operations necessary to meet minimum requirements for dam safety and provide design operation. Perform minor cyclical maintenance to dam and structures to maintain integrity of structure components.

RC: N/A

H: N/A

EN: \$25,000 – Monitor fish passage operations on structure installed in 2010-2011. Protect fee owned lands and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: Red Lake Dam is located at the outlet of lower Red Lake in the northeastern part of Clearwater County, MN. The dam structure controls lake levels on Red Lake and discharges in the Red Lake River which eventually connects with the Red River of the North at East Grand Forks, MN. Damages prevented since construction are approximately \$19.5 million. The dam and related structures are located entirely within the Red Lake Indian Reservation and a significant part of the water management executed by this structure is directly related to Tribal coordination and St. Paul District Tribal Trust responsibilities. A feature was added to Red Lake Dam in 2010 to facilitate fish migration back in to the lake from the Red Lake River and is operated in coordination with Corps of Engineer water control by the Red Lake Band.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Reservoirs at Headwaters of Mississippi River, MN

AUTHORIZATION: RHAs of 1880, 1882 and 1958; FCAs of 1944 and 1958; Water Supply Act of 1958, Fish and Wildlife Coordination Act of 1958; Federal Water Pollution Control Act Amendments of 1972

LOCATION AND DESCRIPTION: The Reservoirs at the Headwaters of the Mississippi River Project are located in north central Minnesota in Itasca, Beltrami, Hubbard, Aitkin, Cass, and Crow Wing Counties. Reservoirs include Winnibigoshish, Leech Lake, Pokegama, Sandy Lake, Pine River, and Gull Lake. The six dams were constructed or re-constructed between 1900 and 1913 for the purpose of aiding navigation by stabilizing water flow in the Mississippi River between St. Paul, Minnesota, and Prairie du Chien, Wisconsin. The project includes six Corps managed campgrounds and several day use areas serving approximately 1.7 million visitors annually. The project's water resource management impacts several communities, thousands of property owners and countless recreational users. Its natural resources are valued by resource agencies, industry and Native American communities.

CONFERENCE AMT. FOR FY2013: \$3,686,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 77,000 O: \$3,267,000 T: \$ 3,344,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,837,000 – Minimal critical operation and maintenance of six dams and associated structures to meet requirements for dam safety, instrumentation and environmental compliance and provide design operation. Complete Real Estate compliance inspection activities on all fee lands, monitor use of fee and easement properties.

RC: \$1,464,000 - Minimal operation and maintenance of recreation/public use facilities. Operate six fee camping areas separated geographically by over 100 miles. Execute all directed programs including Water Safety, Fee Program, and Visitor Assistance.

H: N/A

EN: \$32,000 - Conduct operations and operational maintenance tasks associated with managing the natural resource base. This includes implementation of operational management plan recommendations for basic natural resource operational functions including conservation and protection of soil water wetland forest and vegetation.

WS: N/A

OTHER INFORMATION: Although they were authorized primarily for navigation, the reservoirs operate to reduce flood stages in the vicinity of Aitkin and to facilitate use of the area for recreational purposes and fish and wildlife conservation. The reservoirs are in the heart of a very popular tourist and resort area. On Gull, Leech, Sandy, Pokegama and Winnibigoshish, and Cross Lakes, the Corps has placed facilities for swimming, boat launching, camping, picnicking and sanitation. The regulated outflow from the reservoirs contributes to improved water supply, pollution abatement and industrial development. The 6 Headwaters lakes generate in excess of \$63,000,000 in economic impact to the local economy, and are very important to the State of Minnesota's overall tourism program which one of the top two industries in the state. The public access to water, open space and developed recreational opportunities provide significant quality of life benefits to users and in the project area. The project has prevented over \$30,000,000 in damages through operation of water control structures since construction. Operations of the Headwaters Lakes support a significant number of Tribal Trust responsibilities in the area with many

O&M JUSTIFICATION SHEET

(continued)

of the lakes located on Reservations; and close coordination with tribes, communities and their cultures is part of daily operations.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSISSIPPI

O&M JUSTIFICATION SHEET

PROJECT NAME: Claiborne County Port, MS

AUTHORIZATION: River and Harbor Act 1960, Section 107 (PL 86-645).

LOCATION AND DESCRIPTION: Claiborne County Port is a slack-water, shallow draft harbor, located along the Mississippi River. This project's purpose is to provide a transportation need for water-oriented industry in Claiborne County, Mississippi.

CONFERENCE AMT. FOR FY 2013: \$1,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,000 T: \$1,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,000 provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This port services many small communities and farmers in Mississippi. The project was constructed in 1982.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mouth of Yazoo River, MS

AUTHORIZATION: River and Harbor Act 1960.

LOCATION AND DESCRIPTION: The mouth of the Yazoo River starts at the Mississippi River and continues for 9.3 miles to the junction of Old Mississippi River and Yazoo Rivers at Vicksburg, Mississippi. The channel is 150 feet wide, and a minimum operating depth of 9 feet below the lowest water of record is maintained in the channel. This project's purpose is to provide access to the Yazoo River, the Upper Vicksburg Harbor, and the Vicksburg Harbor.

CONFERENCE AMT. FOR FY 2013: \$30,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$30,000 O: \$4,000 T: \$34,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$34,000 – provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the Vicksburg harbor is open during low water periods. This is a high sediment river and is controlled by the Mississippi River.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pearl River, MS and LA

AUTHORIZATION: River and Harbor Act of 1935, as modified by River and Harbor Act of 1966.

LOCATION AND DESCRIPTION: The Pearl River navigation project is a navigation channel on the Pearl River that originally extended 58 miles from the mouth of the Pearl River to the mouth of Bogalusa Creek at Bogalusa, Mississippi. The project consisted of three locks and three weirs that provided a channel with minimum depth of 7 feet and a minimum bottom width of 100 feet. The project was placed in a caretaker status in 1995 and has been maintained only for maintenance and safety needs.

CONFERENCE AMT. FOR FY 2013: \$145,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$162,000 T: \$162,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$162,000 - provides for minimal maintenance in caretaker status.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: An Initial Appraisal Report was prepared recommending deauthorization of the project. Locks are deteriorating and are potentially unsafe. Subsequent to Hurricane Isaac, damages occurred at Lock 2 as a result of high water filling the lock chamber and overflowing. Since the project is in "Caretaker Status", the structure is left unmanned. An after action review (AAR) has been completed and solutions have been implemented to prevent similar events from occurring in the future. Damage mitigation features are currently being developed.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Rosedale Harbor, MS

AUTHORIZATION: River and Harbor Act 1960.

LOCATION AND DESCRIPTION: Rosedale Harbor is a slack-water, shallow draft harbor, located along the Mississippi River in Bolivar County, Mississippi. This project's purpose is to meet a transportation need for water-oriented industry in Bolivar, Coahoma, and Sunflower Counties in Mississippi.

CONFERENCE AMT. FOR FY 2013: \$11,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,000 O: \$4,000 T: \$10,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$10,000 - provides for minimal surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods. This is a high sediment harbor controlled by the rise and fall of the Mississippi River.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs for water-oriented industry for many small communities and farmers in the Mississippi Delta. The project was constructed in 1978 and has been maintained annually. In 2010, 1,452,391 tons were shipped through Rosedale Harbor; an increase of nearly 70,000 tons from the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo River, MS

AUTHORIZATION: Water Resources Development Act 1986 (PL 99-662).

LOCATION AND DESCRIPTION: The Yazoo River provides navigation from Mouth of the Yazoo River, Vicksburg, Mississippi, to Greenwood, Mississippi. Clearing and snagging of the channel provides a clear channel to Yazoo City. The project depth of 9 feet is authorized, but not dredged, to Greenwood, a distance of over 158 miles.

CONFERENCE AMT. FOR FY 2013: \$26,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$18,000 O: \$5,000 T: \$23,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$23,000 - provides for minimal clearing and snagging of the channel to maintain the authorized dimensions at the confluence of the Yazoo River, Vicksburg Harbor and the Yazoo Canal.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: This project serves the transportation needs of water-oriented industry for many small communities and farmers in the Mississippi Delta from Greenwood to Vicksburg, Mississippi.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSOURI

O&M JUSTIFICATION SHEET

PROJECT NAME: Caruthersville Harbor, MO

AUTHORIZATION: River and Harbor Act 1960, Section 107, as amended.

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River (mile 853.0) at Caruthersville, in Pemiscot County, MO. This is a slack-water harbor used primarily for the export of agricultural goods. The project provides for maintenance of the navigation channel for year-round access to barge transportation for the existing facilities. The approved channel dimensions are 9 feet deep by 150 feet wide by 3,500 feet long with a 300-foot radius turning basin at the upper end. The local interest is the Pemiscot County Port Authority.

CONFERENCE AMT. FOR FY 2013: \$10,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$12,000 T: \$12,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$12,000 – Funding provides for performance of minimal critical surveys of the current harbor conditions. This information that can be provided to local interests for their use in determining the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: The 5 year average commercial tonnage is 232.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study/project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Clarence Cannon Dam and Mark Twain Lake, MO

AUTHORIZATION: FCA 1938 and 1962.

LOCATION AND DESCRIPTION: The project is located on the Salt River at Mile 63 above its confluence with the Mississippi River. This multi-purpose project provides flood risk management, hydropower, water supply, navigation storage, pollution abatement, fish and wildlife conservation, and recreation.

CONFERENCE AMT. FOR FY 2013: \$6,266,000 2/

BUDGET FOR FY 2014: M: \$2,172,000 O: \$4,329,000 T: \$6,501,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,000 - Minimal critical annual recurring operations and maintenance activities associated with the re-regulation downstream channel, dam, reservoir, administration and shop buildings to assure availability of critical infrastructure and structural safety.

FRM: \$1,385,000 – Minimum critical operations and maintenance for flood risk management; critical dam maintenance, FRM operations, dam safety, water control and RE cost for compliance management. Operate and maintain FRM features ensuring operational availability and reliability of critical FRM infrastructure.

RC: \$2,648,000 – Minimum routine operations and maintenance of recreation areas, facilities and programs; operations and minor maintenance of recreation facilities, visitor assistance, public health and safety, law enforcement agreements, public access, use fees collection, visitor center operations.

H: \$1,712,000 – Minimum routine operations and maintenance cost for remote operation of 58 megawatts. Funding will ensure meeting Southwestern Power Administration contract requirements. Sustain hydropower performance by increasing availability and reliability of generating units.

EN: \$651,000 - Minimal operations and maintenance of environmental stewardship program and features; environmental compliance, control of invasive species, Federally-listed threatened and endangered species, cultural and natural resource protection, environmental stewardship. Meet minimum environmental stewardship responsibilities.

WS: \$103,000 – Minimal annual recurring operations and maintenance cost and water supply agreement associated with water supply. Funding will help ensure availability of water supply meeting contract requirements. Meet minimum water supply responsibility.

OTHER INFORMATION: FY 2012 project visitation was 2,265,550, generating recreation economic benefits estimated at \$55,768,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River between the Ohio & Missouri Rivers (Reg Works), MO & IL

AUTHORIZATION: River and Harbor Acts of 1910, 1927, and 1930 as amended by the River and Harbor Acts of 1945 and 1958.

LOCATION AND DESCRIPTION: Project responsibility extends from the mouth of the Ohio River to the Missouri River at the northern boundary of the City of St. Louis including 195 miles of river and 10,000 acres of public land. Project provides nine-foot navigation channel with a lateral canal/Locks 27 at Chain of Rocks, fixed crest rock dam, channel maintenance, dredging, and environmental compliance. Project has environmental stewardship responsibility as well as land- and water-based recreational opportunities and management of flood risk for sixteen miles of federal levee.

CONFERENCE AMT. FOR FY 2013: T: \$25,710,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$33,596,000 O: \$6,707,000 T: \$40,303,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$36,793,000 – Critical operation and maintenance of the project, including Locks 27, open reach dredging, surveys, channel patrol, dam safety, and maintenance of dikes and revetments.

FRM: \$510,000 - Critical operation and maintenance of sixteen miles of Chain of Rocks Federal Levee to include mowing, inspections, and reading of dam instrumentation and operation of flood gates and pump stations. Also includes maintenance of newly constructed berms.

RC: \$345,000 – Minimally operate and maintain six recreational access areas including maintenance of access roads. Coordination with numerous partners on bike trails, access areas, water trails, outgrants, water safety. Repair of boat ramps and access areas damages by high river stages in 2011 and low river stages in 2012.

H: N/A

EN: \$2,655,000 - Basic stewardship of 10,000 acres of land, complex compliance requirements to include the Biological Opinion and Avoid and Minimize programs, management of outgrants, and coordination with environmental partners for conservation and restoration. Maintain project forest lands (American Bottoms) in accordance with Regional Systemic Forest Management Plan.

WS: N/A

OTHER INFORMATION: Over 106 million tons of commodities passed through Lower River project in FY 2011. A day of unscheduled closure at Locks 27 can impact the regional economy by \$3 million, as well as significantly higher national and international secondary impacts. Chain of Rocks levee protects over 250,000 people and \$4.5 billion in economic value. FY 2012 project visitation (Lower River) is estimated at 700,000 visits, generating recreation economic benefits estimated at \$20,824,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi Valley Division

St. Louis District

Mississippi River between the
Ohio & Missouri Rivers (Reg Works),
MO & IL

1 May 2013

MVD-179

O&M JUSTIFICATION SHEET

PROJECT NAME: Southeast Missouri Port (SEMO), Mississippi River, MO

AUTHORIZATION: Section 107 of River and Harbor Act of 1960 (Public Law 86-645)

LOCATION AND DESCRIPTION: This Federal project is located on the right bank of the Mississippi River between river miles 47.5 and 48.8 above the Ohio River in Scott and Cape Girardeau Counties in Southeast Missouri. The project consists of a 1,800-foot slackwater harbor with a nine-foot navigation channel, docking facilities, barge-rail-truck transfers, bagging, warehousing, outdoor storage, and nearby fleeting. It links waterborne transportation to rail and truck and provides economic stimulus to the Southeast Missouri region. The project has a Federal responsibility to dredge the approach channel and the authorized channel within the port.

CONFERENCE AMT. FOR FY 2013: \$1,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,000 O: \$0 T: \$1,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,000 – Minimal channel patrol to monitor project depth.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 864,415 tons of cargo is handled by barge (5-year average, 2007-2011). In 2011, tonnage by barge was 837,782, of a total 1,211,304 tons handled; 2012 barge tonnage and total tonnage at the port is expected to return to an increasing trend. The value of products moving through the Port exceeds \$342,000,000 annually. Jobs created total 800 to 1,000 in the port companies, trucking companies, and supporting businesses. Agricultural benefits include over \$4,000,000 in grain transportation savings and over \$2,000,000 in fertilizer transportation savings, serving 700 to 1,000 farmers in the surrounding region. Projects are attracted to SEMO Port because of its multiple modes of transportation which include waterborne, two major rail lines (Burlington Northern Santa Fe Railway and the Union Pacific Railroad) and the nearby Texas Eastern Products Pipeline which connects Texas, the Midwest, and the Northeast.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: New Madrid County Harbor, MO

AUTHORIZATION: WRDA 1992, Sec.102(n) includes language directing the Secretary of the Army to maintain the New Madrid County Harbor in lieu of maintaining the federally constructed New Madrid Harbor.

LOCATION AND DESCRIPTION: This locally constructed harbor is located on the Mississippi River (mile 885.0), south of the city of New Madrid, in New Madrid County, Missouri. It is a slack water harbor used primarily for the export of agricultural goods. The project provides for maintenance of the navigation channel for year-round access to barge transportation for the existing facilities. The approved channel dimensions are 9 feet deep by 150 feet wide by 1,500 feet long. The local interest is the New Madrid County Port Authority.

CONFERENCE AMT. FOR FY 2013: \$51,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$21,000 O: \$2,000 T: \$23,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$23,000 – Funding provides for performance of minimal critical surveys. This information can be provided to local interests to be used in the determination of the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 104.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

NORTH DAKOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Homme Lake, ND

AUTHORIZATION: FCA 1944

LOCATION AND DESCRIPTION: Dam is on South Branch of Park River about 4 miles upstream from Park River, ND, and 62.1 miles above the mouth of Park River. South, Middle, and North Branches, headwater streams of Park River, rise in Cavalier County in northeastern North Dakota and flow easterly to an almost common confluence near Grafton, ND, forming the main stream which flows easterly 35 miles to join Red River of the North about 35 miles south of the international boundary.

Homme Dam and Lake helps solve flood damage and water supply problems by providing limited protection from spring overflow and a dependable streamflow for water supply at Park River and Grafton. The dam is an earthfill structure 865 feet long, with a 5-foot diameter gate-controlled conduit under the dam and a concrete spillway 150 feet in length adjacent to the dam. The reservoir has a capacity of 3,650 acre-feet below spillway crest.

CONFERENCE AMT. FOR FY 2013: \$296,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$ 236,000 T: \$236,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$225,000 – Minimal critical for operations and maintenance, monitor dam and structures, complete water control data collection and analysis activities to meet minimum dam safety requirements and provide design operations.

RC: N/A.

H: N/A

EN: \$11,000 - Protect corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act.

WS: N/A

OTHER INFORMATION: Homme Lake located on the south branch of the Park River near Park River, ND was authorized and constructed for water supply and flood control. It provides backup water supply for the communities of Park River and Grafton, ND. The project also provides flood risk reduction benefits to downstream areas and has prevented approximately \$2 million in damages since construction. The lake is in an area with scarce water access and recreational opportunities and is a draw for users from the Grand Forks Air Force Base and general public in the area. The outdoor recreation opportunities provided add significantly to quality of life in the project area and the project generates approx \$1.5 million in economic benefits to the local economy annually.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Ashtabula and Baldhill Dam, ND

AUTHORIZATION: FCA 1944

LOCATION AND DESCRIPTION: Baldhill Dam is on the Sheyenne River, 16 miles upstream from Valley City, ND, and about 271 miles above mouth. Sheyenne River rises in central North Dakota and flows 500 miles generally southeast to enter Red River of the North about 10 miles north of Fargo, ND.

Baldhill Dam was constructed to reduce flood damages, primarily at Valley City, and to alleviate water shortages in municipal and rural areas along the Sheyenne River and the Red River of the North. The dam was placed in operation in 1950. It is a 1,650 foot long compacted earth structure with concrete gravity control works 140 feet in length. Atop the control works are three 40 foot tainter gates. There are two 3 foot diameter conduits in the piers for low water control. The reservoir, Lake Ashtabula, has a capacity of 68,600 acre feet at normal pool level. It has prevented flood damages and improved streamflow in the Sheyenne and Red Rivers. The effectiveness of this project was demonstrated during the 1950, 1969, 1975, 1978, 1979, and 1989 floods.

CONFERENCE AMT. FOR FY 2013: \$1,476,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,233,000 T: \$1,233,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$811,000 – Minimal critical to operate, maintain and monitor dam and structures, to meet requirements for dam safety and provide design operation and maintain critical instrumentation in the structure. Monitor the boundaries both fee and easement.

RC: \$282,000 - Minimal operation and maintenance of recreation facilities. Execute directed programs including Water Safety, recreation Fee Program, Visitor Assistance Program, operate Visitor Center, fund Law Enforcement contract.

H: N/A

EN: \$140,000 - Protect Corps fee owned land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and/or environmentally induced events as necessary to meet legal and regulatory requisites of the National Environmental Policy Act. Implement Shoreline Mgt Plan for over 200 structures and noxious weed control program on project lands to comply with state law.

WS: N/A

OTHER INFORMATION: The project provides limited protection from floods downstream from the dam. It also provides sufficient water flow during dry periods to meet water supply needs of municipalities and rural areas along the Sheyenne River and the Red River downstream from the mouth of the Sheyenne River. A diversion structure and pipeline constructed by the city is used by Fargo as the principal source of water during periods of low and marginal water quality water in the Red River of the North.

The Lake Ashtabula project generates over \$3,500,000 in economic impact to the local economy annually. In a mostly arid state (ND), the lake serves as a regional attraction for public water access and use. The opportunities provided on public lands and waters add significantly to the quality of life in the project area. The project has prevented over \$30,000,000 in damages through operations of the dam since construction, and the water supply benefits although unquantifiable, are critical to the downstream

O&M JUSTIFICATION SHEET

(continued)

municipalities. Lake Ashtabula is recognized by our local, state and federal partners as a major natural resource asset in the State of North Dakota.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Souris River, ND

AUTHORIZATION: WRDA 1986 (PL 99-662)

LOCATION AND DESCRIPTION: On the Souris River in Ward, Renville, McHenry, and Bottineau Counties in northwestern North Dakota. The existing Lake Darling Dam is located about 20 miles northwest of Minot, North Dakota. The project also includes features at the communities of Sawyer and Velva and at various locations along the 358 mile U.S. portion of the Souris River.

The 1986 Water Resources Development Act (Public Law 99-662) authorized dam safety and flood control modifications to Lake Darling Dam and seven other dams in the Upper Souris and J. Clark Salyer National Wildlife refuges. Associated facilities include a maintenance building at Lake Darling Dam and an electrified carp barrier at dam 357. Mitigation features for project include dikes and four pump stations at Upper Souris NWR and; raised and upgraded embankments for dams 326, 332 and 341 and a low flow structure for dam 320 at J. Clark Salyer NWR. The construction project was completed in 1998.

CONFERENCE AMT. FOR FY 2013: \$341,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$36,000 O: \$308,000 T: \$344,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$344,000 – Minimal critical operation, maintenance, and monitoring of dam to meet requirements for dam safety, instrumentation, periodic inspection and to provide design operation. Complete minor non-cyclical maintenance on Lake Darling Dam, six refuge dam structures, and two pumping plants and water control and water quality analyses and collections.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: A Memorandum of Understanding between the Department of the Interior (Fish and Wildlife Service) and the Department of the Army was formalized on June 2, 1989 establishing procedures, administration, cooperation and coordination between respective agencies for Construction, Operation and Maintenance, Rehabilitation and Replacement responsibilities for project flood control and mitigation features. This MOU in conjunction with International Agreements with Canada, commit the COE to several water management, water quality, cyclical and major maintenance responsibilities.

Lake Darling Dam which is part of the Souris River Projects complex, located on the Souris River near Minot, ND, has prevented approximately \$125,000,000 in damages since construction. The resources at Lake Darling provide high quality outdoor recreational opportunities for users from the Minot Air Force Base and public in the project area.

The entire Souris River Project consists of eight water control structures and several mitigation features all located within the Upper Souris and J. Clark Salyer National Wildlife Refuges.

O&M JUSTIFICATION SHEET

(continued)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

SOUTH DAKOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Traverse, SD and MN

AUTHORIZATION: FCA 1936

LOCATION AND DESCRIPTION: Works covered by this project lie along Lake Traverse and Bois de Sioux River between the upper end of Lake Traverse at Browns Valley, MN, and the mouth of Bois de Sioux River at Breckenridge, MN. The project terminates six miles south of Breckenridge (six miles upstream of the Bois de Sioux River mouth). Lake drains through river to Red River of the North, and the two waters form a portion of the boundary between State of Minnesota and South Dakota.

The Lake Traverse and Bois de Sioux River project was completed in 1948. It provided for use of Lake Traverse as a flood control and water conservation reservoir and for channel improvement in the river below the lake. The main structure consists of a 14,500 foot earth dam and a concrete control structure at the north end of Lake Traverse near White Rock, South Dakota. A secondary control structure at Reservation Highway near Wheaton permits control of the upper section of the reservoir at a slightly higher elevation. A 5,000 foot embankment at the south end of Lake Traverse to protect Browns Valley and channel improvement for 24 miles below the main dam completed the project. The area is popular for waterfowl hunting and is used extensively for fishing, boating, swimming, and other activities. Access points, parking areas, boat landings, launching ramps and a swimming beach have been made available.

CONFERENCE AMT. FOR FY 2013: \$583,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$554,000 T: \$554,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$443,000 – Minimal critical operations and maintenance, monitor dam and structures, meet minimum requirements for dam safety and provide design operation. Complete Real Estate compliance inspections, monitor use of fee and easement lands.

RC: \$56,000 - Minimal operation and maintenance of recreation/public use facilities. Execute all directed programs, i.e. Water Safety, Visitor Assistance.

H: N/A

EN: \$55,000 - Protect Corps owned fee land and waters from encroachments and imminent loss of significant natural resources due to erosion, wildfire, pests, trespass, or human activity and or environmentally induced events.

WS: N/A

OTHER INFORMATION: The Lake Traverse project is located on the MN/SD border between Browns Valley, MN and Wahpeton, ND. Browns Valley on the very southern end of the project is the location of the continental divide where flowages split between the Gulf of Mexico to the south and Hudson Bay to the north. The project consists of two dams and appurtenant structures and provides flood control benefits downstream on the Bois de Sioux River and Red River of the North. Damages prevented since construction are estimated at \$4,300,000,000 dollars. There are day use public access sites providing fishing and related outdoor recreation activities and the project boasts over 800 acres of wildlife management areas open for public use. Annual economic impact to the local economy derived from Lake Traverse operations is approx \$1,600,000 annually.

O&M JUSTIFICATION SHEET

(continued)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TENNESSEE

O&M JUSTIFICATION SHEET

PROJECT NAME: Northwest Tennessee Regional Harbor, Lake County, TN

AUTHORIZATION: River and Harbor Act of 1960, Sec. 107, as amended (Continuing Authorities Projects Not Requiring Specific Legislation)

LOCATION AND DESCRIPTION: This harbor is located at Mississippi River Mile 900.0 on the left descending bank in Lake County near Tiptonville, Tennessee. The project provides for Federal assistance, not to exceed \$5,000,000, for maintenance of the navigation channel for year-round access to the harbor facilities. The Northwest Tennessee Regional Port Authority is the local sponsor.

CONFERENCE AMT. FOR FY 2013: \$10,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$10,000 T: \$10,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$10,000 – Funding provides for performance of minimal critical surveys. This information can be provided to local interests for their use in determining the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: The harbor is known locally as “Port of Cates Landing. The local sponsor is currently constructing the harbor service facilities. The Corps of Engineers is in the 2nd year of a 5 year monitoring program to measure the success of the project mitigation site.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wolf River Harbor, TN

AUTHORIZATION: The National Industrial Recovery Act (NIRA) of 16 June 1933; modified by the Flood Control Act of 03 July 1958, J. D. 76/85/1.

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River (mile 737.0), near Memphis in Shelby County, TN. This is a slack-water harbor and is used primarily for the import of industrial materials. The project provides for a navigation channel 9 feet deep by 250 feet wide at low water from the mouth to Keel Avenue (mile 1.75) and 200 feet wide from Keel Avenue to mile 3.0. The local interest is the city of Memphis, TN.

CONFERENCE AMT. FOR FY 2013: \$109,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$149,000 O: \$70,000 T: \$219,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$219,000 – Funding provides for the performance of minimal critical surveys, water data collection, and limited dredging.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 848.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

WISCONSIN

O&M JUSTIFICATION SHEET

PROJECT NAME: Eau Galle River Lake, WI

AUTHORIZATION: FCAs of 1944 and 1958; Fish and Wildlife Coordination Act of 1958; RHA 1958; Water Supply Act of 1958

LOCATION AND DESCRIPTION: At and in vicinity of Spring Valley, WI, on Eau Galle River 30 miles above its mouth at Chippewa River, and its tributary, Mines Creek, which flows through the village. Spring Valley is about 45 miles east of St. Paul, MN, and 36 miles west of Eau Claire, WI.

The improvement under the authorization provided for a retarding reservoir and dam, including an uncontrolled spillway, on the Eau Galle River immediately upstream from Spring Valley with a discharge channel downstream from the dam, and remedial work on Mines Creek consisting of channel enlargement, low levees, and drop structures to reduce velocities prior to discharge into the Eau Galle River.

CONFERENCE AMT FOR FY 2013: \$814,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$33,000 O: \$701,000 T: \$734,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$434,000 – Minimal critical operation and maintenance, monitor dam and structures, complete water control data collection and analysis to meet minimum requirements for dam safety and provide design operation. Complete real estate compliance inspections, environment compliance (ERGO), and scheduled Bridge Inspection.

RC: \$280,000 - Minimal operation and maintenance of recreation facilities. Execute directed programs including Water Safety, recreation Fee Program, and Visitor Assistance Program.

H: N/A

ES: \$20,000 - Conduct minimal operations and operational maintenance tasks required to complete environmental stewardship mission. This includes implementation of operational management plan recommendations for basic natural resource operational functions including conservation and protection of soil, water, wetland, forest, and vegetation.

WS: N/A

OTHER INFORMATION: The Eau Galle Project with its large rolled-earth dam, controls 64-square mile drainage basin of the Eau Galle River. The dam was constructed between 1965 -1968, after repeated flooding of the Spring Valley community area. Eau Galle Lake is located on the Eau Galle River immediately upstream of Spring Valley, WI. Damages prevented for the storage in Eau Galle Lake and operations of the water control structure are estimated at approximately \$11,500,000 million since construction.

The project provides an excellent array of outdoor recreation opportunities ranging from overnight camping, hiking, water based activities, horseback camp and trails, and many related activities. These opportunities serve to provide significant quality of life benefits to users and the public in the project area. Economic impact to the local economy derived from operations at Eau Galle Lake is estimated at \$2,200,000 annually.

O&M JUSTIFICATION SHEET

(continued)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSISSIPPI RIVER AND TRIBUTARIES

MISSISSIPPI RIVER AND TRIBUTARIES
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Justification of Estimates for Civil Works Activities
 Department of the Army, Corps of Engineers
 Fiscal Year 2014

SUMMARY MISSISSIPPI RIVER COMMISSION

Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MO, MS, & TN

	<u>FY 2013 President's Budget</u>	<u>FY 2014 President's Budget</u>	<u>Increase or Decrease</u>
Investigations	\$ 600,000	\$ 9,800,000	\$ 9,200,000
Survey	600,000	600,000	0
Preconstruction Engineering and Design	0	0	9,200,000
Construction	99,270,000	113,094,000	13,824,000
Operation and Maintenance	134,130,000	156,106,000	21,976,000
Less Reduction for Savings and Slippage	0	0	0
Less Reduction for Rescission	0	0	0
GRAND TOTAL, MISSISSIPPI RIVER COMMISSION	\$234,000,000	\$279,000,000	\$45,000,000

INVESTIGATIONS

ARKANSAS

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN Continuing - Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Collection and Study of Basic Data (FRM) Memphis, Vicksburg, and New Orleans Districts	N/A	N/A	898,000	900,000	500,000 <u>2/</u>	9,700,000 <u>1/</u>	N/A

Surveys, Gages, and Observations

Fiscal Year 2013 funds are being used for the minimal collection of essential basic data which are subsequently used in the planning and design of flood risk management projects. The data collected under this activity are for authorized projects or units thereof. The data to be collected will consist of information on streamflow, rainfall, floods, and other items of related hydrologic nature.

Fiscal Year 2014 funds will be used for the collection of essential basic data which are subsequently used in the planning and design of flood risk management projects. The data to be collected will consist of information on streamflow, rainfall, floods, and other items of related hydrologic nature. Funds will also be used to fully fund collection of essential basic data; aquatic and water quality monitoring; conduct regional review of numerous H&H related issues or concerns that were discovered during the 2011 flood; and conduct geomorphic and sedimentation assessments. This review is necessary to assess the individual areas of concern and assess them within a regional framework. The H&H studies will review how the MR&T system performed during the 2011 flood, assess any needed changes in the water management of the system, and identify areas/reaches in which the current 1976 Refined Project Flood Flowline may need revision. This will have short and long term impacts to the projects within MVD and ensuring continued benefits. The geomorphic and sedimentation assessment provide the basis for developing and evaluating various river engineering features, rehabilitative measures, and channel modifications. Without a sound understanding of the morphology of the river, prediction of system response to these various actions, or lack thereof, can potentially lead to undesired consequences such as increased maintenance requirements, adverse impacts to navigation and flood control, and ecosystem degradation. In addition, the need to manage river sediment is a resource for coastal restoration purposes has recently expanded the scope of sediment management. A thorough understanding of sediment trends will be essential to developing a comprehensive and sustainable sediment management plan.

This study was authorized by the Flood Control Act of 1928.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TENNESSEE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Memphis Metropolitan Area, Storm Water Management Study, TN & MS (ENR) (Continuing)	3,100,000	546,000	25,000	100,000	100,000 <u>2/</u>	100,000 <u>1/</u>	2,229,000

Memphis District

The purpose of the Memphis Metropolitan Storm Water Management study is to evaluate the need for improvements for flood control, ecosystem restoration, water quality, and related purposes associated with storm water runoff and management. The study area includes all or part of five counties: Shelby, Tipton and Fayette Counties in Southwest Tennessee; DeSoto and Marshall Counties in Northwest Mississippi. The area encompasses all or part of six major drainage basins which are tributaries of the Mississippi River: Hatchie River, Loosahatchie River, Wolf River, Nonconnah Creek, Horn Lake Creek, and Coldwater River. The area of study includes approximately 2,600 square miles and drains an urban area of over one million people. Continuing problems with storm water runoff, streambank instability, water quality, wetland hydrology and aquatic habitat have prompted the study. Three study areas have been identified to date. (1) Cypress Creek, a tributary of the Loosahatchie River in Fayette County, TN, will require flood risk management and ecosystem restoration study. Past channelization and development in the area has resulted in habitat degradation. The streambed is unstable, wetlands are being dewatered and water quality and aquatic habitat is compromised. The West Tennessee River Basin Authority is the potential sponsor. (2) Wolf River, a tributary of the Mississippi River in Shelby County, TN, will require an ecosystem restoration study involving hydrologic restoration of bottomland hardwoods. Past channelization has resulted in dewatering of wetlands resulting in habitat degradation and invasive species. The Shelby Farms Conservancy is the potential sponsor. Other organizations including the Tennessee Department of Transportation, Chickasaw Basin Authority, Ducks Unlimited and the Audubon Society have expressed interest in various elements of the study.

Fiscal Year 2013 funds are being used to initiate the feasibility phase of this study. Fiscal Year 2014 funds will be used to continue the studies. A Feasibility Cost Share Agreement (FCSA) is scheduled to be executed in FY 2013. The estimated cost of the Cypress Creek portion of the feasibility study is \$300,000 which will be cost shared on a 50-50 percent basis. The estimated cost of the Wolf River portion is \$300,000 which will be cost shared on a 50-50 percent basis. The total estimated cost of all feasibility studies identified during the reconnaissance phase having likely sponsors is \$5,600,000. Coordination with potential sponsors will continue in order to identify additional study areas. The reconnaissance report was approved in December 2009 and the reconnaissance phase is scheduled for completion in FY 2013. The feasibility completion date is TBD. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,900,000
Reconnaissance Phase (Federal)	300,000
Feasibility Phase (Federal)	2,800,000
Feasibility Phase (Non-Federal)	2,800,000

Mississippi River Commission

Memphis District

Memphis Metropolitan Area, Storm Water Management Study,
TN and MS

The estimated Federal cost estimate is the same as last presented to Congress (FY 2013).

Reconnaissance phase studies were accomplished as part of the Memphis Metropolitan Area reconnaissance study as authorized by the U.S. House Committee on Transportation and Infrastructure Resolution dated 7 March 1996.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

CONSTRUCTION

ARKANSAS

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Construction

PROJECT: Bayou Meto Basin, Arkansas (Resumption)

LOCATION: The project is located in Lonoke, Prairie, Pulaski, Jefferson, and Arkansas Counties in east-central Arkansas.

DESCRIPTION: Project features include diversion of excess water from the Arkansas River through a pumping station on the upper end of the project with delivery through a system of new canals, existing streams, and pipelines to the water depleted areas; channel improvements, control structures, and a pumping station on the lower end of the project to provide for reduced flooding; water management; waterfowl conservation and management measures; and other environmental restoration features. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.1 to 1 at 7 percent. (FRM 1.7 to 1 at 7 percent; WTR 1.1 to 1 at 7 percent)

TOTAL BENEFIT-COST RATIO: 1.1 to 1 at 7 percent. (FRM 1.7 to 1 at 7 percent; WTR 1.1 to 1 at 7 percent)

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 5.125 percent (FY 2010). (FRM 2.2 to 1 at 5.125 percent; WTR 1.5 to 1 at 5.125 percent)

BASIS OF BENEFIT-COST RATIO: Benefits are based on analyses conducted as part of the Bayou Meto Basin, AR, General Reevaluation Report approved in 2007 at 2005 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$395,337,000		Bayou Meto Basin	12	TBD
Estimated Non-Federal Cost	\$218,837,000				
Cash Contributions	\$124,173,000		PHYSICAL DATA		
Other Costs	\$94,664,000		Major Pumping Stations	4	
Total Estimated Project Cost	\$614,174,000		Channels		
			New Channels	105 Miles	
Allocations to 30 September 2010	\$60,861,300		Existing Channels	116 Miles	
Allocation for FY 2011	(560,000) 1/		Weirs	56	
Allocation for FY 2012	407,600 2/		Pipelines	472 Miles	
Conference Allowance for FY 2013	0		Check Structures	11	
Allocation for FY 2013	4,400,000	17	Turnouts	14	
Allocations through FY 2013	65,108,900		Drop Structures	92	
Estimated Carry-In Funds	0 3/		Inverted Siphons	74	
President's Budget for FY 2014	5,000,000	19	Conservation Measures		
Programmed Balance to Complete after FY 2014	325,228,100		Relocations		
UnProgrammed Balance to Complete after FY 2014	0		Utility Relocations	209	
			Bridge Relocations	66	

1/ \$914,300 reprogrammed from the project.

2/ \$407,600 reprogrammed to the project.

3/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: The project will provide for agricultural water supply, flood control and drainage, water management, and waterfowl management restoration and protection. The agricultural economy, which supports the eastern Arkansas region, cannot exist without a dependable supply of irrigation water. Continued withdrawals at the current rate will deplete the alluvial aquifer such that by the year 2015 it will no longer be a viable source of irrigation water. Agriculture as it is now practiced, will be impossible. The economic result of exhausting the aquifer would be catastrophic. Without a supplemental source of irrigation water only about 34 percent of the project area could be irrigated which would cause approximately \$48,292,000 losses in net farm revenues. The selected plan for agricultural water supply is the combination of conservation, groundwater, on-farm storage, import water, and environmental measures, which best meet the needs of the project area and is the preferred plan of the project sponsor. The selected plan provides a supplemental source of irrigation water combined with conservation, which will allow the alluvial aquifer to stabilize. Flooding problems occur frequently throughout the basin causing serious damages to agriculture, natural resources, and infrastructure. One of the area's greatest needs is relief from flooding and improved drainage and water management in the lower portion of the basin. There are currently 650 acres of dead and dying timber in the Bayou Meto Wildlife Management Area with another 12,000 acres stressed to varying degrees. The selected plan of improvement for flood control includes features to reduce flooding, improve drainage and enhance water management. Features

include channel improvements, water control structures, and a pumping station. Environmental restoration features will create 240 acres of moist soil habitat for waterfowl, and restore 10,000 acres of wet land buffer units. Average annual benefits (2005 price levels) are as follows:

Annual Benefits	Amount	
Flood Control	\$ 5,559,000	
Agricultural Irrigation	\$45,909,000	
Waterfowl Use Days	21,216,388	
Prairie Restoration	10,000 acres	9,159 AAHUs

FISCAL YEAR 2013: Total unobligated funds are being used as follows:

Continue:

Contract Modification, Pumping Station No. 1 (WTR)	266,000
Engineering and Design	52,800
Supervision and Administration	350,000
Total	668,800

Fiscal Year 2013 funds are being used as follows:

Initiate (Fully Funded):

Electrical Sub-Station, Pumping Station No. 1 (WTR)	4,400,000
Total	4,400,000

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate (Fully Funded)	
Electrical Sub-station & Transmission Line, Little Bayou Meto Pump Sta., AR (WTR)	4,400,000
Planning, Engineering and Design	200,000
Supervision and Administration	400,000
Total	5,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, And Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$ 52,346,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), where necessary for the Construction of the project.	42,318,000	
Contribute cash to bring the total non-Federal share of project costs to 35 percent for water supply and flood risk management and 50 percent for waterfowl management features for recreation.	124,173,000	
Operate, maintain, repair, replace and rehabilitate all completed works in accordance with regulations prescribed by the Assistant Secretary of the Army for Civil Works (ASA(CW)).		\$5,143,000
Total Non-Federal Costs	\$218,837,000	\$5,143,000

Mississippi River Commission

Memphis District

Bayou Meto Basin, AR

STATUS OF LOCAL COOPERATION: The Project Partnership Agreement (PPA) was executed with the local sponsor, the Arkansas Natural Resources Commission (ANRC) on 24 May 2010. The Bayou Meto Water Management District (BMWMD), partnering with the ANRC, has completed all institutional and legal requirements for assessment of benefits to landowners within the project area for taxation purposes. The BMWMD intends to utilize proceeds from tax assessments, water contracts, state grants and bond issues to provide their required share of the project cost. Funds to initiate construction were received in FY 2010. ANRC is providing the non-Federal cost share funds to match the American Recovery and Reinvestment Act (ARRA) funds of \$35,000,000 received in Fiscal Year 2010 for construction of Pump Station #1, Little Bayou Meto Pump Station, and Outlet Structure and Canal 1000 design which were awarded in September 2010. Construction of Pump Station No. 1 is scheduled to be completed in September 2013 and Little Bayou Meto Pump Station is scheduled to be completed in September 2013.

The current non-Federal cost estimate of \$218,837,000, which includes a cash contribution of \$124,173,000, is no change from the non-Federal cost estimate of \$218,837,000 noted in the Project Partnership Agreement, which included a cash contribution of \$124,173,000. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$395,337,000 is no change over the latest estimate submitted of \$395,337,000 (Letter dated 24 Sep 07 providing project authorization signed by ASA(CW) and amended GRR dated Dec 08, PPA executed 24 May 2010).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement was published in the Federal Register in December 2006 and submitted in April 2007 for review and approval to ASA (CW) as part of the General Reevaluation Report (GRR). In a memo dated 24 September 2007 the ASA (CW) approved the report and authorized the project.

OTHER INFORMATION: Funds to prepare a General Reevaluation Report and initiate preconstruction engineering and design were appropriated in FY 1998 and funds to initiate construction were appropriated in FY 2010. Fish and Wildlife mitigation costs are estimated to be \$7,431,000. The percentage to the total project cost and the Federal and Non-Federal cost of each component of this multi-purpose project is provided below:

Component	Total Cost Fully Funded 2008 (From PPA)	Percent Of Total	Federal	Non-Federal
Agricultural Water Supply	\$ 501,965,000	82%	\$ 326,277,300	\$ 175,687,700
Waterfowl Management	\$ 60,386,000	10%	\$ 30,193,000	\$ 30,193,000
Flood Control	\$ 51,823,000	8%	\$ 38,867,200	\$ 12,955,800
Project Total	\$ 614,174,000	100%	\$ 395,337,500	\$ 218,836,500

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Channel Improvement, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, a distance of approximately 966 miles.

DESCRIPTION: The plan of improvement consists of stabilizing the banks of the river in a desirable alignment and obtaining the most efficient flow characteristics for it for flood control and navigation by means of revetments, dikes, foreshore protection, and improvement dredging. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1962, 1965, 1966, and 1970.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.28 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$3,969,000,000		Entire Project	93	TBD
Estimated Non-Federal Cost	1,860,000				
Cash Contributions	1,760,000				
Other Costs	100,000				
Total Estimated Project Cost	\$3,970,860,000				
		PHYSICAL DATA			
Allocations to 30 September 2010	3,032,815,000		Lands and Damages	19,135 acres	
Allocation for FY 2011	28,372,000		Revetments	1,097 miles	
Allocation for FY 2012	49,013,000	1/	Dikes	362 miles	
Conference Allowance for FY 2013	46,133,000	4/	Dredging	As Required	
Allocation for FY 2013	46,133,000	5/			
Allocations through FY 2013	3,156,333,000	2/	80	Pumping Station	1
Estimated Carry-in Funds	0	3/			
President's Budget Amount for FY 2014	58,015,000		81		
Programmed Balance to Complete After FY 2014	754,652,000				
Unprogrammed Balance to Complete After FY 2014	0				

1/ Includes \$100,000 reprogrammed to project.

2/ Includes ARRA funds of \$31,006,000 (\$21,232,000 in FY 2009; \$9,836,000 in FY 2010; and (\$62,000) in FY 2012).

3/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

4/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

5/ Fiscal Year 2013 revetment priorities have changed to due to real estate issues at Arkansas City/Yellow Bend and reprioritization of work to address the most problematic area of the river. Dikes priorities have changed to address the most problematic areas due to excessive dredging during low water conditions.

JUSTIFICATION: The Channel Improvement Project is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of Channel Improvement derive from the way in which they operate together with the Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The Mississippi River, with a drainage area of about 1,245,000 square miles, has a wide range of flow, increasing from an approximate minimum of 90,000 cubic feet per second (675,000 gallons per second) to a maximum of 2,345,000 cubic feet per second (17,587,000 gallons per second) which occurred in 1927 at the latitude of Red River Landing. The project flood is 3,030,000 cubic feet per second (22,500,000 gallons per second). Part of the tremendous energy of this volume of flowing water is directed toward a relentless attack on the banks of the river, causing the unprotected banks to cave into the river. As this caving progresses, the attack becomes more direct, the bendway moves in toward the levee, and more sediment is placed in the river and deposited downstream in the form of a sandbar. This bar gradually builds out into the channel and deflects the river's attack to the opposite bank. As the cycle is repeated the river tends to meander and lengthen. Revetment is placed against the banks of the river at locations where mainline levees are being threatened with destruction or where unsatisfactory alignment and channel conditions are developing. Revetment serves a three-fold purpose in that the river is prevented from encroaching on the Main Stem levees, excess material is kept out of the stream, and a favorable channel alignment and depth are maintained. An objective of the plan is to preserve favorable alignments and efficient cross-sectional areas and to prevent the river from creating new meander patterns. In wide reaches of the river, dikes are used to contract the channel width so as to produce an efficient channel for navigation and to insure the flood carrying capacity of the river. Chutes and secondary channels are controlled for the same purpose. Improvement dredging is employed to assist the river in removing natural obstructions which deflect the current into undesirable patterns of flow and to assist in developing an efficient channel. Foreshore protection is utilized to preserve the integrity of the Mississippi River Levees from attack by erosion of the batture. Erosion of the batture leads to steep slopes which, when undermined, result in considerable loss of batture and possible failure of the levee.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$409.7 billion in 2012 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 11 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 180,000. The savings per ton is \$32.00.

The MR&T project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$15.6 billion in damages in 2012 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2012 prices, damages without the projects would have been \$56.4 billion and damages prevented would have been \$53.3 billion.

The 2011 flood set a new flood of record based on a comparison of peak flows measured at representative locations in the lower Mississippi Valley versus previous flood records. In addition, this flood experienced greater stages than the 1927 flood, but since the levees did not crevasse or overtop flooding was reduced by 62 percent. Total damages with existing projects in operation were \$2.9 billion (2012 price levels). In addition, \$1.5 billion damages were incurred by federal flood protection works within the MR&T projects. Damages without projects would have been \$237.2 billion and total damages prevented by projects amounted to \$108.0 billion. Households numbering more than 1.4 Million were saved from impacts and no known deaths occurred.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

Annual Remaining Benefits	Amount @ 7%
Flood Control	\$415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$529,090,000

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Revetments	\$288,000
Dikes	761,000
Total	\$1,049,000

Current funds are being used as follows:

Revetments	\$31,733,000
Dikes	14,400,000
Total	\$46,133,000

The items of revetment work are:

Approximate length in feet:

Chute of Island 35, TN ^{1/}	1,800
Norfolk Star, MS ^{1/}	1,400
Racetrack, MS ^{2/}	2,100
Reinforcement	14,180

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Channel Improvement, AR, IL
KY, LA, MS, MO, and TN

1 May 2013

MR&T-23

FISCAL YEAR 2013 (Continued):

Revetments: The planned program consists of items of work for which funds will be used as follows:

Lands and Damages	\$ 100,000
Construction of Revetments	25,593,000
Cultural Resources	40,000
Planning, Engineering, and Design	5,400,000
Construction Management	600,000
Total	\$31,733,000

Dikes: The planned dike work consists of the following items:

Commerce, MS ^{1/}	\$ 750,000
Porter Lake, MS ^{1/}	750,000
Randolph, TN ^{1/}	1,900,000
Victoria Bend, MS (LDB) ^{2/}	8,852,000
Lands and Damages	50,000
Cultural Resources	20,000
Planning, Engineering, and Design	1,464,000
Construction Management	614,000
Total	\$14,400,000

FISCAL YEAR 2014: The requested amount will be used to continue construction of revetments and dikes, land acquisition; cultural resource investigations; engineering and design; construction management for construction of revetments and dikes; and economic evaluation of the MR&T main stem features. Funds will be applied as follows:

Revetments	\$47,313,000
Dikes	10,702,000
Total	\$58,015,000

The items of revetment work are:

Approximate length in feet:

Chute of Island 35, TN	1,600
Island 40, TN	1,000
Horseshoe, AR	1,800
Ludlow, AR	2,000
Togo Island, LA	4,000
Kings-Point Opposite Delta, MS (SBP)	2,000
Arkansas City Yellow Bend, AR	3,000
Grand Gulf, MS	2,500
Lake Concordia, MS	2,900
Reinforcement	10,280

Revetments: The planned program consists of items of work for which funds will be required as follows:

Lands and Damages	\$ 100,000
Construction of Revetments	40,441,000
Cultural Resources	211,000
Economic evaluation of the MR&T main stem features	166,000
Planning, Engineering, and Design	5,745,000
Construction Management	650,000
Total	\$47,313,000

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Channel Improvement, AR, IL
KY, LA, MS, MO, and TN

FISCAL YEAR 2014 (Continued):

Dikes: The planned dike work consists of the following items:

Lands and Damages	70,000
Cultural Resources	30,000
Planning, Engineering, and Design	1,592,000
Construction Management	715,000
Victoria Bend, MS (LDB)	8,295,000
Total	\$10,702,000

NON-FEDERAL COST: In accordance with Section 4 of the Flood Control Act of 1944, as amended by Section 207 of the Flood Control Act of 1962, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area.	\$ 100,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities.	1,760,000	\$244,000
Total Non-Federal Costs	\$1,860,000	\$244,000

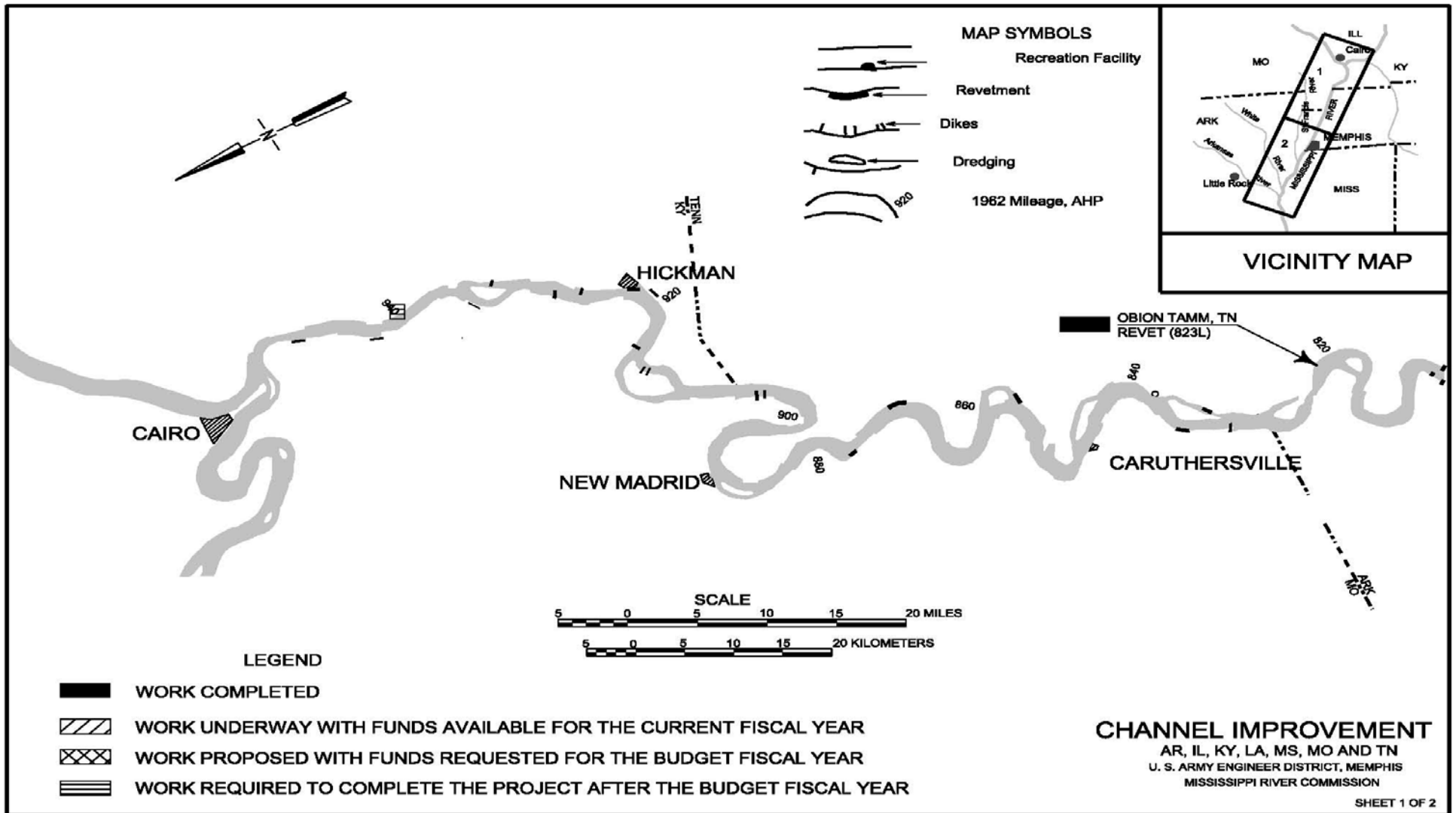
STATUS OF LOCAL COOPERATION: Assurances furnished by the Missouri Department of Conservation for the Dorena Recreation Facility were accepted 27 August 1971; assurances furnished by the Tennessee Department of Conservation for the Richardson Landing Recreation Facility were accepted 3 September 1976; and assurances furnished by the City of Memphis, Tennessee, for Volunteer Bicentennial Park were accepted 11 September 1975. Assurances furnished by the City of Osceola, Arkansas, for Lake Neark, Arkansas, are embodied in the contract for cost sharing approved on 19 September 1982. A Local Cooperation Agreement for the Ed Jones Boat Ramp with the State of Tennessee was signed 27 October 1988. A Local Cooperation Agreement for the Shelby Forest Boat Ramp with the State of Tennessee was signed 11 October 1990. A Local Cooperation Agreement for the Dyersburg, Tennessee, Boat Ramp with the State of Tennessee was signed 11 July 1994.

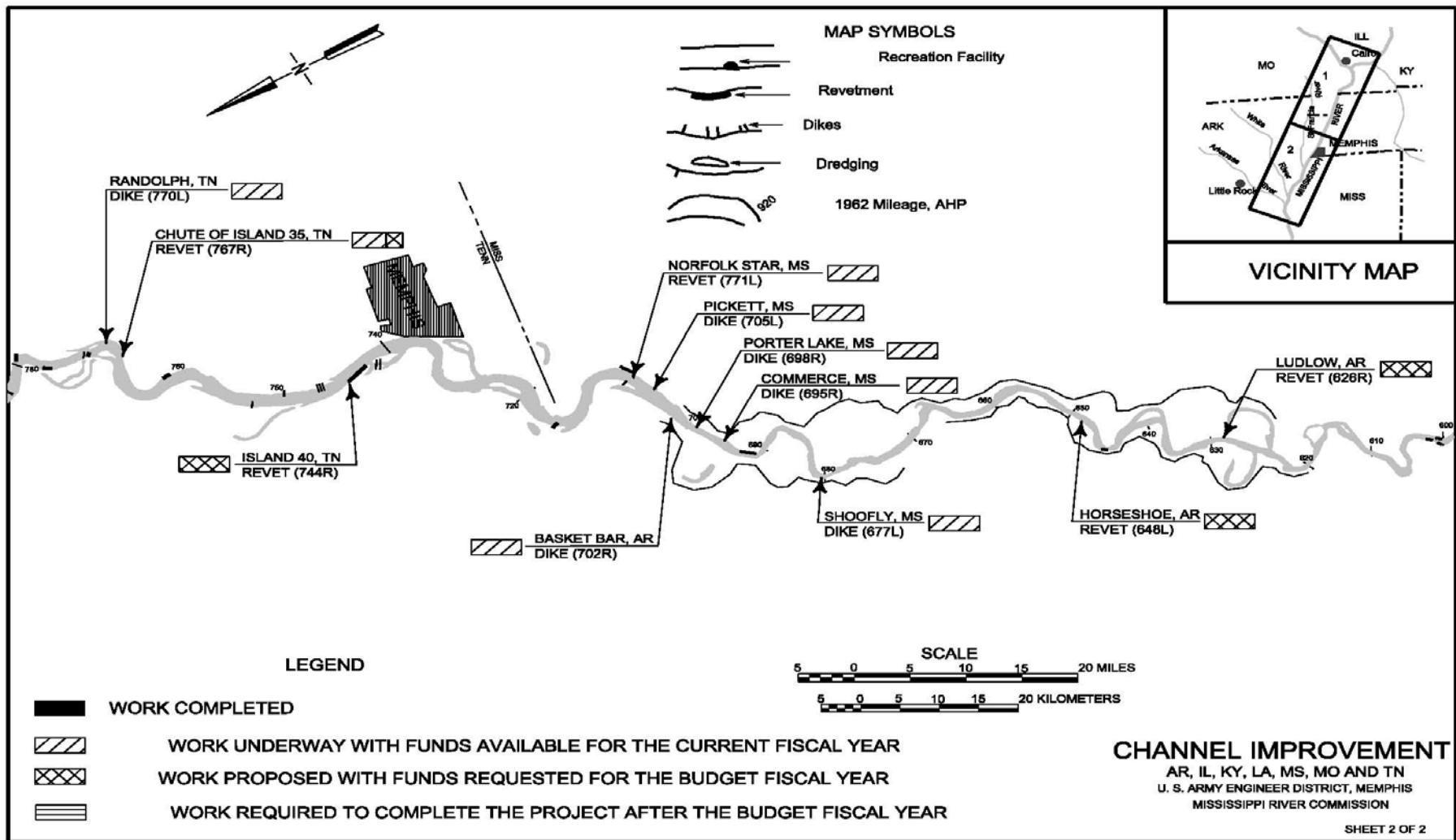
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$3,969,000,000 is an increase of \$1,000,000 from the latest estimate (\$3,968,000,000) presented to Congress (FY 2013). This change includes the following items:

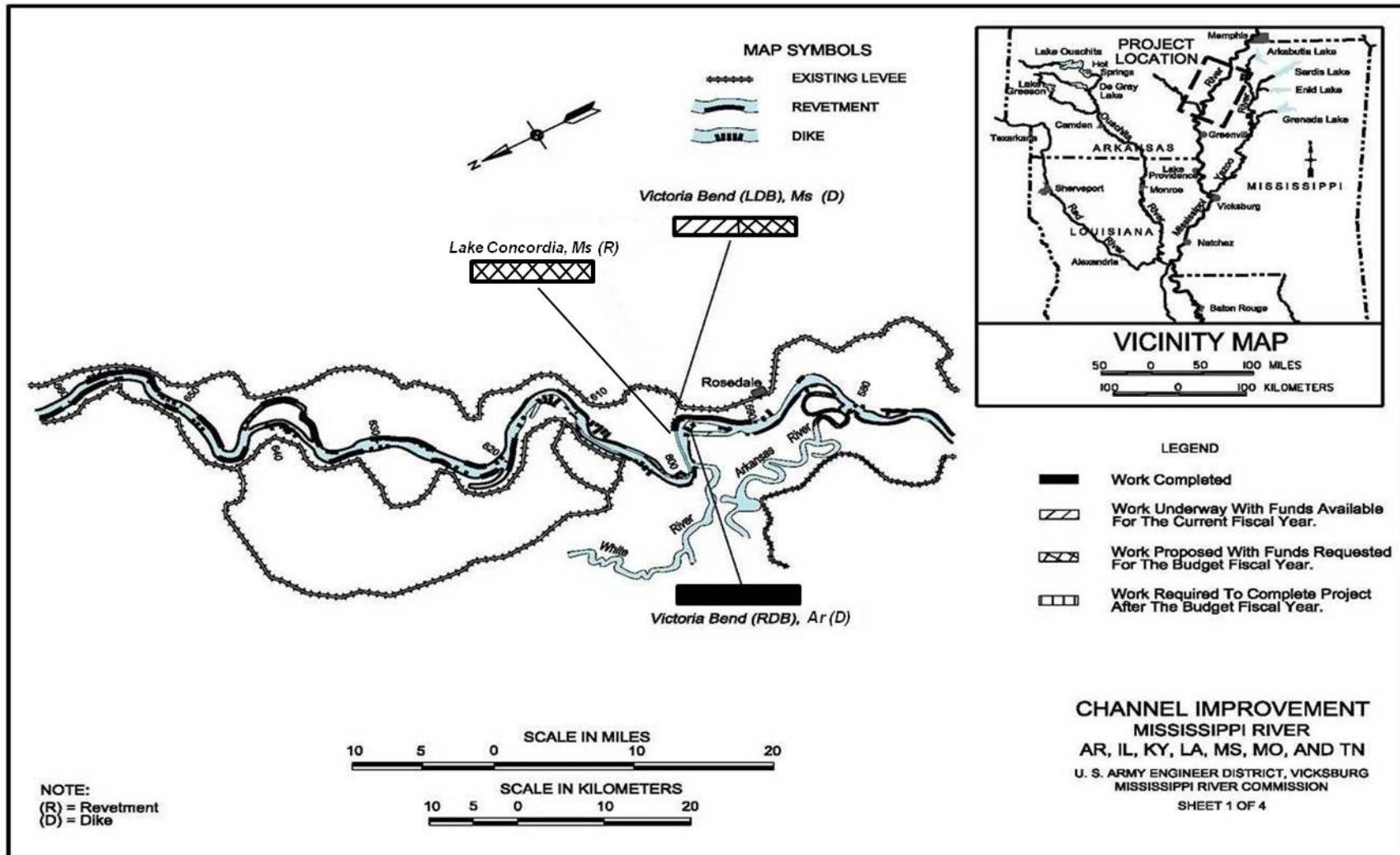
Item	Amount
Price Escalation on Construction Features	\$1,425,000
Post Contract Award and Other Estimating Adjustments	0
Price Escalation on Real Estate	(425,000)
Total	

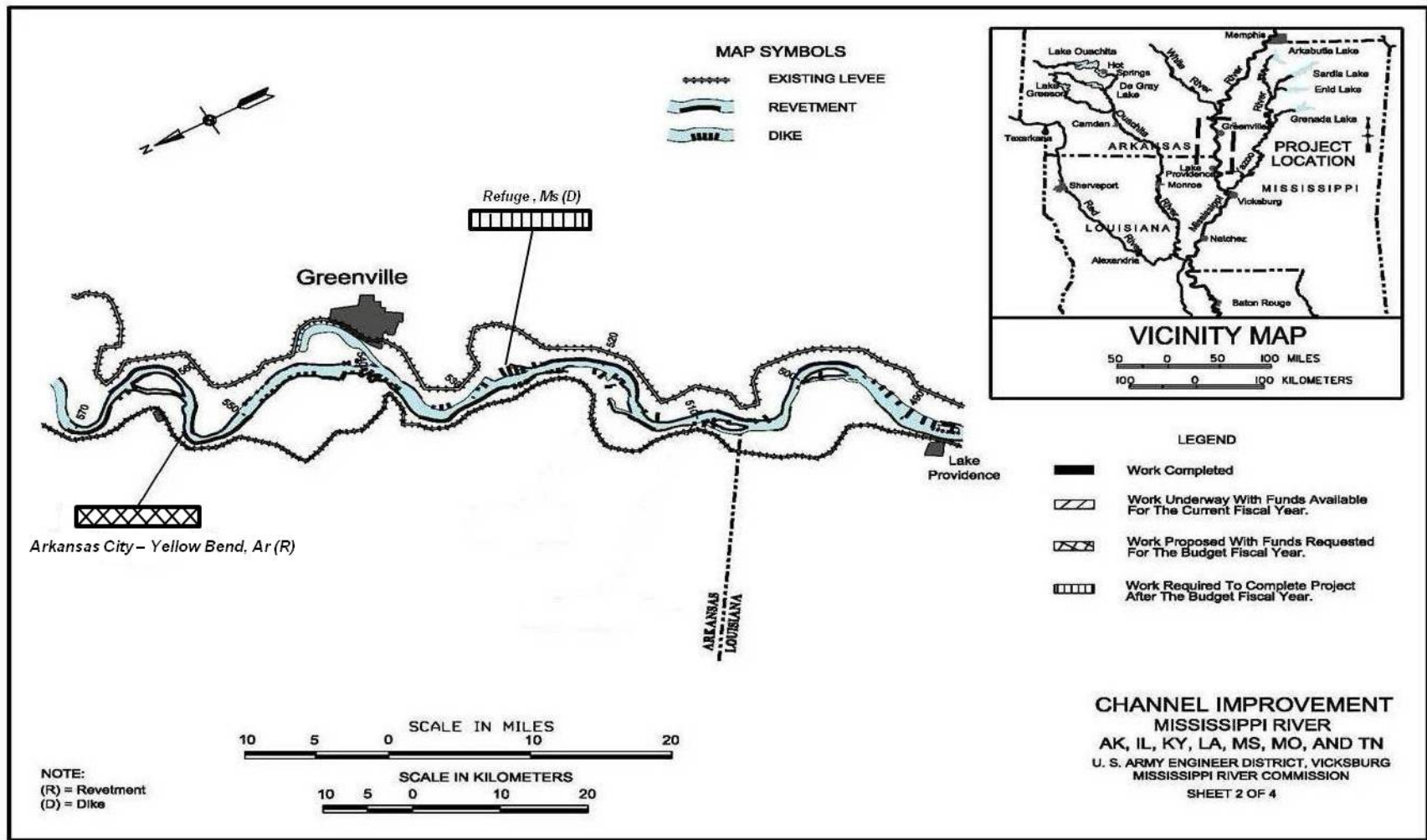
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

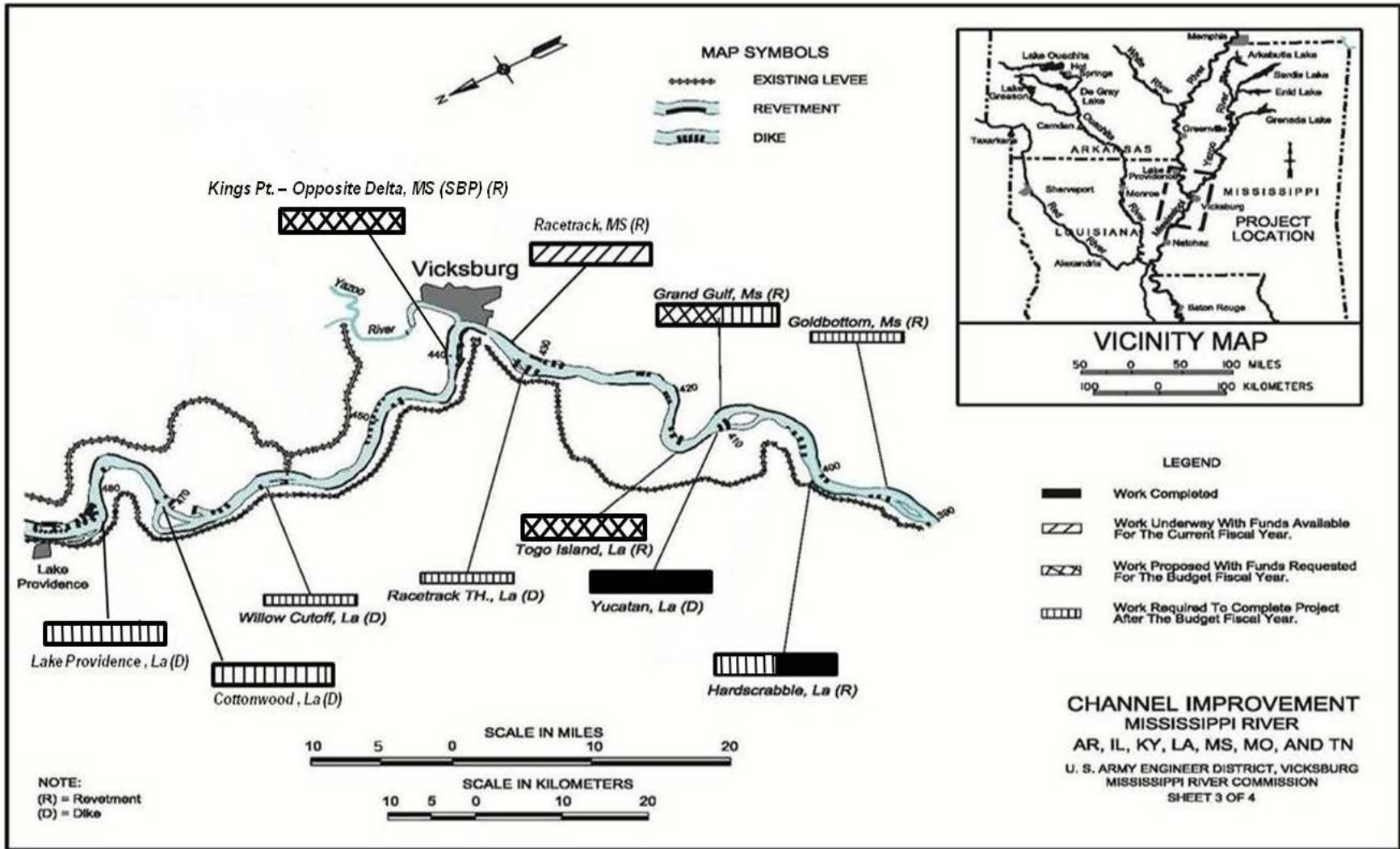
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.

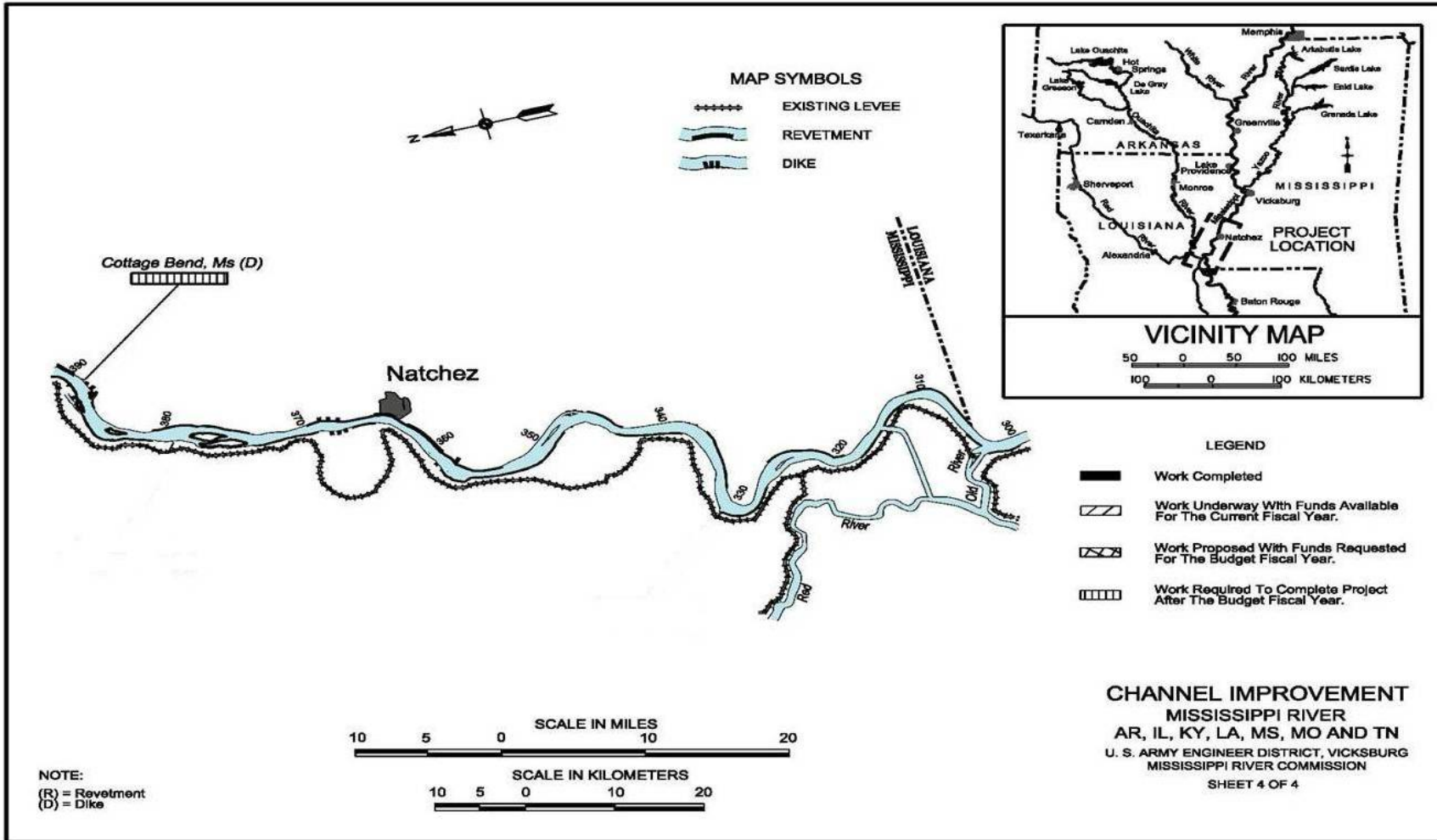


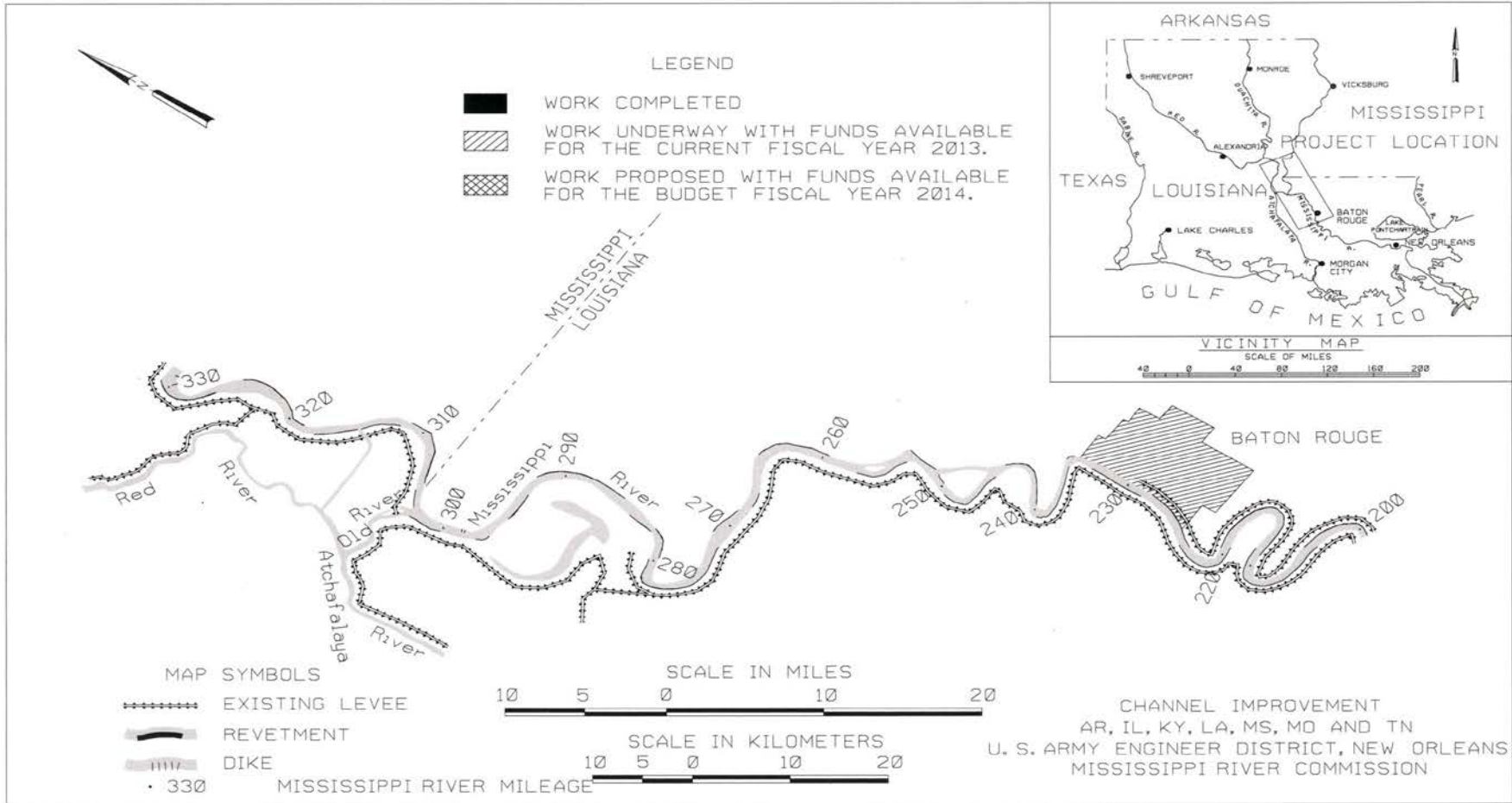




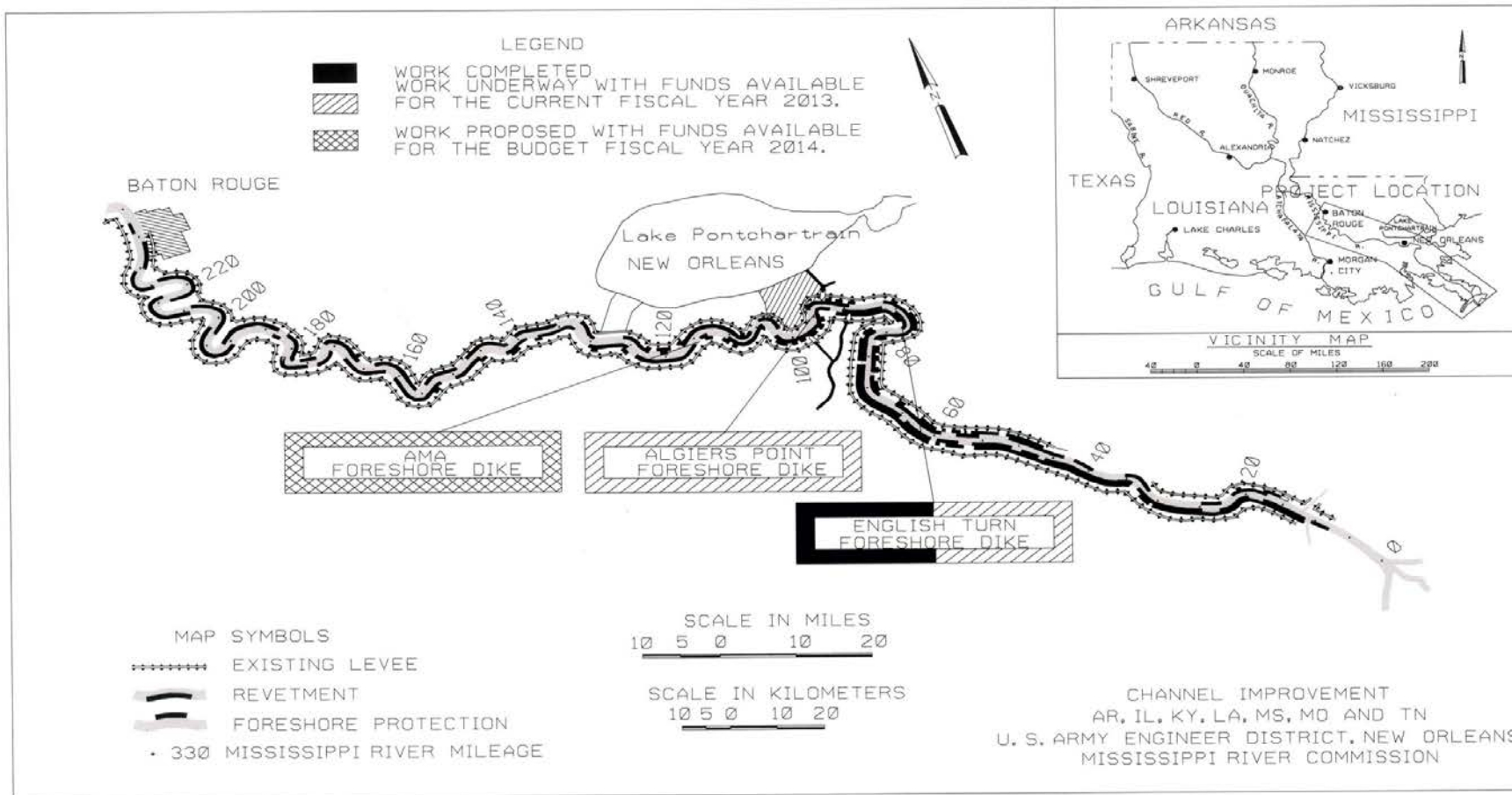








SHEET 1 OF 2



SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Construction

PROJECT: Grand Prairie Region, AR (Resumption)

LOCATION: The Grand Prairie Region and Bayou Meto project area is located in five counties in east central Arkansas. The Grand Prairie Region is primarily located in Arkansas and Prairie Counties and a small portion in Lonoke and Monroe Counties. The Bayou Meto Basin also includes Jefferson County.

DESCRIPTION: The Grand Prairie Region portion of the project addresses the problems of depletion of the alluvial aquifer and the sparta aquifer. The loss of these aquifers would result in severe reductions in irrigated agricultural with devastating losses to the agricultural based economy, and would pose a threat to the municipal and industrial water supply. The project will provide for aquifer protection, agricultural water supply, groundwater conservation, and fish and wildlife restoration and enhancement. The project consists of a pumping station located on the White River, a network of new canals, existing channels, pipelines, and associated channel structures to provide surface water to the water depleted areas. Other project components include on-farm storage reservoirs, conservation measures, and environmental restoration and enhancement measures. Project outputs from the project are protection of the aquifer, creation of fisheries and waterfowl habitat, and agricultural benefits.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.15 TO 1 at 7 percent.

INITIAL BENEFIT-COST RATIO:

BASIS OF BENEFIT-COST RATIO: Benefits are from the revised General Reevaluation Report dated September 1999, approved by the Deputy Commander for Civil Works on 1 November 1999.

SUMMARIZED FINANCIAL DATA

		ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$293,000,000				
Estimated Non-Federal Cost	\$157,000,000		Grand Prairie Region	24	TBD
Cash Contribution	\$86,350,000				
Other Costs	70,650,000				
PHYSICAL DATA					
Total Estimated Project Cost	\$450,000,000		Pumping Stations		
			Major Pumping Station		1640 CFS
			Relief Station		100 CFS
Allocations to 30 September 2010	\$ 97,727,000		Channels		
Allocation for FY 2011	1,198,000		New Channels		184 miles
Allocation for FY 2012	592,000 1/		Existing Channels		291 miles
Conference Allowance for FY 2013	0		Weirs		120
Allocations through FY 2013	105,117,000	64	Pipelines		
Estimated Carry-In Funds	0 2/		Check Stations		14
President's Budget for FY 2014	22,000,000	72	Conservation Measures		
Programmed Balance to Complete after FY 2014	\$165,883,000 3/		Relocations		
Un-programmed Balance to Complete after FY 2014	0		Utility Relocations		342
			Bridge Relocations		34

1/ Additional Allocation.

2/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

3/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The project will provide for groundwater protection, agricultural water supply, and environmental restoration and protection. The agricultural economy, which supports the eastern Arkansas region, cannot exist without a dependable supply of irrigation water. Continued withdrawals at the current rate will deplete the alluvial aquifer such that by the year 2015 it will no longer be a viable source of irrigation water; and agriculture, as it is now practiced, will be impossible. The economic result of exhausting the aquifer would be catastrophic. The selected plan is the combination of conservation, groundwater, on-farm storage, import water, and environmental measures, which best meet the needs of the project area and is the preferred plan with the project sponsor. The selected plan provides a supplemental source of irrigation water combined with conservation, which allows the alluvial aquifer to stabilize. The environmental benefits consist of preservation of the alluvial aquifer, restoration of fisheries habitat, restoration of historic native prairies, and creation of waterfowl habitat. The 184 miles of new canals would result in the creation of 8.560 fish habitat units per month (one habitat equals one acre-foot of prime fish habitat). The placement of 120 weirs in the existing channelized streams in the area would restore 4,328 habitat units per month and the new on-farm storage would provide over 8,000 new surface acres on existing farmland. Very little of the historic prairie remains in the project area. The project provides the opportunity of restoration of approximately 3,000 acres into native prairie grasses along project rights-of-way. Waterfowl habitat is a major component of the project. An average of 38,000 additional acres of rice field would be flooded annually providing a high quality food source for waterfowl and over 22,000,000 duck use days. In addition, the long term drying of the wetland along the White River within the southern portions of the Grand Prairie would be halted or slowed through protection of the aquifer.

Average annual benefits (1996 price levels) are as follows:

Annual Benefits	Amount
Irrigation	\$35,812,000
Fish and Wildlife	472,000
Total	\$36,284,000

FISCAL YEAR 2013: Total unobligated funds are being used as follows:

Continue:	
Supervision and Administration	\$140,800
Total	140,800

Current year funds are being used as follows:

Initiate (Fully Funded):	
Discharge Pipes Segment 2	\$5,500,000
Engineering and Design	250,000
Supervision and Administration	250,000
Total	\$5,600,000

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate (Fully Fund):	
DeValls Bluff Pump Station Super-structure	\$20,000,000
Engineering and Design	1,000,000
Supervision and Administration	1,000,000
Total	\$22,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas.	\$ 11,106,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), where necessary for the construction of the project.	17,986,000	
Operate, maintain, repair, replace and rehabilitate all completed works in accordance with regulations prescribed by the Assistant Secretary of the Army for Civil Works (ASA(CW)).		\$7,200,000
Contribute cash to bring the total non-Federal share of project costs to 35 percent.	127,908,000	
Total Non-Federal Costs	\$157,000,000	\$7,200,000

The current non-Federal cost estimate of \$157,000,000 which includes a cash contribution of \$127,908,000 is an increase of \$46,000,000 from the latest estimate (\$111,000,000) presented to Congress (FY 2001).

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement was executed with the project sponsors, the State of Arkansas and the White River Regional Irrigation Water Distribution District, on 4 August 2000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$293,000,000 is an increase of \$85,000,000 from the latest estimate (\$208,000,000) presented to Congress (FY 2001). The estimate includes changes to the following items.

Item	Amount
Price Escalation on Construction Features	\$ 50,000,000
Post Contract Award and Other Estimating Adjustments (including Contingency Adjustments)	35,000,000
Price Escalation on Real Estate	0
Total	\$ 85,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Record of Decision (ROD) for the Final Environmental Impact Statement was executed in February 2000.

OTHER INFORMATION: The project was originally authorized by the Flood Control Act of 1950 and subsequently deauthorized in 1989 pursuant to provisions of Section 101(B) of the Water Resource Development Act (WRDA) of 1986. The project was reauthorized for construction by the Water Resources Development of 1996 to include groundwater protection and conservation, agricultural water supply and waterfowl management if the Secretary determines that the change in project scope is technically sound, environmentally acceptable and economically feasible. Feasibility level investigations of the Grand Prairie Region were conducted as part of the Eastern Arkansas Regional Comprehensive Study with a general reevaluation conducted under the same authority. The GRR was approved by the Deputy Commander for Civil Works 1 November 1999. This report, indicated that aquifer protection and groundwater conservation, agricultural water supply, fish and wildlife habitat restoration, and waterfowl management were feasible. The Record of Decision (ROD) on the final Environmental Impact Statement was executed in February 2000. The Memorandum of Agreement (MOA) with Natural Resource Conservation Service (NRCS) for construction of on-farm features was executed in August 2000. Funds to initiate preconstruction engineering and design were appropriated in FY 1991 and funds to initiate construction were appropriated in FY 1999.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN - Construction

PROJECT: Mississippi River Levees, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The Mississippi River Levee system on the west bank extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to the vicinity of Venice, Louisiana, and on the east bank from Hickman, Kentucky, to opposite Venice, Louisiana, except where interrupted by hills and tributary streams. Included in the system are the levees which protect Mounds, Mound City and Cairo, Illinois, and the New Madrid Levee and Floodway.

DESCRIPTION: The plan of improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project flood. This feature includes 1,595 miles of levees and 14.8 miles of floodwall. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary Authorization Act of 1971, PL 92-222, WRDA 92, and WRDA 00.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.28 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The last comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$2,548,892,000		Entire Project	94	TBD
Future Non-Federal Reimbursement	674,000				
Estimated Federal Cost (Ultimate)	2,548,218,000				PHYSICAL DATA
Estimated Non-Federal Cost	89,453,000		Channel and Canals		72 miles
Cash Contributions	\$2,935,000		Levees:		
Other Costs	85,844,000		Average Height		20-35 feet
Reimbursement	674,000		Length		1,595.0 miles
Recreation Facilities	\$674,000		Floodwalls:		
			Average Height		14-23 feet
Total Estimated Project Cost	\$2,638,345,000		Length		14.8 miles
Allocations to 30 September 2010	\$1,423,842,000		Levee Berms		654.8 miles
Allocation for FY 2011	25,114,000		Levee Roads		1,541.6 miles
Allocation for FY 2012	27,727,000		Pumping Stations		5
Conference Allowance for FY 2013	45,187,000	3/			
Allocation for FY 2013	45,187,000	4/			
Allocations through FY 2013	1,521,870,000	1/	60		
Estimated Carry-in Funds	0	2/			
President's Budget for FY 2014	22,829,000		61		
Programmed Balance to Complete After FY 2014	\$1,004,193,000				
Un-programmed Balance to Complete After FY 2014	0				

1/ Includes ARRA funds of \$5,964,000 (\$7,300,000 in FY 09 (\$1,000,000) in FY 10; and (\$336,000) in FY 11.

2/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

3/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

4/ Deviation from the items listed in FY 13 J/sheet are due to contract savings on one levee item which resulted in award of one additional contract and adjustments in relocations, planning, engineering, and design; and construction management estimates; two levee items were awarded with PL112-77 funds.

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Mississippi River Levees, AR, IL,
KY, LA, MS, MO, and TN

JUSTIFICATION: The Mississippi River Levee system is one of several Main Stem components, which together comprise the plan of improvement for the flood risk reduction on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River and a few miscellaneous items. Because the benefits of the Mississippi River Levees derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The Mississippi River Levee System provides protection to 23,620 square miles and partial protection to an additional 3,780 square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to highly developed agricultural areas, the levees afford protection to urban areas and many industries.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$409.7 billion in 2012 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 11 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 180,000. The savings per ton is \$32.00.

The MR&T project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$15.6 billion in damages in 2012 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2012 prices, damages without the projects would have been \$56.4 billion and damages prevented would have been \$53.3 billion.

The 2011 flood set a new flood of record based on a comparison of peak flows measured at representative locations in the lower Mississippi Valley versus previous flood records. In addition, this flood experienced greater stages than the 1927 flood, but since the levees did not crevasse or overtop flooding was reduced by 62 percent. Total damages with existing projects in operation were \$2.7 billion (2011 price levels). In addition, \$1.5 billion damages were incurred by federal flood protection works within the MR&T projects. Damages without projects would have been \$110.7 billion and total damages prevented by projects amounted to \$108.0 billion. Households numbering more than 974,000 were saved from impacts and no known deaths occurred. Expressed in 2012 prices, damages without the projects would have been \$112.4 billion and damages prevented would have been \$109.8 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

Annual Remaining Benefits	Amount @ 7%
Flood Control	\$415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$529,090,000

FISCAL YEAR 2013: The total unobligated dollars are being used as follows:

Initiate:	
Nash, Mo Parcel 4, Seepage Measures	\$ 2,300,000
Magna Vista-Brunswick, MS Item 463-L	3,759,000
Manchac Bend	4,942,000
Arbroth Control Wells	400,000
Critical areas identified as part of the Levee System Evaluation Reports (LSER) required for certification:	
Algiers Forebay Bern	1,000,000
Manchac to St. Gabriel	1,500,000
P&S for future items identified as part of the LSER required for certification	650,000
Planning, Engineering and Design	5,000,000
Construction Management	2,000,000
Total	\$21,551,000

Current funds are being used as follows:

Continue:	
Lands and Damages	75,000
Relocations	747,000
Cultural Resources Preservation	25,000
Initiate:	
Cairo, IL, Slope Flattening/Correction (L-5.1 AC)	6,000,000
Lake Jackson to Palmetto, MS Item 509-L	5,700,000
Magna Vista-Brunswick, MS Item 463-L	7,344,000
Jefferson Heights Phase I	8,720,000
Planning, Engineering and Design	9,524,000
Supervision and Administration	7,052,000
Total	45,187,000

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Mississippi River Levees, AR, IL,
KY, LA, MS, MO, and TN

In the event of emergency conditions, such as levee slides, sand boils, bank erosion or other events which threaten levee integrity, the Corps intends to reallocate the funds identified on the priorities presented below to accomplish necessary emergency actions.

FISCAL YEAR 2014: The requested amount will be used to continue cultural resources, planning, engineering and design on ongoing and future levee construction items; plans and specifications (P&S) for critical areas identified as part of the Levee System Evaluation Reports (LSER) requirements and initiate economic evaluation of the MR&T main stem features. Funds will be applied as follows:

Continue:

Cultural Resources Preservation	\$ 25,000
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Initiate:

Economic evaluation of the MR&T main stem features	499,000
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P&S for future critical areas identified as part of the Levee System Evaluation Reports (LSER) requirements	1,675,000
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Planning, Engineering and Design	13,655,000
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Construction Management	6,975,000
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Total	\$22,829,000
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NON-FEDERAL COST: In accordance with the Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968 and PL 92-222, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$85,844,000	\$11,175,000
Minor maintenance of all flood control works after their completion, except controlling a regulating spillway structures, including special relief levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to mainline river levees.	3,609,000	0
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	\$89,453,000	\$11,175,000
Total Non-Federal Costs	\$89,453,000	\$11,175,000

STATUS OF LOCAL COOPERATION: It is estimated that local interests had spent approximately \$292,000,000 for flood protection prior to the Act of 15 May 1928. After passage of the Act, the 37 levee districts along the Mississippi River adopted resolutions assuring the United States that the requirements of local cooperation will be met. These local interests have acquired all rights-of-way for work completed and underway and will try to provide the rights-of-way for work scheduled for Fiscal Year 2012. Supplemental assurances covering the requirements of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646) have been accepted for Main Stem Mississippi River Levees in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee.

Assurances of local cooperation for the recreation facilities at Warfield Point, Mississippi, were accepted on 14 October 1969. Supplemental assurances covering the River and Harbor Act of 1970 (PL 91-611) and PL 91-646 were accepted 7 August 1972. Assurances have not as yet been requested for the recreation facilities at Mississippi River State Park, Arkansas.

Mississippi River Commission

Memphis, Vicksburg, and
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Mississippi River Levees, AR, IL,
KY, LA, MS, MO, and TN

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,548,892,000 is an increase of \$8,292,000 from the latest estimate (\$2,540,600,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$12,110,000
Design Changes	18,331,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	(31,124,000) ^{1/}
Price Escalation on Real Estate	7,002,000
Price Escalation on Design Costs	1,422,000
Price Escalation or Construction Management Costs	551,000
Total	\$ 8,292,000

1/Decreases (\$31,124,000) are based on contract award items listed below:

Barfield and Wilson, AR Relief Wells	(224,000)
Blue Lake, AR Outlet Ditches	204,000
Council Bend/Gammon, AR Relief Wells	(82,000)
Above Cairo, IL Parcel 1 Slurry Trench Item 2	4,431,000
Delta, MS Parcel 2 Relief Wells	(154,000)
Farrell/Baders, MS Relief Wells	45,000
Hillhouse, MS Seepage Control Parcel 1	(36,000)
Trotter/Delta, MS Parcel 1 Seepage Control	(71,000)
Tunica, MS	(81,000)
Above Cairo, IL Relief Wells Item 2a	(19,001,000)
Hickman, KY Sewer Pipe Removal	(183,000)
New Madrid, MO Gravity Outlet, Box Culvert, Levee Closure	(711,000)
New Items Identified	14,000,000
Work Not Required	(30,001,000)
Duplicated Item	(5,065,000)
Better Estimates	5,742,000
Contingencies	63,000

Mississippi River Commission

Memphis, Vicksburg, and
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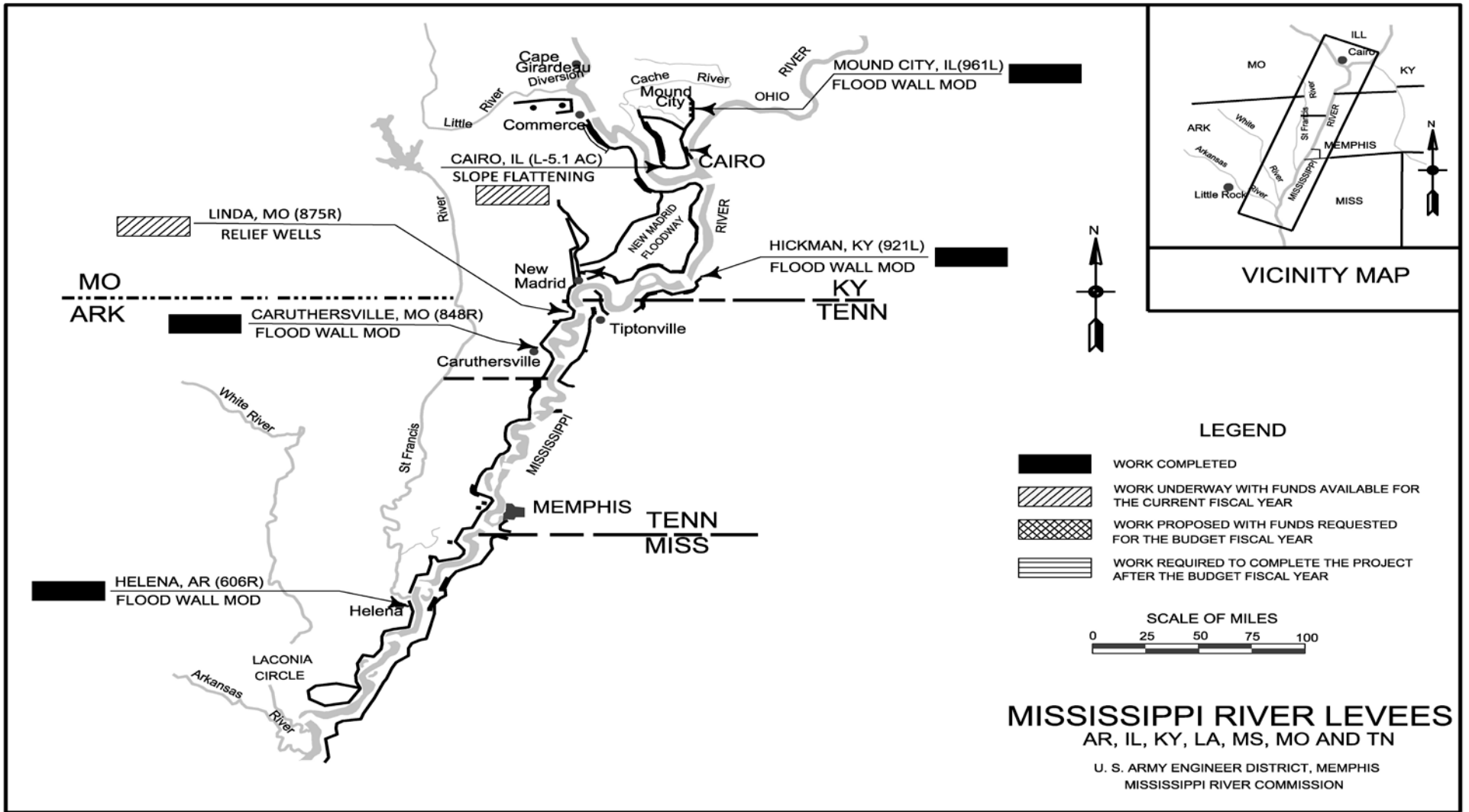
Mississippi River Levees, AR, IL,
KY, LA, MS, MO, and TN

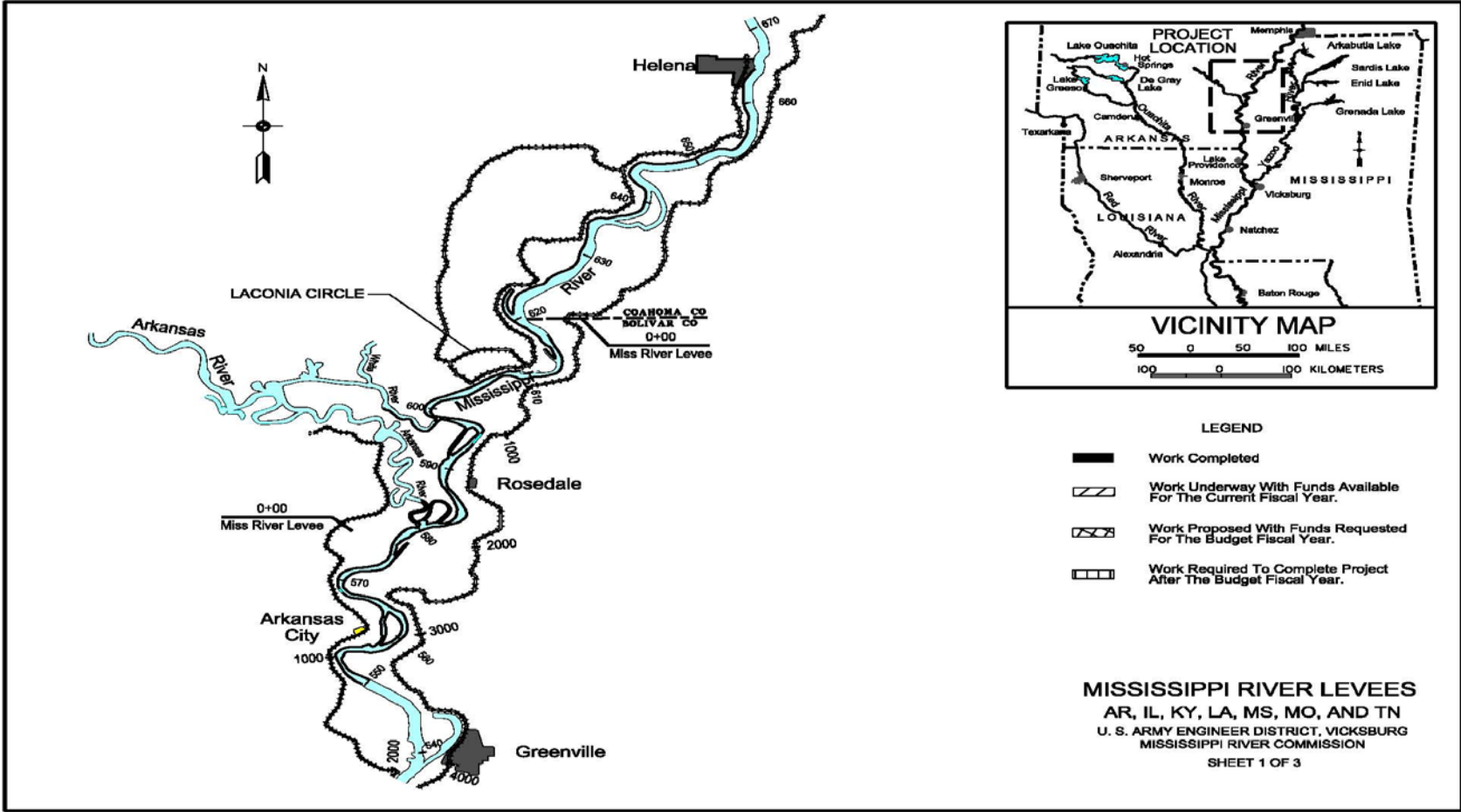
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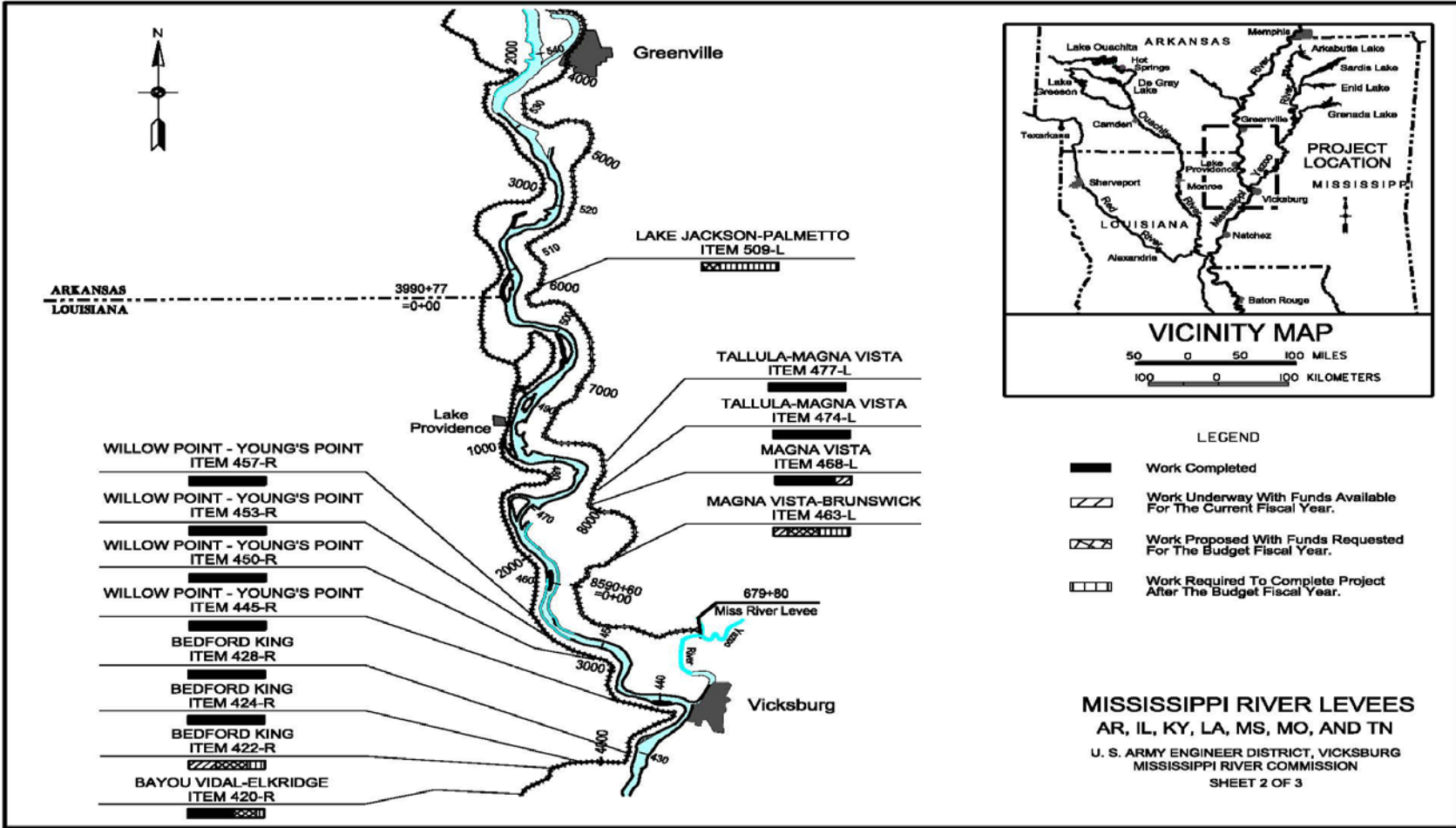
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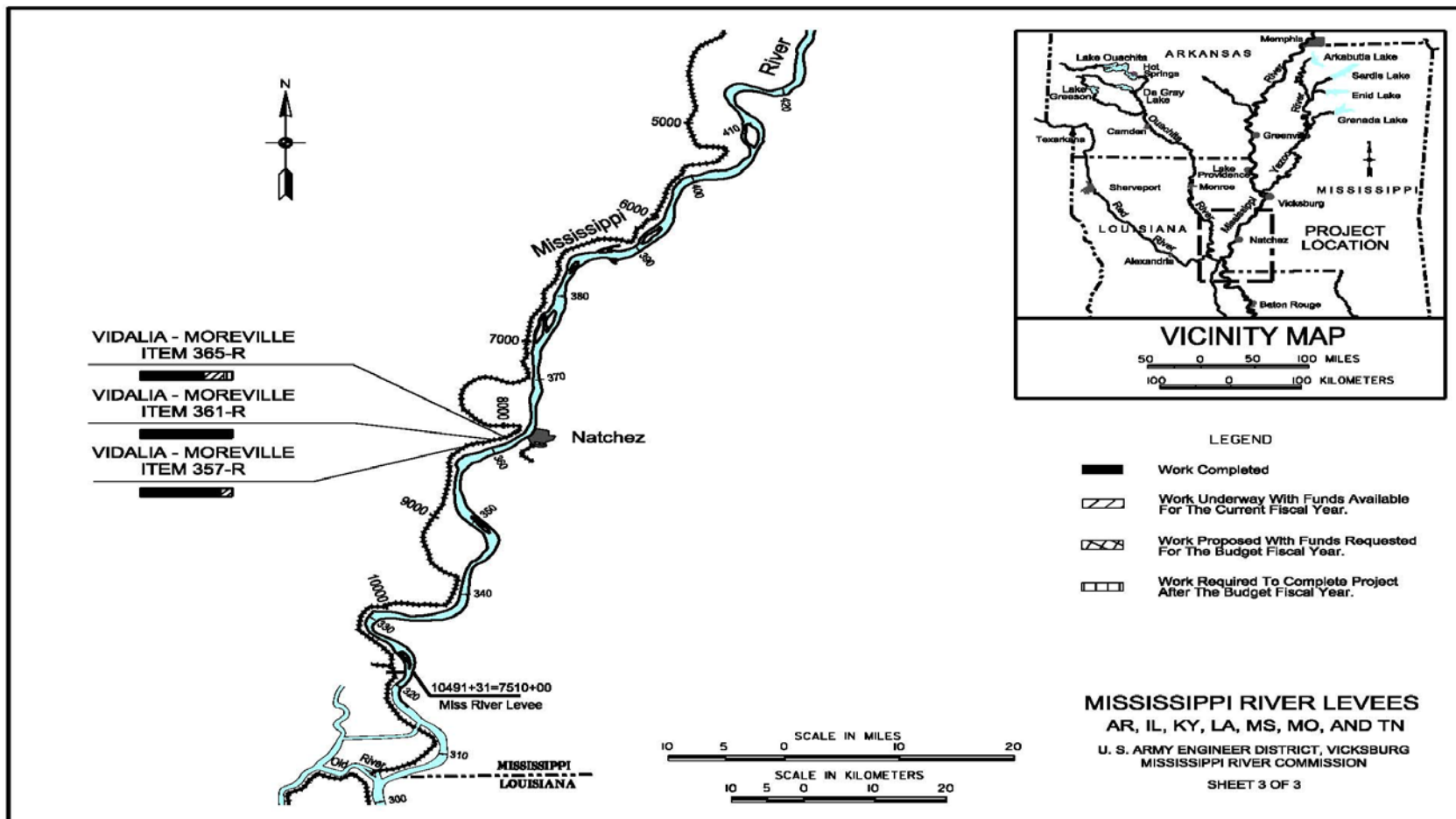
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976. A Supplemental Environmental Impact Statement for the project was completed and the Record of Decision was signed on 5 October 1998. The adequacy of the Supplemental Environmental Impact Statement was challenged but upheld by the United States District Court for the Eastern District of Louisiana. The Fifth Circuit Court of Appeals on October 23, 2000, affirmed the district court's grant of summary judgment to the Government.

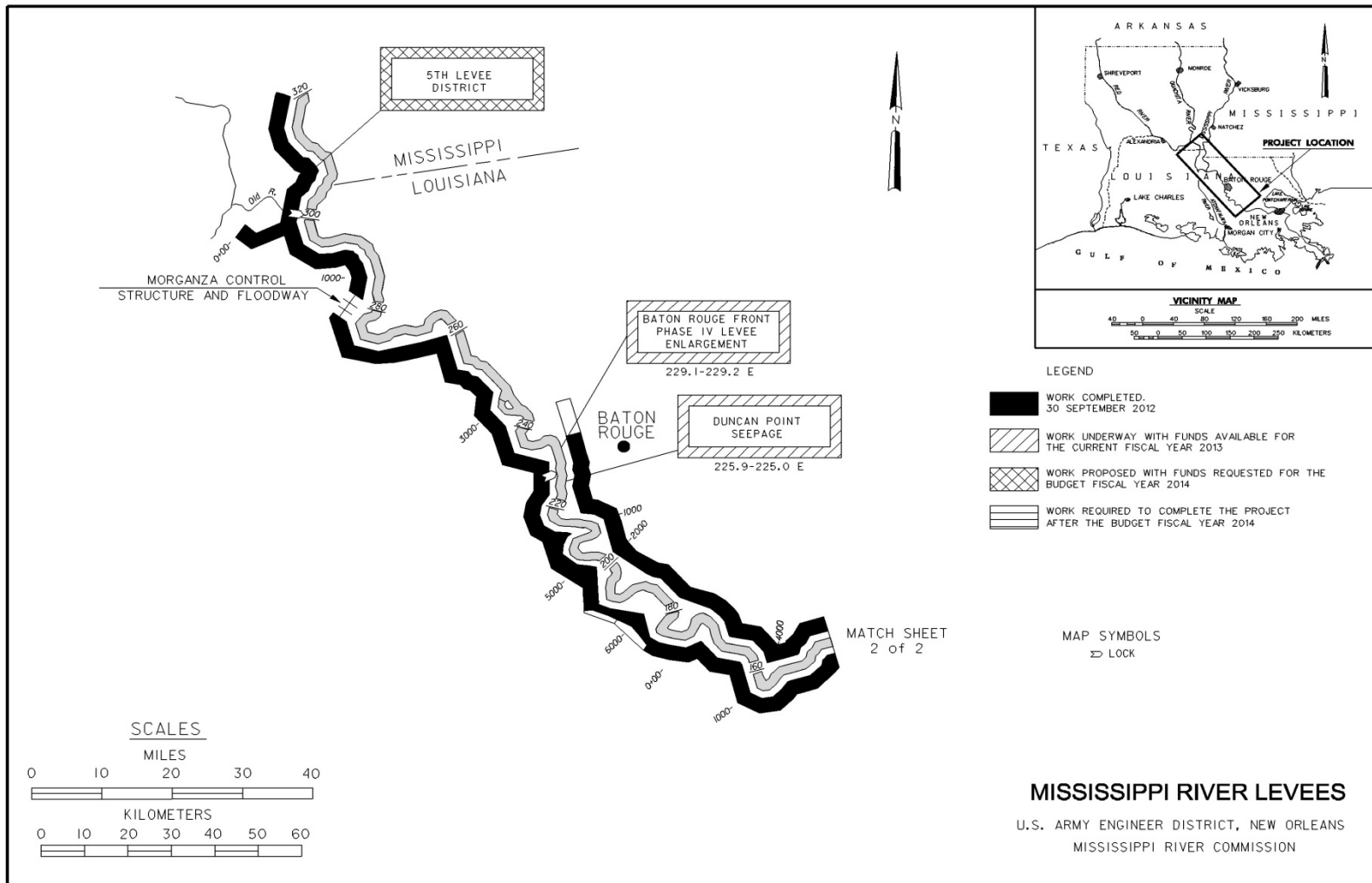
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.



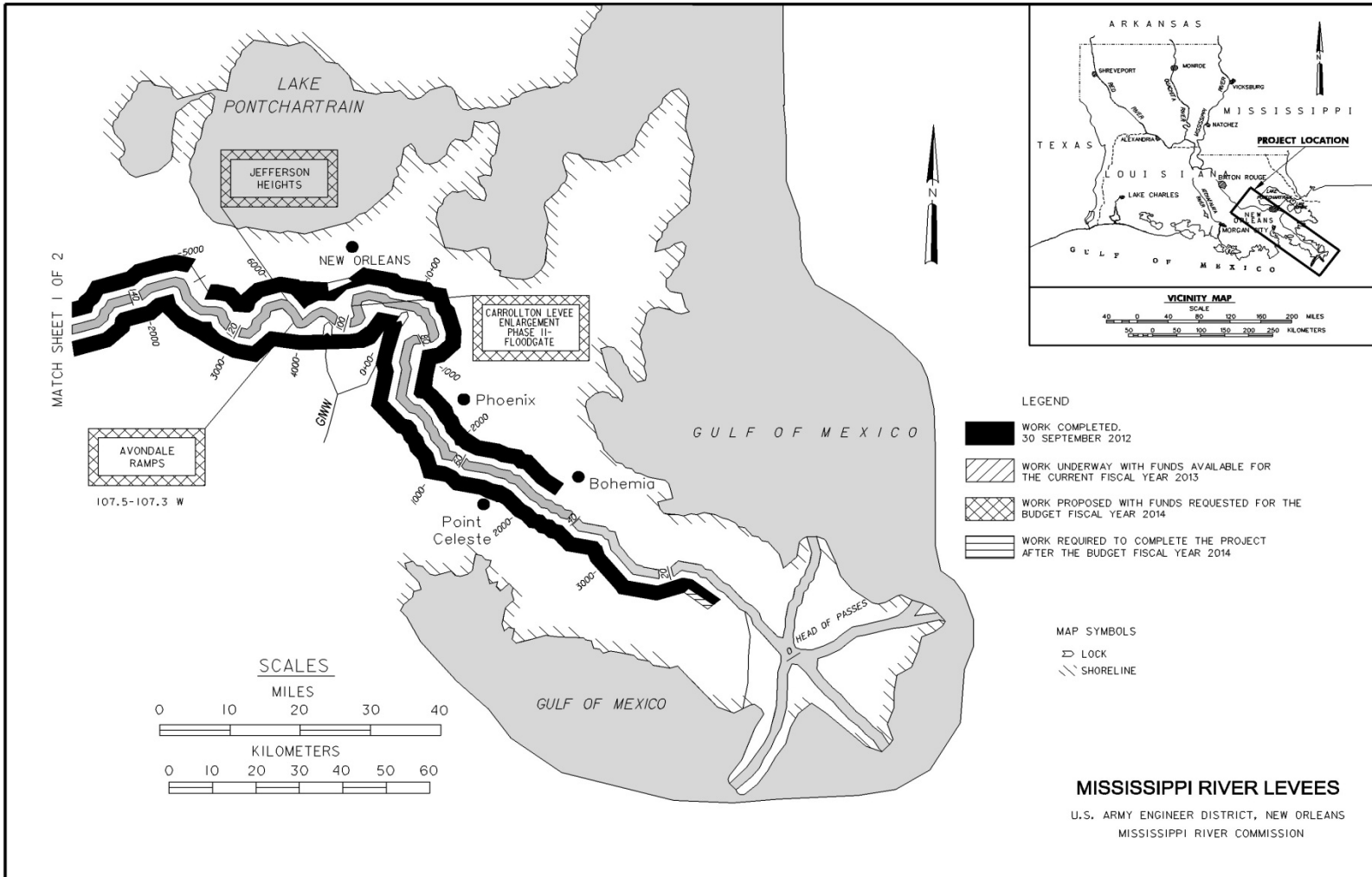








SHEET 1 OF 2



SHEET 2 OF 2

LOUISIANA

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Atchafalaya Basin, Louisiana (Continuing)

LOCATION: The project is located in south-central Louisiana below the latitude of Old River and west of and generally paralleling the Mississippi River. The Atchafalaya River flows through the middle of the basin.

DESCRIPTION: The plan of improvement consists of a leveed floodway about 15 miles wide and 110 miles long that extends generally from the latitude of Old River to the Gulf of Mexico. The upper half of the basin is divided by the leveed Atchafalaya River. The Morganza Floodway is to the east of the Atchafalaya River and has a capacity of 600,000 cubic feet per second, which is introduced into the floodway by a gated control structure. The West Atchafalaya Floodway, which is located to the west of the river, is placed into operation when the fuse plug sections are overtopped bringing flows from the river that will introduce 900,000 cubic feet per second into the lower basin. After passing through the floodways, the flood waters enter the Gulf of Mexico through the Lower Atchafalaya River at Morgan City and the Wax Lake Outlet channel constructed west of Patterson, Louisiana. The project is part of a system and all work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1934, 1936, 1938, 1941, 1946, 1950, 1954

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.28 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

INITIAL BENEFIT - COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT - COST RATIO: Benefits are from latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA

		ACCUM PCT OF EST FED COST	STATUS (January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$2,206,200,000		Entire Project	96 Physical	TBD
Estimated Non-Federal Cost	\$ 14,800,000				
Cash Contributions	\$ 2,500,000				
Other Costs	12,300,000				
Total Estimated Project Cost	\$2,221,000,000				
Allocations to 30 September 2010	\$1,067,123,000				
Allocation for FY 2011	5,090,000				
Allocation for FY 2012	6,471,000				
Conference Allowance for FY 2013	6,300,000	<u>2/</u>			
Allocations through FY 2013	1,084,984,000	<u>1/</u>			
Estimated Carry-In Funds	0	<u>3/</u> 49			
President's Budget Amount for FY 2014	3,500,000				
Programmed Balance to Complete after FY 2014	1,117,716,000	50			
Unprogrammed Balance to Complete after FY 2014	0				

1/ Includes ARRA funds of \$8,253,000 (\$11,063,000 in FY 09; (\$2,962,000); and \$152,000 in FY 12).

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 14 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

PHYSICAL DATA

Levees:

Average Height - 20 feet
Length - 449 miles

Relocations:

Roads - 15 miles
Railroads - 20 miles

Drainage Structures:

Pointe Coupee	2 gates, 10.5 by 15 feet
Melville	2 - 72-inch corrugated metal pipe with vertical lift gate
Darbonne	10-foot by 10-foot barrel with vertical lift gate
Bayou des Glaises	72-inch corrugated metal pipe with flap gate
Bayou Courtableau	2 weirs, 503 feet long
Brushy Bayou	5-foot by 6-foot barrel with vertical lift gate
Bayou Courtableau	5-barrel, each 10 feet by 15 feet with vertical lift gate
Wax Lake East	25 pipes, 5 feet in diameter with slide gates
Wax Lake West	15 pipes, 5 feet in diameter with slide gates

Lands and Damages:
289,212 acres

Pumping Stations:

Number - 15
Capacity - Minimum - 50 cubic feet per second
Maximum - 1,500 cubic feet per second
Average - 400 cubic feet per second

Bank Stabilization:

Length - 58 miles

Floodgates:

Charenton - Sector-gated, 45 feet wide
East Calumet - Sector-gated, 45 feet wide
West Calumet - Sector-gated, 45 feet wide

Channels:

Length: 147.1 miles

Locks:

Bayou Boeuf, 75 feet by 1,156 feet, earth chamber
Bayou Sorrel, 56 feet by 797 feet, earth chamber
Berwick, 45 feet by 300 feet, concrete chamber

Atchafalaya River Navigation:

New Channel-10.1 miles

Freshwater Control Structure (Planned):

Sherburne - dual 10-foot by 10-foot reinforced concrete box culverts with gates
Henderson - dual 10-foot by 10-foot reinforced concrete box culverts with gates

JUSTIFICATION: The MR&T Project is designed to safely convey a Project Design Flood (PDF) from Cairo, IL to the Gulf of Mexico via the main river channels, floodways, and backwater areas. At the latitude of the Old River Control Complex (ORCC), Louisiana, the PDF flows total 3,030,000 cfs. From the ORCC to the Morganza Floodway, the MR&T project will convey up to 2,100,000 cfs for the PDF in the Mississippi River. Below the Morganza Floodway, the MR&T Project will contain 1,500,000 cubic feet per second within the Mississippi River without threatening the integrity of the levees along its banks which protect densely populated areas, highly developed agricultural lands, and industries along the river until it reaches the Bonnet Carre Spillway (about 30 miles upstream of New Orleans). At Bonnet Carre, 250,000 cfs are diverted to Lake Pontchartrain for the PDF with the remaining flows passing via the Mississippi River to the Gulf of Mexico including passing the City of New Orleans. With respect to the Atchafalaya Floodway, the MR&T Project is designed to pass up to 1,500,000 cfs which includes the Red/Ouachita/Black watershed flows and diverted flows via the ORCC (620,000 cfs) and the Morganza Floodway (600,000 cfs) for the PDF. In order to prevent diverted waters from spreading over the rich and highly developed agricultural lands within the Atchafalaya Basin, these rivers and floodways have been leveed to confine the diverted flow.

This floodway system is, for all practical purposes, a part of the main river system, in as much as the integrity of the main river system depends upon its utilization.

Since this construction began, farms and industries have developed in the areas adjacent to the floodway assuming that they would receive protection. Therefore, overtopping or crevassing of the levees would cause far more damage than anticipated at the start of project construction. The main protection levees in the lower reaches are deficient because of consolidation of the soft underlying soils, especially those below the latitude of Krotz Springs, LA. Early construction of these levees to the approved grade is essential, not only for flood protection, but as a means of access for the movement of manpower and equipment to any spot threatened by floods.

The Atchafalaya Basin project is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of the Atchafalaya Basin derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$409.7 billion in 2012 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 11 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 180,000. The savings per ton is \$32.00.

The MR&T project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$15.6 billion in damages in 2012 prices.

Mississippi River Commission

New Orleans District

Atchafalaya Basin, LA

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2012 prices, damages without the projects would have been \$56.4 billion and damages prevented would have been \$53.3 billion.

The 2011 flood set a new flood of record based on a comparison of peak flows measured at representative locations in the lower Mississippi Valley versus previous flood records. In addition, this flood experienced greater stages than the 1927 flood, but since the levees did not crevasse or overtop flooding was reduced by 62 percent. Total damages with existing projects in operation were \$2.9 billion (2012 price levels). In addition, \$1.5 billion damages were incurred by federal flood protection works within the MR&T projects. Damages without projects would have been \$237.2 billion and total damages prevented by projects amounted to \$108.0 billion. Households numbering more than 1.4 Million were saved from impacts and no known deaths occurred.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

Annual Remaining Benefits	Amount @ 7%
Flood Control	\$ 415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$ 529,090,000

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Planning, Engineering and Design	573,000
Modifications to on-going construction	1,200,000
Total	\$1,773,000

Current year funds are being used as follows:

Lands and Damages	\$ 5,000
Surveys and Layouts	10,000
Initiate & complete construction – West Bayou Sale Gordy Phase B	3,800,000
Planning, Engineering and Design	1,485,000
Construction Management	1,000,000
Total	\$6,300,000

FISCAL YEAR 2014: The requested amount will be used for ongoing engineering and design; construction management cost; and economic evaluation of the MR&T main stem features. Funds will be applied as follows:

E&D, EDC, S&A	\$3,000,000
Economic evaluation of the MR&T main stem features	500,000
Total	\$3,500,000

NON-FEDERAL COST: In accordance with the Flood Control Act of 15 May 1928, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Bear the administrative costs for furnishing rights-of-way for levee and levee drainage construction; purchase maintenance equipment; and perform miscellaneous levee work.	\$ 1,110,000	0
Agree to accept lands turned over to them under the provision of Section 4 of the Flood Control Act of 15 May 1928, and as provided in the Flood Control Act of 18 August 1941.	0	0
Bear costs for and maintain all flood control works after their completion, except controlling and regulating spillway structures, including special levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to the levees.	0	\$3,700,000
For the Upper Point Coupee Loop Area, provide an interior drainage system and comply with the applicable provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, approved 2 January 1971, and comply with the provision of Section 221 of the Flood Control Act of 1970, PL 91-611.	11,190,000	0
The State of Louisiana, through the Department of Transportation and Development as the local sponsor, will provide a voluntary 25% cost share for the planning, design, and construction of the interim protection for floodproofing of riverfront businesses in Morgan City and Berwick.	2,500,000	0
Total Non-Federal Costs	\$14,800,000	\$3,700,000

Mississippi River Commission

New Orleans District

Atchafalaya Basin, LA

STATUS OF LOCAL COOPERATION: Necessary assurances for maintaining the project have been furnished by the Atchafalaya Basin Levee District; Red River, Atchafalaya and Bayou Boeuf Levee District; St. Mary Parish Government; Pointe Coupee Parish Police Jury; and the towns of Berwick and Morgan City, LA. These agencies are furnishing all requirements of local cooperation necessary for meeting present project schedules. Newly formed St. Mary Parish Levee District has expressed interest in serving as the local sponsor for portions of the system in St. Mary Parish.

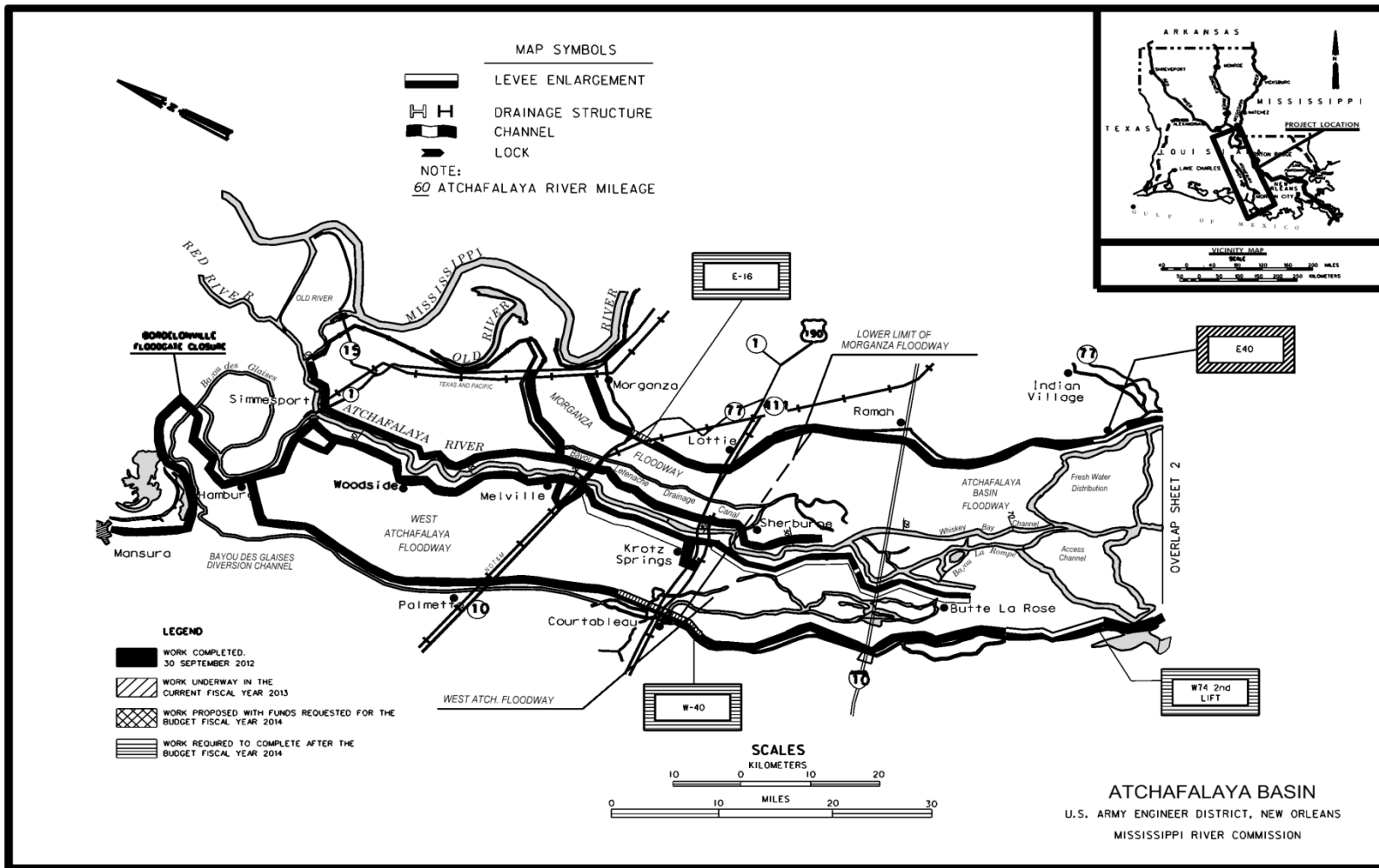
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,206,200,000 is an increase of \$217,800,000 from the latest fully funded estimate (\$1,988,400,000) presented to Congress (Budget Year 2013).

Item	Amount
Price Escalation on Construction Features	\$217,800,000
Total	\$217,800,000

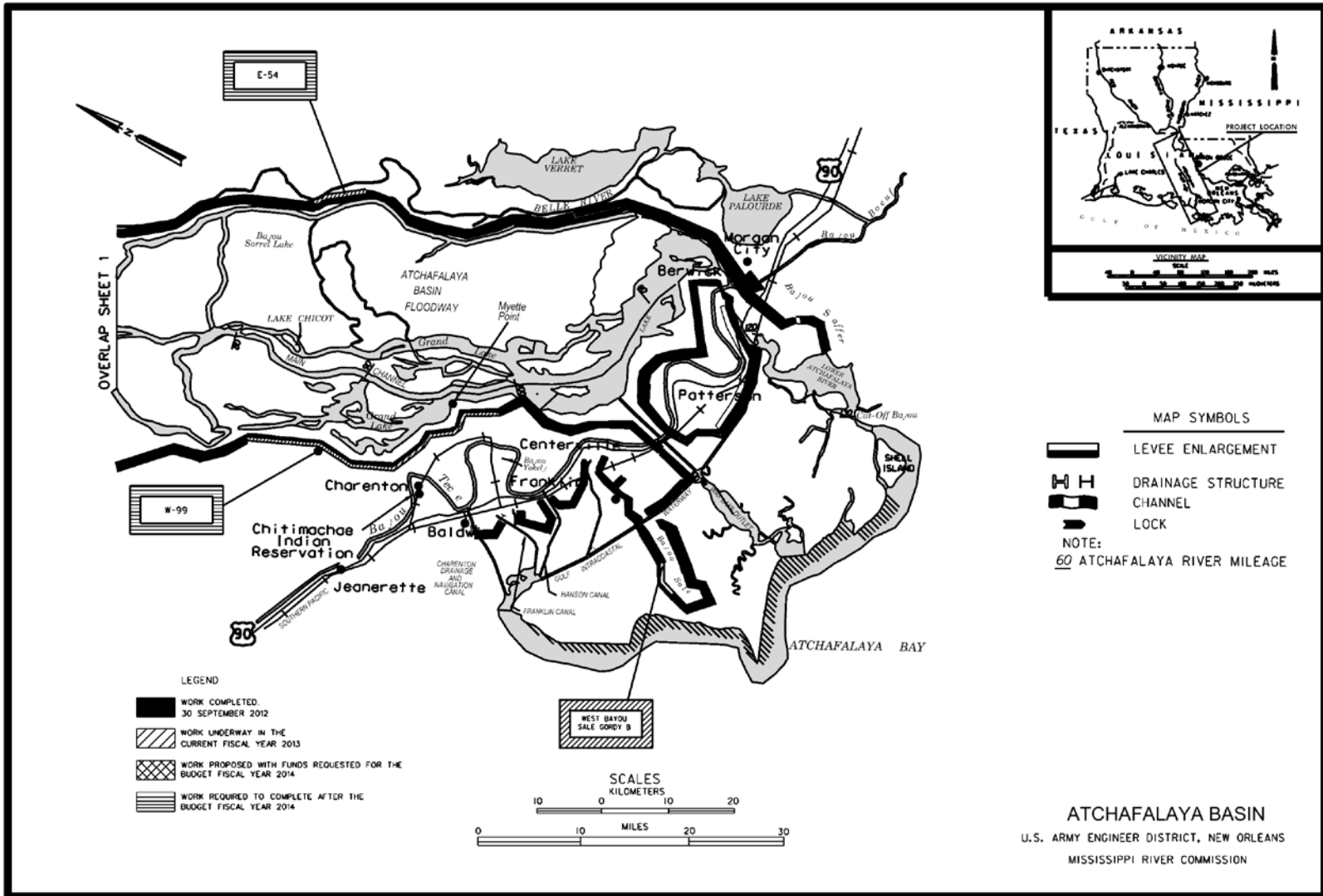
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982. The final Environmental Impact Statement for the Upper Pointe Coupee Loop Area was filed with the Council on Environment Quality on 11 June 1976.

OTHER INFORMATION: Funds to initiate construction were appropriated in 1928.

Bayou Sorrel Lock is a component of the Mississippi River and Tributaries (MR&T), Atchafalaya Basin, Louisiana Project. The lock provides navigation access, while maintaining a continuous line of protection against the MR&T project design flood flow. The project flood flow line for the Atchafalaya Basin was modified in 1986 to the current elevation of 28.7 feet National Geodetic Vertical Datum (NGVD). In order to maintain the level of flood protection provided by the Atchafalaya Basin, Louisiana Project, the lock must be modified or replaced. The need to modify Bayou Sorrel Lock presents an opportunity to address increasing navigation concerns at this lock. Planning, engineering, and design of the modification or replacement for flood reduction benefits were delayed until the optimum navigation plan could be studied. The feasibility study was completed in November 2003 and approved in March 2004. The flood control portion is fully Federally funded and justified under the Mississippi River and Tributaries project.



SHEET 1 OF 2



SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN - Construction

PROJECT: Atchafalaya Basin Floodway System, Louisiana (Continuing)

LOCATION: The project is located in south central Louisiana and encompasses approximately 595,000 acres in an area bounded on the north by south right-of-way line of the Union Pacific Railroad (just south of US Hwy 190 passing through Krotz Springs, LA); on the south by Morgan City; and on the east and west by the East and West Atchafalaya Basin Protection Levees.

DESCRIPTION: The plan of improvement consists of acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway for flood control purposes, environmental protection purposes, developmental control purposes, and public access; acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway, for recreation developmental purposes and construction of several campgrounds, boat launching ramps, visitor's center, other recreational facilities and initial construction of two pilot water management units, including construction of miscellaneous canal closures and water circulation improvements, and implementation of future units at the discretion of the Chief of Engineers. These project features will be implemented in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act, 1985; Water Resources Development Act, 1986; Energy and Water Development Appropriations Act, 1988; Energy and Water Development Appropriations Act, 1991; Energy and Water Development Appropriations Act, 1997; and Water Resources Development Act, 2000, and Water Resources Development Act of 2007.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.28 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

INITIAL BENEFIT-COST RATIO: This project is a feature of the Main Stem system that was authorized in Fiscal Year 1928. Initial funds for the acquisition of real estate interests for flood control, developmental control, environmental protection, and public access were provided in 1985. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA

		ACCUM PCT OF EST FED COST	STATUS	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$422,823,000		Land Acquisition	60	TBD
Estimated Non-Federal Cost	84,997,000		Management Units	7	TBD
Cash Contribution	\$81,530,000		Entire Project	34	TBD
Other Costs	\$3,467,000				
Total Estimated Project Cost	\$507,820,000				

PHYSICAL DATA

Allocations thru 30 September 2010	136,448,000				
Allocation for FY 2011	2,127,000				
Allocation for FY 2012	7,800,000	2/			
Conference Allowance for FY 2013	1,650,000	3/			
Allocation for FY 2013	1,650,000	5/			
Allocations through FY 2013	148,025,000	1/			
Estimated Carry-In Funds	0				
President's Budget for FY 2014	1,750,000	4/	35		
Programmed Balance to Complete after FY 2014	273,048,000		36		
Un-programmed Balance to Complete after FY 2014					

Lands and Damages: 388,000 Acres
Recreational Facilities
3 campgrounds – developed
7 campgrounds – primitive
15 2-lane boat launching ramps
1 Visitors Center
Trails

1/ Includes ARRA funds of \$3,451,000 (\$3,975,000 in FY 09; (\$67,000); in FY 11; and (\$457,000) in FY 12).

2/ Includes \$1,100,000 reprogrammed from the project.

3/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

4/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 14 from prior appropriations for use on this project effort is 0. This amount will be used to perform work on the project as follows: N/A.

5/ FY 13 priorities changed due to delay in acquiring private real estate for Buffalo Cove.

JUSTIFICATION: The Atchafalaya Basin Floodway System features result from a comprehensive study with a view to developing a plan for the enhancement, management, and preservation of the water quality and related land resources of the Atchafalaya River Basin, Louisiana, which would include provisions for reductions of siltation, improvement of water quality, and possible improvements of the area for commercial and sport fishing. The features of the Atchafalaya Basin Floodway System are compatible with the current flood control plan, and include real estate acquisition of lands, flowage easements, and developmental control easements in the floodway south of Krotz Springs, Louisiana, to ensure unhampered use of the floodway during major floods; and environmental protection easements to protect the basin's environmental resources. Provision of additional public access and several campgrounds, boat launching ramps, visitors' center, and other recreational facilities are also authorized. The water management units' feature involves making use of distinct and unique hydrologic units within the floodway to improve historical (where practical) overflow conditions and thereby enhance aquatic ecosystem productivity.

The Atchafalaya Basin Floodway System is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. The benefits of the Atchafalaya Basin Floodway System are derived from the way in which they operate together with all other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$409.7 billion in 2012 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 11 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 180,000. The savings per ton is \$32.00.

The MR&T project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$15.6 billion in damages in 2012 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2012 prices, damages without the projects would have been \$56.4 billion and damages prevented would have been \$53.3 billion.

The 2011 flood set a new flood of record based on a comparison of peak flows measured at representative locations in the lower Mississippi Valley versus previous flood records. In addition, this flood experienced greater stages than the 1927 flood, but since the levees did not crevasse or overtop flooding was reduced by 62 percent. Total damages with existing projects in operation were \$2.9 billion (2012 price levels). In addition, \$1.5 billion damages were incurred by federal flood protection works within the MR&T projects. Damages without projects would have been \$237.2 billion and total damages prevented by projects amounted to \$108.0 billion. Households numbering more than 1.4 Million were saved from impacts and no known deaths occurred.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount @ 7%
Flood Control	\$ 415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$ 529,090,000

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Real Estate	\$ 250,000
Buffalo Cove Construction	2,815,000
Buffalo Cove WMU (Design)	175,000
SEIS	200,000
PPA	200,000
ABFS Monitoring	50,000
ABFS Public Access	230,000
Total	\$3,920,000

The current amount is being applied as follows:

Real Estate – lands and damages	\$ 250,000
Buffalo Cove Construction	600,000
Buffalo Cove WMU (Design)	200,000
Henderson WMU (Design)	300,000
ABFS Monitoring	300,000
Total	\$1,650,000

FISCAL YEAR 2014: Funds will be used to continue construction of the Buffalo Cove management unit; pre-engineering and design for the Henderson management unit; continue acquisition for Buffalo Cove land requirement, and economic evaluation of the MR&T main stem features. The requested amount will be applied as follows:

Buffalo Cove Construction and Henderson Design	\$1,200,000
Comprehensive Easements Real Estate	50,000
Economic evaluation of the MR&T main stem features	500,000
Total	\$1,750,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Requirements of Local Cooperation		
Pay one half of the separable cost allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.	\$ 61,194,000	\$ 1,361,000
Provide lands, easements, right-of-way, and dredged material disposal areas for recreation.	3,467,000	0
Pay 25 percent of construction, operation, and maintenance of Water Management Units.	20,336,000	7,253,000
Total Non-Federal Costs	\$ 84,997,000	\$ 8,614,000

The non-Federal sponsor has agreed to voluntarily contribute 25 percent of construction costs for Water Management Units. Buffalo Cove Water Management Unit construction has been exempted from non-Federal sponsor cost sharing.

STATUS OF LOCAL COOPERATION: The Avoyelles Parish Police Jury is the non-Federal sponsor for the Simmesport Boat Ramp and the PPA was executed on 18 April 2001. The State of Louisiana has provided a letter of intent supporting the recreation feature of the project and agrees to its cost sharing requirements. The State designated the Department of Natural Resources to be the lead State agency to represent the State in the implementation of the project. Additional sponsors, St. Mary Parish, serves as local sponsor for Myette Point Boat Landing and the PPA was executed on 18 May 2004. The State of Louisiana, Department of Natural Resources, is also serving as the sponsor for the management units. The PPA for the Buffalo Cove management unit was executed on 16 May 2005.

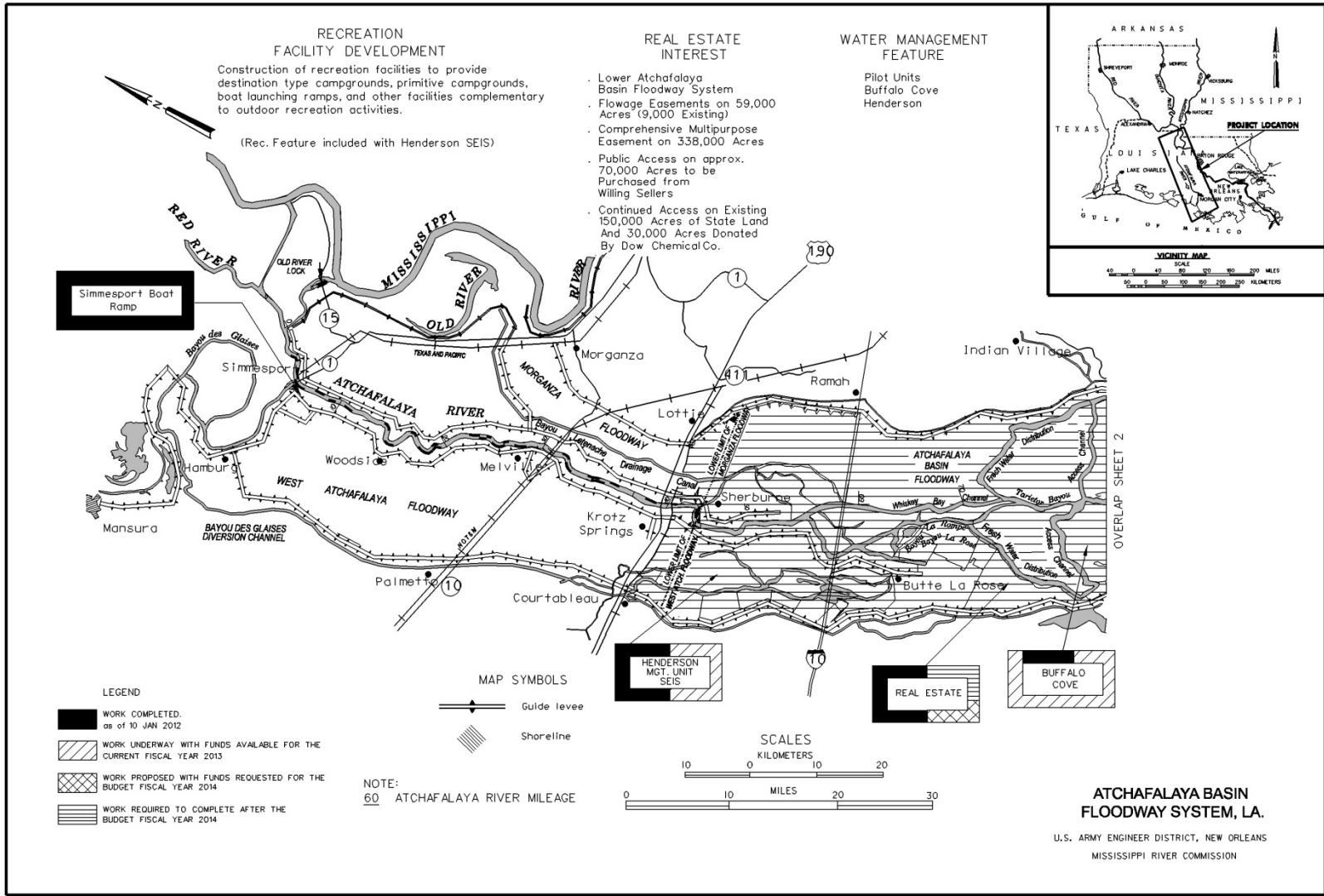
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$422,823,000 is an increase of \$14,124,000 from the latest estimate (\$408,699,000) presented to Congress (FY 2013) 1/

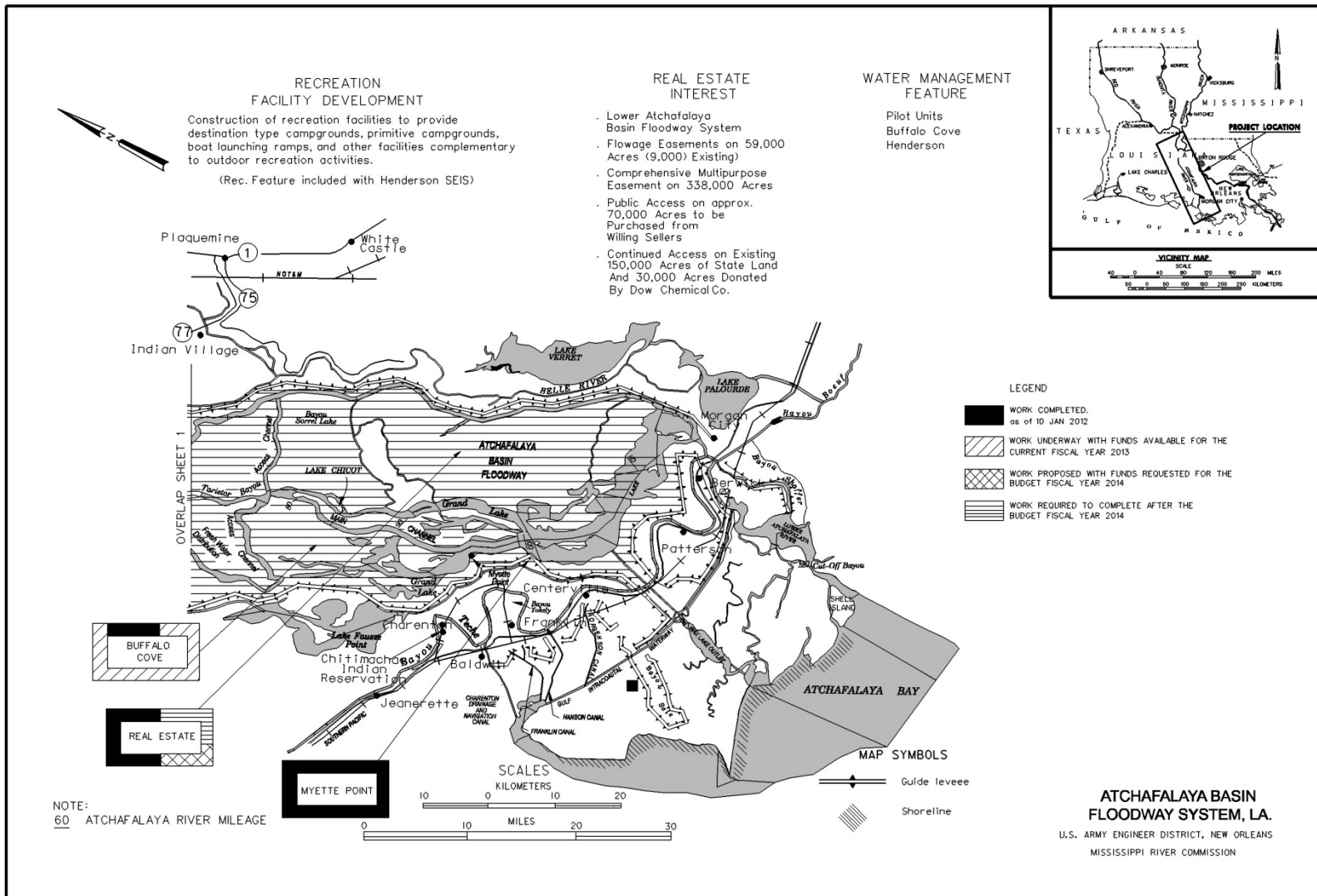
Item	Amount
Price Escalation on Construction Features	\$14,124,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982. A Supplemental Environmental Impact Statement (SEIS) for Henderson Lake Management Unit and Recreation Feature (combined) has been initiated in fiscal year 2008 with anticipated completion and approval in 2013. A Supplemental Environmental Impact Statement (SEIS) for Buffalo Cove, Flat Lake, Beau Bayou, Cocodrie Swamp has also been initiated with completion paralleling the 5 year monitoring program for Buffalo Cove.

OTHER INFORMATION: First Fiscal Year project funds were appropriated was 1985.

1/ The FY 2013 Justification Sheet incorrectly reflected an increase of \$41,125,000. The Federal project cost estimate of \$495,409,300 was inaccurately reflected as \$367,574,000. The net change was (\$86,710,300).





MR&T OPERATION AND MAINTENANCE

Key to Abbreviations:

N = Navigation

FRM = Flood Risk Management

RC = Recreation

H = Hydropower

EN = Environmental Stewardship

WS = Water Supply

ARKANSAS

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Channel Improvement, AR, IL, KY, LA, MS, MO, and TN

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1962, 1965, 1966, and 1970 authorized stabilization of the banks of the Mississippi River along with other improvements to provide an increase in the carrying capacity of the river and protection to lands in the delta against flooding in the Lower Mississippi River Basin.

LOCATION AND DESCRIPTION: The project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, a distance of approximately 966 miles. The plan of improvement consists of stabilizing the banks of the river in a desirable alignment to obtain the most efficient flow characteristics for it for flood risk reduction and navigation along the Mississippi River by means of revetments, dikes, foreshore protection, and improvement dredging.

CONFERENCE AMT. FOR FY 2013: T: \$56,001,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$72,846,000 O: \$4,132,000 T: \$76,978,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$32,676,000 – Funding provides for minimal critical dredging and dike maintenance of the Mississippi River which is critical for transportation of goods and provides access to numerous ports and recreation facilities. Funding needed to ensure that the authorized navigation channel is maintained on the Mississippi River shallow draft navigation channel during extended drought conditions. Timely maintenance will ensure stable maintenance cost and provide for channel stability and integrity.

FRM: \$44,302,000 – Funding provides for minimal critical hired labor activities associated with the revetment season including upper bank paving, and stone repairs contract. These funds will minimize the risk of project failure by maintaining a stable and reliable channel to reduce damages from flooding and prevent bank and levee failures.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: Despite record flows on the Mississippi River during the 2011 Flood, stages were kept well below those seen in previous events. This is due to the continued successful performance of Channel Improvements constructed as part of the Mississippi and Tributaries project. The 5 year average commercial tonnage is 160,936. Maintenance funds will minimize the risk of project failure by maintaining a stable and reliable channel to insure the integrity of the Mainline Mississippi River levee, navigation safety, and channel alignment. Maintenance of dike structures will greatly reduce required channel dredging, buy down risk of catastrophic failures, and restore a safe and navigable channel. The MR&T account is a multi-purpose program/project that provides a 9' by 300' navigation channel from Cairo IL to Baton Rouge LA. This reach of the river was significantly impacted by low water during drought conditions during the summer and fall of 2012. In order for barge traffic on the Middle Mississippi

Mississippi River Commission

Memphis, Vicksburg and
New Orleans Districts

Channel Improvement, AR,
IL, KY, LA, MS, MO, and TN

MR&T O&M JUSTIFICATION SHEET

(continued)

River to reach deep drafts ports, it must transit this reach. Dredging the O&M funded main Mississippi River shallow draft navigation channel without dredging the MR&T portion would be of little benefit as most navigation, 90% plus, also navigates that reach of the lower Mississippi River.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Helena Harbor, Phillips County, AR

AUTHORIZATION: River and Harbor Act of 1960, Sec. 107, as amended

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River (mile 663.0) at Helena in Phillips County, Arkansas. This is a slack-water harbor used primarily for the export of agricultural goods. The project provides for maintenance of the navigation channel for year-round access to barge transportation for the existing facilities. The approved channel dimensions are 9 feet deep by 450 feet wide by 3,200 feet long. The local interest is the city of Helena, AR.

CONFERENCE AMT. FOR FY 2013: \$ 74,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$11,000 O: \$22,000 T: \$33,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$26,000 – Funding provides for performance of minimal critical surveys. This information can be provided to the local interests to be used in the determination of the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 1,797.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Inspection of Completed Works, AR, IL, KY, LA, MS, MO, and TN

AUTHORIZATION: RHA 1899 (Sec 14 & 16). FCA 1928 and amendments

LOCATION AND DESCRIPTION: The Inspection of Completed Works (ICW) includes inspection and monitoring of the MR&T flood control system to assure its capability to perform as designed and constructed. The MR&T projects consist of approximately 3,486 miles of levees and floodwalls (including tributary levees), flood risk reduction structures, floodways, drainage structures, pumping stations, flood risk reduction channels, reservoirs, dikes, and revetments. Most of the flood risk reduction features referenced above are federally constructed, but are operated and maintained by state levee districts or local governmental agencies. The ICW program includes responsibility for inspecting all of the flood risk reduction features to ensure appropriate maintenance is being performed.

CONFERENCE AMT. FOR FY 2013: T: \$1,918,000 2/

BUDGETED AMOUNT FOR FY 2014: O: \$1,937,000 T: \$1,937,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$1,937,000 – Funding provides for minimal critical inspections and monitoring of the MR&T flood control system, flood control permitting, and levee certification.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: The ICW program assures the MR&T system is being properly maintained to provide the authorized protection. Since the initiation of the MR&T project in 1928, the nation has invested a total of \$14 billion, with \$612 billion in cumulative damages prevented. This amounts to a 44 to 1 return for every dollar invested.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Inspection of Completed Works, AR,
IL, KY, LA, MS, MO, and TN

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Arkansas River, North Bank, AR

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1946, and 1965.

LOCATION AND DESCRIPTION: The flood control project is located in southeast Arkansas.

CONFERENCE AMT. AMOUNT FOR FY 2013: \$287,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$287,000 O: \$0 T: \$287,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$287,000 - provides for minimal critical operation and maintenance of the project including levee slide repairs. This project has prevented over \$7.7M in flood damage since project completion in 1940.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Arkansas River, South Bank, AR

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1946, and 1965.

LOCATION AND DESCRIPTION: The flood control project is located in southeast Arkansas.

CONFERENCE AMT. FOR FY 2013: \$193,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$150,000 O: \$43,000 T: \$193,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$193,000 - provides for minimal critical operation and maintenance of the project including levee slide repairs and data collection. In conjunction with west bank Mississippi River Levees, this system provides protection to approximately 5300 sq miles in southeast Arkansas and northeast Louisiana.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Mapping, AR, IL, KY, LA, MS, MO, and TN

AUTHORIZATION: The Flood Control Act approved 15 May 1928 and amendments provide for the preparation of topographic maps of the alluvial valley in the furtherance of the control of floods on the Mississippi River and tributaries.

LOCATION AND DESCRIPTION: Provides for up-to-date maps that will be used in the control of floods on the Mississippi River and tributaries.

CONFERENCE AMT. FOR FY 2013: T: \$1,063,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,063,000 T: \$1,063,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$1,063,000 – Funding provides for in-house hired labor for the annual critical maintenance of existing/new inventory and the collection of funds for the sales of maps, publications, historical photos, aerial photography, and other material on rivers and harbors, and flood control infrastructure on the Mississippi River and tributaries. The 1:62,500 quadrangle maps are currently being converted from the original hard copy format to a digital CADD format. The digital format will allow the maps to be used in the CADD environment for a multitude of uses including GIS applications.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Provides for up-to-date maps that will be used in the control of floods on the Mississippi River and Tributaries.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary Authorization Act of 1971, PL 92-222, WRDA 92, and WRDA 00

LOCATION AND DESCRIPTION: The Mississippi River Levee system on the west bank extends from Allenville, MO, southward to Venice, LA, and on the east bank from Hickman, KY, to opposite Venice, LA, except where interrupted by hills and tributary streams. The Mississippi River Levee System provides flood risk reduction to over 23 thousand square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to highly developed agricultural areas, the levees afford protection to urban areas and many industries. The project provides for the maintenance of authorized facilities for the protection against headwater floods of the Mississippi River by means of levees, berms, culverts, outlet structures and floodwalls. Major maintenance of the authorized features of the Mississippi River Levees Project is 100% Federally funded. Local interests are responsible for providing minor maintenance and rights-of-way.

CONFERENCE AMT. FOR FY 2013: T: \$8,452,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,563,000 O: \$1,916,000 T: \$8,479,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$8,477,000 – Provides funding for minimal critical operation and maintenance of levees, levee slide repairs.

RC: N/A.

H: N/A.

EN: \$2,000 – Provides funding for mitigation of construction losses as a result of an environmental analysis and Section 7 consultation with Fish & Wildlife Service, pump station operation, flood fights, water analysis data collection, water control, aerial video, aerial brush kill, cultural resource investigations and environmental surveys, and periodic inspections.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Mississippi River Levees, AR
IL, KY, LA, MS, MO, and TN

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: St. Francis Basin, AR and MO

AUTHORIZATION: Flood Control Act, 15 May 1928, as amended by the Acts of 15 June 1936, 18 August 1941, 24 July 1946, 17 May 1950, 27 October 1965 and 13 August 1968. Local cooperation requirements were modified by the Flood Control Act of 24 July 1946, and limited local responsibility to ordinary maintenance as defined by Section 3 of the Flood Control Act of 15 May 1928.

LOCATION AND DESCRIPTION: The project extends from the hills southwest of Cape Girardeau, Missouri, to the confluence of the St. Francis and Mississippi Rivers – approximately 10 miles north of Helena, Arkansas. The project provides for a certain level of Federal maintenance of authorized structures to provide the authorized level of flood protection. Structures include levees, channels and two pumping stations.

CONFERENCE AMT. FOR FY 2013: T: \$ 5,900,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,900,000 O: \$3,000,000 T: \$5,900,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A.

FRM: \$5,900,000 – Funding provides for minimal critical activities such as the administration of previously awarded maintenance contracts, operation and maintenance of pump stations, flood fight activities, aerial brush kill along channels, periodic inspections, cultural resource investigations, environmental surveys and channel surveys at various locations in Arkansas and Missouri. These funds will minimize the risk of project failure by repairing damages from previous flood events and operating and maintaining the structures to provide the authorized level of protection.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: The operation and maintenance of this project assures the project provides flood risk reduction benefits to an area of approximately 14,000,000 acres of agricultural lands including numerous small towns, several major railroads, highways, and utilities, located in Missouri and Arkansas. It is estimated that the recurrence of the 1937 flood, under present conditions of development in the floodplain, would cause damages of over \$111,426,000 (2012 price levels) if the flood occurred during the crop growing season, without this project.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Tensas Basin, Boeuf-Tensas River, AR and LA

AUTHORIZATION: Flood Control Acts of 1944, 1946, 1950, 1958, 1962, 1965, 1968, and WRDA of 1986.

LOCATION AND DESCRIPTION: The flood control project is located in central and northeast Louisiana and southeast Arkansas and includes the Lake Chicot pumping plant.

CONFERENCE AMT. FOR FY 2013: \$1,839,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,839,000 T: \$1,839,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,839,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. This project has prevented over \$2.0M in flood damages since construction and allows adequate drainage for 5300 square miles in southeast Arkansas and northeast Louisiana.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: White River Backwater, AR

AUTHORIZATION: Flood Control Act of 15 May 1928, as amended. Local cooperation requirements, as modified by the Flood Control Act of 30 October 1951, were limited to ordinary maintenance as defined by Section 3 of the Flood Control Act of 15 May 1928.

LOCATION AND DESCRIPTION: The project is located approximately 20 miles south of Helena, near Elaine, AR, in Phillips and Desha Counties. It consists of 40.2 miles of levee, a pumping station, outlet structures, and culverts. The White River Backwater levee, together with the Mississippi River Levee between Old Town and Laconia Circle, protects the enclosed area against all but very large floods. The combined levee system reduces extreme crests on the White River by admitting drainage into the enclosed area thereby restoring the White River Backwater Pool.

CONFERENCE AMT. FOR FY 2013: T: \$ 1,142,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$550,000 O: \$592,000 T: \$1,142,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A.

FRM: \$1,142,000 – Funding provides for hired labor minimal critical activities associated with administration of previously awarded maintenance contracts, pump station operation, water data collection, air quality permits, periodic inspections, levee certification and levee slide repairs. These funds will minimize the risk of project failure by reducing damages from flooding and providing the authorized level of flood risk management.

REC: N/A.

HYD: N/A.

ES: N/A.

WS: N/A.

OTHER INFORMATION: This project is a feature of the Mississippi River and Tributaries system, which has brought an unprecedented degree of flood protection to the four million people living in the 35,000-square-mile project area within the lower Mississippi Valley.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

LOUISIANA

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Atchafalaya Basin, LA

AUTHORIZATION: Authorized by Public Law. 780, 83rd Congress approved 3 September 1954, to provide for control of flows from the Mississippi River to the Atchafalaya River and Basin by mechanically operated control structures on the right bank of the Mississippi River. This is a modification of Flood Control Act of 15 May 1928.

LOCATION AND DESCRIPTION: The project is located in south-central Louisiana below the latitude of Old River and west of and generally paralleling the Mississippi River. The Atchafalaya River flows through the middle of the basin. The plan of improvement consists of a leveed floodway about 15 miles wide and 110 miles long that extends generally from the latitude of Old River to the Gulf of Mexico.

CONFERENCE AMT. FOR FY 2013: \$9,747,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,539,000 O: \$6,208,000 T: \$9,747,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,741,000 - Provides funding for minimal critical operations and routine maintenance of Bayou Sorrel, Bayou Bouef and Berwick lock, surveys to determine the channel conditions, engineering designs for dredging and lock repairs, environmental compliance, real estate management, instrumentations and periodic inspections of locks.

FRM: \$2,006,000 – Provides funding for minimal critical operations and routine maintenance of flood control structures – Morganza FCS, Pointe Coupe PS & DS, Bayou Courtableau FG, Charenton DS and 13 St Mary Parish pumping stations, water control management, environmental compliance, real estate management, engineering designs for levee repairs, instrumentations and periodic Inspections for flood control structures, bridges and pumping stations.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Basin features are designed to protect agricultural areas and towns from normal high waters of the Mississippi and Red River backwater area, floods on the Atchafalaya River, and excess floodwater of the Mississippi-Red River. Dredging in Berwick Harbor and Tidewater Point are essential for providing access to waterfront businesses in Morgan City and safe passage between GIWW main stem & Alternate Route. Dredging Three Rivers is essential for navigation passing from the Mississippi River into the Atchafalaya River through Old River Lock.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Atchafalaya Basin Floodway System, LA

AUTHORIZATION: Supplemental Appropriations Act, 1985; Water Resources Development Act, 1986; Energy and Water Development Appropriations Act, 1988; Energy and Water Development Appropriations Act, 1991; Energy and Water Development Appropriations Act, 1997; and Water Resources Development Act, 2000, and Water Resources Development Act of 2007

LOCATION AND DESCRIPTION: The project is located in south-central Louisiana and encompasses approximately 595,000 acres in an area bounded on the north by south right-of-way line of the Union Pacific Railroad (just south of US Hwy 190 passing through Krotz Springs, LA); on the south by Morgan City; and on the east and west by the East and West Atchafalaya Basin Protection Levees. Manage, operate and protect 50,000 acres of project lands and 200,000 acres of easement lands.

CONFERENCE AMT. FOR FY 2013: T: \$1,738,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$197,000 O: \$1,324,000 T: \$1,521,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014.

N: N/A

FRM: \$197,000 —Provides funding for minimal critical maintenance to inspect basin protection levees and easements within the basin.

RC: \$701,000 - Provides funding for minimal critical operation of recreation features and recreation access coordination responsibilities at the minimal initial Service budget level of support.

H: N/A

EN: \$623,000 - Provides funding for operation and management of natural resources of project and easement lands.

WS: N/A

OTHER INFORMATION: This project is a government owned portion of the floodway that provides safe passage of floodwaters through the Atchafalaya Basin. Recreation and Environmental Stewardship activities are the main part of the project, when the floodway is not open for floodwaters. Park rangers ensure public safety through water safety patrols, information kiosks and specific recreation promotion “Step Out Side” days. Hunting and fishing seasons are coordinated with the state to allow for safe recreational and commercial use by the public.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Baton Rouge Harbor, Devils Swamp, LA

AUTHORIZATION: Authorized by River and Harbor Act of 24 July 1946. Transferred to Flood Control, MR&T, under Flood Control Act of June 1948.

LOCATION AND DESCRIPTION: The project is located in northern portion of East Baton Rouge Parish, Louisiana, on the left descending bank of the Mississippi River. The authorized barge channel is 2.5 miles long, 12 feet deep and 300 feet wide.

CONFERENCE AMT FOR FY 2013: \$60,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$69,000 T: \$69,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$69,000 – Provides funding for surveys to determine channel conditions, engineering designs, P&S, cost estimate, environmental compliance and real estate management for minimal critical maintenance dredging operations.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The purpose of the channel is to provide an industrial expansion area for the Port of Baton Rouge. Without annual dredging, full dimensions will be lost and channel availability will be reduced below the acceptable performance measure goal of 90% availability.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Cocodrie and Tributaries, LA

AUTHORIZATION: Authorized by Section 3 of the Flood Control Act of 1941 and Section 87 of the Water Resources Development Act of 1974.

LOCATION AND DESCRIPTION: The project is located in central Louisiana, in Rapides, Avoyelles, Evangeline and St. Landry parishes and provides for flood relief to the area tributary to lower Bayou Courtableau.

CONFERENCE AMT. FOR FY 2013: T: \$ 46,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$48,000 T: \$48,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$48,000 - Minimal Critical - Provides funding for hired labor staff to collect, manage, store and disseminate data from water level gages in support of reducing flood heights and improving drainage.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Project maintains flood risk reduction in central Louisiana. Gauges are maintained to track flow stages.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Bonnet Carre, LA

AUTHORIZATION: Flood Control Act of 15 May 1928 (PL 70-391), as amended.

LOCATION AND DESCRIPTION: The Bonnet Carre' Spillway is the southernmost floodway in the MR&T system. Located in St. Charles Parish, Louisiana, the spillway furnishes protection for the city of New Orleans and other communities about 26 miles downstream.

CONFERENCE AMT. FOR FY 2013: \$2,195,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$558,000 O: \$1,630,000 T: \$2,188,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$1,565,000 - Provides funding for minimal critical operating expenses (grass cutting, floodway clearing, building, equipment and road maintenance; Real Estate activities such as maintenance and review of permits, outgrants, existing rights-of way).

RC: \$443,000 - Provides funding to accommodate visitation (ranger patrols and maintenance of visitor use areas such as shelters, boat ramps, dog training areas, ATV trails, fishing/crawfishing areas).

H: N/A

EN: \$185,000- Provides funding for management and maintenance of natural resources within the 7,623 acre project area.

WS: N/A

OTHER INFORMATION: The Bonnet Carre Spillway is an invaluable part of the flood protection system for the New Orleans metropolitan area. It has been operated 10 times since 1937, preventing billions of dollars worth in damage from Mississippi River floods. Without it the New Orleans metro area would likely have experienced severe flooding on several occasions. Without the spillway, the Mississippi River levees in the New Orleans area would have to be built larger to obtain similar protection, also possibly with a lower safety factor than using the spillway.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Red River, South Bank Levees, LA

AUTHORIZATION: Flood Control Act of 1928, (Public Law 391), 70th Congress

LOCATION AND DESCRIPTION: The levee system extends from Red River mile 67 at Moncla, LA, in Avoyelles Parish to mile 126 at Hot Wells, LA, in Rapides Parish.

CONFERENCE AMT. FOR FY 2013: \$368,000 2/

BUDGETED AMOUNT FOR FY 2014 M: \$285,000 O: \$171,000 T: \$456,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$456,000 - provides for minimal critical operation and maintenance of the project including levee slide repair. This project provides protection to 1739 square miles of urban, agricultural, and wooded lands from headwater flooding from the Red and Black Rivers and backwater flooding from the Mississippi River.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi Delta Region, LA

AUTHORIZATION: Flood Control Act of 1965, and Water Resources Development Acts of 1974, 1986 and 1996.

LOCATION AND DESCRIPTION: The Mississippi Delta Region (MDR) Project is located in the lower Mississippi River delta region in Plaquemines and St. Charles Parishes, LA. and includes the Caernarvon and Davis Pond Freshwater Diversions. The Caernarvon structure is located in Plaquemines Parish on the east bank of the Mississippi River in the vicinity of Caernarvon, LA. The Davis Pond structure is located in St. Charles Parish on the west bank just downstream of Luling, LA. Located in coastal Louisiana, these structures divert freshwater, nutrients, and sediments, from the Mississippi River to bays and marshes of Breton Sound and Barataria Basins, respectively, for fish and wildlife enhancement. The project restores ecological conditions by controlling salinity and supplementing nutrients and sediments.

CONFERENCE AMT. FOR FY 2013: T: \$472,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$472,000 T: \$472,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$472,000 - Minimal Critical - Provides funding for operating and maintaining the Caernarvon Freshwater Diversion Structure and the Davis Pond Freshwater Diversion Structure. The Caernarvon structure is operated by Plaquemines Parish and the Davis Pond structure is operated by St. Charles Parish, both under contract with the local sponsor, Louisiana Office of Coastal Protection and Restoration (LAOCPR). Funding for project operation and maintenance is cost-shared at 75% Federal/25% State.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The current funding allocation is insufficient to meet the Corps' cost-share responsibility for the project. Beyond the ecological and economic benefits that the MDR Project provides, the project diversions restore connectivity between the Mississippi River and its estuaries, for increased coastal sustainability. The restored coastal areas enhance wildlife and fisheries productivity.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Old River, LA

AUTHORIZATION: Authorized by Public Law. 780, 83rd Congress approved 3 September 1954, to provide for control of flows from the Mississippi River to the Atchafalaya River and Basin by mechanically operated control structures on the right bank of the Mississippi River. This is a modification of Flood Control Act of 15 May 1928.

LOCATION AND DESCRIPTION: The project is located adjacent to Mississippi River, 85 miles above Baton Rouge, LA.

CONFERENCE AMT. FOR FY 2013: \$8,050,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 3,901,000 O: \$ 4,217,000 T: \$8,118,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: \$ 1,747,000 - Provides funding for minimal critical operation and routine maintenance of Old River Lock; reconnaissance surveys performed in the forebay and tailbay channel to assure that the channels are navigable; real estate management; instrumentation and data gathering and evaluation; dredge forebay and tailbay channel to assure the channels are navigable(\$1,000,000); refurbish mooring bits (\$400,000); replace concrete drainage culvert (\$200,000); and complete inspection reports of the Old River Lock & Bridge.

FRM: \$ 6,063,000 – Provides funding for minimal critical operation and maintenance resources required to support hired labor forces that maintain the integrity of the existing structures and facilities; instrumentation data gathering and evaluation; completion of inspection reports; real estate management; collect, manage store, disseminate, and analyze water level gages; and perform underwater inspection of the Low Sill and Auxiliary Structures' stilling basins; replace the crane cables on the Auxiliary, Low Sill, and Overbank Structures' Cranes; and install a pile cluster at Knox Landing.

RC: \$ 168,000 -- Operations for Recreation Function.

H: N/A

EN: \$ 140,000 - Management of Special Status Species and Natural Resources.

WS: N/A

OTHER INFORMATION: The project's function is to maintain a stable relationship between the Mississippi, Red and Atchafalaya Rivers. The Control Structures maintain the 70/30 flow diversions between the Mississippi, Red and Atchafalaya Rivers. Old River Lock provides the northern most navigation channel connecting the Mississippi, Red and Atchafalaya and Black Rivers. This project prevents the Mississippi River from changing its course to that of the Atchafalaya River.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

New Orleans District

Old River, LA

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Tensas Basin, Red River Backwater Area, LA

AUTHORIZATION: Flood Control Acts of 1941, 1944, 1946, 1950, 1958, 1962, 1965, 1968, and WRDA of 1986.

LOCATION AND DESCRIPTION: The flood control project is located in central and northeast Louisiana. The lower basin features include levees, drainage structures and Tensas-Cocodrie pumping plant.

CONFERENCE AMT. FOR FY 2013: \$2,414,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,414,000 T: \$2,414,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,414,000 - provides for minimal critical operation and maintenance of the project including Tensas Cocodrie Pumping Plant, levee slide repair, inspections, data collection, analysis and real estate management. This project prevented approximately 90M in flood damages since construction. It provides protection to the Tensas-Cocodrie area without jeopardizing the safety and integrity of the main line Mississippi River levees.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

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MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Greenville Harbor, MS

AUTHORIZATION: FCA 1928, as amended by the FCAs 1946, 1954, and WRDA 1986

LOCATION AND DESCRIPTION: The Greenville Harbor, located at Greenville, MS, provides access to the Mississippi River by way of a 250-foot-wide by 9-foot-deep channel. The harbor is located in an old bendway of the Mississippi River on Lake Ferguson, just southwest of the city of Greenville. The harbor and turning basin are 500 feet wide and 10,000 feet long, with a depth of 9 feet at the lowest river stages. The project's purpose is to provide local businesses, industries and vessels navigating the Mississippi River access to the harbor facilities at Greenville.

CONFERENCE AMT. FOR FY 2013: \$23,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$20,000 O: \$4,000 T: \$24,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$24,000 – provides for necessary surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: In 2010, 2,114,517 tons were shipped through Greenville Harbor; an increase of over 600,000 tons from the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Vicksburg Harbor, MS

AUTHORIZATION: FCA 1928, as amended by the FCAs 1946, 1954, and WRDA 1986.

LOCATION AND DESCRIPTION: The Vicksburg Harbor is located in west-central Mississippi at Vicksburg, MS, with access to the Mississippi River by way of the Yazoo River Diversion Canal. The harbor channel is 500 feet wide and 12,000 feet long with a 500-foot-wide, 15,000-foot-long channel on the Yazoo River Diversion Canal from the Mississippi River to the harbor entrance. A minimum depth of 9 feet at the lowest Mississippi River stage is maintained. The project's purpose is to provide local businesses, industries and vessels navigating the Mississippi River access to the harbor facilities at Vicksburg.

CONFERENCE AMT. FOR FY 2013: \$41,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$38,000 O: \$4,000 T: \$42,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$42,000 – provides for necessary surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: In 2010, 3,350,189 tons were shipped through Vicksburg Harbor; an increase of nearly 35,000 tons from the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Arkabutla Lake, MS

AUTHORIZATION: Flood Control Acts of 1928, (Sec 3); 1936, (Sec 4); 1937, (Sec 6); 1938, (Sec 2); 1941, (Sec 3); 1944, (Sec 10); and 1946 (Sec 10).

LOCATION AND DESCRIPTION: Arkabutla Lake is located in Tate and DeSoto Counties in north Mississippi, approximately 4 miles north of Arkabutla, Mississippi, and 30 miles south of Memphis, Tennessee. Arkabutla Lake is on the Coldwater River and stores floodwaters to provide for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major role in the region.

CONFERENCE AMT. FOR FY 2013: \$5,203,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$44,000 O: \$5,310,000 T: \$5,354,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,927,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Funding is critical to ensure routine maintenance of aging flood control structures (constructed in 1943) to include earthen dam maintenance, (10,000 ft in length), intake and outlet structures, relief wells, piezometers, instrumentation, turfgrass maintenance, nuisance animal control, maintenance of rock shoreline protection, herbicide applications, etc. Arkabutla Lake has a drainage area of 1,000 square miles and has a flood pool of 33.4 surface acres. Since construction, Arkabutla Lake has prevented over \$197,000,000 in flood damages within the Yazoo Basin.

RC: \$1,905,000 - provides for minimal operation and maintenance of the recreation facilities. Facilities include: 13 developed recreation areas, 8 boat ramps, 340 campsites, and over 400 picnic sites.

H: N/A.

EN: \$522,000 - provides for minimal operation and maintenance of the project including management of natural resources such as, forestry, fish/wildlife, cultural resources management, endangered species management, nuisance plant and animal control, erosion protection, and wildfire suppression on over 57,000 acres of land and water. Funding includes routine maintenance of authorized wetland mitigation lands at Askew Management Area totaling over 4,300 acres.

WS: N/A.

OTHER INFORMATION: Arkabutla maintains a total visitation of over 900,000 visitors per year. With multiplier effects, visitor spending resulted in \$14.68M total sales, \$5.32M in total personal income, and supported 237 jobs in the local communities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Big Sunflower River, MS

AUTHORIZATION: Flood Control Acts of 1944, 1946, 1950, and 1962 and 1965 (Sec 201).

LOCATION AND DESCRIPTION: The Big Sunflower River Basin comprises an area of approximately 4,200 square miles in northwest Mississippi. The existing flood control project is not currently functioning as originally constructed due to loss of channel design capacity both from vegetative growth and sediment accumulation. The current project will restore the channels to original design capacities.

CONFERENCE AMT. FOR FY 2013: \$177,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$185,000 T: \$185,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$168,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. The project has prevented over \$413M in flood damages since construction.

RC: N/A.

H: N/A.

EN: \$17,000 - provides for routine operation and maintenance including oversight of mitigation.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Enid Lake, MS

AUTHORIZATION: Flood Control Acts of 1928, (Sec 3); 1936, (Sec 4); 1937, (Sec 6); 1938, (Sec 2); 1941, (Sec 3); 1944, (Sec 10); and 1946 (Sec 10).

LOCATION AND DESCRIPTION: Enid Lake is located in Yalobusha, Panola, and Lafayette Counties in north-central Mississippi east of Enid, Mississippi, and south of Batesville, Mississippi. Enid Lake is on the Yocona River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major economic role in the region.

CONFERENCE AMT. FOR FY 2013: \$4,795,000 2/

BUDGETED AMOUNT FOR FY 2014: M: O: \$4,777,000 T: \$4,777,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,345,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Funding is critical to ensure routine maintenance of aging flood control structures (constructed in 1952), to include earthen dam maintenance (8,400 ft in length), intake and outlet structures, relief wells, piezometers, instrumentation, turfgrass maintenance, nuisance animal control, maintenance of rock shoreline protection, herbicide applications, etc. Enid Lake has a drainage area of 560 square miles and has a flood pool of 28,000 surface acres. Since construction, Enid Lake has prevented over \$125,000,000 in flood damages within the Yazoo Basin.

RC: \$1,972,000 - provides for minimal operation and maintenance of the recreation facilities. Facilities include: 14 developed recreation areas, 15 boat ramps, 463 campsites, and over 260 picnic sites.

H: N/A.

EN: \$460,000 - provides for minimal operation and maintenance of the project including management of natural resources such as forestry, fish/wildlife, cultural resources, endangered species, nuisance plant and animal control, erosion protection, and wildlife suppression on over 44,000 acres of land and water.

WS: N/A.

OTHER INFORMATION: Arkabutla maintains a total visitation of over 1,970,000 visitors per year. With multiplier effects visitor spending resulted in \$11.94M total sales, \$4.32M in total personal income, and supported 190 jobs in the local communities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Greenwood, MS

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, 1946.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, Mississippi, and includes the operation and maintenance of city of Greenwood Protection Works and includes 55 miles of levees and 14 miles of channels, 2 miles of ditch, 59 drainage structures, 4 pumping plants and 7 weirs.

CONFERENCE AMT. FOR FY 2013: \$788,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$788,000 T: \$788,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$788,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. Also, ensures the protection of the city of Greenwood, Mississippi from flooding by the Yazoo, Tallahatchie, and Yalobusha Rivers.

RC: N/A.

H: N/A.

EN: N/A

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Grenada Lake, MS

AUTHORIZATION: Flood Control Acts of 1928, (Sec 3); 1936, (Sec 4); 1937, (Sec 6); 1938, (Sec 2); 1941, (Sec 3); 1944, (Sec 10); and 1946 (Sec 10).

LOCATION AND DESCRIPTION: Grenada Lake is located in north-central Mississippi northeast of Grenada, Mississippi. Grenada Dam is located in Grenada County, and the lake encompasses portions of Grenada, Yalobusha, and Calhoun Counties. Grenada Dam is on the Yalobusha River and stores floodwaters to provide for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major role in the region.

CONFERENCE AMT. FOR FY 2013: \$5,222,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$5,164,000 T: \$5,164,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$2,782,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Funding is critical to ensure routine maintenance of aging flood control structures (constructed in 1954) to include earthen dam maintenance (13,728 ft. in length), intake and outlet structures, relief wells, piezometers, instrumentation, turfgrass maintenance, nuisance animal control, maintenance of rock shoreline protection, herbicide applications, etc. Grenada Lake has a drainage area of 1,320 square miles and has a flood pool of 64,600 surface acres. Since construction, Grenada Lake has prevented over \$251,000,000 in flood damages within the Yazoo Basin.

RC: \$1,902,000 - provides for minimal operation and maintenance of the recreation facilities. Facilities include; 26 developed recreation areas, 19 boat ramps, 489 campsites, and over 270 picnic sites.

H: N/A.

EN: \$480,000 - provides for minimal operation and maintenance of the project including management of natural resources to include forestry, fish/wildlife, cultural resources, endangered species, nuisance plant and animal control, erosion protection, and wildfire suppression on over 90,370 acres of land and water.

WS: N/A.

OTHER INFORMATION: Grenada maintains a total visitation of over 1,389,000 visitors per year. With multiplier effects, visitor spending resulted in \$39.91 million total sales, \$14.22 million in total personal income, and supported 742 jobs in the local communities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

Vicksburg District

Yazoo Basin, Grenada Lake, MS

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Main Stem, MS

AUTHORIZATION: Flood Control Act of 1941, 1944, and 1965.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, MS, and includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

CONFERENCE AMT. FOR FY 2013: \$1,273,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,273,000 T: \$1,273,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$1,148,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. Protects approximately 1.2 million acres of prime agricultural lands and communities from overflow of the Yazoo River system.

RC: N/A.

H: N/A.

EN: \$125,000 - provides for minimal operation and maintenance of approximately 3,500 acres of mitigation property that was licensed to the Mississippi Department of Wildlife, Fisheries and Parks under a real estate instrument and Memorandum of Agreement in FY 2009.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Sardis Lake, MS

AUTHORIZATION: Flood Control Acts of 1928, (Sec 3); 1936, (Sec 4); 1937, (Sec 6); 1938, (Sec 2); 1941, (Sec 3); 1944, (Sec 10); and 1946 (Sec 10).

LOCATION AND DESCRIPTION: Sardis Lake is located in north-central Mississippi southeast of Sardis, Mississippi. Sardis Dam is located in Panola County, and the lake encompasses portions of Panola, Lafayette, and Marshall Counties. Sardis Dam is on the Little Tallahatchie River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major role in the region.

CONFERENCE AMT. FOR FY 2013: \$6,493,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$6,493,000 T: \$6,493,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$3,559,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Funding is critical to ensure routine maintenance of aging flood control structures (constructed in 1940) to include earthen dam maintenance (15,300 feet in length), intake and outlet structures, relief wells, piezometers, instrumentation, turfgrass maintenance, nuisance animal control, maintenance of rock shoreline protection, herbicide applications, etc. Sardis Lake has a drainage area of 1,545 square miles and has a flood pool of 58,500 surface acres. Since construction, Sardis Lake has prevented over \$734,000,000 in flood damages within the Yazoo Basin.

RC: \$2,376,000 - provides for minimal operation and maintenance of the recreation facilities, including 20 developed recreation areas, 28 boat ramps, 786 campsites, and over 460 picnic sites.

H: N/A.

EN: \$558,000 - provides for minimal operation and maintenance of the project including management of natural resources to include forestry, fish/wildlife, cultural resources management, endangered species management, nuisance plant and animal control, erosion protection, and wildfire suppression on over 98,500 acres of land and water.

WS: N/A.

OTHER INFORMATION: Sardis Lake maintains a total visitation of over 1,300,000 visitors per year. With multiplier effects, visitor spending resulted in \$25.45 million total sales, \$9.10 million in total personal income, and supported 463.97 jobs in the local communities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

Vicksburg District

Yazoo Basin, Sardis Lake, MS

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Tributaries, MS

AUTHORIZATION: Flood Control Act of 1941, 1944, 1965.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, MS, and includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

CONFERENCE AMT. FOR FY 2013: \$944,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$944,000 T: \$944,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$944,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. Protects approximately 1.2 million acres of prime agricultural lands and communities from overflow of the Yazoo River system.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Will M. Whittington Auxiliary Channel, MS

AUTHORIZATION: Flood Control Act of 1928, 1936, 1937, 1938, 1941, 1944, 1946, 1962 and 1965.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, Headwater Area, MS. The project includes levees floodway and landside drainage ditches from the vicinity of Silver City on the Yazoo River to near the mouth of Big Sunflower River.

CONFERENCE AMT. FOR FY 2013: \$375,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,000 O: \$369,000 T: \$375,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$375,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. This flood control feature splits the flows of the Yazoo River and reduces flood stages in the Yazoo Basin.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Yazoo Backwater Area, MS

AUTHORIZATION: Flood Control Act of 1941, 1944, 1965.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, MS, and includes the operation and maintenance of seven drainage structures.

CONFERENCE AMT. FOR FY 2013: \$511,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$526,000 T: \$526,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$463,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. Has prevented over \$98 million dollars in flood damages since construction, protecting prime agricultural lands and many small communities from backwater flooding from the Mississippi River.

RC N/A.

H: N/A.

EN: \$63,000 - provides operation and maintenance of property acquired to mitigate construction losses as a result of an environmental analysis and Section 7 consultation with the United States Fish and Wildlife Service.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Yazoo City, MS

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, 1946.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin. The project includes the operation and maintenance of Yazoo City Protection Works and includes levees, channels, drainage structures, pumping plants and weirs.

CONFERENCE AMT. FOR FY 2013: \$714,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$714,000 T: \$714,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$714,000 – provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis and protects approximately 35 square miles to include the city of Yazoo City, Mississippi, operating as part of the MR&T system.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSOURI

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Wappapello Lake, MO

AUTHORIZATION: Overton Act of 1936, Flood Control Act 1944.

LOCATION AND DESCRIPTION: This project is located on the St. Francis River, mile 309, in the Ozark uplands of Wayne County, Missouri, and provides flood control, recreation, water quality, and conservation of fish and wildlife. Wappapello Lake consists of 44,349 acres of land and 8,400 acres of water. The dam site lies 22 miles southeast of Greenville, 16 miles northeast of Poplar Bluff, and one mile southwest of Wappapello, Missouri.

CONFERENCE AMT. FOR FY 2013: \$4,064,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$1,521,000 O: \$3,239,000 T: \$4,760,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,346,000 – Minimal critical O&M for FRM operations; dam safety (gatehouse, concrete overflow spillway, dam and 3 dikes); water control data/analysis; security; Real Estate costs for compliance management; sustainability packages for repair of hydropower unit inside gatehouse and conservation lighting and energy savings at administration office compound.

RC: \$1,885,000 – Funding provides for reduced routine O&M of recreation areas, facilities and programs. Visitor Assistance, Public Health and Safety, Accessibility, Use Fee Collection, and Visitor Center O&M. Contract costs associated with the routine recreation program include: law enforcement; park attendants; combined services (mowing, cleaning, garbage removal); janitorial; utilities; tree trimming; etc.

H: N/A

EN: \$529,000 – Funding provides routine O&M of environmental stewardship program and features; environmental compliance; management of endangered/invasive species (Feral Hogs, Emerald Ash Borer); cultural/historical resources; land management (forest, wetlands) and agricultural leases.

WS: N/A

OTHER INFORMATION: FY 2012 project visitation was 1,878,303, generating economic benefits estimated at \$32,988,000. Flood recovery supplemental repairs continue.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TENNESSEE

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Memphis Harbor, McKellar Lake, Memphis, TN

AUTHORIZATION: FCA 1928, HD 90/70/1, as amended by subsequent acts, as modified and expanded by SD 51/80/1, approved 24 July 1946.

LOCATION AND DESCRIPTION: This project is located near Memphis, TN, at Mississippi River mile 725.5. The project provides maintenance dredging to provide barge traffic year round access to harbor facilities. The navigation channel extends 7.5 miles into the harbor with a 9-foot project depth and 300 to 500-foot width at various locations.

CONFERENCE AMT. FOR FY 2013: T: \$1,464,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,803,000 O: \$0 T: \$1,803,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: \$1,803,000 – Funding provides for performance of minimal critical surveys of the harbor conditions, limited maintenance dredging, and analysis of dredge disposal requirements.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 8,647.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSISSIPPI RIVER AND TRIBUTARIES

MISSISSIPPI RIVER AND TRIBUTARIES
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MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO, AND TN (See Arkansas)

Kentucky

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Mississippi

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MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO, AND TN (See Arkansas)

Missouri

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MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO, AND TN (See Arkansas)

Tennessee

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Justification of Estimates for Civil Works Activities
 Department of the Army, Corps of Engineers
 Fiscal Year 2014

SUMMARY MISSISSIPPI RIVER COMMISSION

Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MO, MS, & TN

	<u>FY 2013</u> <u>President's Budget</u>	<u>FY 2014</u> <u>President's Budget</u>	<u>Increase</u> <u>or Decrease</u>
Investigations	\$ 600,000	\$ 9,800,000	\$ 9,200,000
Survey	600,000	600,000	0
Preconstruction Engineering and Design	0	0	9,200,000
Construction	99,270,000	113,094,000	13,824,000
Operation and Maintenance	134,130,000	156,106,000	21,976,000
Less Reduction for Savings and Slippage	0	0	0
Less Reduction for Rescission	0	0	0
 GRAND TOTAL, MISSISSIPPI RIVER COMMISSION	 \$234,000,000	 \$279,000,000	 \$45,000,000

INVESTIGATIONS

ARKANSAS

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN Continuing - Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior To FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Collection and Study of Basic Data (FRM) Memphis, Vicksburg, and New Orleans Districts	N/A	N/A	898,000	900,000	500,000 <u>2/</u>	9,700,000 <u>1/</u>	N/A

Surveys, Gages, and Observations

Fiscal Year 2013 funds are being used for the minimal collection of essential basic data which are subsequently used in the planning and design of flood risk management projects. The data collected under this activity are for authorized projects or units thereof. The data to be collected will consist of information on streamflow, rainfall, floods, and other items of related hydrologic nature.

Fiscal Year 2014 funds will be used for the collection of essential basic data which are subsequently used in the planning and design of flood risk management projects. The data to be collected will consist of information on streamflow, rainfall, floods, and other items of related hydrologic nature. Funds will also be used to fully fund collection of essential basic data; aquatic and water quality monitoring; conduct regional review of numerous H&H related issues or concerns that were discovered during the 2011 flood; and conduct geomorphic and sedimentation assessments. This review is necessary to assess the individual areas of concern and assess them within a regional framework. The H&H studies will review how the MR&T system performed during the 2011 flood, assess any needed changes in the water management of the system, and identify areas/reaches in which the current 1976 Refined Project Flood Flowline may need revision. This will have short and long term impacts to the projects within MVD and ensuring continued benefits. The geomorphic and sedimentation assessment provide the basis for developing and evaluating various river engineering features, rehabilitative measures, and channel modifications. Without a sound understanding of the morphology of the river, prediction of system response to these various actions, or lack thereof, can potentially lead to undesired consequences such as increased maintenance requirements, adverse impacts to navigation and flood control, and ecosystem degradation. In addition, the need to manage river sediment is a resource for coastal restoration purposes has recently expanded the scope of sediment management. A thorough understanding of sediment trends will be essential to developing a comprehensive and sustainable sediment management plan.

This study was authorized by the Flood Control Act of 1928.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TENNESSEE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Memphis Metropolitan Area, Storm Water Management Study, TN & MS (ENR) (Continuing)	3,100,000	546,000	25,000	100,000	100,000 <u>2/</u>	100,000 <u>1/</u>	2,229,000

Memphis District

The purpose of the Memphis Metropolitan Storm Water Management study is to evaluate the need for improvements for flood control, ecosystem restoration, water quality, and related purposes associated with storm water runoff and management. The study area includes all or part of five counties: Shelby, Tipton and Fayette Counties in Southwest Tennessee; DeSoto and Marshall Counties in Northwest Mississippi. The area encompasses all or part of six major drainage basins which are tributaries of the Mississippi River: Hatchie River, Loosahatchie River, Wolf River, Nonconnah Creek, Horn Lake Creek, and Coldwater River. The area of study includes approximately 2,600 square miles and drains an urban area of over one million people. Continuing problems with storm water runoff, streambank instability, water quality, wetland hydrology and aquatic habitat have prompted the study. Three study areas have been identified to date. (1) Cypress Creek, a tributary of the Loosahatchie River in Fayette County, TN, will require flood risk management and ecosystem restoration study. Past channelization and development in the area has resulted in habitat degradation. The streambed is unstable, wetlands are being dewatered and water quality and aquatic habitat is compromised. The West Tennessee River Basin Authority is the potential sponsor. (2) Wolf River, a tributary of the Mississippi River in Shelby County, TN, will require an ecosystem restoration study involving hydrologic restoration of bottomland hardwoods. Past channelization has resulted in dewatering of wetlands resulting in habitat degradation and invasive species. The Shelby Farms Conservancy is the potential sponsor. Other organizations including the Tennessee Department of Transportation, Chickasaw Basin Authority, Ducks Unlimited and the Audubon Society have expressed interest in various elements of the study.

Fiscal Year 2013 funds are being used to initiate the feasibility phase of this study. Fiscal Year 2014 funds will be used to continue the studies. A Feasibility Cost Share Agreement (FCSA) is scheduled to be executed in FY 2013. The estimated cost of the Cypress Creek portion of the feasibility study is \$300,000 which will be cost shared on a 50-50 percent basis. The estimated cost of the Wolf River portion is \$300,000 which will be cost shared on a 50-50 percent basis. The total estimated cost of all feasibility studies identified during the reconnaissance phase having likely sponsors is \$5,600,000. Coordination with potential sponsors will continue in order to identify additional study areas. The reconnaissance report was approved in December 2009 and the reconnaissance phase is scheduled for completion in FY 2013. The feasibility completion date is TBD. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,900,000
Reconnaissance Phase (Federal)	300,000
Feasibility Phase (Federal)	2,800,000
Feasibility Phase (Non-Federal)	2,800,000

Mississippi River Commission

Memphis District

Memphis Metropolitan Area, Storm Water Management Study,
TN and MS

The estimated Federal cost estimate is the same as last presented to Congress (FY 2013).

Reconnaissance phase studies were accomplished as part of the Memphis Metropolitan Area reconnaissance study as authorized by the U.S. House Committee on Transportation and Infrastructure Resolution dated 7 March 1996.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

CONSTRUCTION

ARKANSAS

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Construction

PROJECT: Bayou Meto Basin, Arkansas (Resumption)

LOCATION: The project is located in Lonoke, Prairie, Pulaski, Jefferson, and Arkansas Counties in east-central Arkansas.

DESCRIPTION: Project features include diversion of excess water from the Arkansas River through a pumping station on the upper end of the project with delivery through a system of new canals, existing streams, and pipelines to the water depleted areas; channel improvements, control structures, and a pumping station on the lower end of the project to provide for reduced flooding; water management; waterfowl conservation and management measures; and other environmental restoration features. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.1 to 1 at 7 percent. (FRM 1.7 to 1 at 7 percent; WTR 1.1 to 1 at 7 percent)

TOTAL BENEFIT-COST RATIO: 1.1 to 1 at 7 percent. (FRM 1.7 to 1 at 7 percent; WTR 1.1 to 1 at 7 percent)

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 5.125 percent (FY 2010). (FRM 2.2 to 1 at 5.125 percent; WTR 1.5 to 1 at 5.125 percent)

BASIS OF BENEFIT-COST RATIO: Benefits are based on analyses conducted as part of the Bayou Meto Basin, AR, General Reevaluation Report approved in 2007 at 2005 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$395,337,000		Bayou Meto Basin	12	TBD
Estimated Non-Federal Cost	\$218,837,000				
Cash Contributions	\$124,173,000		PHYSICAL DATA		
Other Costs	\$94,664,000		Major Pumping Stations	4	
Total Estimated Project Cost	\$614,174,000		Channels		
			New Channels	105 Miles	
Allocations to 30 September 2010	\$60,861,300		Existing Channels	116 Miles	
Allocation for FY 2011	(560,000) 1/		Weirs	56	
Allocation for FY 2012	407,600 2/		Pipelines	472 Miles	
Conference Allowance for FY 2013	0		Check Structures	11	
Allocation for FY 2013	4,400,000	17	Turnouts	14	
Allocations through FY 2013	65,108,900		Drop Structures	92	
Estimated Carry-In Funds	0 3/		Inverted Siphons	74	
President's Budget for FY 2014	5,000,000	19	Conservation Measures		
Programmed Balance to Complete after FY 2014	325,228,100		Relocations		
UnProgrammed Balance to Complete after FY 2014	0		Utility Relocations	209	
			Bridge Relocations	66	

1/ \$914,300 reprogrammed from the project.

2/ \$407,600 reprogrammed to the project.

3/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

JUSTIFICATION: The project will provide for agricultural water supply, flood control and drainage, water management, and waterfowl management restoration and protection. The agricultural economy, which supports the eastern Arkansas region, cannot exist without a dependable supply of irrigation water. Continued withdrawals at the current rate will deplete the alluvial aquifer such that by the year 2015 it will no longer be a viable source of irrigation water. Agriculture as it is now practiced, will be impossible. The economic result of exhausting the aquifer would be catastrophic. Without a supplemental source of irrigation water only about 34 percent of the project area could be irrigated which would cause approximately \$48,292,000 losses in net farm revenues. The selected plan for agricultural water supply is the combination of conservation, groundwater, on-farm storage, import water, and environmental measures, which best meet the needs of the project area and is the preferred plan of the project sponsor. The selected plan provides a supplemental source of irrigation water combined with conservation, which will allow the alluvial aquifer to stabilize. Flooding problems occur frequently throughout the basin causing serious damages to agriculture, natural resources, and infrastructure. One of the area's greatest needs is relief from flooding and improved drainage and water management in the lower portion of the basin. There are currently 650 acres of dead and dying timber in the Bayou Meto Wildlife Management Area with another 12,000 acres stressed to varying degrees. The selected plan of improvement for flood control includes features to reduce flooding, improve drainage and enhance water management. Features

include channel improvements, water control structures, and a pumping station. Environmental restoration features will create 240 acres of moist soil habitat for waterfowl, and restore 10,000 acres of wet land buffer units. Average annual benefits (2005 price levels) are as follows:

Annual Benefits	Amount	
Flood Control	\$ 5,559,000	
Agricultural Irrigation	\$45,909,000	
Waterfowl Use Days	21,216,388	
Prairie Restoration	10,000 acres	9,159 AAHUs

FISCAL YEAR 2013: Total unobligated funds are being used as follows:

Continue:

Contract Modification, Pumping Station No. 1 (WTR)	266,000
Engineering and Design	52,800
Supervision and Administration	350,000
Total	668,800

Fiscal Year 2013 funds are being used as follows:

Initiate (Fully Funded):

Electrical Sub-Station, Pumping Station No. 1 (WTR)	4,400,000
Total	4,400,000

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate (Fully Funded)	
Electrical Sub-station & Transmission Line, Little Bayou Meto Pump Sta., AR (WTR)	4,400,000
Planning, Engineering and Design	200,000
Supervision and Administration	400,000
Total	5,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, And Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$ 52,346,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), where necessary for the Construction of the project.	42,318,000	
Contribute cash to bring the total non-Federal share of project costs to 35 percent for water supply and flood risk management and 50 percent for waterfowl management features for recreation.	124,173,000	
Operate, maintain, repair, replace and rehabilitate all completed works in accordance with regulations prescribed by the Assistant Secretary of the Army for Civil Works (ASA(CW)).		\$5,143,000
Total Non-Federal Costs	\$218,837,000	\$5,143,000

Mississippi River Commission

Memphis District

Bayou Meto Basin, AR

STATUS OF LOCAL COOPERATION: The Project Partnership Agreement (PPA) was executed with the local sponsor, the Arkansas Natural Resources Commission (ANRC) on 24 May 2010. The Bayou Meto Water Management District (BMWMD), partnering with the ANRC, has completed all institutional and legal requirements for assessment of benefits to landowners within the project area for taxation purposes. The BMWMD intends to utilize proceeds from tax assessments, water contracts, state grants and bond issues to provide their required share of the project cost. Funds to initiate construction were received in FY 2010. ANRC is providing the non-Federal cost share funds to match the American Recovery and Reinvestment Act (ARRA) funds of \$35,000,000 received in Fiscal Year 2010 for construction of Pump Station #1, Little Bayou Meto Pump Station, and Outlet Structure and Canal 1000 design which were awarded in September 2010. Construction of Pump Station No. 1 is scheduled to be completed in September 2013 and Little Bayou Meto Pump Station is scheduled to be completed in September 2013.

The current non-Federal cost estimate of \$218,837,000, which includes a cash contribution of \$124,173,000, is no change from the non-Federal cost estimate of \$218,837,000 noted in the Project Partnership Agreement, which included a cash contribution of \$124,173,000. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$395,337,000 is no change over the latest estimate submitted of \$395,337,000 (Letter dated 24 Sep 07 providing project authorization signed by ASA(CW) and amended GRR dated Dec 08, PPA executed 24 May 2010).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement was published in the Federal Register in December 2006 and submitted in April 2007 for review and approval to ASA (CW) as part of the General Reevaluation Report (GRR). In a memo dated 24 September 2007 the ASA (CW) approved the report and authorized the project.

OTHER INFORMATION: Funds to prepare a General Reevaluation Report and initiate preconstruction engineering and design were appropriated in FY 1998 and funds to initiate construction were appropriated in FY 2010. Fish and Wildlife mitigation costs are estimated to be \$7,431,000. The percentage to the total project cost and the Federal and Non-Federal cost of each component of this multi-purpose project is provided below:

Component	Total Cost Fully Funded 2008 (From PPA)	Percent Of Total	Federal	Non-Federal
Agricultural Water Supply	\$ 501,965,000	82%	\$ 326,277,300	\$ 175,687,700
Waterfowl Management	\$ 60,386,000	10%	\$ 30,193,000	\$ 30,193,000
Flood Control	\$ 51,823,000	8%	\$ 38,867,200	\$ 12,955,800
Project Total	\$ 614,174,000	100%	\$ 395,337,500	\$ 218,836,500

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Channel Improvement, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, a distance of approximately 966 miles.

DESCRIPTION: The plan of improvement consists of stabilizing the banks of the river in a desirable alignment and obtaining the most efficient flow characteristics for it for flood control and navigation by means of revetments, dikes, foreshore protection, and improvement dredging. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1962, 1965, 1966, and 1970.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.28 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$3,969,000,000		Entire Project	93	TBD
Estimated Non-Federal Cost	1,860,000				
Cash Contributions	1,760,000				
Other Costs	100,000				
Total Estimated Project Cost	\$3,970,860,000				
		PHYSICAL DATA			
Allocations to 30 September 2010	3,032,815,000		Lands and Damages		19,135 acres
Allocation for FY 2011	28,372,000		Revetments		1,097 miles
Allocation for FY 2012	49,013,000	1/	Dikes		362 miles
Conference Allowance for FY 2013	46,133,000	4/	Dredging		As Required
Allocation for FY 2013	46,133,000	5/			
Allocations through FY 2013	3,156,333,000	2/	80	Pumping Station	1
Estimated Carry-in Funds	0	3/			
President's Budget Amount for FY 2014	58,015,000		81		
Programmed Balance to Complete After FY 2014	754,652,000				
Unprogrammed Balance to Complete After FY 2014	0				

1/ Includes \$100,000 reprogrammed to project.

2/ Includes ARRA funds of \$31,006,000 (\$21,232,000 in FY 2009; \$9,836,000 in FY 2010; and (\$62,000) in FY 2012).

3/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

4/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

5/ Fiscal Year 2013 revetment priorities have changed to due to real estate issues at Arkansas City/Yellow Bend and reprioritization of work to address the most problematic area of the river. Dikes priorities have changed to address the most problematic areas due to excessive dredging during low water conditions.

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Channel Improvement, AR, IL
KY, LA, MS, MO, and TN

1 May 2013

MR&T-20

JUSTIFICATION: The Channel Improvement Project is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of Channel Improvement derive from the way in which they operate together with the Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The Mississippi River, with a drainage area of about 1,245,000 square miles, has a wide range of flow, increasing from an approximate minimum of 90,000 cubic feet per second (675,000 gallons per second) to a maximum of 2,345,000 cubic feet per second (17,587,000 gallons per second) which occurred in 1927 at the latitude of Red River Landing. The project flood is 3,030,000 cubic feet per second (22,500,000 gallons per second). Part of the tremendous energy of this volume of flowing water is directed toward a relentless attack on the banks of the river, causing the unprotected banks to cave into the river. As this caving progresses, the attack becomes more direct, the bendway moves in toward the levee, and more sediment is placed in the river and deposited downstream in the form of a sandbar. This bar gradually builds out into the channel and deflects the river's attack to the opposite bank. As the cycle is repeated the river tends to meander and lengthen. Revetment is placed against the banks of the river at locations where mainline levees are being threatened with destruction or where unsatisfactory alignment and channel conditions are developing. Revetment serves a three-fold purpose in that the river is prevented from encroaching on the Main Stem levees, excess material is kept out of the stream, and a favorable channel alignment and depth are maintained. An objective of the plan is to preserve favorable alignments and efficient cross-sectional areas and to prevent the river from creating new meander patterns. In wide reaches of the river, dikes are used to contract the channel width so as to produce an efficient channel for navigation and to insure the flood carrying capacity of the river. Chutes and secondary channels are controlled for the same purpose. Improvement dredging is employed to assist the river in removing natural obstructions which deflect the current into undesirable patterns of flow and to assist in developing an efficient channel. Foreshore protection is utilized to preserve the integrity of the Mississippi River Levees from attack by erosion of the batture. Erosion of the batture leads to steep slopes which, when undermined, result in considerable loss of batture and possible failure of the levee.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$409.7 billion in 2012 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 11 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 180,000. The savings per ton is \$32.00.

The MR&T project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$15.6 billion in damages in 2012 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2012 prices, damages without the projects would have been \$56.4 billion and damages prevented would have been \$53.3 billion.

The 2011 flood set a new flood of record based on a comparison of peak flows measured at representative locations in the lower Mississippi Valley versus previous flood records. In addition, this flood experienced greater stages than the 1927 flood, but since the levees did not crevasse or overtop flooding was reduced by 62 percent. Total damages with existing projects in operation were \$2.9 billion (2012 price levels). In addition, \$1.5 billion damages were incurred by federal flood protection works within the MR&T projects. Damages without projects would have been \$237.2 billion and total damages prevented by projects amounted to \$108.0 billion. Households numbering more than 1.4 Million were saved from impacts and no known deaths occurred.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

Annual Remaining Benefits	Amount @ 7%
Flood Control	\$415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$529,090,000

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Revetments	\$288,000
Dikes	761,000
Total	\$1,049,000

Current funds are being used as follows:

Revetments	\$31,733,000
Dikes	14,400,000
Total	\$46,133,000

The items of revetment work are:

Approximate length in feet:

Chute of Island 35, TN ^{1/}	1,800
Norfolk Star, MS ^{1/}	1,400
Racetrack, MS ^{2/}	2,100
Reinforcement	14,180

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Channel Improvement, AR, IL
KY, LA, MS, MO, and TN

1 May 2013

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FISCAL YEAR 2013 (Continued):

Revetments: The planned program consists of items of work for which funds will be used as follows:

Lands and Damages	\$ 100,000
Construction of Revetments	25,593,000
Cultural Resources	40,000
Planning, Engineering, and Design	5,400,000
Construction Management	600,000
Total	\$31,733,000

Dikes: The planned dike work consists of the following items:

Commerce, MS ^{1/}	\$ 750,000
Porter Lake, MS ^{1/}	750,000
Randolph, TN ^{1/}	1,900,000
Victoria Bend, MS (LDB) ^{2/}	8,852,000
Lands and Damages	50,000
Cultural Resources	20,000
Planning, Engineering, and Design	1,464,000
Construction Management	614,000
Total	\$14,400,000

FISCAL YEAR 2014: The requested amount will be used to continue construction of revetments and dikes, land acquisition; cultural resource investigations; engineering and design; construction management for construction of revetments and dikes; and economic evaluation of the MR&T main stem features. Funds will be applied as follows:

Revetments	\$47,313,000
Dikes	10,702,000
Total	\$58,015,000

The items of revetment work are:

Approximate length in feet:

Chute of Island 35, TN	1,600
Island 40, TN	1,000
Horseshoe, AR	1,800
Ludlow, AR	2,000
Togo Island, LA	4,000
Kings-Point Opposite Delta, MS (SBP)	2,000
Arkansas City Yellow Bend, AR	3,000
Grand Gulf, MS	2,500
Lake Concordia, MS	2,900
Reinforcement	10,280

Revetments: The planned program consists of items of work for which funds will be required as follows:

Lands and Damages	\$ 100,000
Construction of Revetments	40,441,000
Cultural Resources	211,000
Economic evaluation of the MR&T main stem features	166,000
Planning, Engineering, and Design	5,745,000
Construction Management	650,000
Total	\$47,313,000

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Channel Improvement, AR, IL
KY, LA, MS, MO, and TN

FISCAL YEAR 2014 (Continued):

Dikes: The planned dike work consists of the following items:

Lands and Damages	70,000
Cultural Resources	30,000
Planning, Engineering, and Design	1,592,000
Construction Management	715,000
Victoria Bend, MS (LDB)	8,295,000
Total	\$10,702,000

NON-FEDERAL COST: In accordance with Section 4 of the Flood Control Act of 1944, as amended by Section 207 of the Flood Control Act of 1962, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area.	\$ 100,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities.	1,760,000	\$244,000
Total Non-Federal Costs	\$1,860,000	\$244,000

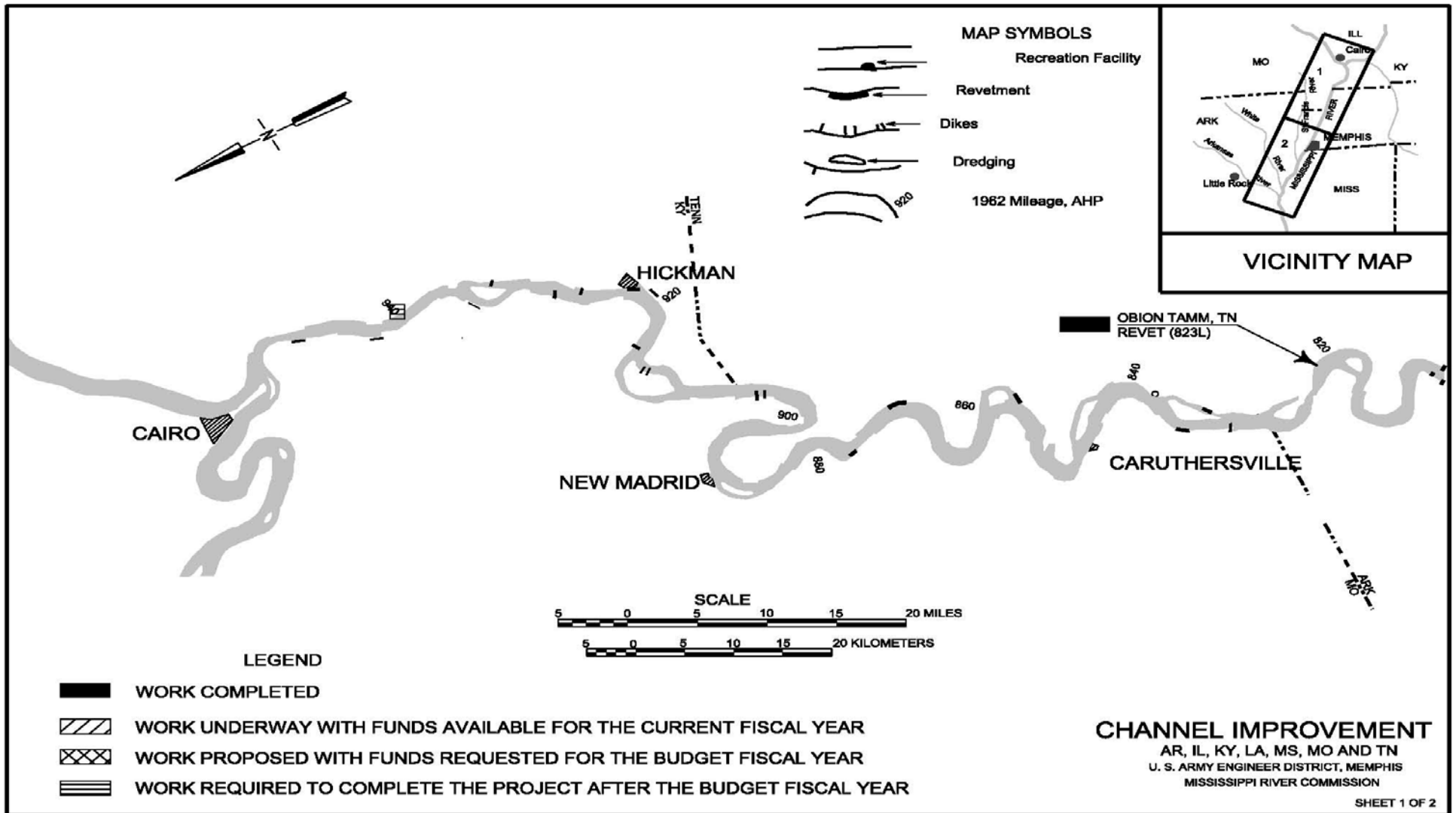
STATUS OF LOCAL COOPERATION: Assurances furnished by the Missouri Department of Conservation for the Dorena Recreation Facility were accepted 27 August 1971; assurances furnished by the Tennessee Department of Conservation for the Richardson Landing Recreation Facility were accepted 3 September 1976; and assurances furnished by the City of Memphis, Tennessee, for Volunteer Bicentennial Park were accepted 11 September 1975. Assurances furnished by the City of Osceola, Arkansas, for Lake Neark, Arkansas, are embodied in the contract for cost sharing approved on 19 September 1982. A Local Cooperation Agreement for the Ed Jones Boat Ramp with the State of Tennessee was signed 27 October 1988. A Local Cooperation Agreement for the Shelby Forest Boat Ramp with the State of Tennessee was signed 11 October 1990. A Local Cooperation Agreement for the Dyersburg, Tennessee, Boat Ramp with the State of Tennessee was signed 11 July 1994.

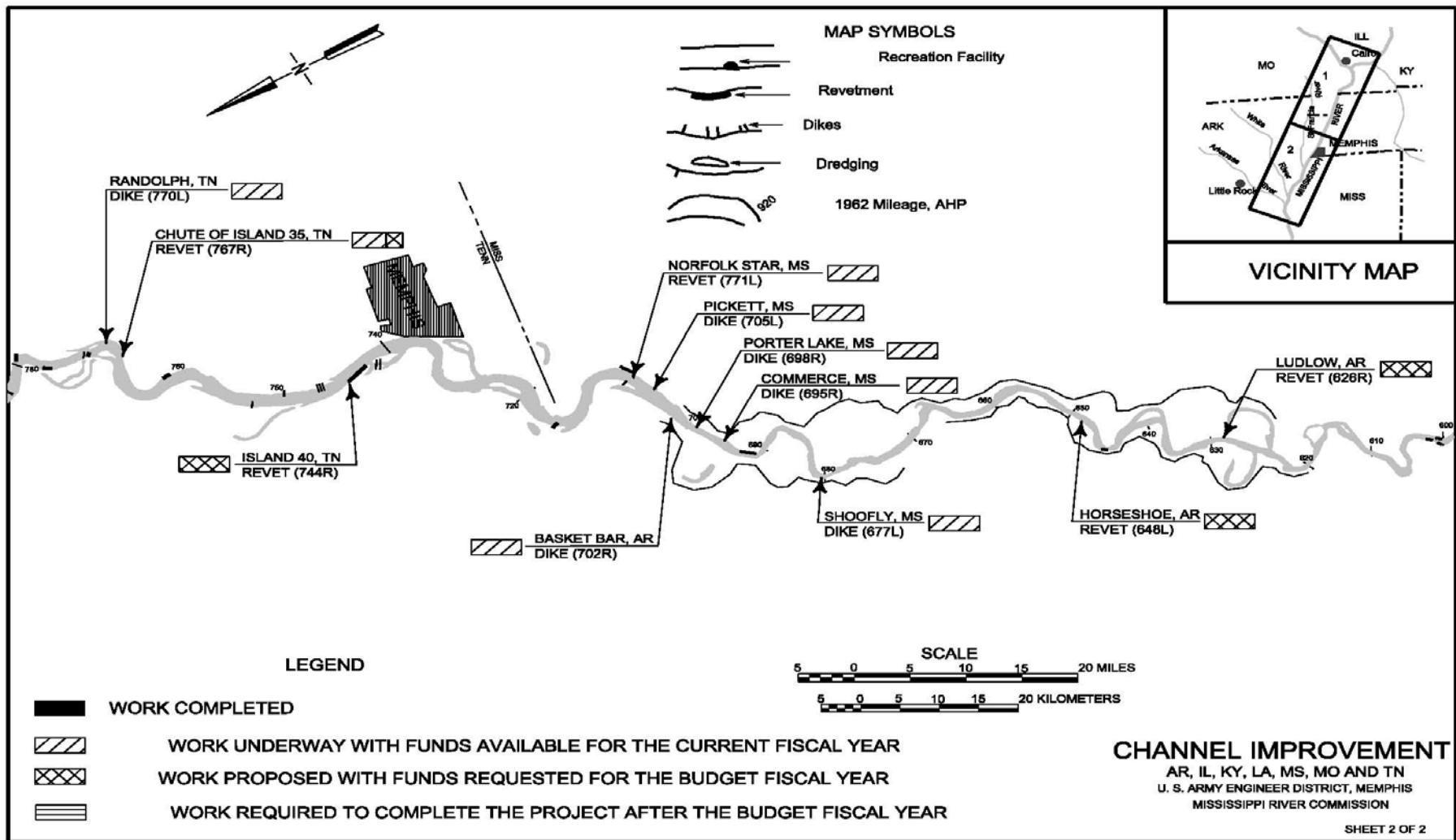
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$3,969,000,000 is an increase of \$1,000,000 from the latest estimate (\$3,968,000,000) presented to Congress (FY 2013). This change includes the following items:

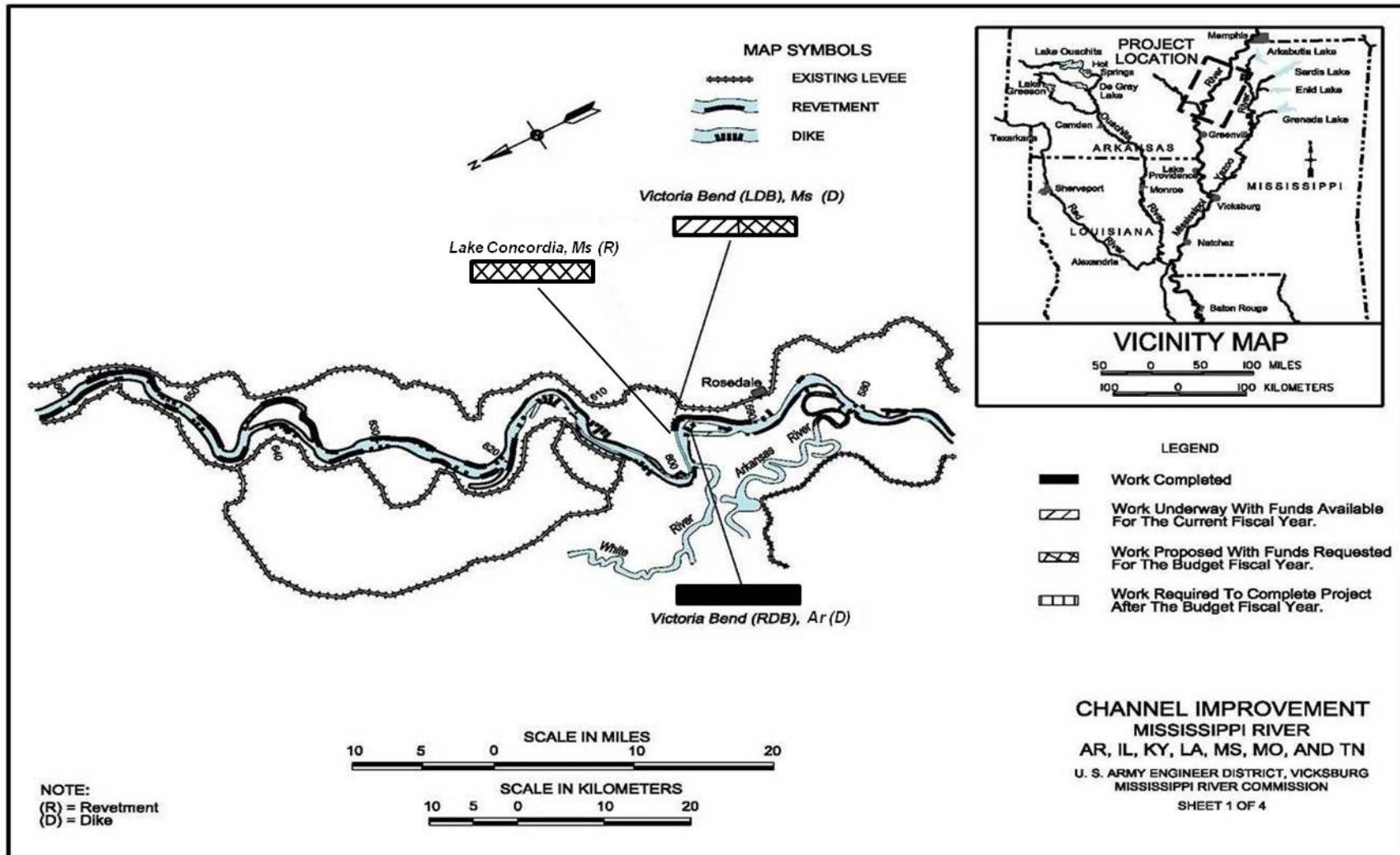
Item	Amount
Price Escalation on Construction Features	\$1,425,000
Post Contract Award and Other Estimating Adjustments	0
Price Escalation on Real Estate	(425,000)
Total	

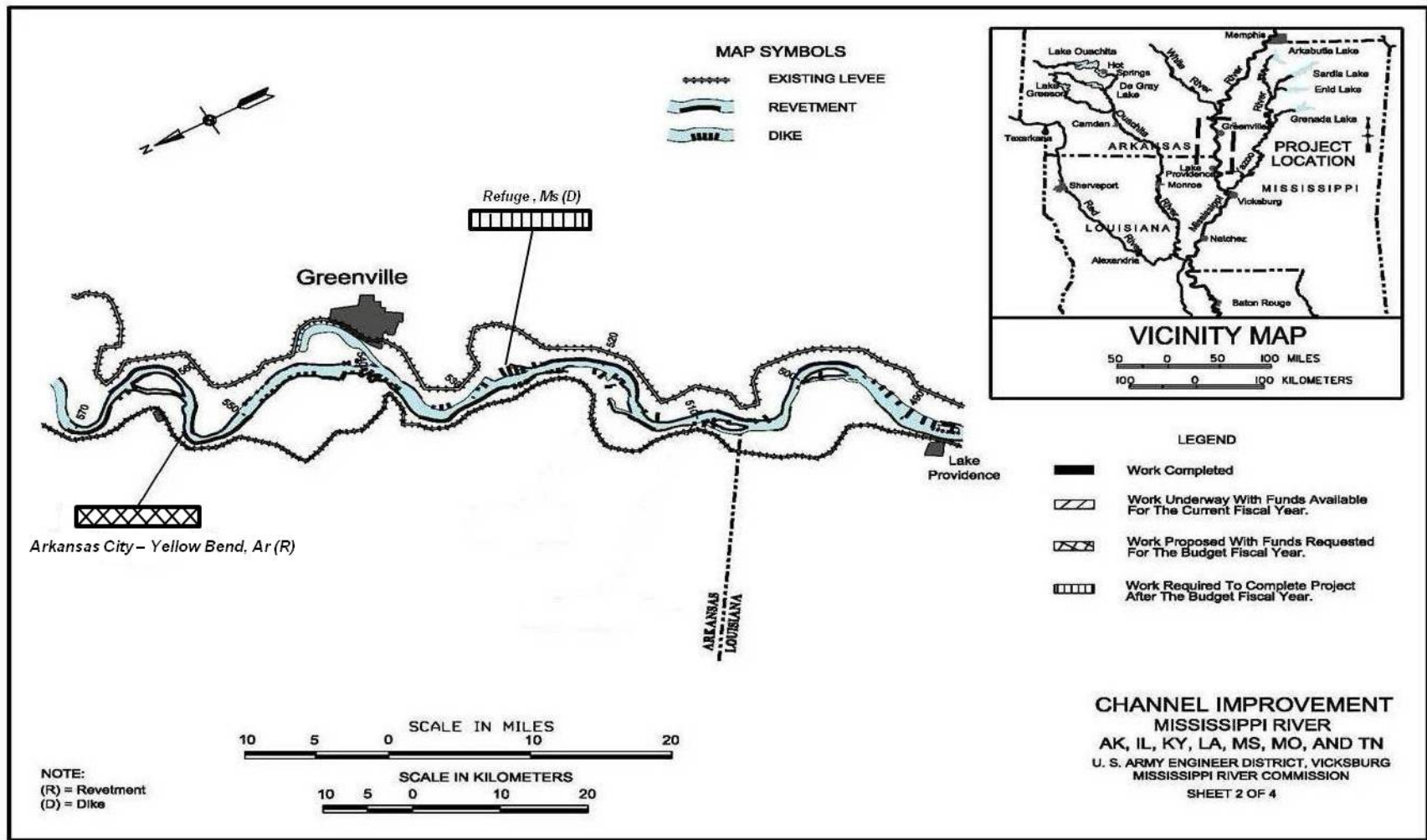
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

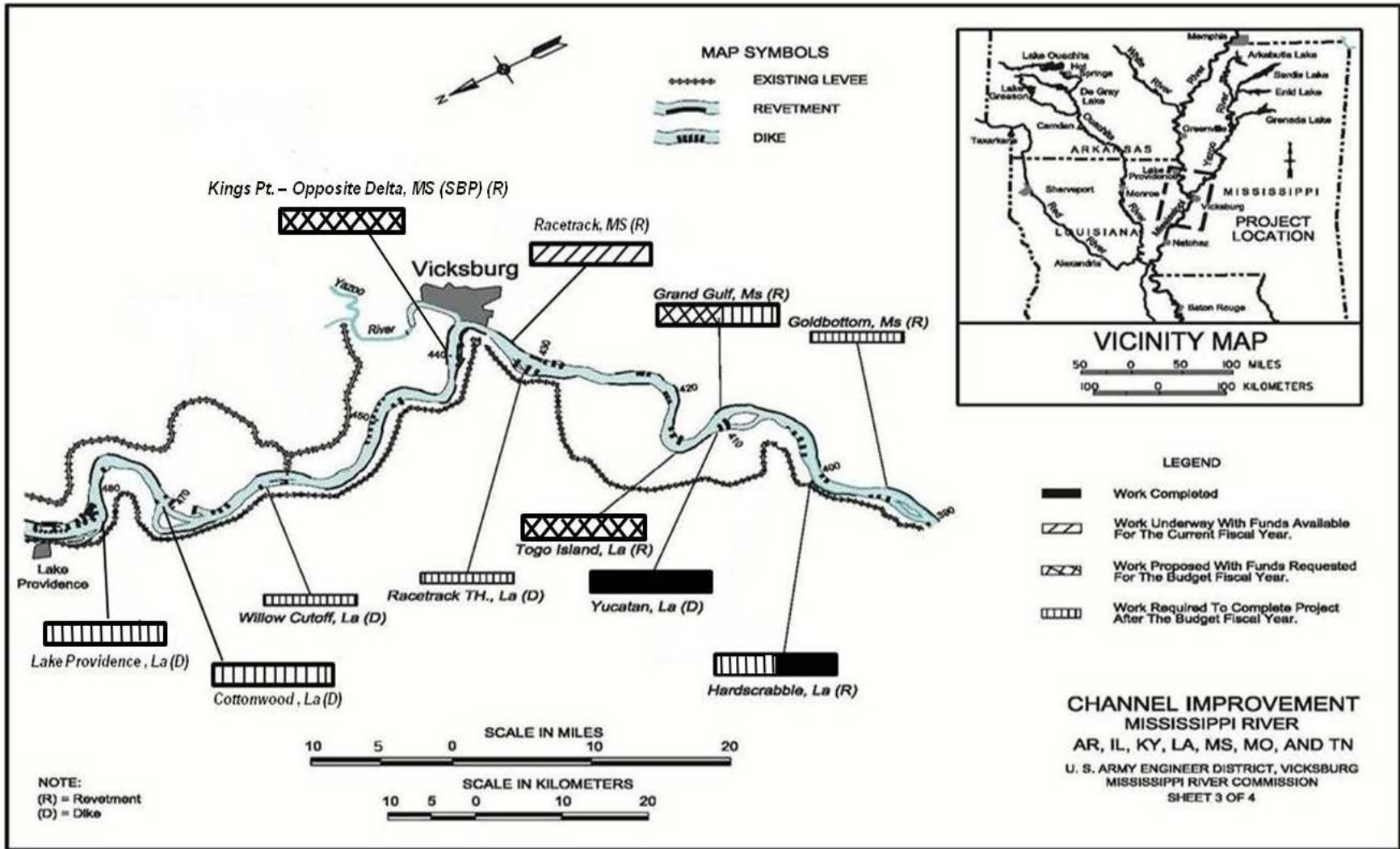
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.

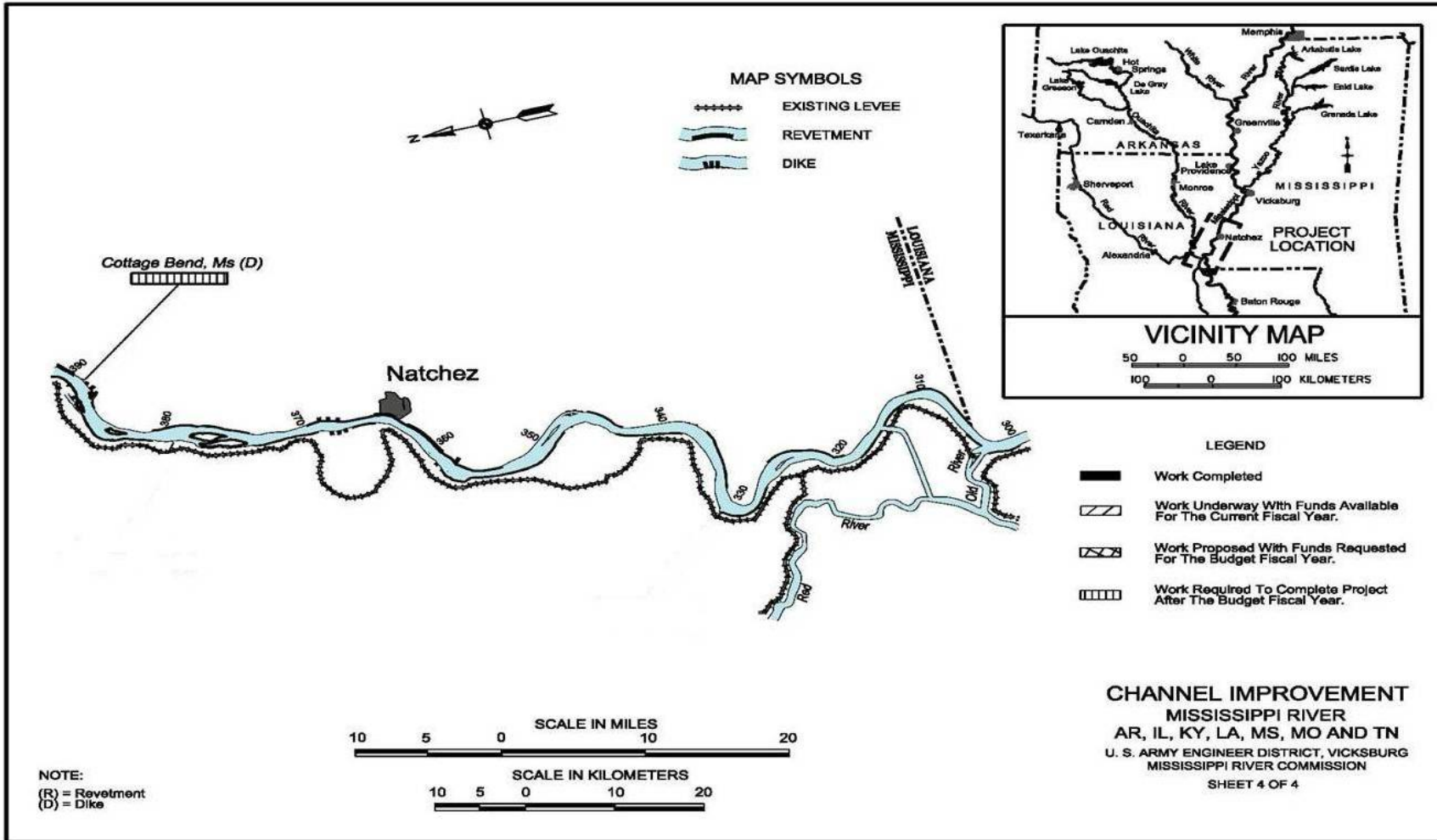


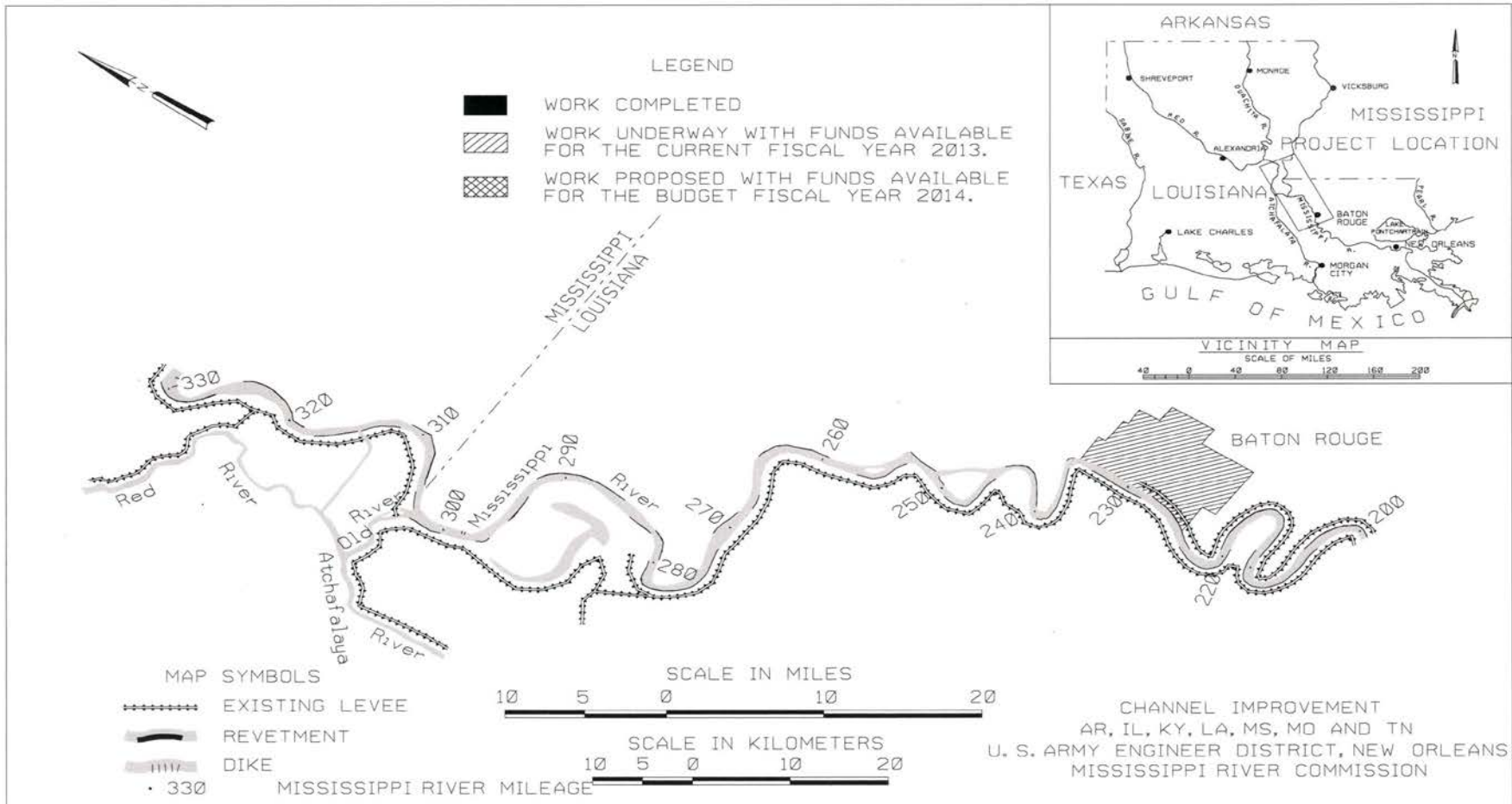


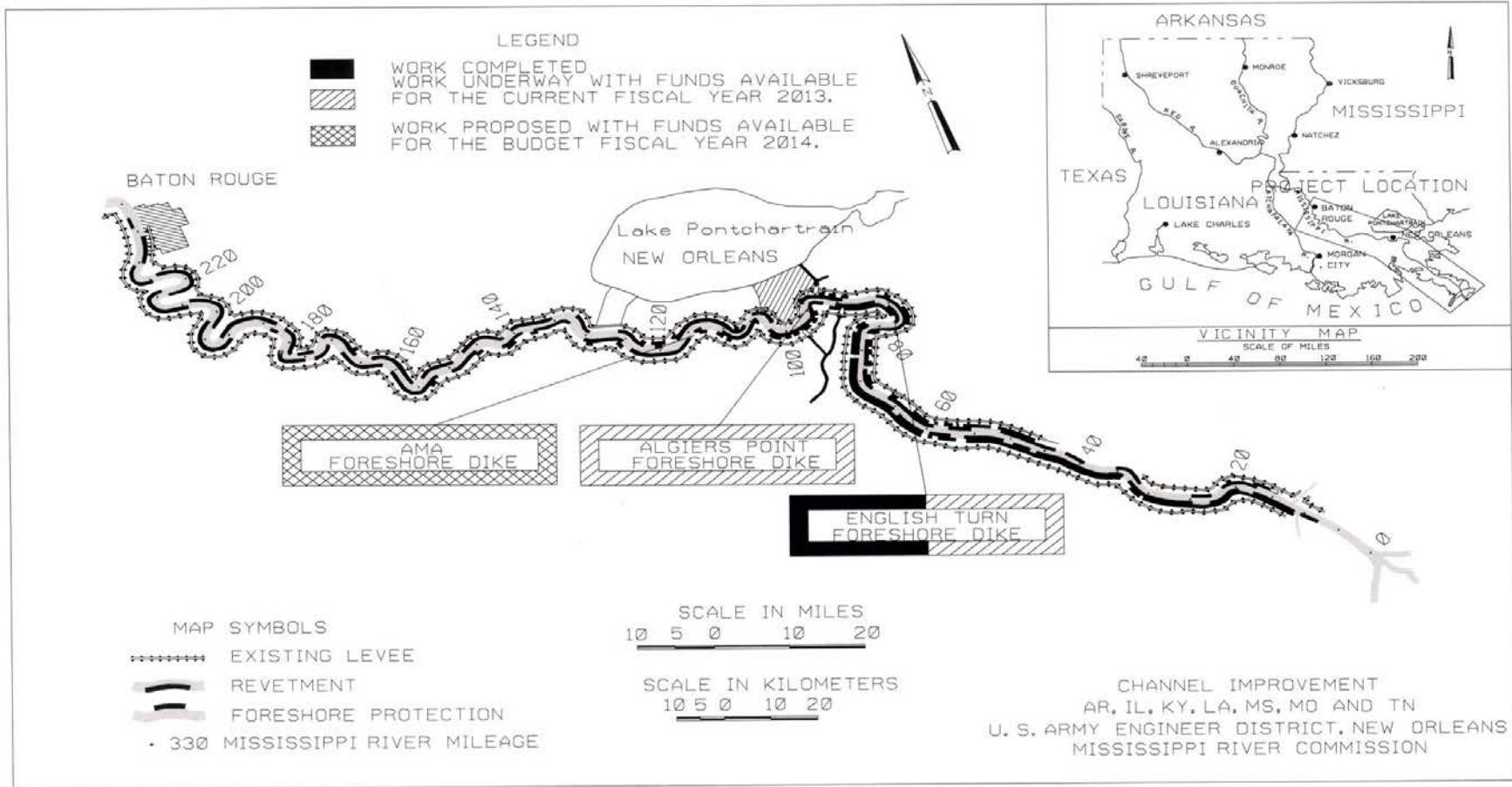












SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Construction

PROJECT: Grand Prairie Region, AR (Resumption)

LOCATION: The Grand Prairie Region and Bayou Meto project area is located in five counties in east central Arkansas. The Grand Prairie Region is primarily located in Arkansas and Prairie Counties and a small portion in Lonoke and Monroe Counties. The Bayou Meto Basin also includes Jefferson County.

DESCRIPTION: The Grand Prairie Region portion of the project addresses the problems of depletion of the alluvial aquifer and the sparta aquifer. The loss of these aquifers would result in severe reductions in irrigated agricultural with devastating losses to the agricultural based economy, and would pose a threat to the municipal and industrial water supply. The project will provide for aquifer protection, agricultural water supply, groundwater conservation, and fish and wildlife restoration and enhancement. The project consists of a pumping station located on the White River, a network of new canals, existing channels, pipelines, and associated channel structures to provide surface water to the water depleted areas. Other project components include on-farm storage reservoirs, conservation measures, and environmental restoration and enhancement measures. Project outputs from the project are protection of the aquifer, creation of fisheries and waterfowl habitat, and agricultural benefits.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.15 TO 1 at 7 percent.

INITIAL BENEFIT-COST RATIO:

BASIS OF BENEFIT-COST RATIO: Benefits are from the revised General Reevaluation Report dated September 1999, approved by the Deputy Commander for Civil Works on 1 November 1999.

SUMMARIZED FINANCIAL DATA

		ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$293,000,000				
Estimated Non-Federal Cost	\$157,000,000		Grand Prairie Region	24	TBD
Cash Contribution	\$86,350,000				
Other Costs	70,650,000				
PHYSICAL DATA					
Total Estimated Project Cost	\$450,000,000		Pumping Stations		
			Major Pumping Station		1640 CFS
			Relief Station		100 CFS
Allocations to 30 September 2010	\$ 97,727,000		Channels		
Allocation for FY 2011	1,198,000		New Channels		184 miles
Allocation for FY 2012	592,000 1/		Existing Channels		291 miles
Conference Allowance for FY 2013	0		Weirs		120
Allocations through FY 2013	105,117,000	64	Pipelines		
Estimated Carry-In Funds	0 2/		Check Stations		14
President's Budget for FY 2014	22,000,000	72	Conservation Measures		
Programmed Balance to Complete after FY 2014	\$165,883,000 3/		Relocations		
Un-programmed Balance to Complete after FY 2014	0		Utility Relocations		342
			Bridge Relocations		34

1/ Additional Allocation.

2/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

3/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The project will provide for groundwater protection, agricultural water supply, and environmental restoration and protection. The agricultural economy, which supports the eastern Arkansas region, cannot exist without a dependable supply of irrigation water. Continued withdrawals at the current rate will deplete the alluvial aquifer such that by the year 2015 it will no longer be a viable source of irrigation water; and agriculture, as it is now practiced, will be impossible. The economic result of exhausting the aquifer would be catastrophic. The selected plan is the combination of conservation, groundwater, on-farm storage, import water, and environmental measures, which best meet the needs of the project area and is the preferred plan with the project sponsor. The selected plan provides a supplemental source of irrigation water combined with conservation, which allows the alluvial aquifer to stabilize. The environmental benefits consist of preservation of the alluvial aquifer, restoration of fisheries habitat, restoration of historic native prairies, and creation of waterfowl habitat. The 184 miles of new canals would result in the creation of 8.560 fish habitat units per month (one habitat equals one acre-foot of prime fish habitat). The placement of 120 weirs in the existing channelized streams in the area would restore 4,328 habitat units per month and the new on-farm storage would provide over 8,000 new surface acres on existing farmland. Very little of the historic prairie remains in the project area. The project provides the opportunity of restoration of approximately 3,000 acres into native prairie grasses along project rights-of-way. Waterfowl habitat is a major component of the project. An average of 38,000 additional acres of rice field would be flooded annually providing a high quality food source for waterfowl and over 22,000,000 duck use days. In addition, the long term drying of the wetland along the White River within the southern portions of the Grand Prairie would be halted or slowed through protection of the aquifer.

Average annual benefits (1996 price levels) are as follows:

Annual Benefits	Amount
Irrigation	\$35,812,000
Fish and Wildlife	472,000
Total	\$36,284,000

FISCAL YEAR 2013: Total unobligated funds are being used as follows:

Continue:	
Supervision and Administration	\$140,800
Total	140,800

Current year funds are being used as follows:

Initiate (Fully Funded):	
Discharge Pipes Segment 2	\$5,500,000
Engineering and Design	250,000
Supervision and Administration	250,000
Total	\$5,600,000

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate (Fully Fund):	
DeValls Bluff Pump Station Super-structure	\$20,000,000
Engineering and Design	1,000,000
Supervision and Administration	1,000,000
Total	\$22,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way and borrow and excavated or dredged material disposal areas.	\$ 11,106,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), where necessary for the construction of the project.	17,986,000	
Operate, maintain, repair, replace and rehabilitate all completed works in accordance with regulations prescribed by the Assistant Secretary of the Army for Civil Works (ASA(CW)).		\$7,200,000
Contribute cash to bring the total non-Federal share of project costs to 35 percent.	127,908,000	
Total Non-Federal Costs	\$157,000,000	\$7,200,000

The current non-Federal cost estimate of \$157,000,000 which includes a cash contribution of \$127,908,000 is an increase of \$46,000,000 from the latest estimate (\$111,000,000) presented to Congress (FY 2001).

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement was executed with the project sponsors, the State of Arkansas and the White River Regional Irrigation Water Distribution District, on 4 August 2000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$293,000,000 is an increase of \$85,000,000 from the latest estimate (\$208,000,000) presented to Congress (FY 2001). The estimate includes changes to the following items.

Item	Amount
Price Escalation on Construction Features	\$ 50,000,000
Post Contract Award and Other Estimating Adjustments (including Contingency Adjustments)	35,000,000
Price Escalation on Real Estate	0
Total	\$ 85,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Record of Decision (ROD) for the Final Environmental Impact Statement was executed in February 2000.

OTHER INFORMATION: The project was originally authorized by the Flood Control Act of 1950 and subsequently deauthorized in 1989 pursuant to provisions of Section 101(B) of the Water Resource Development Act (WRDA) of 1986. The project was reauthorized for construction by the Water Resources Development of 1996 to include groundwater protection and conservation, agricultural water supply and waterfowl management if the Secretary determines that the change in project scope is technically sound, environmentally acceptable and economically feasible. Feasibility level investigations of the Grand Prairie Region were conducted as part of the Eastern Arkansas Regional Comprehensive Study with a general reevaluation conducted under the same authority. The GRR was approved by the Deputy Commander for Civil Works 1 November 1999. This report, indicated that aquifer protection and groundwater conservation, agricultural water supply, fish and wildlife habitat restoration, and waterfowl management were feasible. The Record of Decision (ROD) on the final Environmental Impact Statement was executed in February 2000. The Memorandum of Agreement (MOA) with Natural Resource Conservation Service (NRCS) for construction of on-farm features was executed in August 2000. Funds to initiate preconstruction engineering and design were appropriated in FY 1991 and funds to initiate construction were appropriated in FY 1999.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN - Construction

PROJECT: Mississippi River Levees, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The Mississippi River Levee system on the west bank extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to the vicinity of Venice, Louisiana, and on the east bank from Hickman, Kentucky, to opposite Venice, Louisiana, except where interrupted by hills and tributary streams. Included in the system are the levees which protect Mounds, Mound City and Cairo, Illinois, and the New Madrid Levee and Floodway.

DESCRIPTION: The plan of improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project flood. This feature includes 1,595 miles of levees and 14.8 miles of floodwall. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary Authorization Act of 1971, PL 92-222, WRDA 92, and WRDA 00.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.28 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The last comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$2,548,892,000		Entire Project	94	TBD
Future Non-Federal Reimbursement	674,000				
Estimated Federal Cost (Ultimate)	2,548,218,000				PHYSICAL DATA
Estimated Non-Federal Cost	89,453,000		Channel and Canals		72 miles
Cash Contributions	\$2,935,000		Levees:		
Other Costs	85,844,000		Average Height		20-35 feet
Reimbursement	674,000		Length		1,595.0 miles
Recreation Facilities	\$674,000		Floodwalls:		
			Average Height		14-23 feet
Total Estimated Project Cost	\$2,638,345,000		Length		14.8 miles
Allocations to 30 September 2010	\$1,423,842,000		Levee Berms		654.8 miles
Allocation for FY 2011	25,114,000		Levee Roads		1,541.6 miles
Allocation for FY 2012	27,727,000		Pumping Stations		5
Conference Allowance for FY 2013	45,187,000	3/			
Allocation for FY 2013	45,187,000	4/			
Allocations through FY 2013	1,521,870,000	1/	60		
Estimated Carry-in Funds	0	2/			
President's Budget for FY 2014	22,829,000		61		
Programmed Balance to Complete After FY 2014	\$1,004,193,000				
Un-programmed Balance to Complete After FY 2014	0				

1/ Includes ARRA funds of \$5,964,000 (\$7,300,000 in FY 09 (\$1,000,000) in FY 10; and (\$336,000) in FY 11.

2/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

3/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

4/ Deviation from the items listed in FY 13 J/sheet are due to contract savings on one levee item which resulted in award of one additional contract and adjustments in relocations, planning, engineering, and design; and construction management estimates; two levee items were awarded with PL112-77 funds.

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Mississippi River Levees, AR, IL,
KY, LA, MS, MO, and TN

JUSTIFICATION: The Mississippi River Levee system is one of several Main Stem components, which together comprise the plan of improvement for the flood risk reduction on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River and a few miscellaneous items. Because the benefits of the Mississippi River Levees derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The Mississippi River Levee System provides protection to 23,620 square miles and partial protection to an additional 3,780 square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to highly developed agricultural areas, the levees afford protection to urban areas and many industries.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$409.7 billion in 2012 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 11 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 180,000. The savings per ton is \$32.00.

The MR&T project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$15.6 billion in damages in 2012 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2012 prices, damages without the projects would have been \$56.4 billion and damages prevented would have been \$53.3 billion.

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The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

Annual Remaining Benefits	Amount @ 7%
Flood Control	\$415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$529,090,000

FISCAL YEAR 2013: The total unobligated dollars are being used as follows:

Initiate:	
Nash, Mo Parcel 4, Seepage Measures	\$ 2,300,000
Magna Vista-Brunswick, MS Item 463-L	3,759,000
Manchac Bend	4,942,000
Arbroth Control Wells	400,000
Critical areas identified as part of the Levee System Evaluation Reports (LSER) required for certification:	
Algiers Forebay Bern	1,000,000
Manchac to St. Gabriel	1,500,000
P&S for future items identified as part of the LSER required for certification	650,000
Planning, Engineering and Design	5,000,000
Construction Management	2,000,000
Total	\$21,551,000

Current funds are being used as follows:

Continue:	
Lands and Damages	75,000
Relocations	747,000
Cultural Resources Preservation	25,000
Initiate:	
Cairo, IL, Slope Flattening/Correction (L-5.1 AC)	6,000,000
Lake Jackson to Palmetto, MS Item 509-L	5,700,000
Magna Vista-Brunswick, MS Item 463-L	7,344,000
Jefferson Heights Phase I	8,720,000
Planning, Engineering and Design	9,524,000
Supervision and Administration	7,052,000
Total	45,187,000

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Mississippi River Levees, AR, IL,
KY, LA, MS, MO, and TN

In the event of emergency conditions, such as levee slides, sand boils, bank erosion or other events which threaten levee integrity, the Corps intends to reallocate the funds identified on the priorities presented below to accomplish necessary emergency actions.

FISCAL YEAR 2014: The requested amount will be used to continue cultural resources, planning, engineering and design on ongoing and future levee construction items; plans and specifications (P&S) for critical areas identified as part of the Levee System Evaluation Reports (LSER) requirements and initiate economic evaluation of the MR&T main stem features. Funds will be applied as follows:

Continue:

Cultural Resources Preservation	\$ 25,000
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Initiate:

Economic evaluation of the MR&T main stem features	499,000
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P&S for future critical areas identified as part of the Levee System Evaluation Reports (LSER) requirements	1,675,000
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Planning, Engineering and Design	13,655,000
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Construction Management	6,975,000
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Total	\$22,829,000
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NON-FEDERAL COST: In accordance with the Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968 and PL 92-222, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$85,844,000	\$11,175,000
Minor maintenance of all flood control works after their completion, except controlling a regulating spillway structures, including special relief levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to mainline river levees.	3,609,000	0
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	\$89,453,000	\$11,175,000
Total Non-Federal Costs	\$89,453,000	\$11,175,000

STATUS OF LOCAL COOPERATION: It is estimated that local interests had spent approximately \$292,000,000 for flood protection prior to the Act of 15 May 1928. After passage of the Act, the 37 levee districts along the Mississippi River adopted resolutions assuring the United States that the requirements of local cooperation will be met. These local interests have acquired all rights-of-way for work completed and underway and will try to provide the rights-of-way for work scheduled for Fiscal Year 2012. Supplemental assurances covering the requirements of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646) have been accepted for Main Stem Mississippi River Levees in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee.

Assurances of local cooperation for the recreation facilities at Warfield Point, Mississippi, were accepted on 14 October 1969. Supplemental assurances covering the River and Harbor Act of 1970 (PL 91-611) and PL 91-646 were accepted 7 August 1972. Assurances have not as yet been requested for the recreation facilities at Mississippi River State Park, Arkansas.

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Mississippi River Levees, AR, IL,
KY, LA, MS, MO, and TN

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,548,892,000 is an increase of \$8,292,000 from the latest estimate (\$2,540,600,000) presented to Congress (FY 2013). This change includes the following items:

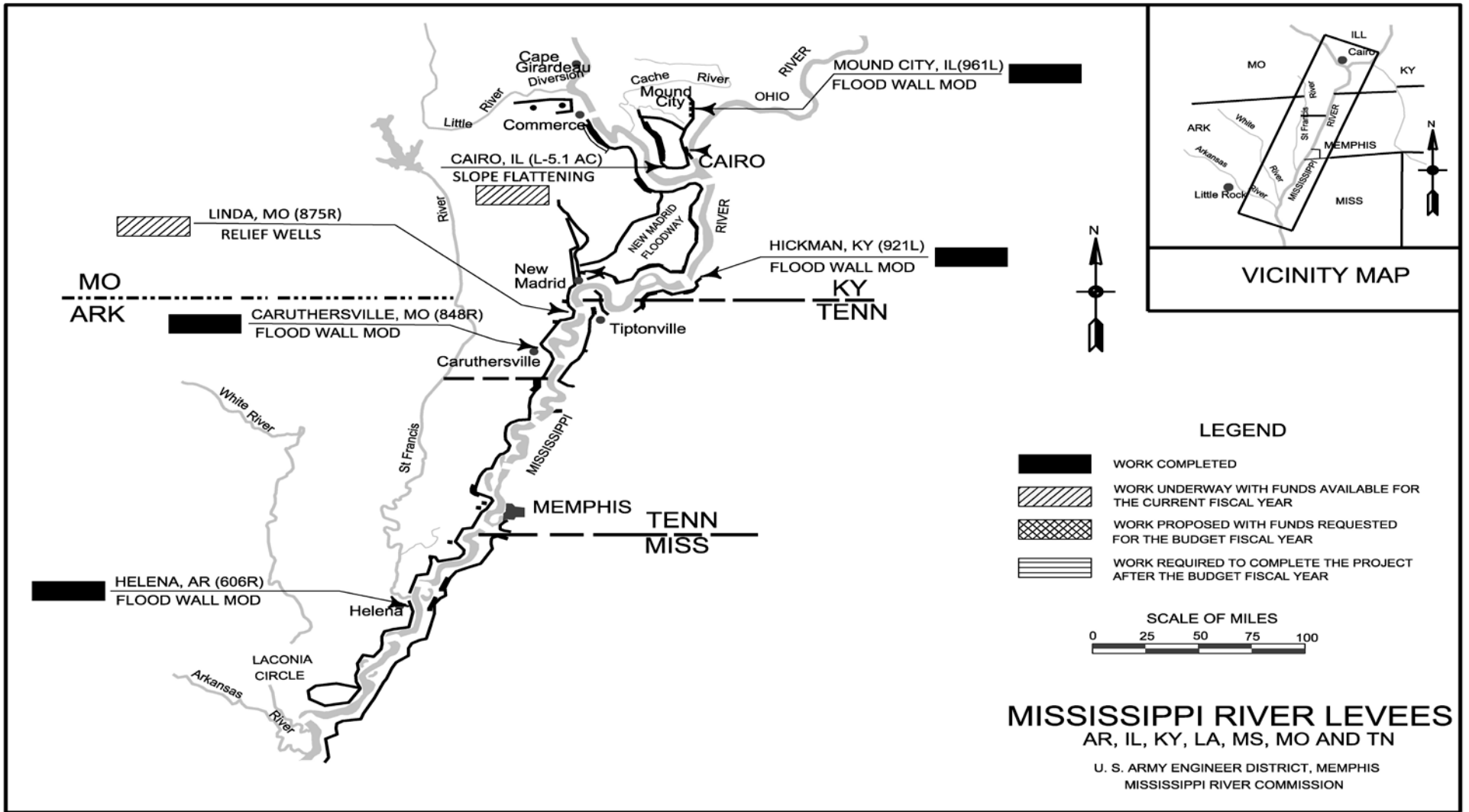
Item	Amount
Price Escalation on Construction Features	\$12,110,000
Design Changes	18,331,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	(31,124,000) ^{1/}
Price Escalation on Real Estate	7,002,000
Price Escalation on Design Costs	1,422,000
Price Escalation or Construction Management Costs	551,000
Total	\$ 8,292,000

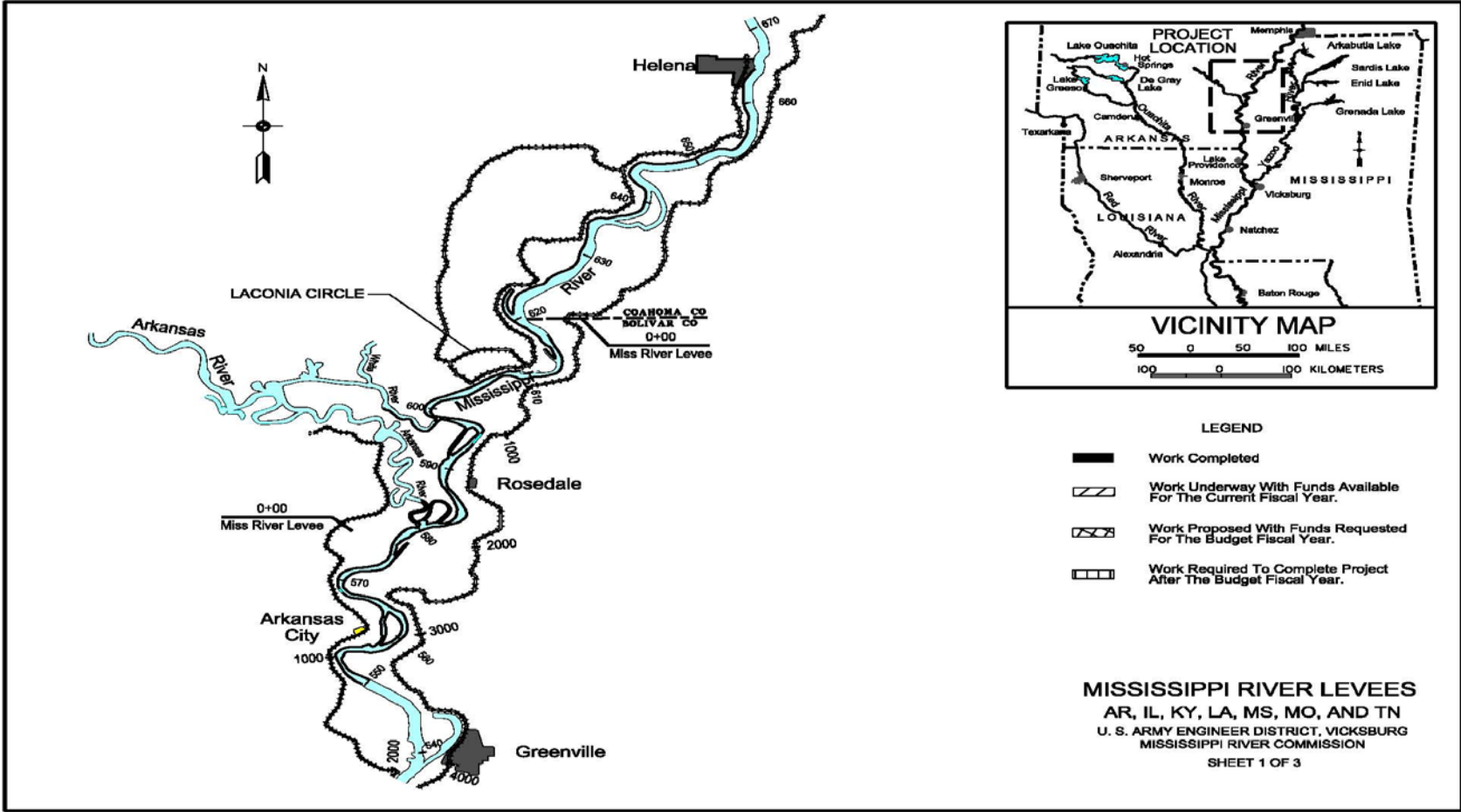
1/Decreases (\$31,124,000) are based on contract award items listed below:

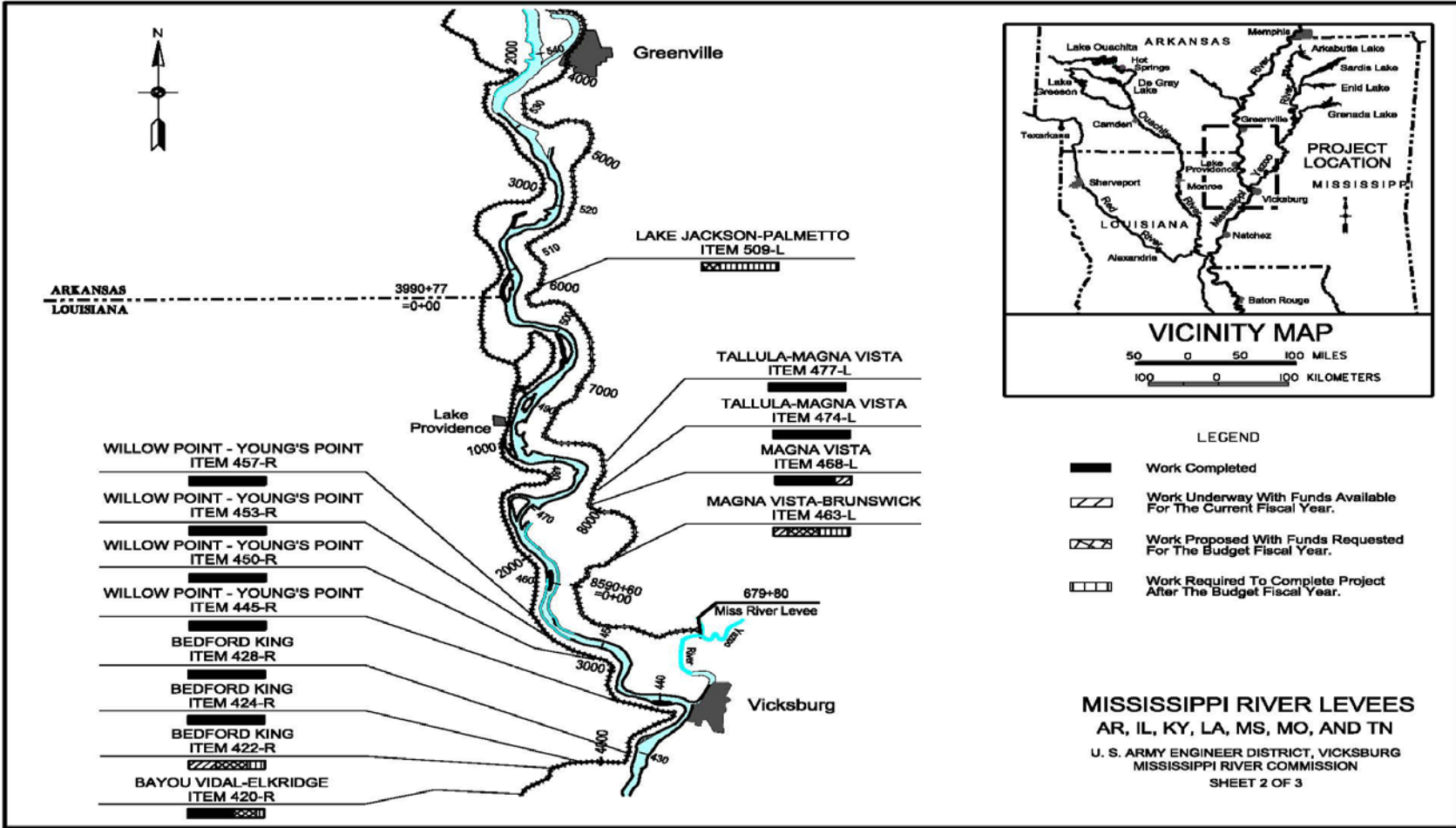
Barfield and Wilson, AR Relief Wells	(224,000)
Blue Lake, AR Outlet Ditches	204,000
Council Bend/Gammon, AR Relief Wells	(82,000)
Above Cairo, IL Parcel 1 Slurry Trench Item 2	4,431,000
Delta, MS Parcel 2 Relief Wells	(154,000)
Farrell/Baders, MS Relief Wells	45,000
Hillhouse, MS Seepage Control Parcel 1	(36,000)
Trotter/Delta, MS Parcel 1 Seepage Control	(71,000)
Tunica, MS	(81,000)
Above Cairo, IL Relief Wells Item 2a	(19,001,000)
Hickman, KY Sewer Pipe Removal	(183,000)
New Madrid, MO Gravity Outlet, Box Culvert, Levee Closure	(711,000)
New Items Identified	14,000,000
Work Not Required	(30,001,000)
Duplicated Item	(5,065,000)
Better Estimates	5,742,000
Contingencies	63,000

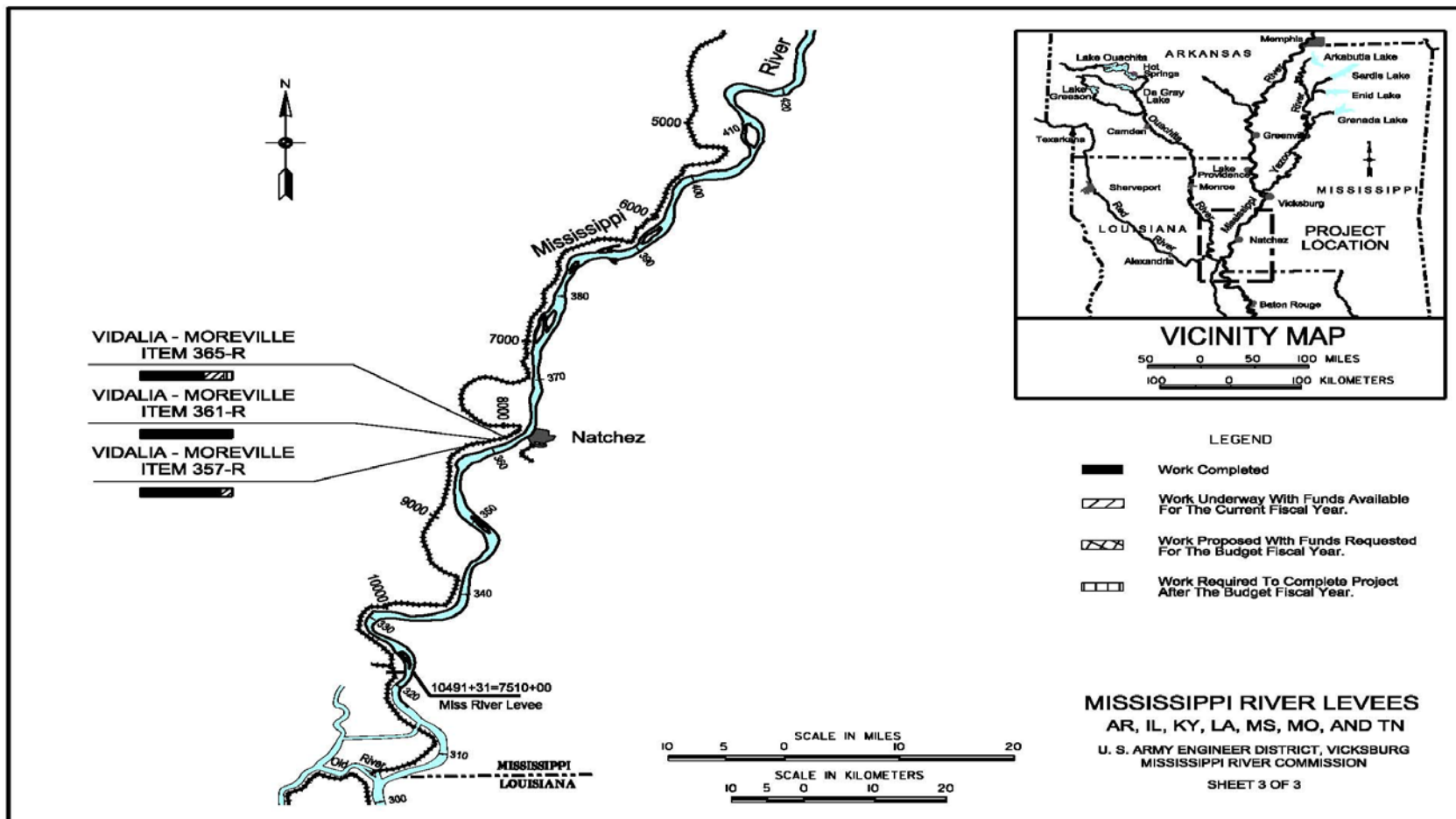
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976. A Supplemental Environmental Impact Statement for the project was completed and the Record of Decision was signed on 5 October 1998. The adequacy of the Supplemental Environmental Impact Statement was challenged but upheld by the United States District Court for the Eastern District of Louisiana. The Fifth Circuit Court of Appeals on October 23, 2000, affirmed the district court's grant of summary judgment to the Government.

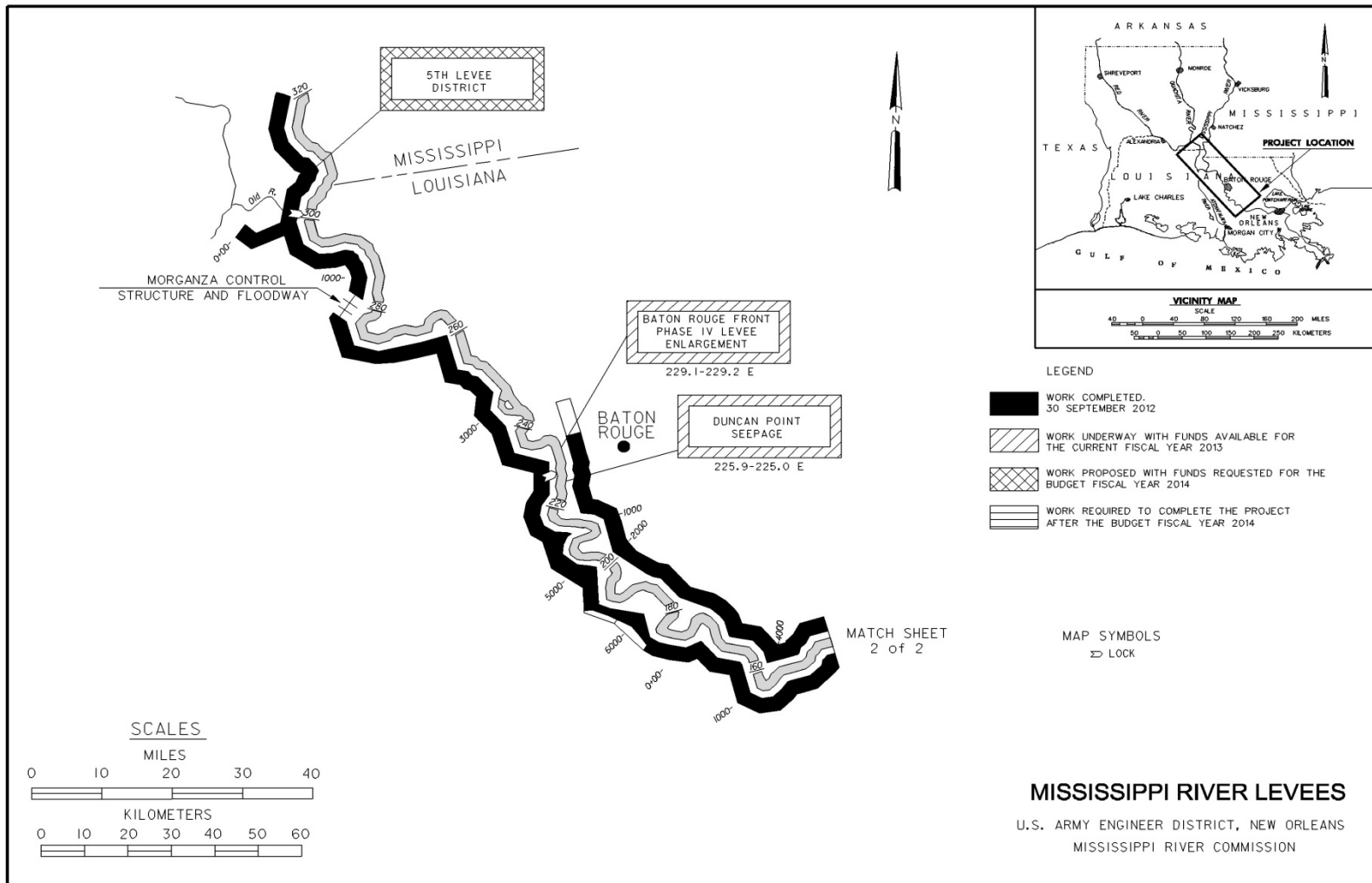
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.



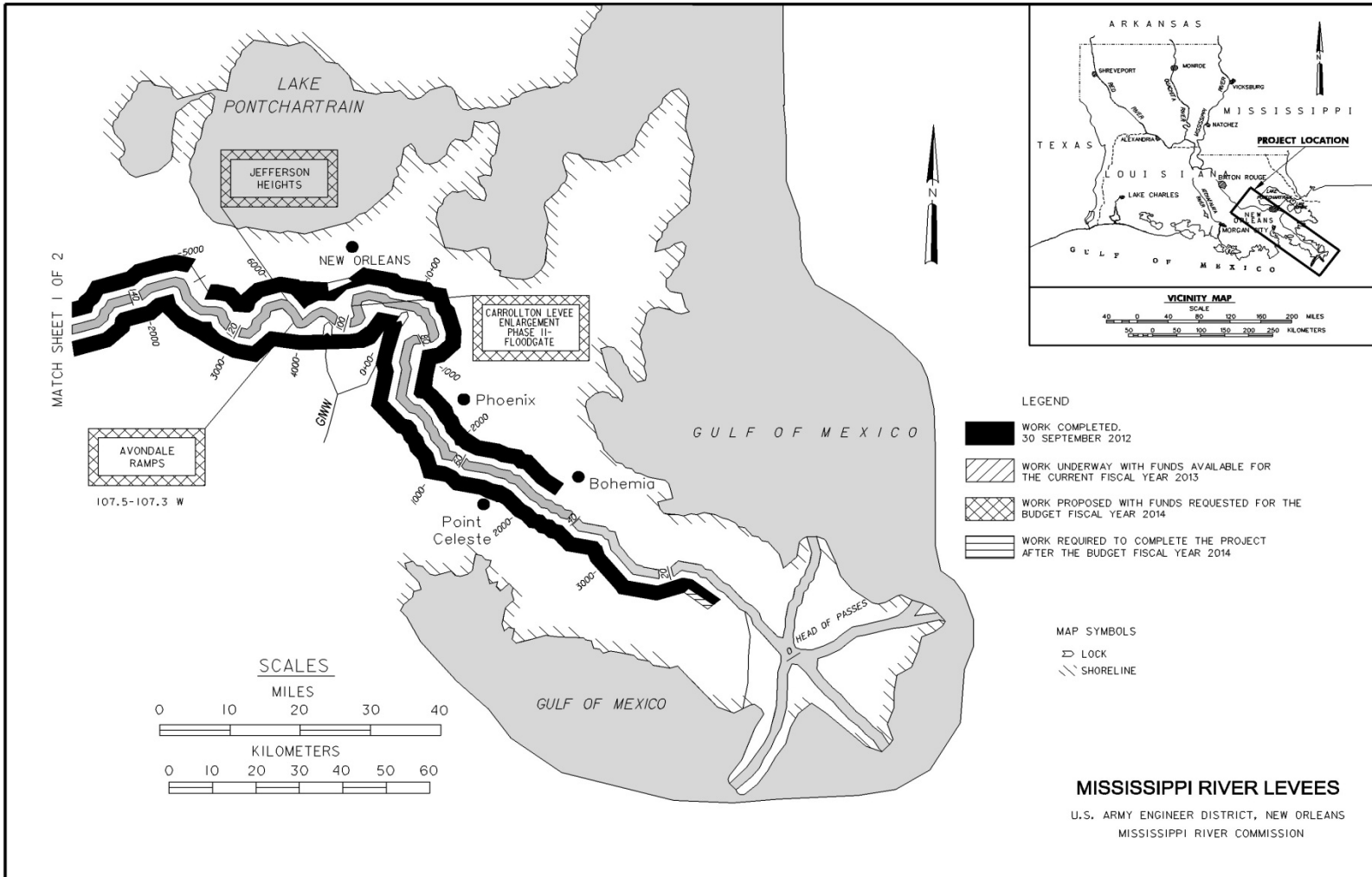








SHEET 1 OF 2



LOUISIANA

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Atchafalaya Basin, Louisiana (Continuing)

LOCATION: The project is located in south-central Louisiana below the latitude of Old River and west of and generally paralleling the Mississippi River. The Atchafalaya River flows through the middle of the basin.

DESCRIPTION: The plan of improvement consists of a leveed floodway about 15 miles wide and 110 miles long that extends generally from the latitude of Old River to the Gulf of Mexico. The upper half of the basin is divided by the leveed Atchafalaya River. The Morganza Floodway is to the east of the Atchafalaya River and has a capacity of 600,000 cubic feet per second, which is introduced into the floodway by a gated control structure. The West Atchafalaya Floodway, which is located to the west of the river, is placed into operation when the fuse plug sections are overtopped bringing flows from the river that will introduce 900,000 cubic feet per second into the lower basin. After passing through the floodways, the flood waters enter the Gulf of Mexico through the Lower Atchafalaya River at Morgan City and the Wax Lake Outlet channel constructed west of Patterson, Louisiana. The project is part of a system and all work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1934, 1936, 1938, 1941, 1946, 1950, 1954

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.28 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

INITIAL BENEFIT - COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT - COST RATIO: Benefits are from latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA

		ACCUM PCT OF EST FED COST	STATUS (January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$2,206,200,000		Entire Project	96 Physical	TBD
Estimated Non-Federal Cost	\$ 14,800,000				
Cash Contributions	\$ 2,500,000				
Other Costs	12,300,000				
Total Estimated Project Cost	\$2,221,000,000				
Allocations to 30 September 2010	\$1,067,123,000				
Allocation for FY 2011	5,090,000				
Allocation for FY 2012	6,471,000				
Conference Allowance for FY 2013	6,300,000	<u>2/</u>			
Allocations through FY 2013	1,084,984,000	<u>1/</u>			
Estimated Carry-In Funds	0	<u>3/</u> 49			
President's Budget Amount for FY 2014	3,500,000				
Programmed Balance to Complete after FY 2014	1,117,716,000	50			
Unprogrammed Balance to Complete after FY 2014	0				

1/ Includes ARRA funds of \$8,253,000 (\$11,063,000 in FY 09; (\$2,962,000); and \$152,000 in FY 12).

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 14 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

PHYSICAL DATA

Levees:

Average Height - 20 feet
Length - 449 miles

Relocations:

Roads - 15 miles
Railroads - 20 miles

Drainage Structures:

Pointe Coupee	2 gates, 10.5 by 15 feet
Melville	2 - 72-inch corrugated metal pipe with vertical lift gate
Darbonne	10-foot by 10-foot barrel with vertical lift gate
Bayou des Glaises	72-inch corrugated metal pipe with flap gate
Bayou Courtableau	2 weirs, 503 feet long
Brushy Bayou	5-foot by 6-foot barrel with vertical lift gate
Bayou Courtableau	5-barrel, each 10 feet by 15 feet with vertical lift gate
Wax Lake East	25 pipes, 5 feet in diameter with slide gates
Wax Lake West	15 pipes, 5 feet in diameter with slide gates

Lands and Damages:
289,212 acres

Pumping Stations:

Number - 15
Capacity - Minimum - 50 cubic feet per second
Maximum - 1,500 cubic feet per second
Average - 400 cubic feet per second

Bank Stabilization:

Length - 58 miles

Floodgates:

Charenton - Sector-gated, 45 feet wide
East Calumet - Sector-gated, 45 feet wide
West Calumet - Sector-gated, 45 feet wide

Channels:

Length: 147.1 miles

Locks:

Bayou Boeuf, 75 feet by 1,156 feet, earth chamber
Bayou Sorrel, 56 feet by 797 feet, earth chamber
Berwick, 45 feet by 300 feet, concrete chamber

Atchafalaya River Navigation:

New Channel-10.1 miles

Freshwater Control Structure (Planned):

Sherburne - dual 10-foot by 10-foot reinforced
concrete box culverts with gates
Henderson - dual 10-foot by 10-foot reinforced
concrete box culverts with gates

JUSTIFICATION: The MR&T Project is designed to safely convey a Project Design Flood (PDF) from Cairo, IL to the Gulf of Mexico via the main river channels, floodways, and backwater areas. At the latitude of the Old River Control Complex (ORCC), Louisiana, the PDF flows total 3,030,000 cfs. From the ORCC to the Morganza Floodway, the MR&T project will convey up to 2,100,000 cfs for the PDF in the Mississippi River. Below the Morganza Floodway, the MR&T Project will contain 1,500,000 cubic feet per second within the Mississippi River without threatening the integrity of the levees along its banks which protect densely populated areas, highly developed agricultural lands, and industries along the river until it reaches the Bonnet Carre Spillway (about 30 miles upstream of New Orleans). At Bonnet Carre, 250,000 cfs are diverted to Lake Pontchartrain for the PDF with the remaining flows passing via the Mississippi River to the Gulf of Mexico including passing the City of New Orleans. With respect to the Atchafalaya Floodway, the MR&T Project is designed to pass up to 1,500,000 cfs which includes the Red/Ouachita/Black watershed flows and diverted flows via the ORCC (620,000 cfs) and the Morganza Floodway (600,000 cfs) for the PDF. In order to prevent diverted waters from spreading over the rich and highly developed agricultural lands within the Atchafalaya Basin, these rivers and floodways have been leveed to confine the diverted flow.

This floodway system is, for all practical purposes, a part of the main river system, in as much as the integrity of the main river system depends upon its utilization.

Since this construction began, farms and industries have developed in the areas adjacent to the floodway assuming that they would receive protection. Therefore, overtopping or crevassing of the levees would cause far more damage than anticipated at the start of project construction. The main protection levees in the lower reaches are deficient because of consolidation of the soft underlying soils, especially those below the latitude of Krotz Springs, LA. Early construction of these levees to the approved grade is essential, not only for flood protection, but as a means of access for the movement of manpower and equipment to any spot threatened by floods.

The Atchafalaya Basin project is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of the Atchafalaya Basin derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$409.7 billion in 2012 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 11 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 180,000. The savings per ton is \$32.00.

The MR&T project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$15.6 billion in damages in 2012 prices.

Mississippi River Commission

New Orleans District

Atchafalaya Basin, LA

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2012 prices, damages without the projects would have been \$56.4 billion and damages prevented would have been \$53.3 billion.

The 2011 flood set a new flood of record based on a comparison of peak flows measured at representative locations in the lower Mississippi Valley versus previous flood records. In addition, this flood experienced greater stages than the 1927 flood, but since the levees did not crevasse or overtop flooding was reduced by 62 percent. Total damages with existing projects in operation were \$2.9 billion (2012 price levels). In addition, \$1.5 billion damages were incurred by federal flood protection works within the MR&T projects. Damages without projects would have been \$237.2 billion and total damages prevented by projects amounted to \$108.0 billion. Households numbering more than 1.4 Million were saved from impacts and no known deaths occurred.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

Annual Remaining Benefits	Amount @ 7%
Flood Control	\$ 415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$ 529,090,000

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Planning, Engineering and Design	573,000
Modifications to on-going construction	1,200,000
Total	\$1,773,000

Current year funds are being used as follows:

Lands and Damages	\$ 5,000
Surveys and Layouts	10,000
Initiate & complete construction – West Bayou Sale Gordy Phase B	3,800,000
Planning, Engineering and Design	1,485,000
Construction Management	1,000,000
Total	\$6,300,000

FISCAL YEAR 2014: The requested amount will be used for ongoing engineering and design; construction management cost; and economic evaluation of the MR&T main stem features. Funds will be applied as follows:

E&D, EDC, S&A	\$3,000,000
Economic evaluation of the MR&T main stem features	500,000
Total	\$3,500,000

NON-FEDERAL COST: In accordance with the Flood Control Act of 15 May 1928, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Bear the administrative costs for furnishing rights-of-way for levee and levee drainage construction; purchase maintenance equipment; and perform miscellaneous levee work.	\$ 1,110,000	0
Agree to accept lands turned over to them under the provision of Section 4 of the Flood Control Act of 15 May 1928, and as provided in the Flood Control Act of 18 August 1941.	0	0
Bear costs for and maintain all flood control works after their completion, except controlling and regulating spillway structures, including special levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to the levees.	0	\$3,700,000
For the Upper Point Coupee Loop Area, provide an interior drainage system and comply with the applicable provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, approved 2 January 1971, and comply with the provision of Section 221 of the Flood Control Act of 1970, PL 91-611.	11,190,000	0
The State of Louisiana, through the Department of Transportation and Development as the local sponsor, will provide a voluntary 25% cost share for the planning, design, and construction of the interim protection for floodproofing of riverfront businesses in Morgan City and Berwick.	2,500,000	0
Total Non-Federal Costs	\$14,800,000	\$3,700,000

Mississippi River Commission

New Orleans District

Atchafalaya Basin, LA

STATUS OF LOCAL COOPERATION: Necessary assurances for maintaining the project have been furnished by the Atchafalaya Basin Levee District; Red River, Atchafalaya and Bayou Boeuf Levee District; St. Mary Parish Government; Pointe Coupee Parish Police Jury; and the towns of Berwick and Morgan City, LA. These agencies are furnishing all requirements of local cooperation necessary for meeting present project schedules. Newly formed St. Mary Parish Levee District has expressed interest in serving as the local sponsor for portions of the system in St. Mary Parish.

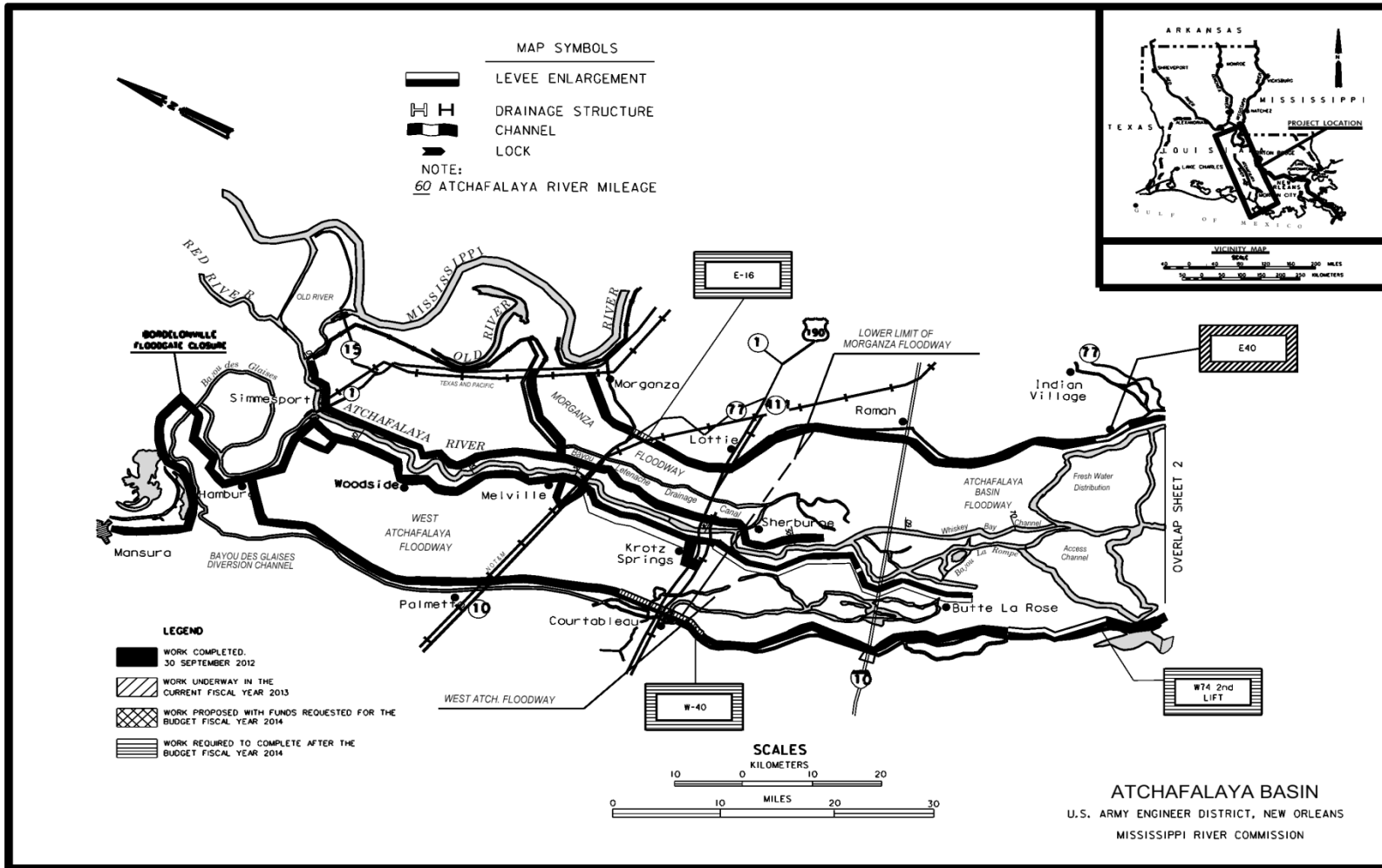
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,206,200,000 is an increase of \$217,800,000 from the latest fully funded estimate (\$1,988,400,000) presented to Congress (Budget Year 2013).

Item	Amount
Price Escalation on Construction Features	\$217,800,000
Total	\$217,800,000

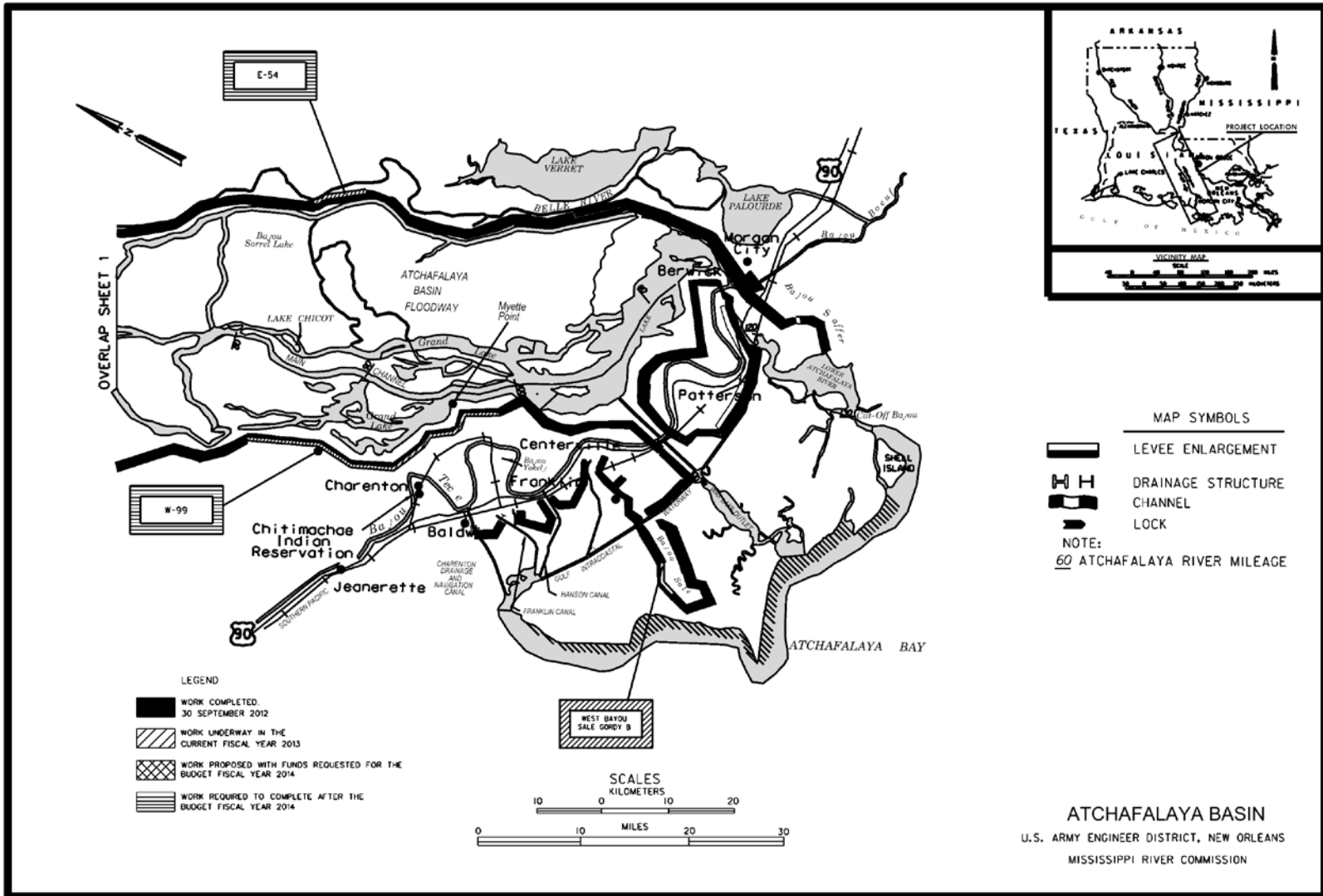
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982. The final Environmental Impact Statement for the Upper Pointe Coupee Loop Area was filed with the Council on Environment Quality on 11 June 1976.

OTHER INFORMATION: Funds to initiate construction were appropriated in 1928.

Bayou Sorrel Lock is a component of the Mississippi River and Tributaries (MR&T), Atchafalaya Basin, Louisiana Project. The lock provides navigation access, while maintaining a continuous line of protection against the MR&T project design flood flow. The project flood flow line for the Atchafalaya Basin was modified in 1986 to the current elevation of 28.7 feet National Geodetic Vertical Datum (NGVD). In order to maintain the level of flood protection provided by the Atchafalaya Basin, Louisiana Project, the lock must be modified or replaced. The need to modify Bayou Sorrel Lock presents an opportunity to address increasing navigation concerns at this lock. Planning, engineering, and design of the modification or replacement for flood reduction benefits were delayed until the optimum navigation plan could be studied. The feasibility study was completed in November 2003 and approved in March 2004. The flood control portion is fully Federally funded and justified under the Mississippi River and Tributaries project.



SHEET 1 OF 2



SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN - Construction

PROJECT: Atchafalaya Basin Floodway System, Louisiana (Continuing)

LOCATION: The project is located in south central Louisiana and encompasses approximately 595,000 acres in an area bounded on the north by south right-of-way line of the Union Pacific Railroad (just south of US Hwy 190 passing through Krotz Springs, LA); on the south by Morgan City; and on the east and west by the East and West Atchafalaya Basin Protection Levees.

DESCRIPTION: The plan of improvement consists of acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway for flood control purposes, environmental protection purposes, developmental control purposes, and public access; acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway, for recreation developmental purposes and construction of several campgrounds, boat launching ramps, visitor's center, other recreational facilities and initial construction of two pilot water management units, including construction of miscellaneous canal closures and water circulation improvements, and implementation of future units at the discretion of the Chief of Engineers. These project features will be implemented in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act, 1985; Water Resources Development Act, 1986; Energy and Water Development Appropriations Act, 1988; Energy and Water Development Appropriations Act, 1991; Energy and Water Development Appropriations Act, 1997; and Water Resources Development Act, 2000, and Water Resources Development Act of 2007.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.28 to 1 at 7 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

INITIAL BENEFIT-COST RATIO: This project is a feature of the Main Stem system that was authorized in Fiscal Year 1928. Initial funds for the acquisition of real estate interests for flood control, developmental control, environmental protection, and public access were provided in 1985. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA

		ACCUM PCT OF EST FED COST	STATUS	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$422,823,000		Land Acquisition	60	TBD
Estimated Non-Federal Cost	84,997,000		Management Units	7	TBD
Cash Contribution	\$81,530,000		Entire Project	34	TBD
Other Costs	\$3,467,000				
Total Estimated Project Cost	\$507,820,000				

PHYSICAL DATA

Allocations thru 30 September 2010	136,448,000				
Allocation for FY 2011	2,127,000				
Allocation for FY 2012	7,800,000	2/			
Conference Allowance for FY 2013	1,650,000	3/			
Allocation for FY 2013	1,650,000	5/			
Allocations through FY 2013	148,025,000	1/			
Estimated Carry-In Funds	0				
President's Budget for FY 2014	1,750,000	4/	35		
Programmed Balance to Complete after FY 2014	273,048,000		36		
Un-programmed Balance to Complete after FY 2014					

Lands and Damages: 388,000 Acres
Recreational Facilities

3 campgrounds – developed
7 campgrounds – primitive
15 2-lane boat launching ramps
1 Visitors Center
Trails

1/ Includes ARRA funds of \$3,451,000 (\$3,975,000 in FY 09; (\$67,000); in FY 11; and (\$457,000) in FY 12).

2/ Includes \$1,100,000 reprogrammed from the project.

3/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

4/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 14 from prior appropriations for use on this project effort is 0. This amount will be used to perform work on the project as follows: N/A.

5/ FY 13 priorities changed due to delay in acquiring private real estate for Buffalo Cove.

JUSTIFICATION: The Atchafalaya Basin Floodway System features result from a comprehensive study with a view to developing a plan for the enhancement, management, and preservation of the water quality and related land resources of the Atchafalaya River Basin, Louisiana, which would include provisions for reductions of siltation, improvement of water quality, and possible improvements of the area for commercial and sport fishing. The features of the Atchafalaya Basin Floodway System are compatible with the current flood control plan, and include real estate acquisition of lands, flowage easements, and developmental control easements in the floodway south of Krotz Springs, Louisiana, to ensure unhampered use of the floodway during major floods; and environmental protection easements to protect the basin's environmental resources. Provision of additional public access and several campgrounds, boat launching ramps, visitors' center, and other recreational facilities are also authorized. The water management units' feature involves making use of distinct and unique hydrologic units within the floodway to improve historical (where practical) overflow conditions and thereby enhance aquatic ecosystem productivity.

The Atchafalaya Basin Floodway System is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. The benefits of the Atchafalaya Basin Floodway System are derived from the way in which they operate together with all other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$409.7 billion in 2012 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 11 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 180,000. The savings per ton is \$32.00.

The MR&T project was authorized by the Flood Control Act of 1928 after the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$15.6 billion in damages in 2012 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2012 prices, damages without the projects would have been \$56.4 billion and damages prevented would have been \$53.3 billion.

The 2011 flood set a new flood of record based on a comparison of peak flows measured at representative locations in the lower Mississippi Valley versus previous flood records. In addition, this flood experienced greater stages than the 1927 flood, but since the levees did not crevasse or overtop flooding was reduced by 62 percent. Total damages with existing projects in operation were \$2.9 billion (2012 price levels). In addition, \$1.5 billion damages were incurred by federal flood protection works within the MR&T projects. Damages without projects would have been \$237.2 billion and total damages prevented by projects amounted to \$108.0 billion. Households numbering more than 1.4 Million were saved from impacts and no known deaths occurred.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual remaining benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount @ 7%
Flood Control	\$ 415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$ 529,090,000

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Real Estate	\$ 250,000
Buffalo Cove Construction	2,815,000
Buffalo Cove WMU (Design)	175,000
SEIS	200,000
PPA	200,000
ABFS Monitoring	50,000
ABFS Public Access	230,000
Total	\$3,920,000

The current amount is being applied as follows:

Real Estate – lands and damages	\$ 250,000
Buffalo Cove Construction	600,000
Buffalo Cove WMU (Design)	200,000
Henderson WMU (Design)	300,000
ABFS Monitoring	300,000
Total	\$1,650,000

FISCAL YEAR 2014: Funds will be used to continue construction of the Buffalo Cove management unit; pre-engineering and design for the Henderson management unit; continue acquisition for Buffalo Cove land requirement, and economic evaluation of the MR&T main stem features. The requested amount will be applied as follows:

Buffalo Cove Construction and Henderson Design	\$1,200,000
Comprehensive Easements Real Estate	50,000
Economic evaluation of the MR&T main stem features	500,000
Total	\$1,750,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Pay one half of the separable cost allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.	\$ 61,194,000	\$ 1,361,000
Provide lands, easements, right-of-way, and dredged material disposal areas for recreation.	3,467,000	0
Pay 25 percent of construction, operation, and maintenance of Water Management Units.	20,336,000	7,253,000
Total Non-Federal Costs	\$ 84,997,000	\$ 8,614,000

The non-Federal sponsor has agreed to voluntarily contribute 25 percent of construction costs for Water Management Units. Buffalo Cove Water Management Unit construction has been exempted from non-Federal sponsor cost sharing.

STATUS OF LOCAL COOPERATION: The Avoyelles Parish Police Jury is the non-Federal sponsor for the Simmesport Boat Ramp and the PPA was executed on 18 April 2001. The State of Louisiana has provided a letter of intent supporting the recreation feature of the project and agrees to its cost sharing requirements. The State designated the Department of Natural Resources to be the lead State agency to represent the State in the implementation of the project. Additional sponsors, St. Mary Parish, serves as local sponsor for Myette Point Boat Landing and the PPA was executed on 18 May 2004. The State of Louisiana, Department of Natural Resources, is also serving as the sponsor for the management units. The PPA for the Buffalo Cove management unit was executed on 16 May 2005.

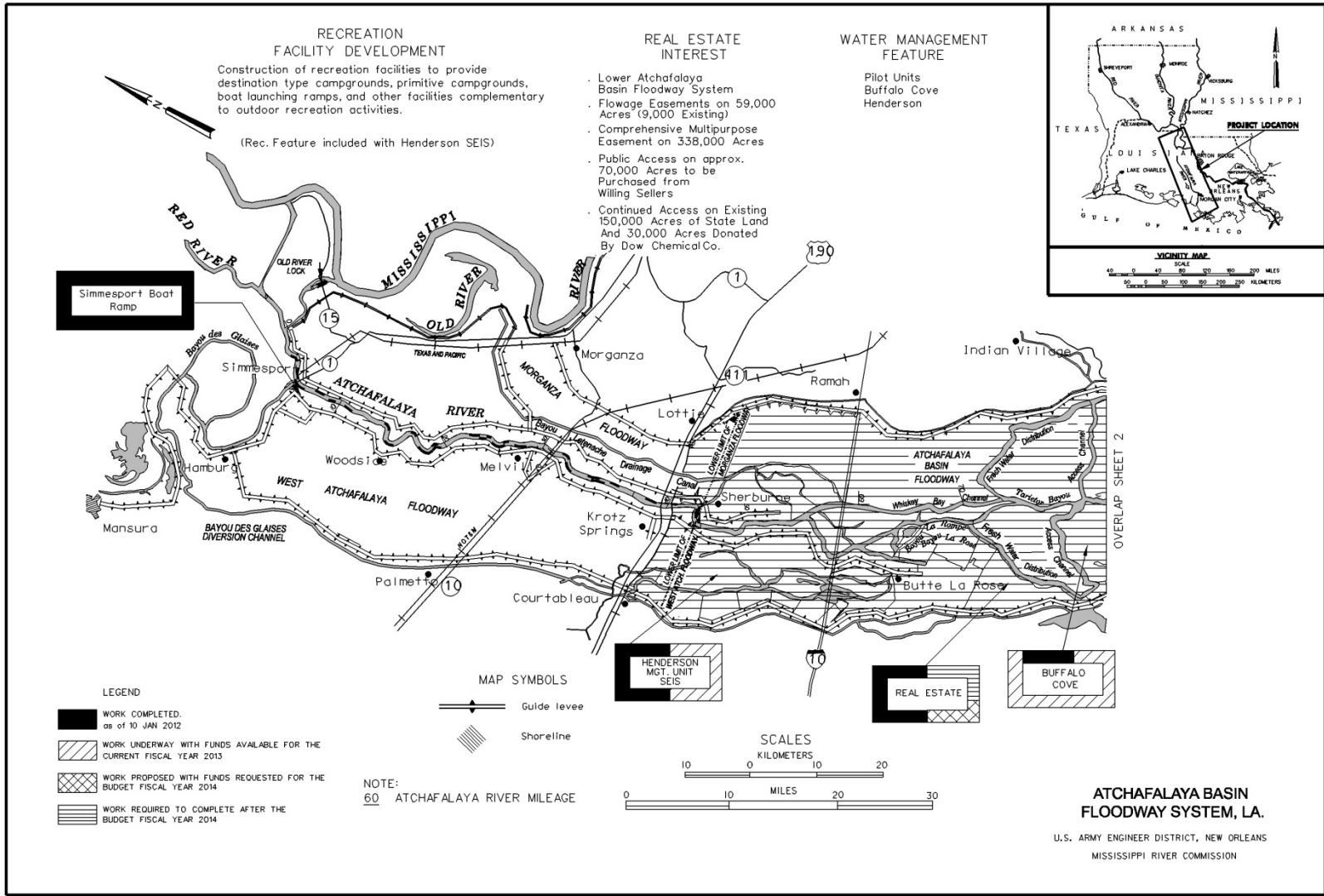
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$422,823,000 is an increase of \$14,124,000 from the latest estimate (\$408,699,000) presented to Congress (FY 2013) 1/

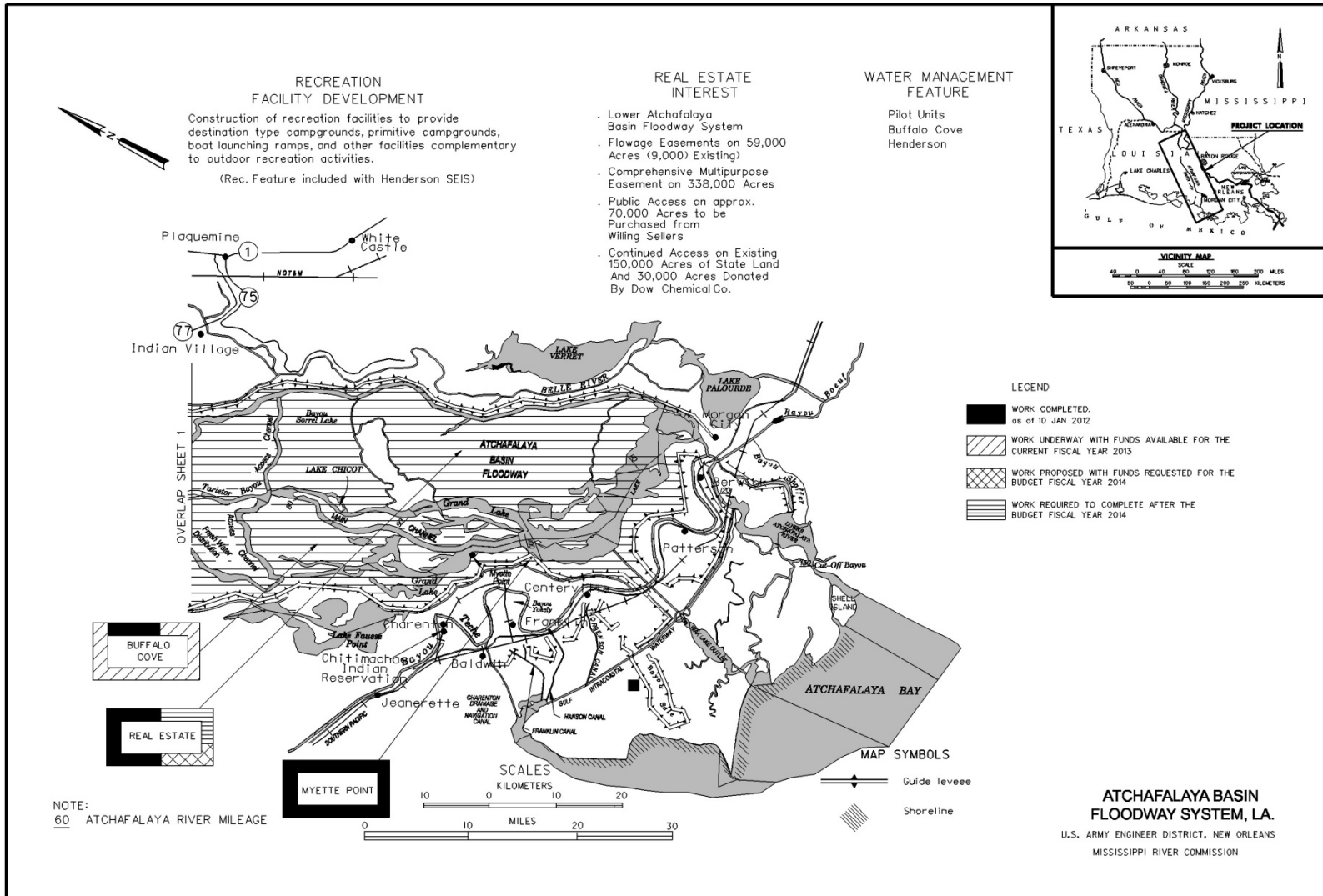
Item	Amount
Price Escalation on Construction Features	\$14,124,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982. A Supplemental Environmental Impact Statement (SEIS) for Henderson Lake Management Unit and Recreation Feature (combined) has been initiated in fiscal year 2008 with anticipated completion and approval in 2013. A Supplemental Environmental Impact Statement (SEIS) for Buffalo Cove, Flat Lake, Beau Bayou, Cocodrie Swamp has also been initiated with completion paralleling the 5 year monitoring program for Buffalo Cove.

OTHER INFORMATION: First Fiscal Year project funds were appropriated was 1985.

1/ The FY 2013 Justification Sheet incorrectly reflected an increase of \$41,125,000. The Federal project cost estimate of \$495,409,300 was inaccurately reflected as \$367,574,000. The net change was (\$86,710,300).





MR&T OPERATION AND MAINTENANCE

Key to Abbreviations:

N = Navigation

FRM = Flood Risk Management

RC = Recreation

H = Hydropower

EN = Environmental Stewardship

WS = Water Supply

ARKANSAS

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Channel Improvement, AR, IL, KY, LA, MS, MO, and TN

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1962, 1965, 1966, and 1970 authorized stabilization of the banks of the Mississippi River along with other improvements to provide an increase in the carrying capacity of the river and protection to lands in the delta against flooding in the Lower Mississippi River Basin.

LOCATION AND DESCRIPTION: The project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, a distance of approximately 966 miles. The plan of improvement consists of stabilizing the banks of the river in a desirable alignment to obtain the most efficient flow characteristics for it for flood risk reduction and navigation along the Mississippi River by means of revetments, dikes, foreshore protection, and improvement dredging.

CONFERENCE AMT. FOR FY 2013: T: \$56,001,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$72,846,000 O: \$4,132,000 T: \$76,978,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$32,676,000 – Funding provides for minimal critical dredging and dike maintenance of the Mississippi River which is critical for transportation of goods and provides access to numerous ports and recreation facilities. Funding needed to ensure that the authorized navigation channel is maintained on the Mississippi River shallow draft navigation channel during extended drought conditions. Timely maintenance will ensure stable maintenance cost and provide for channel stability and integrity.

FRM: \$44,302,000 – Funding provides for minimal critical hired labor activities associated with the revetment season including upper bank paving, and stone repairs contract. These funds will minimize the risk of project failure by maintaining a stable and reliable channel to reduce damages from flooding and prevent bank and levee failures.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: Despite record flows on the Mississippi River during the 2011 Flood, stages were kept well below those seen in previous events. This is due to the continued successful performance of Channel Improvements constructed as part of the Mississippi and Tributaries project. The 5 year average commercial tonnage is 160,936. Maintenance funds will minimize the risk of project failure by maintaining a stable and reliable channel to insure the integrity of the Mainline Mississippi River levee, navigation safety, and channel alignment. Maintenance of dike structures will greatly reduce required channel dredging, buy down risk of catastrophic failures, and restore a safe and navigable channel. The MR&T account is a multi-purpose program/project that provides a 9' by 300' navigation channel from Cairo IL to Baton Rouge LA. This reach of the river was significantly impacted by low water during drought conditions during the summer and fall of 2012. In order for barge traffic on the Middle Mississippi

Mississippi River Commission

Memphis, Vicksburg and
New Orleans Districts

Channel Improvement, AR,
IL, KY, LA, MS, MO, and TN

MR&T O&M JUSTIFICATION SHEET

(continued)

River to reach deep drafts ports, it must transit this reach. Dredging the O&M funded main Mississippi River shallow draft navigation channel without dredging the MR&T portion would be of little benefit as most navigation, 90% plus, also navigates that reach of the lower Mississippi River.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Helena Harbor, Phillips County, AR

AUTHORIZATION: River and Harbor Act of 1960, Sec. 107, as amended

LOCATION AND DESCRIPTION: This harbor is located on the Mississippi River (mile 663.0) at Helena in Phillips County, Arkansas. This is a slack-water harbor used primarily for the export of agricultural goods. The project provides for maintenance of the navigation channel for year-round access to barge transportation for the existing facilities. The approved channel dimensions are 9 feet deep by 450 feet wide by 3,200 feet long. The local interest is the city of Helena, AR.

CONFERENCE AMT. FOR FY 2013: \$ 74,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$11,000 O: \$22,000 T: \$33,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$26,000 – Funding provides for performance of minimal critical surveys. This information can be provided to the local interests to be used in the determination of the navigation capacity of the harbor.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 1,797.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Inspection of Completed Works, AR, IL, KY, LA, MS, MO, and TN

AUTHORIZATION: RHA 1899 (Sec 14 & 16). FCA 1928 and amendments

LOCATION AND DESCRIPTION: The Inspection of Completed Works (ICW) includes inspection and monitoring of the MR&T flood control system to assure its capability to perform as designed and constructed. The MR&T projects consist of approximately 3,486 miles of levees and floodwalls (including tributary levees), flood risk reduction structures, floodways, drainage structures, pumping stations, flood risk reduction channels, reservoirs, dikes, and revetments. Most of the flood risk reduction features referenced above are federally constructed, but are operated and maintained by state levee districts or local governmental agencies. The ICW program includes responsibility for inspecting all of the flood risk reduction features to ensure appropriate maintenance is being performed.

CONFERENCE AMT. FOR FY 2013: T: \$1,918,000 2/

BUDGETED AMOUNT FOR FY 2014: O: \$1,937,000 T: \$1,937,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$1,937,000 – Funding provides for minimal critical inspections and monitoring of the MR&T flood control system, flood control permitting, and levee certification.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: The ICW program assures the MR&T system is being properly maintained to provide the authorized protection. Since the initiation of the MR&T project in 1928, the nation has invested a total of \$14 billion, with \$612 billion in cumulative damages prevented. This amounts to a 44 to 1 return for every dollar invested.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Inspection of Completed Works, AR,
IL, KY, LA, MS, MO, and TN

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Arkansas River, North Bank, AR

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1946, and 1965.

LOCATION AND DESCRIPTION: The flood control project is located in southeast Arkansas.

CONFERENCE AMT. AMOUNT FOR FY 2013: \$287,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$287,000 O: \$0 T: \$287,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$287,000 - provides for minimal critical operation and maintenance of the project including levee slide repairs. This project has prevented over \$7.7M in flood damage since project completion in 1940.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Arkansas River, South Bank, AR

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1946, and 1965.

LOCATION AND DESCRIPTION: The flood control project is located in southeast Arkansas.

CONFERENCE AMT. FOR FY 2013: \$193,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$150,000 O: \$43,000 T: \$193,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$193,000 - provides for minimal critical operation and maintenance of the project including levee slide repairs and data collection. In conjunction with west bank Mississippi River Levees, this system provides protection to approximately 5300 sq miles in southeast Arkansas and northeast Louisiana.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Mapping, AR, IL, KY, LA, MS, MO, and TN

AUTHORIZATION: The Flood Control Act approved 15 May 1928 and amendments provide for the preparation of topographic maps of the alluvial valley in the furtherance of the control of floods on the Mississippi River and tributaries.

LOCATION AND DESCRIPTION: Provides for up-to-date maps that will be used in the control of floods on the Mississippi River and tributaries.

CONFERENCE AMT. FOR FY 2013: T: \$1,063,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,063,000 T: \$1,063,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$1,063,000 – Funding provides for in-house hired labor for the annual critical maintenance of existing/new inventory and the collection of funds for the sales of maps, publications, historical photos, aerial photography, and other material on rivers and harbors, and flood control infrastructure on the Mississippi River and tributaries. The 1:62,500 quadrangle maps are currently being converted from the original hard copy format to a digital CADD format. The digital format will allow the maps to be used in the CADD environment for a multitude of uses including GIS applications.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Provides for up-to-date maps that will be used in the control of floods on the Mississippi River and Tributaries.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary Authorization Act of 1971, PL 92-222, WRDA 92, and WRDA 00

LOCATION AND DESCRIPTION: The Mississippi River Levee system on the west bank extends from Allenville, MO, southward to Venice, LA, and on the east bank from Hickman, KY, to opposite Venice, LA, except where interrupted by hills and tributary streams. The Mississippi River Levee System provides flood risk reduction to over 23 thousand square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to highly developed agricultural areas, the levees afford protection to urban areas and many industries. The project provides for the maintenance of authorized facilities for the protection against headwater floods of the Mississippi River by means of levees, berms, culverts, outlet structures and floodwalls. Major maintenance of the authorized features of the Mississippi River Levees Project is 100% Federally funded. Local interests are responsible for providing minor maintenance and rights-of-way.

CONFERENCE AMT. FOR FY 2013: T: \$8,452,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,563,000 O: \$1,916,000 T: \$8,479,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$8,477,000 – Provides funding for minimal critical operation and maintenance of levees, levee slide repairs.

RC: N/A.

H: N/A.

EN: \$2,000 – Provides funding for mitigation of construction losses as a result of an environmental analysis and Section 7 consultation with Fish & Wildlife Service, pump station operation, flood fights, water analysis data collection, water control, aerial video, aerial brush kill, cultural resource investigations and environmental surveys, and periodic inspections.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts

Mississippi River Levees, AR
IL, KY, LA, MS, MO, and TN

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: St. Francis Basin, AR and MO

AUTHORIZATION: Flood Control Act, 15 May 1928, as amended by the Acts of 15 June 1936, 18 August 1941, 24 July 1946, 17 May 1950, 27 October 1965 and 13 August 1968. Local cooperation requirements were modified by the Flood Control Act of 24 July 1946, and limited local responsibility to ordinary maintenance as defined by Section 3 of the Flood Control Act of 15 May 1928.

LOCATION AND DESCRIPTION: The project extends from the hills southwest of Cape Girardeau, Missouri, to the confluence of the St. Francis and Mississippi Rivers – approximately 10 miles north of Helena, Arkansas. The project provides for a certain level of Federal maintenance of authorized structures to provide the authorized level of flood protection. Structures include levees, channels and two pumping stations.

CONFERENCE AMT. FOR FY 2013: T: \$ 5,900,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,900,000 O: \$3,000,000 T: \$5,900,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A.

FRM: \$5,900,000 – Funding provides for minimal critical activities such as the administration of previously awarded maintenance contracts, operation and maintenance of pump stations, flood fight activities, aerial brush kill along channels, periodic inspections, cultural resource investigations, environmental surveys and channel surveys at various locations in Arkansas and Missouri. These funds will minimize the risk of project failure by repairing damages from previous flood events and operating and maintaining the structures to provide the authorized level of protection.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: The operation and maintenance of this project assures the project provides flood risk reduction benefits to an area of approximately 14,000,000 acres of agricultural lands including numerous small towns, several major railroads, highways, and utilities, located in Missouri and Arkansas. It is estimated that the recurrence of the 1937 flood, under present conditions of development in the floodplain, would cause damages of over \$111,426,000 (2012 price levels) if the flood occurred during the crop growing season, without this project.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Tensas Basin, Boeuf-Tensas River, AR and LA

AUTHORIZATION: Flood Control Acts of 1944, 1946, 1950, 1958, 1962, 1965, 1968, and WRDA of 1986.

LOCATION AND DESCRIPTION: The flood control project is located in central and northeast Louisiana and southeast Arkansas and includes the Lake Chicot pumping plant.

CONFERENCE AMT. FOR FY 2013: \$1,839,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,839,000 T: \$1,839,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,839,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. This project has prevented over \$2.0M in flood damages since construction and allows adequate drainage for 5300 square miles in southeast Arkansas and northeast Louisiana.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: White River Backwater, AR

AUTHORIZATION: Flood Control Act of 15 May 1928, as amended. Local cooperation requirements, as modified by the Flood Control Act of 30 October 1951, were limited to ordinary maintenance as defined by Section 3 of the Flood Control Act of 15 May 1928.

LOCATION AND DESCRIPTION: The project is located approximately 20 miles south of Helena, near Elaine, AR, in Phillips and Desha Counties. It consists of 40.2 miles of levee, a pumping station, outlet structures, and culverts. The White River Backwater levee, together with the Mississippi River Levee between Old Town and Laconia Circle, protects the enclosed area against all but very large floods. The combined levee system reduces extreme crests on the White River by admitting drainage into the enclosed area thereby restoring the White River Backwater Pool.

CONFERENCE AMT. FOR FY 2013: T: \$ 1,142,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$550,000 O: \$592,000 T: \$1,142,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A.

FRM: \$1,142,000 – Funding provides for hired labor minimal critical activities associated with administration of previously awarded maintenance contracts, pump station operation, water data collection, air quality permits, periodic inspections, levee certification and levee slide repairs. These funds will minimize the risk of project failure by reducing damages from flooding and providing the authorized level of flood risk management.

REC: N/A.

HYD: N/A.

ES: N/A.

WS: N/A.

OTHER INFORMATION: This project is a feature of the Mississippi River and Tributaries system, which has brought an unprecedented degree of flood protection to the four million people living in the 35,000-square-mile project area within the lower Mississippi Valley.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

LOUISIANA

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Atchafalaya Basin, LA

AUTHORIZATION: Authorized by Public Law. 780, 83rd Congress approved 3 September 1954, to provide for control of flows from the Mississippi River to the Atchafalaya River and Basin by mechanically operated control structures on the right bank of the Mississippi River. This is a modification of Flood Control Act of 15 May 1928.

LOCATION AND DESCRIPTION: The project is located in south-central Louisiana below the latitude of Old River and west of and generally paralleling the Mississippi River. The Atchafalaya River flows through the middle of the basin. The plan of improvement consists of a leveed floodway about 15 miles wide and 110 miles long that extends generally from the latitude of Old River to the Gulf of Mexico.

CONFERENCE AMT. FOR FY 2013: \$9,747,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,539,000 O: \$6,208,000 T: \$9,747,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,741,000 - Provides funding for minimal critical operations and routine maintenance of Bayou Sorrel, Bayou Bouef and Berwick lock, surveys to determine the channel conditions, engineering designs for dredging and lock repairs, environmental compliance, real estate management, instrumentations and periodic inspections of locks.

FRM: \$2,006,000 – Provides funding for minimal critical operations and routine maintenance of flood control structures – Morganza FCS, Pointe Coupe PS & DS, Bayou Courtableau FG, Charenton DS and 13 St Mary Parish pumping stations, water control management, environmental compliance, real estate management, engineering designs for levee repairs, instrumentations and periodic Inspections for flood control structures, bridges and pumping stations.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Basin features are designed to protect agricultural areas and towns from normal high waters of the Mississippi and Red River backwater area, floods on the Atchafalaya River, and excess floodwater of the Mississippi-Red River. Dredging in Berwick Harbor and Tidewater Point are essential for providing access to waterfront businesses in Morgan City and safe passage between GIWW main stem & Alternate Route. Dredging Three Rivers is essential for navigation passing from the Mississippi River into the Atchafalaya River through Old River Lock.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Atchafalaya Basin Floodway System, LA

AUTHORIZATION: Supplemental Appropriations Act, 1985; Water Resources Development Act, 1986; Energy and Water Development Appropriations Act, 1988; Energy and Water Development Appropriations Act, 1991; Energy and Water Development Appropriations Act, 1997; and Water Resources Development Act, 2000, and Water Resources Development Act of 2007

LOCATION AND DESCRIPTION: The project is located in south-central Louisiana and encompasses approximately 595,000 acres in an area bounded on the north by south right-of-way line of the Union Pacific Railroad (just south of US Hwy 190 passing through Krotz Springs, LA); on the south by Morgan City; and on the east and west by the East and West Atchafalaya Basin Protection Levees. Manage, operate and protect 50,000 acres of project lands and 200,000 acres of easement lands.

CONFERENCE AMT. FOR FY 2013: T: \$1,738,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$197,000 O: \$1,324,000 T: \$1,521,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014.

N: N/A

FRM: \$197,000 —Provides funding for minimal critical maintenance to inspect basin protection levees and easements within the basin.

RC: \$701,000 - Provides funding for minimal critical operation of recreation features and recreation access coordination responsibilities at the minimal initial Service budget level of support.

H: N/A

EN: \$623,000 - Provides funding for operation and management of natural resources of project and easement lands.

WS: N/A

OTHER INFORMATION: This project is a government owned portion of the floodway that provides safe passage of floodwaters through the Atchafalaya Basin. Recreation and Environmental Stewardship activities are the main part of the project, when the floodway is not open for floodwaters. Park rangers ensure public safety through water safety patrols, information kiosks and specific recreation promotion "Step Out Side" days. Hunting and fishing seasons are coordinated with the state to allow for safe recreational and commercial use by the public.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Baton Rouge Harbor, Devils Swamp, LA

AUTHORIZATION: Authorized by River and Harbor Act of 24 July 1946. Transferred to Flood Control, MR&T, under Flood Control Act of June 1948.

LOCATION AND DESCRIPTION: The project is located in northern portion of East Baton Rouge Parish, Louisiana, on the left descending bank of the Mississippi River. The authorized barge channel is 2.5 miles long, 12 feet deep and 300 feet wide.

CONFERENCE AMT FOR FY 2013: \$60,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$69,000 T: \$69,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$69,000 – Provides funding for surveys to determine channel conditions, engineering designs, P&S, cost estimate, environmental compliance and real estate management for minimal critical maintenance dredging operations.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The purpose of the channel is to provide an industrial expansion area for the Port of Baton Rouge. Without annual dredging, full dimensions will be lost and channel availability will be reduced below the acceptable performance measure goal of 90% availability.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Bayou Cocodrie and Tributaries, LA

AUTHORIZATION: Authorized by Section 3 of the Flood Control Act of 1941 and Section 87 of the Water Resources Development Act of 1974.

LOCATION AND DESCRIPTION: The project is located in central Louisiana, in Rapides, Avoyelles, Evangeline and St. Landry parishes and provides for flood relief to the area tributary to lower Bayou Courtableau.

CONFERENCE AMT. FOR FY 2013: T: \$ 46,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$48,000 T: \$48,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$48,000 - Minimal Critical - Provides funding for hired labor staff to collect, manage, store and disseminate data from water level gages in support of reducing flood heights and improving drainage.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Project maintains flood risk reduction in central Louisiana. Gauges are maintained to track flow stages.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Bonnet Carre, LA

AUTHORIZATION: Flood Control Act of 15 May 1928 (PL 70-391), as amended.

LOCATION AND DESCRIPTION: The Bonnet Carre' Spillway is the southernmost floodway in the MR&T system. Located in St. Charles Parish, Louisiana, the spillway furnishes protection for the city of New Orleans and other communities about 26 miles downstream.

CONFERENCE AMT. FOR FY 2013: \$2,195,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$558,000 O: \$1,630,000 T: \$2,188,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$1,565,000 - Provides funding for minimal critical operating expenses (grass cutting, floodway clearing, building, equipment and road maintenance; Real Estate activities such as maintenance and review of permits, outgrants, existing rights-of way).

RC: \$443,000 - Provides funding to accommodate visitation (ranger patrols and maintenance of visitor use areas such as shelters, boat ramps, dog training areas, ATV trails, fishing/crawfishing areas).

H: N/A

EN: \$185,000- Provides funding for management and maintenance of natural resources within the 7,623 acre project area.

WS: N/A

OTHER INFORMATION: The Bonnet Carre Spillway is an invaluable part of the flood protection system for the New Orleans metropolitan area. It has been operated 10 times since 1937, preventing billions of dollars worth in damage from Mississippi River floods. Without it the New Orleans metro area would likely have experienced severe flooding on several occasions. Without the spillway, the Mississippi River levees in the New Orleans area would have to be built larger to obtain similar protection, also possibly with a lower safety factor than using the spillway.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Red River, South Bank Levees, LA

AUTHORIZATION: Flood Control Act of 1928, (Public Law 391), 70th Congress

LOCATION AND DESCRIPTION: The levee system extends from Red River mile 67 at Moncla, LA, in Avoyelles Parish to mile 126 at Hot Wells, LA, in Rapides Parish.

CONFERENCE AMT. FOR FY 2013: \$368,000 2/

BUDGETED AMOUNT FOR FY 2014 M: \$285,000 O: \$171,000 T: \$456,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$456,000 - provides for minimal critical operation and maintenance of the project including levee slide repair. This project provides protection to 1739 square miles of urban, agricultural, and wooded lands from headwater flooding from the Red and Black Rivers and backwater flooding from the Mississippi River.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Mississippi Delta Region, LA

AUTHORIZATION: Flood Control Act of 1965, and Water Resources Development Acts of 1974, 1986 and 1996.

LOCATION AND DESCRIPTION: The Mississippi Delta Region (MDR) Project is located in the lower Mississippi River delta region in Plaquemines and St. Charles Parishes, LA. and includes the Caernarvon and Davis Pond Freshwater Diversions. The Caernarvon structure is located in Plaquemines Parish on the east bank of the Mississippi River in the vicinity of Caernarvon, LA. The Davis Pond structure is located in St. Charles Parish on the west bank just downstream of Luling, LA. Located in coastal Louisiana, these structures divert freshwater, nutrients, and sediments, from the Mississippi River to bays and marshes of Breton Sound and Barataria Basins, respectively, for fish and wildlife enhancement. The project restores ecological conditions by controlling salinity and supplementing nutrients and sediments.

CONFERENCE AMT. FOR FY 2013: T: \$472,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$472,000 T: \$472,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$472,000 - Minimal Critical - Provides funding for operating and maintaining the Caernarvon Freshwater Diversion Structure and the Davis Pond Freshwater Diversion Structure. The Caernarvon structure is operated by Plaquemines Parish and the Davis Pond structure is operated by St. Charles Parish, both under contract with the local sponsor, Louisiana Office of Coastal Protection and Restoration (LAOCPR). Funding for project operation and maintenance is cost-shared at 75% Federal/25% State.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The current funding allocation is insufficient to meet the Corps' cost-share responsibility for the project. Beyond the ecological and economic benefits that the MDR Project provides, the project diversions restore connectivity between the Mississippi River and its estuaries, for increased coastal sustainability. The restored coastal areas enhance wildlife and fisheries productivity.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Old River, LA

AUTHORIZATION: Authorized by Public Law. 780, 83rd Congress approved 3 September 1954, to provide for control of flows from the Mississippi River to the Atchafalaya River and Basin by mechanically operated control structures on the right bank of the Mississippi River. This is a modification of Flood Control Act of 15 May 1928.

LOCATION AND DESCRIPTION: The project is located adjacent to Mississippi River, 85 miles above Baton Rouge, LA.

CONFERENCE AMT. FOR FY 2013: \$8,050,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 3,901,000 O: \$ 4,217,000 T: \$8,118,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: \$ 1,747,000 - Provides funding for minimal critical operation and routine maintenance of Old River Lock; reconnaissance surveys performed in the forebay and tailbay channel to assure that the channels are navigable; real estate management; instrumentation and data gathering and evaluation; dredge forebay and tailbay channel to assure the channels are navigable(\$1,000,000); refurbish mooring bits (\$400,000); replace concrete drainage culvert (\$200,000); and complete inspection reports of the Old River Lock & Bridge.

FRM: \$ 6,063,000 – Provides funding for minimal critical operation and maintenance resources required to support hired labor forces that maintain the integrity of the existing structures and facilities; instrumentation data gathering and evaluation; completion of inspection reports; real estate management; collect, manage store, disseminate, and analyze water level gages; and perform underwater inspection of the Low Sill and Auxiliary Structures' stilling basins; replace the crane cables on the Auxiliary, Low Sill, and Overbank Structures' Cranes; and install a pile cluster at Knox Landing.

RC: \$ 168,000 -- Operations for Recreation Function.

H: N/A

EN: \$ 140,000 - Management of Special Status Species and Natural Resources.

WS: N/A

OTHER INFORMATION: The project's function is to maintain a stable relationship between the Mississippi, Red and Atchafalaya Rivers. The Control Structures maintain the 70/30 flow diversions between the Mississippi, Red and Atchafalaya Rivers. Old River Lock provides the northern most navigation channel connecting the Mississippi, Red and Atchafalaya and Black Rivers. This project prevents the Mississippi River from changing its course to that of the Atchafalaya River.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

New Orleans District

Old River, LA

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Tensas Basin, Red River Backwater Area, LA

AUTHORIZATION: Flood Control Acts of 1941, 1944, 1946, 1950, 1958, 1962, 1965, 1968, and WRDA of 1986.

LOCATION AND DESCRIPTION: The flood control project is located in central and northeast Louisiana. The lower basin features include levees, drainage structures and Tensas-Cocodrie pumping plant.

CONFERENCE AMT. FOR FY 2013: \$2,414,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,414,000 T: \$2,414,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,414,000 - provides for minimal critical operation and maintenance of the project including Tensas Cocodrie Pumping Plant, levee slide repair, inspections, data collection, analysis and real estate management. This project prevented approximately 90M in flood damages since construction. It provides protection to the Tensas-Cocodrie area without jeopardizing the safety and integrity of the main line Mississippi River levees.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

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MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Greenville Harbor, MS

AUTHORIZATION: FCA 1928, as amended by the FCAs 1946, 1954, and WRDA 1986

LOCATION AND DESCRIPTION: The Greenville Harbor, located at Greenville, MS, provides access to the Mississippi River by way of a 250-foot-wide by 9-foot-deep channel. The harbor is located in an old bendway of the Mississippi River on Lake Ferguson, just southwest of the city of Greenville. The harbor and turning basin are 500 feet wide and 10,000 feet long, with a depth of 9 feet at the lowest river stages. The project's purpose is to provide local businesses, industries and vessels navigating the Mississippi River access to the harbor facilities at Greenville.

CONFERENCE AMT. FOR FY 2013: \$23,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$20,000 O: \$4,000 T: \$24,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$24,000 – provides for necessary surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: In 2010, 2,114,517 tons were shipped through Greenville Harbor; an increase of over 600,000 tons from the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Vicksburg Harbor, MS

AUTHORIZATION: FCA 1928, as amended by the FCAs 1946, 1954, and WRDA 1986.

LOCATION AND DESCRIPTION: The Vicksburg Harbor is located in west-central Mississippi at Vicksburg, MS, with access to the Mississippi River by way of the Yazoo River Diversion Canal. The harbor channel is 500 feet wide and 12,000 feet long with a 500-foot-wide, 15,000-foot-long channel on the Yazoo River Diversion Canal from the Mississippi River to the harbor entrance. A minimum depth of 9 feet at the lowest Mississippi River stage is maintained. The project's purpose is to provide local businesses, industries and vessels navigating the Mississippi River access to the harbor facilities at Vicksburg.

CONFERENCE AMT. FOR FY 2013: \$41,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$38,000 O: \$4,000 T: \$42,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$42,000 – provides for necessary surveys in the event maintenance dredging is required to maintain authorized channel dimensions, ensuring the harbor is open during low water periods.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: In 2010, 3,350,189 tons were shipped through Vicksburg Harbor; an increase of nearly 35,000 tons from the previous year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Arkabutla Lake, MS

AUTHORIZATION: Flood Control Acts of 1928, (Sec 3); 1936, (Sec 4); 1937, (Sec 6); 1938, (Sec 2); 1941, (Sec 3); 1944, (Sec 10); and 1946 (Sec 10).

LOCATION AND DESCRIPTION: Arkabutla Lake is located in Tate and DeSoto Counties in north Mississippi, approximately 4 miles north of Arkabutla, Mississippi, and 30 miles south of Memphis, Tennessee. Arkabutla Lake is on the Coldwater River and stores floodwaters to provide for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major role in the region.

CONFERENCE AMT. FOR FY 2013: \$5,203,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$44,000 O: \$5,310,000 T: \$5,354,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,927,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Funding is critical to ensure routine maintenance of aging flood control structures (constructed in 1943) to include earthen dam maintenance, (10,000 ft in length), intake and outlet structures, relief wells, piezometers, instrumentation, turfgrass maintenance, nuisance animal control, maintenance of rock shoreline protection, herbicide applications, etc. Arkabutla Lake has a drainage area of 1,000 square miles and has a flood pool of 33.4 surface acres. Since construction, Arkabutla Lake has prevented over \$197,000,000 in flood damages within the Yazoo Basin.

RC: \$1,905,000 - provides for minimal operation and maintenance of the recreation facilities. Facilities include: 13 developed recreation areas, 8 boat ramps, 340 campsites, and over 400 picnic sites.

H: N/A.

EN: \$522,000 - provides for minimal operation and maintenance of the project including management of natural resources such as, forestry, fish/wildlife, cultural resources management, endangered species management, nuisance plant and animal control, erosion protection, and wildfire suppression on over 57,000 acres of land and water. Funding includes routine maintenance of authorized wetland mitigation lands at Askew Management Area totaling over 4,300 acres.

WS: N/A.

OTHER INFORMATION: Arkabutla maintains a total visitation of over 900,000 visitors per year. With multiplier effects, visitor spending resulted in \$14.68M total sales, \$5.32M in total personal income, and supported 237 jobs in the local communities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Big Sunflower River, MS

AUTHORIZATION: Flood Control Acts of 1944, 1946, 1950, and 1962 and 1965 (Sec 201).

LOCATION AND DESCRIPTION: The Big Sunflower River Basin comprises an area of approximately 4,200 square miles in northwest Mississippi. The existing flood control project is not currently functioning as originally constructed due to loss of channel design capacity both from vegetative growth and sediment accumulation. The current project will restore the channels to original design capacities.

CONFERENCE AMT. FOR FY 2013: \$177,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$185,000 T: \$185,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$168,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. The project has prevented over \$413M in flood damages since construction.

RC: N/A.

H: N/A.

EN: \$17,000 - provides for routine operation and maintenance including oversight of mitigation.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Enid Lake, MS

AUTHORIZATION: Flood Control Acts of 1928, (Sec 3); 1936, (Sec 4); 1937, (Sec 6); 1938, (Sec 2); 1941, (Sec 3); 1944, (Sec 10); and 1946 (Sec 10).

LOCATION AND DESCRIPTION: Enid Lake is located in Yalobusha, Panola, and Lafayette Counties in north-central Mississippi east of Enid, Mississippi, and south of Batesville, Mississippi. Enid Lake is on the Yocona River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major economic role in the region.

CONFERENCE AMT. FOR FY 2013: \$4,795,000 2/

BUDGETED AMOUNT FOR FY 2014: M: O: \$4,777,000 T: \$4,777,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,345,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Funding is critical to ensure routine maintenance of aging flood control structures (constructed in 1952), to include earthen dam maintenance (8,400 ft in length), intake and outlet structures, relief wells, piezometers, instrumentation, turfgrass maintenance, nuisance animal control, maintenance of rock shoreline protection, herbicide applications, etc. Enid Lake has a drainage area of 560 square miles and has a flood pool of 28,000 surface acres. Since construction, Enid Lake has prevented over \$125,000,000 in flood damages within the Yazoo Basin.

RC: \$1,972,000 - provides for minimal operation and maintenance of the recreation facilities. Facilities include: 14 developed recreation areas, 15 boat ramps, 463 campsites, and over 260 picnic sites.

H: N/A.

EN: \$460,000 - provides for minimal operation and maintenance of the project including management of natural resources such as forestry, fish/wildlife, cultural resources, endangered species, nuisance plant and animal control, erosion protection, and wildlife suppression on over 44,000 acres of land and water.

WS: N/A.

OTHER INFORMATION: Arkabutla maintains a total visitation of over 1,970,000 visitors per year. With multiplier effects visitor spending resulted in \$11.94M total sales, \$4.32M in total personal income, and supported 190 jobs in the local communities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Greenwood, MS

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, 1946.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, Mississippi, and includes the operation and maintenance of city of Greenwood Protection Works and includes 55 miles of levees and 14 miles of channels, 2 miles of ditch, 59 drainage structures, 4 pumping plants and 7 weirs.

CONFERENCE AMT. FOR FY 2013: \$788,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$788,000 T: \$788,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$788,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. Also, ensures the protection of the city of Greenwood, Mississippi from flooding by the Yazoo, Tallahatchie, and Yalobusha Rivers.

RC: N/A.

H: N/A.

EN: N/A

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Grenada Lake, MS

AUTHORIZATION: Flood Control Acts of 1928, (Sec 3); 1936, (Sec 4); 1937, (Sec 6); 1938, (Sec 2); 1941, (Sec 3); 1944, (Sec 10); and 1946 (Sec 10).

LOCATION AND DESCRIPTION: Grenada Lake is located in north-central Mississippi northeast of Grenada, Mississippi. Grenada Dam is located in Grenada County, and the lake encompasses portions of Grenada, Yalobusha, and Calhoun Counties. Grenada Dam is on the Yalobusha River and stores floodwaters to provide for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major role in the region.

CONFERENCE AMT. FOR FY 2013: \$5,222,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$5,164,000 T: \$5,164,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$2,782,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Funding is critical to ensure routine maintenance of aging flood control structures (constructed in 1954) to include earthen dam maintenance (13,728 ft. in length), intake and outlet structures, relief wells, piezometers, instrumentation, turfgrass maintenance, nuisance animal control, maintenance of rock shoreline protection, herbicide applications, etc. Grenada Lake has a drainage area of 1,320 square miles and has a flood pool of 64,600 surface acres. Since construction, Grenada Lake has prevented over \$251,000,000 in flood damages within the Yazoo Basin.

RC: \$1,902,000 - provides for minimal operation and maintenance of the recreation facilities. Facilities include; 26 developed recreation areas, 19 boat ramps, 489 campsites, and over 270 picnic sites.

H: N/A.

EN: \$480,000 - provides for minimal operation and maintenance of the project including management of natural resources to include forestry, fish/wildlife, cultural resources, endangered species, nuisance plant and animal control, erosion protection, and wildfire suppression on over 90,370 acres of land and water.

WS: N/A.

OTHER INFORMATION: Grenada maintains a total visitation of over 1,389,000 visitors per year. With multiplier effects, visitor spending resulted in \$39.91 million total sales, \$14.22 million in total personal income, and supported 742 jobs in the local communities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

Vicksburg District

Yazoo Basin, Grenada Lake, MS

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Main Stem, MS

AUTHORIZATION: Flood Control Act of 1941, 1944, and 1965.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, MS, and includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

CONFERENCE AMT. FOR FY 2013: \$1,273,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,273,000 T: \$1,273,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$1,148,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. Protects approximately 1.2 million acres of prime agricultural lands and communities from overflow of the Yazoo River system.

RC: N/A.

H: N/A.

EN: \$125,000 - provides for minimal operation and maintenance of approximately 3,500 acres of mitigation property that was licensed to the Mississippi Department of Wildlife, Fisheries and Parks under a real estate instrument and Memorandum of Agreement in FY 2009.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Sardis Lake, MS

AUTHORIZATION: Flood Control Acts of 1928, (Sec 3); 1936, (Sec 4); 1937, (Sec 6); 1938, (Sec 2); 1941, (Sec 3); 1944, (Sec 10); and 1946 (Sec 10).

LOCATION AND DESCRIPTION: Sardis Lake is located in north-central Mississippi southeast of Sardis, Mississippi. Sardis Dam is located in Panola County, and the lake encompasses portions of Panola, Lafayette, and Marshall Counties. Sardis Dam is on the Little Tallahatchie River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Recreation and tourism associated with the lake play a major role in the region.

CONFERENCE AMT. FOR FY 2013: \$6,493,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$6,493,000 T: \$6,493,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$3,559,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Funding is critical to ensure routine maintenance of aging flood control structures (constructed in 1940) to include earthen dam maintenance (15,300 feet in length), intake and outlet structures, relief wells, piezometers, instrumentation, turfgrass maintenance, nuisance animal control, maintenance of rock shoreline protection, herbicide applications, etc. Sardis Lake has a drainage area of 1,545 square miles and has a flood pool of 58,500 surface acres. Since construction, Sardis Lake has prevented over \$734,000,000 in flood damages within the Yazoo Basin.

RC: \$2,376,000 - provides for minimal operation and maintenance of the recreation facilities, including 20 developed recreation areas, 28 boat ramps, 786 campsites, and over 460 picnic sites.

H: N/A.

EN: \$558,000 - provides for minimal operation and maintenance of the project including management of natural resources to include forestry, fish/wildlife, cultural resources management, endangered species management, nuisance plant and animal control, erosion protection, and wildfire suppression on over 98,500 acres of land and water.

WS: N/A.

OTHER INFORMATION: Sardis Lake maintains a total visitation of over 1,300,000 visitors per year. With multiplier effects, visitor spending resulted in \$25.45 million total sales, \$9.10 million in total personal income, and supported 463.97 jobs in the local communities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi River Commission

Vicksburg District

Yazoo Basin, Sardis Lake, MS

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Tributaries, MS

AUTHORIZATION: Flood Control Act of 1941, 1944, 1965.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, MS, and includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

CONFERENCE AMT. FOR FY 2013: \$944,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$944,000 T: \$944,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$944,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. Protects approximately 1.2 million acres of prime agricultural lands and communities from overflow of the Yazoo River system.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Will M. Whittington Auxiliary Channel, MS

AUTHORIZATION: Flood Control Act of 1928, 1936, 1937, 1938, 1941, 1944, 1946, 1962 and 1965.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, Headwater Area, MS. The project includes levees floodway and landside drainage ditches from the vicinity of Silver City on the Yazoo River to near the mouth of Big Sunflower River.

CONFERENCE AMT. FOR FY 2013: \$375,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,000 O: \$369,000 T: \$375,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$375,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. This flood control feature splits the flows of the Yazoo River and reduces flood stages in the Yazoo Basin.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Yazoo Backwater Area, MS

AUTHORIZATION: Flood Control Act of 1941, 1944, 1965.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin, MS, and includes the operation and maintenance of seven drainage structures.

CONFERENCE AMT. FOR FY 2013: \$511,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$526,000 T: \$526,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$463,000 - provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis. Has prevented over \$98 million dollars in flood damages since construction, protecting prime agricultural lands and many small communities from backwater flooding from the Mississippi River.

RC N/A.

H: N/A.

EN: \$63,000 - provides operation and maintenance of property acquired to mitigate construction losses as a result of an environmental analysis and Section 7 consultation with the United States Fish and Wildlife Service.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Yazoo Basin, Yazoo City, MS

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, 1946.

LOCATION AND DESCRIPTION: The project is located in the Yazoo Basin. The project includes the operation and maintenance of Yazoo City Protection Works and includes levees, channels, drainage structures, pumping plants and weirs.

CONFERENCE AMT. FOR FY 2013: \$714,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$714,000 T: \$714,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A.

FRM: \$714,000 – provides for minimal critical operation and maintenance of the project including inspections, data collection and analysis and protects approximately 35 square miles to include the city of Yazoo City, Mississippi, operating as part of the MR&T system.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSOURI

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Wappapello Lake, MO

AUTHORIZATION: Overton Act of 1936, Flood Control Act 1944.

LOCATION AND DESCRIPTION: This project is located on the St. Francis River, mile 309, in the Ozark uplands of Wayne County, Missouri, and provides flood control, recreation, water quality, and conservation of fish and wildlife. Wappapello Lake consists of 44,349 acres of land and 8,400 acres of water. The dam site lies 22 miles southeast of Greenville, 16 miles northeast of Poplar Bluff, and one mile southwest of Wappapello, Missouri.

CONFERENCE AMT. FOR FY 2013: \$4,064,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$1,521,000 O: \$3,239,000 T: \$4,760,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,346,000 – Minimal critical O&M for FRM operations; dam safety (gatehouse, concrete overflow spillway, dam and 3 dikes); water control data/analysis; security; Real Estate costs for compliance management; sustainability packages for repair of hydropower unit inside gatehouse and conservation lighting and energy savings at administration office compound.

RC: \$1,885,000 – Funding provides for reduced routine O&M of recreation areas, facilities and programs. Visitor Assistance, Public Health and Safety, Accessibility, Use Fee Collection, and Visitor Center O&M. Contract costs associated with the routine recreation program include: law enforcement; park attendants; combined services (mowing, cleaning, garbage removal); janitorial; utilities; tree trimming; etc.

H: N/A

EN: \$529,000 – Funding provides routine O&M of environmental stewardship program and features; environmental compliance; management of endangered/invasive species (Feral Hogs, Emerald Ash Borer); cultural/historical resources; land management (forest, wetlands) and agricultural leases.

WS: N/A

OTHER INFORMATION: FY 2012 project visitation was 1,878,303, generating economic benefits estimated at \$32,988,000. Flood recovery supplemental repairs continue.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TENNESSEE

MR&T O&M JUSTIFICATION SHEET

PROJECT NAME: Memphis Harbor, McKellar Lake, Memphis, TN

AUTHORIZATION: FCA 1928, HD 90/70/1, as amended by subsequent acts, as modified and expanded by SD 51/80/1, approved 24 July 1946.

LOCATION AND DESCRIPTION: This project is located near Memphis, TN, at Mississippi River mile 725.5. The project provides maintenance dredging to provide barge traffic year round access to harbor facilities. The navigation channel extends 7.5 miles into the harbor with a 9-foot project depth and 300 to 500-foot width at various locations.

CONFERENCE AMT. FOR FY 2013: T: \$1,464,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,803,000 O: \$0 T: \$1,803,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: \$1,803,000 – Funding provides for performance of minimal critical surveys of the harbor conditions, limited maintenance dredging, and analysis of dredge disposal requirements.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: 5 year average commercial tonnage is 8,647.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

North Atlantic Division

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Justification of Estimate

Investigations

Maryland

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Anacostia Watershed Restoration, Montgomery County, MD Baltimore District	1,083,794	0	83,794	0	250,000 <u>2/</u>	500,000 <u>1/</u>	250,000

The study area includes the Anacostia River watershed within Montgomery County, Maryland, including parts of four major sub-watersheds in the basin. The Anacostia watershed is one of the most urbanized watersheds within the Chesapeake Bay basin; since European settlement, the watershed has lost 70 percent forest cover, 93 percent of its tidal wetlands, and 95 percent of native submerged aquatic vegetation. As such, the Anacostia watershed reflects a system that has suffered from years of environmental neglect although major restoration efforts since 1987 are beginning to improve conditions. The Corps, in conjunction with local stakeholders, including Montgomery County, have developed the Anacostia Restoration Plan to protect, improve, and restore the watershed by identifying specific restoration strategies to be implemented by the Corps and/or stakeholders in the future.

The Section 905(b) analysis determined that there is a Federal interest for further feasibility studies to develop watershed restoration plans for the Anacostia River. Major tasks included: data consolidation and trends analyses; watershed modeling; the identification, scoring, ranking, and prioritization of restoration opportunities. The plan was completed in February 2010 and was released to the public on April 19, 2010. This current feasibility study is follow-on to the restoration plan and will include investigations and analyses necessary to formulate, justify, and implement projects from the restoration plan in Montgomery County that are in the Federal interest. Primary problems to be addressed in this feasibility effort will include stream restoration, fish blockage removal and wetland restoration. This feasibility study supports the habitat goals of the Chesapeake Bay protection executive order, E.O. 13508. A cost-sharing agreement was executed with the Metropolitan Washington Council of Governments (MWCOC) on September 25, 2006, and amended in September 2007, to develop the Anacostia Restoration Plan.

Fiscal Year 2013 funds are being used to initiate the feasibility study, including data collection and public coordination. Fiscal Year 2014 funds will be used to continue the feasibility phase of the study, including environmental analyses and plan formulation. An Independent External Review is not required for this effort. The estimated cost of the feasibility phase is \$2,000,000 and the sponsor, Prince George's County Maryland, understands the 50/50 cost sharing summary as follows:

Total Estimated Study Costs	2,167,588
Reconnaissance Phase (Federal)	83,794
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The study is authorized by House Committee on Public Works and Transportation resolution, dated September 8, 1988.

Division: North Atlantic

District: Baltimore

Anacostia Watershed Restoration,
Montgomery County, MD

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Anacostia Watershed Restoration, Montgomery County, MD
Baltimore District

The reconnaissance phase was completed in July 2012. The feasibility study schedule is TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Anacostia Watershed Restoration, Prince George's County, MD Baltimore District	1,083,794	0	83,794	0	250,000 <u>2/</u>	500,000 <u>1/</u>	250,000

The study area includes the Anacostia River watershed within Prince George's County, Maryland, including all or parts of 12 major sub-watersheds and the tidal portion of the river. The Anacostia watershed is one of the most urbanized watersheds within the Chesapeake Bay basin; since European settlement, the watershed has lost 70 percent forest cover, 93 percent of its tidal wetlands, and 95 percent of native submerged aquatic vegetation. As such, the Anacostia watershed reflects a system that has suffered from years of environmental neglect although major restoration efforts since 1987 are beginning to improve conditions. The Corps, in conjunction with local stakeholders, including Prince George's County, have developed the Anacostia Restoration Plan (ARP) to protect, improve and restore the watershed by identifying specific restoration strategies to be implemented by the Corps and/or stakeholders in the future.

The Section 905(b) analysis determined there is potential Federal interest in developing and implementing a watershed restoration plan for the Anacostia River. Major tasks included: data consolidation and trends analyses; watershed modeling; the identification, scoring, ranking, and prioritization of restoration opportunities. The plan was completed in February 2010 and was released to the public on April 19, 2010. This current feasibility study is follow-on to the restoration plan and will include investigations and analyses necessary to formulate, justify, and implement projects from the restoration plan in Prince George's County that are in the Federal interest. Primary problems to be addressed in this feasibility effort will include stream restoration, fish blockage removal and wetland restoration. This feasibility study supports the habitat goals of the Chesapeake Bay protection executive order, E.O. 13508. A cost-sharing agreement was executed with the Metropolitan Washington Council of Governments (MWCOC) on September 25, 2006, and amended in September 2007, to develop the Anacostia Restoration Plan.

Fiscal Year 2013 funds are being used to initiate the feasibility study, including data collection and public coordination. Fiscal Year 2014 funds will be used to continue the feasibility phase of the study, including environmental analyses and plan formulation. The estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. An Independent External Review is not required for this effort. A summary of study cost sharing is as follows:

Total Estimated Study Costs	\$2,167,588
Reconnaissance Phase (Federal)	83,794
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The study is authorized by House Committee on Public Works and Transportation resolution, dated September 8, 1988.

Division: North Atlantic

District: Baltimore

Anacostia Watershed Restoration,
Prince George's County, MD

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Anacostia Watershed Restoration, Prince George's County, MD
Baltimore District

The reconnaissance phase was completed in July 2012. The feasibility study schedule is TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Baltimore Harbor and Channels 50-Foot, MD & VA (Resumption)	1,500,000	0	0	0	0 <u>2/</u>	400,000 <u>1/</u>	1,100,000

Baltimore District

The Baltimore Harbor and Channels 50-Foot project, constructed in the 1980s, provides a 50-foot main shipping channel from Fort McHenry to the Port of Baltimore. In addition, the project maintains the Curtis Bay Channel, the East Channel, and the West Channel which are dredged to a depth of 50 feet, 49 feet, and 40 feet deep, respectively, with all three channels being dredged to a width of 600 feet. However, several channel components of the 50-foot project are not fully constructed to its authorized width dimensions. Two of the three 1000-foot wide Virginia channels are only dredged to a width of 800 feet, the 800-foot wide Maryland channels are only dredged to 700 feet, and the 600-foot wide Curtis Bay Channel is only dredged to a width of 400 feet. Since 1986, the maritime industry has continued to move towards larger vessels that will be making port calls. The current channel depths to the Port of Baltimore is adequate for today's vessel traffic, but the narrow channel width are of a concern to the vessel pilots and shipping companies due to shipping efficiency and safety. Currently, deeper and wider vessels sometimes experience safety problems passing other ships in the narrow channels which results in time delays and increased shipping costs. Furthermore, in 2014 when the Panama Canal improvements are scheduled to be completed, ships with drafts depths of 50-feet and beams widths of 160-feet will experience shipping delays and safety problems making calls in the Port of Baltimore. The current channels were designed for dry bulk and tanker ships of up to 150,000 DWT, which corresponds to beam widths of about 145 feet at draft depths up to 50 feet. The benefit cost ratio for the currently authorized 50-foot project is 6.6 to 1 based upon the latest economic analysis dated October 1987. The Maryland Port Administration understands the financial requirements for the general re-evaluation effort and is ready to execute the feasibility cost sharing agreement in FY 2014.

Fiscal Year 2014 funds will be used to initiate the general re-evaluation Report, including harbor simulation modeling. The preliminary estimated cost of the general re-evaluation is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. An independent external peer review will be required for this effort. However, the IEPR costs have not yet been determined for this effort. A summary general re-evaluation cost sharing is as follows:

Total Estimated Phase GRR Cost	\$3,000,000
Reconnaissance Phase (Federal)	0
Feasibility Phase GRR (Federal)	1,500,000
Feasibility Phase GRR (Non-Federal)	1,500,000

Division: North Atlantic

District: Baltimore

Study Name: Baltimore Harbor and Channels
50-Foot, MD, VA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Baltimore Harbor and Channels 50-Foot, MD & VA
(Resumption)

Baltimore District

The project is authorized by Rivers and Harbors Act of 1917, as modified by the Rivers and Harbors Acts 1927, 1930, 1940, 1945, 1958, and 1970.
The general re-evaluation report schedule is TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Division: North Atlantic

District: Baltimore

Study Name: Baltimore Harbor and Channels
50-Foot, MD, VA

1 May 2013

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APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2013 \$	Allocation FY 2013 \$	Budget Amount FY 2014 \$	Additional to Complete After FY 2013 \$
SURVEYS – New (Aquatic Ecosystem Restoration)					
Chesapeake Bay Comprehensive Plan, MD, PA, VA, NY, WV, DE, DC Baltimore District	300,000	0	0	250,000 <u>1/</u>	50,000

The Chesapeake Bay watershed and tidal tributaries is the single largest estuary in the United States with a surface area of approximately 4,400 square miles. It is approximately 200 miles long and varies from 4 to 30 miles in width. The Chesapeake Bay’s ecosystem is an intricate and delicate connection of terrestrial and aquatic habitats. It is composed of thousands of miles of river and stream habitat that interconnect the land, water, living resources and human communities of the Bay watershed. The Bay’s vital habitats, including open water, submerged aquatic grasses, tidal and non-tidal marshes, freshwater wetlands and vernal pools, streams and forests, support species abundance and diversity, which is the bedrock to sustainable ecosystems.

The reconnaissance phase will determine if there is a Federal interest for further feasibility level studies to evaluate potential aquatic ecosystem restoration measures, as well as recommending an evaluation for a watershed assessment. Possible implementable solutions include: environmental dredging, shoreline stabilization, wetland creation and restoration, and the beneficial use of dredged material. The analysis will include existing Federal, State and local plans and will address the most recent Chesapeake Bay Agreement commitments and Executive Order 13508 Chesapeake Bay Protection and Restoration goals which target the integration of living resource protection and restoration; vital habitat protection and restoration; water quality restoration; sound land use stewardship and community engagement. The potential sponsors for the feasibility level studies are the State of Maryland and the Commonwealth of Virginia who both understand the cost sharing requirements for the feasibility phase of the study. The reconnaissance phase schedule is TBD.

The study is authorized by a resolution from the Committee on Environment and Public Works of the United States Senate, adopted September 2002.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Division: North Atlantic

District: Baltimore

Chesapeake Bay Comprehensive Plan,
MD, PA , VA, NY, WV, DE, DC

Massachusetts

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Boston Harbor, MA	3,750,000	426,000	400,000	(25,000) <u>3/</u>	50,000 <u>2/</u>	400,000 <u>1/</u>	2,499,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (Navigation)

New England District

Boston Harbor is located along the eastern shoreline of Massachusetts and is New England's largest port serving as the principal distribution point for the commerce of Massachusetts, New Hampshire and Vermont. In 2009, waterborne commerce totaled 20.5 million tons, of which approximately 78 percent were liquid petroleum products. The inner harbor is comprised of the Main Ship, Reserved, Chelsea River and Mystic River Channels. The Massachusetts Port Authority (Massport) has been upgrading facilities at Conley Terminal, which is located along the southerly side of the Reserved Channel. In addition, Massport has plans to expand Conley Terminal onto the adjacent Coastal Oil Terminal property and to develop a bulk cargo terminal at nearby Massport Marine Terminal, increasing the number of berths that would benefit from deeper channels. Ships drawing 45-foot drafts now make 3 calls a week to Boston Harbor. The recommended project, estimated to cost \$340,000,000, with an estimated Federal cost of \$216,000,000 and an estimated Non-Federal cost of \$124,00,000, would deepen the Broad Sound North Entrance Channel to 50 feet and the President's Roads, Main Ship and Lower Reserved Channels and Turning Area to 48 feet. The average annual benefits amount to \$105,873,000 all for commercial navigation. The benefit-to-cost ratio is 6.7 to 1 based upon the latest economic analysis dated May 2012. The potential project sponsor is Massport, who fully understands the cost sharing requirements for the project and is ready to execute the design agreement in FY 2013. PED will ultimately be cost shared at the rate for the project to be constructed, but will be financed through the PED phase at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$ 5,000,000	Total Estimated Preconstruction Engineering and Design Costs	\$ 5,000,000
Initial Federal Share	3,750,000	Ultimate Federal Share	3,250,000
Initial Non-Federal Share	1,250,000	Ultimate Non-Federal Share	1,750,000

Study is authorized by Senate Committee on Environment and Public Works Resolution dated 12 September 1969. Consistent with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986 and 1996 as amended, local interests are required to provide all lands, easements, right-of-way, and relocations (LERR) determined by the Federal Government to be necessary for the construction, operation and maintenance of the project; pay 25 percent of all costs allocated to General Navigation Features (GNF) for that portion of the project which has a depth in excess of 20 feet but not more than 45 feet during project construction; pay 50 percent of all GNF costs for that portion of the project which has a depth in excess of 45 feet during project construction; and pay an additional 10 percent of all GNF costs, less a credit for the cost of LERR, over a period not to exceed 30 years after project construction. Fiscal Year 2013 and prior year funds will be used to negotiate and execute the design agreement and initiate preconstruction engineering and design efforts. Initiation of design has been delayed pending completion of the Chief's Report and Supplemental Environmental Impact Statement (SEIS). Additional time was needed to refine the

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Boston Harbor, MA

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (Navigation)

New England District

recommended plan and address impacts of the project on the recently included Atlantic Sturgeon on the threatened species list. Funds requested for Fiscal Year 2014 will be used to continue design efforts, including detailed engineering and design. The design effort schedule is TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$801,000. This amount will be used to perform work on the project as follows: the unobligated carry-in funds will be use to complete final engineering and design.

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ The project received \$10,000 in FY 2012 offset by a \$35,000 reprogramming from the project.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

New Hampshire

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Connecticut River Ecosystem Restoration, NH & VT (Resumption)	1,631,000	864,000	99,000	45,000	0 <u>2/</u>	400,000 <u>1/</u>	223,000

New England District

The Connecticut River Watershed extends from the northernmost part of New Hampshire to Long Island Sound and includes a small portion of the Canadian Province of Quebec. Its total drainage area is 11,260 square miles of which 3,046 square miles lie in New Hampshire and 3,928 square miles in Vermont. The watershed has experienced considerable development resulting in significant loss of floodplain, fish spawning habitat (e.g. Atlantic salmon, striped Bass), wetlands, waterfowl nesting areas and other valuable fish and aquatic habitat. Existing aquatic habitat resources have also been impacted by deposition of eroded stream bank material. The Connecticut River and its tributaries depend on a naturally variable flow to support all the different parts of the ecosystem. The construction of hydroelectric, flood risk management, and other dams in the watershed along with municipal and commercial water withdrawals has altered the watershed's natural hydrologic regime and has blocked the passage of anadromous fish. The study will identify opportunities to modify the management of the dams and water systems to address ecological concerns while maintaining those projects intended purposes. Studies are also needed to identify and evaluate measures to reduce stream bank erosion, restore anadromous fisheries migratory corridors and spawning habitat, restore degraded wetlands and riverine habitat and improve the overall fish and wildlife habitat of the Connecticut River. It is the first watershed in the nation to be named a "Blueway" under the National Blueways System established through the Administration's America's Great Outdoors initiative. The Blueways program recognizes river systems conserved using a watershed approach to stewardship and achieved through partnerships with stakeholders.

The reconnaissance report, certified in September 2002, recommends feasibility phase studies to improve flow management in the river, identify and evaluate measures to reduce stream bank erosion, restore degraded fish and wildlife habitat and provide fish passage. Available funds are being used to continue the feasibility study, which involves developing a series of flow models that simulate and optimize operations at 70 large reservoirs, including the 14 Corps owned flood control dams, in the watershed. A feasibility cost sharing agreement was executed with The Nature Conservancy on 5 August 2005.

Fiscal Year 2014 funds will be used to continue the feasibility study, including environmental analyses, plan formulation, completion of the basin-wide hydrologic modeling and public coordination. The estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,131,000
Reconnaissance Phase (Federal)	131,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

Study is authorized by Senate Committee on Environment and Public Works Resolution dated 23 May 2001.

Division: North Atlantic

District: New England

Connecticut River Ecosystem Restoration, NH & VT

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Connecticut River Ecosystem Restoration, NH & VT
(Resumption)

New England District

The reconnaissance phase was completed in August 2005. The feasibility study schedule is TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Merrimack River Watershed Study, NH and MA New England District	5,550,000	2,019,000	299,000	191,000	200,000 <u>2/</u>	200,000 <u>1/</u>	2,641,000

The Merrimack River originates in Franklin, New Hampshire at the confluence of the Pemigewasset and Winnepesaukee Rivers and flows southerly towards the Massachusetts border then easterly towards the coast. The Merrimack River basin encompasses approximately 5,010 square miles and is the fourth largest watershed in New England. The main stem of the river is about 116 miles in length with about 74 miles in New Hampshire and 42 miles in Massachusetts. The headwaters are located in the White Mountain National Forest. The estuary includes 2,500 acres of coastal wetlands and is bordered by the Parker River National Wildlife Refuge. Existing uses include aquatic habitat for fish and wildlife, water supply, recreation, hydropower production and commercial shell fishing. The Merrimack River supports anadromous fisheries and endangered species. Although significant improvements have been made to the overall quality of the Merrimack River, many problems exist including poor water quality, degraded aquatic habitat and competing water uses. The Corps study will help define the overall condition of the watershed and allow for science-based decisions on prioritized investments to improve water quality and ecosystem restoration. The Section 905(b) analysis was certified on 25 January 2002, which found there was a Federal interest to pursue comprehensive studies in the Merrimack River Watershed. A cost-sharing agreement was executed with the City of Lowell, representing the Merrimack Community Coalition, on 20 February 2002 for the Lower Merrimack River Basin (LMRB) study. Phase I of the LMRB study was completed in August 2006. A second cost-sharing agreement was signed with the New Hampshire Department of Environmental Services on 25 August 2006 to begin Phase II investigations of the Upper Merrimack River Basin (UMRB) watershed assessment.

Fiscal Year 2013 funds are being used to continue UMRB and LMRB investigations, including additional watershed modeling, data collections, analysis of restoration alternatives, evaluation of designated uses, watershed flood analysis, and stakeholder coordination. Funds requested for Fiscal Year 2014 will be used to continue UMRB and LMRB investigations, including additional data collection and analysis of restoration alternatives, watershed modeling, and evaluation of alternative management scenarios. The estimated cost of the watershed assessment is \$7,200,000, and was originally cost shared on a 50-50 percent basis by Federal and non-Federal interests. This cost sharing was modified to 75-25 by Section 2010 of WRDA 2007. For those Section 729 agreements executed on or after December 11, 2000, the agreements are to be amended for the revised cost sharing requirement. The agreements for continued investigation of both the UMRB and LMRB have been amended in accordance with WRDA 2007. The change in the cost share is retroactive to the start of the watershed assessment study. A summary of the watershed assessment cost sharing is as follows:

Total Estimated Study Cost	\$7,350,000
Reconnaissance Phase (Federal)	150,000
Feasibility Phase (Federal)	5,400,000
Feasibility Phase (Non-Federal)	1,800,000

Division: North Atlantic

District: New England

Merrimack River Watershed Study, NH & MA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Merrimack River Watershed Study, NH and MA
New England District

The study authority is Section 729 of the Water Resources Development Act of 1986, as amended.

The reconnaissance phase was completed in February 2002. The watershed assessment schedule is TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

New Jersey

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Delaware River Comprehensive, NJ (Completion)	2,685,000	1,294,000	399,000	327,000 <u>3/</u>	290,000 <u>2/</u>	375,000 <u>1/</u>	0

Philadelphia District

The Delaware River basin is located in 42 counties in portions of New York, New Jersey, Delaware and Pennsylvania, draining an approximate 13,539 square mile area. The river basin has experienced considerable degradation over the past two hundred years due to urbanization and industrialization. In addition, the river basin includes the Atlantic Flyway, the final stopover for millions of migratory birds. The river basin is divided into the upper and lower basins. The upper basin area includes small rural and agricultural communities, some heavily populated and industrialized areas, and abandoned mining complexes, which are experiencing developmental, recreational, and environmental pressures; and acid mine drainage problems from over twenty locations. The lower basin, which includes the area from Trenton to Philadelphia through Delaware Bay is heavily urbanized and industrialized, and includes commercial navigation projects. These projects place millions of cubic yards of sediments annually into upland disposal sites that has degraded thousands of acres of wetlands and terrestrial habitat.

The study is investigating potential solutions to watershed problems, including flood damage reduction measures, floodplain management applications, aquatic ecosystem restoration measure, and use of dredged materials disposal opportunities. The study is also being coordinated with ongoing initiatives under consideration by the State of New Jersey Division of Watershed Management. The sponsor for the feasibility phase of the study is the New Jersey Department of Environmental Protection who executed the feasibility cost sharing agreement in July 2006.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study, including conducting the alternative formulation briefing, and selection of the final plan for the draft feasibility report. Fiscal Year 2014 funds will be used to complete the feasibility phase of the study, including final plan selection for the feasibility report and inter-agency coordination. The estimated cost of the feasibility phase is \$5,370,000, which is being cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	5,370,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	2,685,000
Feasibility Phase (Non-Federal)	2,685,000

The study authority is Senate Committee on Public Works Resolution dated July 20, 2005.

The reconnaissance phase was completed under the Delaware River Basin Comprehensive, NY, NJ, PA, & DE in September 2005. The feasibility study is scheduled to be completed in FY 2014.

Division: North Atlantic

District: Philadelphia

Delaware River Comprehensive, NJ

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Delaware River Comprehensive, NJ
(Completion)

Philadelphia District

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ In Fiscal Year 2012, the study received an appropriation of \$277,000 and a reprogramming of \$49,999.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Delaware River Dredged Material Utilization, NJ, DE & PA Philadelphia District	1,749,000	209,000	199,000	100,000	0 <u>2/</u>	300,000 <u>1/</u>	941,000

The study area includes the Federal navigation channels in the Delaware River, its tributaries in New Jersey, Delaware and Pennsylvania, and the Federal navigation channels in Delaware Bay to determine if beneficial uses of dredged materials are feasible to for such remedial uses for regional sediment management, aquatic ecosystem restoration and/or flood and coast storm damage reduction measures.

The ongoing Section 905 (b) report, which is scheduled to be completed in FY 2013, will determine if there is a federal interest to proceed into further feasibility level studies. If the Section 905 (b) report is found to be in accord with policy, the feasibility level studies will evaluate beneficial uses of dredge materials measures for the existing authorized Delaware River projects that currently have continuing ongoing maintenance dredging in New Jersey, Delaware and Pennsylvania including communities along Maurice and Salem Rivers, and in Cramer Hill Park, NJ; communities along the state of Delaware's bay shore areas; and communities along the Christina River and Tinicum Island in Pennsylvania. The potential sponsors for the feasibility level studies are the New Jersey Department of Environmental Protection, the Delaware Department of Natural Resources and Environmental Control and the Pennsylvania Department of Environmental Protection who all understand the cost-sharing requirements for the feasibility phase studies and are expected to execute the feasibility cost sharing agreement in FY 2013.

Fiscal Year 2014 funds will be used to continue the feasibility phase study, including data gathering for cultural and environmental analyses. The estimated cost of the feasibility phase is \$3,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,249,000
Reconnaissance Phase (Federal)	249,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The study is authorized by a resolution from the Committee on Environment and Public Works of the United States Senate, adopted October 26, 2005.

The reconnaissance phase is scheduled to be completed in FY 2013. The feasibility study completion date is TBD.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Delaware River Dredged Material Utilization, NJ, DE & PA
Philadelphia District

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Hudson-Raritan Estuary, Lower Passaic River, NJ New York District	4,700,000	3,483,000	199,000	166,000	50,000 <u>2/</u>	200,000 <u>1/</u>	602,000

The study area is located in Essex County and Hudson, New Jersey, about five miles west of Battery of New York City and encompasses 17 miles of the lower Passaic River from the river's confluence with Newark Bay to Dundee Dam. The area is urban to suburban and has been heavily industrialized since the mid-nineteenth century. This industrial activity has degraded the wetlands from discharges of oils, chemicals and other chemical waste from the manufacturing of electrical components and petro chemical oil refinement resulting in contaminated bottom sediments in the river that are unfavorable for fish and wildlife habitat. The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies in the Lower Passaic River Basin. The feasibility study for the Lower Passaic River Basin will assess items that have a Federal interest for ecosystem restoration, including creation of wetlands and alteration of hydrology/hydraulics to support habitat improvements within the Lower Passaic River and sections of Newark Bay. The non-Federal sponsor is the New Jersey Department of Transportation, who executed a cost-sharing agreement in June 2003. The restoration feasibility study is integrated with a CERCLA Superfund Remedial Investigation/Feasibility Study via the Urban Rivers Restoration Initiative with US Environmental Protection Agency, as well as additional coordination with trustees including New Jersey Department of Environmental Protection, National Oceanic Atmospheric Association and US Fish and Wildlife Service.

Fiscal Year 2013 funds are being used to continue the feasibility phase, including updating restoration opportunities in coordination with the EPA's early action plans for the lower 8.2 miles of the lower Passaic River in conjunction with their Superfund Remedial Investigation. FY 2013 funds will also be used to advance restoration planning in the remaining Lower Passaic River watershed upstream to Dundee Dam. Fiscal Year 2014 funds will be used to continue the feasibility phase, including preparation of the draft Feasibility Study Report. The estimated cost of the feasibility phase is \$9,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. An Independent External Peer Review is to be conducted at an estimated cost \$200,000 at full federal expense and is exempted from the 50-50 cost sharing for the feasibility phase of the study. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$9,200,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	4,700,000
Feasibility Phase (Non-Federal)	4,500,000

The study is authorized by the House of Representatives Committee on Transportation and Infrastructure Resolution (Docket Number 2596) dated 15 April 1999.

The reconnaissance phase was completed in June 2003. The feasibility study schedule is TBD.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Hudson-Raritan Estuary, Lower Passaic River, NJ
New York District

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Passaic River Main Stem, NJ New York District	1,490,000	0	0	250,000	1,000,000 <u>2/</u>	240,000 <u>1/</u>	TBD

The project is located in the Passaic River Basin which encompasses 935 square miles with 84 percent of the basin in northern New Jersey and with 16 percent of basin in southeastern New York State. Storm events have caused severe and repeated flooding claiming lives and causing property damage in the Passaic River Basin since colonial times. The basin experienced extensive growth of residential and industrial development during the last 100 years that has multiplied the threat of serious damages and loss of life. The Passaic River Basin is home to some 2.5 million people occupying over 20,000 homes and the basin is also home to numerous businesses and commercial establishments. Since 1900, at least 26 lives have been lost in floods and the total losses are over \$5.5 billion dollars. In addition to the flood damages that occur in over thirty-five municipalities in the basin, environmental damage from flooding has also occurred. Furthermore, significant interruptions to the transportation systems have caused hardship in the basin during and after each flood event. The "flood of record," occurred in 1903, with more recent floods occurring in 1968, 1971, 1972, 1973, two in 1975, 1984, 1992, 1999, 2005, 2007, 2010 and 2011 were devastating enough to warrant Federal Disaster declarations. The recent March 2010 and April 2011 Nor'easters and August 2011 Tropical Storms all caused significant damages.

The prior design effort on the authorized project consisted of several separable elements including an underground diversion tunnel, levees and floodwalls, and acquisition of natural flood storage areas. This effort was suspended in 1996 at the request of the non-Federal sponsor. Only a few localized projects have been implemented. Renewed community interest and the New Jersey Department of Environmental Protection (NJDEP) have requested a re-evaluation be conducted to determine the need for permanent flood and storm damage reduction measures. A feasibility level general re-evaluation is being conducted to advance the other authorized project features or new elements. A feasibility cost-sharing agreement was executed with the New Jersey Department of Environmental Protection for the Phase I general re-evaluation in June 2012.

Fiscal Year 2013 funds are being used to continue the Phase I general re-evaluation effort to examine alternatives to the existing project. During the third quarter of FY 2013, a determination will be made if further studies are necessary. If the determination confirms that the project cannot be re-scoped to comply with the 3X3X3 planning transformation initiatives, a waiver will be prepared and coordinated with HQUSACE for approval to proceed into a Phase II general re-evaluation effort. Fiscal Year 2014 funds will be used to complete the Phase I general re-evaluation effort. The estimated cost of the Phase I general re-evaluation effort is \$2,980,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the Phase I general re-evaluation cost sharing is as follows:

Total Estimated Phase I GRR Cost	\$2,980,000
Reconnaissance Phase (Federal)	0
Feasibility Phase I GRR Phase (Federal)	1,490,000
Feasibility Phase I GRR Phase (Non-Federal)	1,490,000

Division: North Atlantic

District: New York

Passaic River Main Stem, NJ

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Passaic River Main Stem, NJ
New York District

The project is authorized by Section 101(a) 18(A) of the WRDA of 1990 as modified by Section 102(p) of WRDA 1992 and Section 327 of WRDA 2000.

The Phase I general re-evaluation effort is scheduled for completion in FY 2014.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Peckman River Basin, NJ (Completion)	2,711,000	2,091,000	129,000	200,000	0 <u>2/</u>	291,000 <u>1/</u>	0

New York District

The Peckman River Basin is located in Essex and Passaic Counties, New Jersey. The river is a tributary of the Passaic River and originates in the Town of West Orange and flows through the towns of Verona, Cedar Grove, and Little Falls, New Jersey, to its confluence with the Passaic River in West Patterson, New Jersey, draining about a 10-square mile area. Extensive development within these towns has resulted in flood damages to 220 homes and businesses. Extensive erosion from flooding at specific locations has caused significant ecosystem degradation that has impaired the habitat suitability and ecology of the river

The reconnaissance study completed in July 2001 recommended further feasibility level studies to evaluate potential flood damage risk reduction measures, as well as aquatic ecosystem restoration measures. The feasibility cost-sharing agreement was executed in March 2002 with the State of New Jersey Department of Environmental Protection.

Fiscal year 2014 funds will be used to complete the feasibility phase of the study, including economic and environmental analyses and technical reviews. The estimated cost of the feasibility phase is \$4,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. An Independent External Peer Review is to be conducted at an estimated cost \$291,000 at full federal expense and is exempted from the 50-50 cost sharing for the feasibility phase of the study. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$5,111,000
Reconnaissance Phase (Federal)	20,000
Feasibility Phase (Federal)	2,691,000
Feasibility Phase (Non-Federal)	2,400,000

The study is authorized by the U.S. House of Representatives Committee on Transportation & Infrastructure Resolution adopted 21 June 2000.

The reconnaissance phase was completed in March 2002. The feasibility study is scheduled to be completed in FY 2014.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Peckman River Basin, NJ
(Completion)

New York District

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

New York

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Hudson-Raritan Estuary, NY and NJ New York District	10,240,000	7,120,000	997,000	583,000	400,000 <u>2/</u>	550,000 <u>1/</u>	390,000

The Hudson Raritan Estuary study area includes the Port of New York and New Jersey. The study is evaluating restoration measures for eight Planning Regions /State water systems within the estuary which include: Jamaica Bay; Lower Bay; Lower Raritan River; Arthur Kill and Kill Van Kull; Newark Bay, Hackensack River and Passaic Rivers; Lower Hudson River; Harlem River, East River, and Western Long Island Sound and Upper Bay. These waters and the surrounding shoreline, mudflats, intertidal marshes, and adjacent upland areas provide valuable habitat for fish, and wildlife resources, and migrating birds along the Atlantic flyway. The area is the habitat for several endangered species, such as, the shortnosed sturgeon, sea turtles, peregrine falcons, piping plover, and rosette terns.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies. The feasibility study is assessing the viability of restoring balance to overall ecological functions and values within the Hudson-Raritan Estuary through the development of a Comprehensive Restoration Plan (CRP). The CRP was developed in partnership with the NY-NJ Harbor Estuary Program and regional stakeholders to set forth a consensus vision, master plan and strategy to create future restoration opportunities and restore degraded habitat for coastal wetlands, oyster reefs, eel grass beds and water birds. In addition, contaminant reduction measures, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality will be evaluated. The feasibility cost-sharing agreement was executed in July 2001 with the Port Authority of New York and New Jersey.

Fiscal Year 2013 funds will be used to continue the feasibility phase of the study, including the evaluation of ecological benefits and costs of restoration opportunities for the draft feasibility study, conduct the agency technical reviews, incorporate the feasibility study recommendations for the Hudson-Raritan Estuary – Hackensack Meadowlands effort into this study’s recommendations, and continue the public outreach program. Fiscal Year 2014 funds are being used to continue the feasibility phase of the study, including the draft feasibility study and Environmental Impact Statement, ecological benefits and costs analyses of restoration opportunities, coordination with regional stakeholders. The estimated cost of the feasibility phase is \$19,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. An Independent External Peer Review is to be conducted at an estimated cost \$500,000 at full federal expense and is exempted from the 50-50 cost sharing for the feasibility phase of the study. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$19,740,000
Reconnaissance Phase (Federal)	240,000
Feasibility Phase (Federal)	10,000,000
Feasibility Phase (Non-Federal)	9,500,000

The study is authorized by the House of Representatives Committee on Transportation and Infrastructure Resolution (Docket Number 2596) dated 15 April 1999.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Hudson-Raritan Estuary, NY and NJ
New York District

The reconnaissance phase was completed in July 2001. The feasibility study schedule is TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Westchester County Streams, Byram River Basin, NY and CT New York District	1,645,000	110,000	86,000	191,000	200,000 <u>2/</u>	100,000 <u>1/</u>	958,000

The Byram River Basin study area is located in Westchester County, New York, and Fairfield County, Connecticut. Major storm events and nor'easters cause erosion to the basin streams and tributaries which pose a threat to public and private property, the area's infrastructure, and safety to human life. The continued sediment transport also damages the basin's ecosystem which impacts the fish and wildlife habitats and recreational activities within the basin. The study will address flood and coastal storm damage reduction measures, as well as ecosystem opportunities within the entire basin. The potential plans could provide comprehensive solutions that will protect homes and businesses from flood damages and restore degraded aquatic ecosystem habitats.

The reconnaissance report there was found Federal interest for further feasibility phase studies. The feasibility study will evaluate potential flood and coastal storm damage reduction opportunities, as well as aquatic ecosystem opportunities to improve the basin's fish and wildlife habitat, water quality improvements, streambank and riparian habitat restoration, sediment transport control, and balancing flow regimes. The feasibility cost-sharing agreement was executed in August 2012 with the Town of Greenwich, Connecticut.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study, including data gathering for existing conditions, and coordination with local interests. Fiscal Year 2014 funds will be used to continue the feasibility phase, including economic and environmental analyses. The estimated cost of the feasibility phase is \$3,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,145,000
Reconnaissance Phase (Federal)	145,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The study is authorized by the U.S. House of Representatives Committee on Transportation & Infrastructure Resolution adopted 2 May 2007.

The reconnaissance phase was completed in August 2012. The feasibility study schedule is TBD.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Westchester County Streams, Byram River Basin, NY and CT
New York District

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Virginia

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Norfolk Harbor and Channels, Elizabeth River Element, VA (Resumption)	1,500,000	0	0	0	0 <u>2/</u>	800,000 <u>1/</u>	700,000

Norfolk District

The Norfolk Harbor and Channels project is located in Hampton Roads, Virginia, a 25-square mile natural harbor serving the ports of Norfolk, Newport News, Portsmouth, Chesapeake, and Hampton, Virginia. The project has been constructed in separable elements based on the needs of the port community and the financial capability of the non-Federal Sponsor, the Virginia Port Authority, an agent of the Commonwealth of Virginia. The study area includes the existing Elizabeth River channel and extends as far upstream as the existing Southern Branch channel. A reconnaissance-level report was completed in July 2012, which demonstrated continued economic feasibility and local sponsor support for implementing this separable element. The proposed project improvements would consist of deepening the existing 40-foot channel on the Main Branch and Southern Branch of the Elizabeth River to the authorized depth of 45 feet and the existing 35-foot channel on the Southern Branch of the Elizabeth River to the authorized depth of 40 feet. These deeper channel depths would allow current and future vessel fleets to fully load the various commodities that move in and out of the waterway. A General Re-evaluation effort will be required to reexamine the channel dimensions required and conduct a new economic analysis. The Virginia Port Authority understands the financial requirements for the General Re-evaluation effort and is ready to execute the feasibility cost sharing agreement in FY 2014.

Fiscal Year 2014 funds will be used to implement a General Re-evaluation of the project in accordance with the Planning Transformation guidance, including development of a project management plan, execution of a feasibility cost sharing agreement, vessel simulation studies, and data gathering for economic and environmental analyses. The estimated cost of this effort is \$3,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Phase GRR Cost	\$3,000,000
Reconnaissance Phase (Federal)	0
Feasibility Phase GRR (Federal)	1,500,000
Feasibility Phase GRR (Non-Federal)	1,500,000

The project is authorized by the Supplemental Appropriations Act of 1985 and the Water Resources Development Act of 1986.

The reconnaissance report was completed in July 2012. The feasibility study completion date is TBD.

Division: North Atlantic

District: Norfolk

Study Name: Norfolk Harbor and Channels, Elizabeth River Element, VA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Norfolk Harbor and Channels, Elizabeth River Element, VA
(Resumption)

Norfolk District

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. N/A

2/ At the time this J-Sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study in N/A.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account in N/A.

Division: North Atlantic

District: Norfolk

Study Name: Norfolk Harbor and Channels,
Elizabeth River Element, VA

1 May 2013

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Construction

Delaware

APPROPRIATION TITLE: Construction, General - Navigation (Deep Draft)

PROJECT: Delaware River Main Channel, Delaware, New Jersey, and Pennsylvania (Continuing)

LOCATION: The project area is located within the Delaware Estuary and borders Pennsylvania, New Jersey and Delaware. It extends over 100 miles of the Delaware River from Philadelphia, Pennsylvania, and Camden, New Jersey, to the mouth of the Delaware Bay.

DESCRIPTION: The recommended plan of improvement calls for deepening the existing Delaware River Federal Navigation Channel from 40 to 45 feet from Philadelphia Harbor, Pa., and Beckett Street Terminal, Camden, N.J., to the mouth of the Delaware Bay, appropriate bend widening, and partial deepening of the Marcus Hook anchorage and relocation of and addition of aids to navigation. The dredged material from the Delaware River portion of the project will be placed in Federally-owned confined upland disposal facilities. Dredged material from the Delaware Bay portion of the project will be used for two beneficial use projects.

AUTHORIZATION: Section 101(6) Water Resources Development Act of 1992, as modified by Section 308 Water Resources Development Act of 1999 and by Section 306 Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 1.5 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 7 3/8 percent, based on the Limited Reevaluation Report dated February 1998.

BASIS OF BENEFIT-COST RATIO: Updated Assessment of Relevant Market and Industry Trends Report, approved September 2011.

SUMMARIZED FINANCIAL DATA:		STATUS:	PERCENT	PHYSICAL
		(1 Jan 2013)	COMPLETE	COMPLETION
				SCHEDULE
Estimated Total Federal Cost	\$226,000,000	Channel Dredging:	26	TBD
Estimated Federal Cost (Ultimate) (COE)	\$226,000,000	Entire Project:	26	TBD
Estimated Other Federal Cost (USCG)	\$ 0			
Estimated Non-Federal Cost	\$112,948,000	PHYSICAL DATA:		
Cash Contributions	\$ 75,235,000	Channel: Channel deepening (dredging of about 103 miles;		
Other Costs	\$ 37,713,000	widening and deepening of bends; deepening of an anchorage		
		Disposal Construction: Eight Federally owned confined upland disposal areas		
		and two beneficial use areas		
Total Estimated Project Cost	\$338,948,000	Navigation aids: Relocation and additional navigation aids		

Division: North Atlantic

District: Philadelphia

Delaware River Main Channel, NJ, PA & DE

1 May 2013

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SUMMARIZED FINANCIAL DATA (continued)

		ACCUM. PCT OF EST. FED COST
Allocations to 30 September 2010	\$ 32,712,000	
Allocation for FY 2011	\$ 1,000	
Allocation for FY 2012	\$ 16,864,000	
Conference Allowance for FY 2013	\$ 31,000,000 5/	
Allocations through FY 2013	\$ 80,577,000 1/ 2/ 3/ 6/	36
Estimated Unobligated Carry-In Funds	\$ 0 4/	
President's Budget for FY 2014	\$ 20,000,000	44
Programmed Balance to Complete after FY 2014	\$ 125,423,000 7/	
Unprogrammed Balance to Complete after FY 2014	\$ 0	

1/ \$44,745,000 reprogrammed from the project.

2/ \$149,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$10,025,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The existing 40-foot Federal navigation project restricts efficient movement of tankers, dry bulk carriers, and containerized cargo vessels, resulting in transportation delays from light loading and lightering of vessels entering the Delaware River port system. The deeper 45-foot project would reduce transportation cost by allowing the Maritime industry to use deeper draft vessels to move these commodities more efficiently. In addition, the project will use dredged material to construct two beneficial use projects: (1) a wetland restoration project; and (2) the Federally authorized Broadkill Beach, Delaware, shore protection project. The average annual benefits are \$35,167,000, of which \$34,576,000 are for transportation cost savings and \$591,000 are for cost savings to the Broadkill Beach project, based on the Updated Assessment of Relevant Market and Industry Trends Report, approved September 2011, at October 2010 prices.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete Reach D	\$20,450,000
Initiate Reach E including Beneficial Use of Dredged Material for Disposal	\$10,611,900
Total	\$31,061,900 8/

8/ Includes unobligated carry-in from FY 2012.

Division: North Atlantic

District: Philadelphia

Delaware River Main Channel, NJ, PA & DE

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue Reach E dredging with completion of contract awarded in FY 13 which includes Beneficial Use of Dredged Material for Disposal	\$20,000,000
Total	\$20,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights-of-way	\$ 0	
Pay 100 percent of costs to modify local service facilities, where necessary, for the construction of the project.	\$ 37,713,000	
Pay 25 percent of the costs allocated to general navigation features during construction.	\$ 75,235,000	
Bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the completed project.		\$316,000
Total Non-Federal Cost	\$112,948,000 1/	\$316,000

1/ The Non-Federal sponsor has also agreed to reimburse an additional 10 percent of the general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, and relocation provided for commercial navigation.

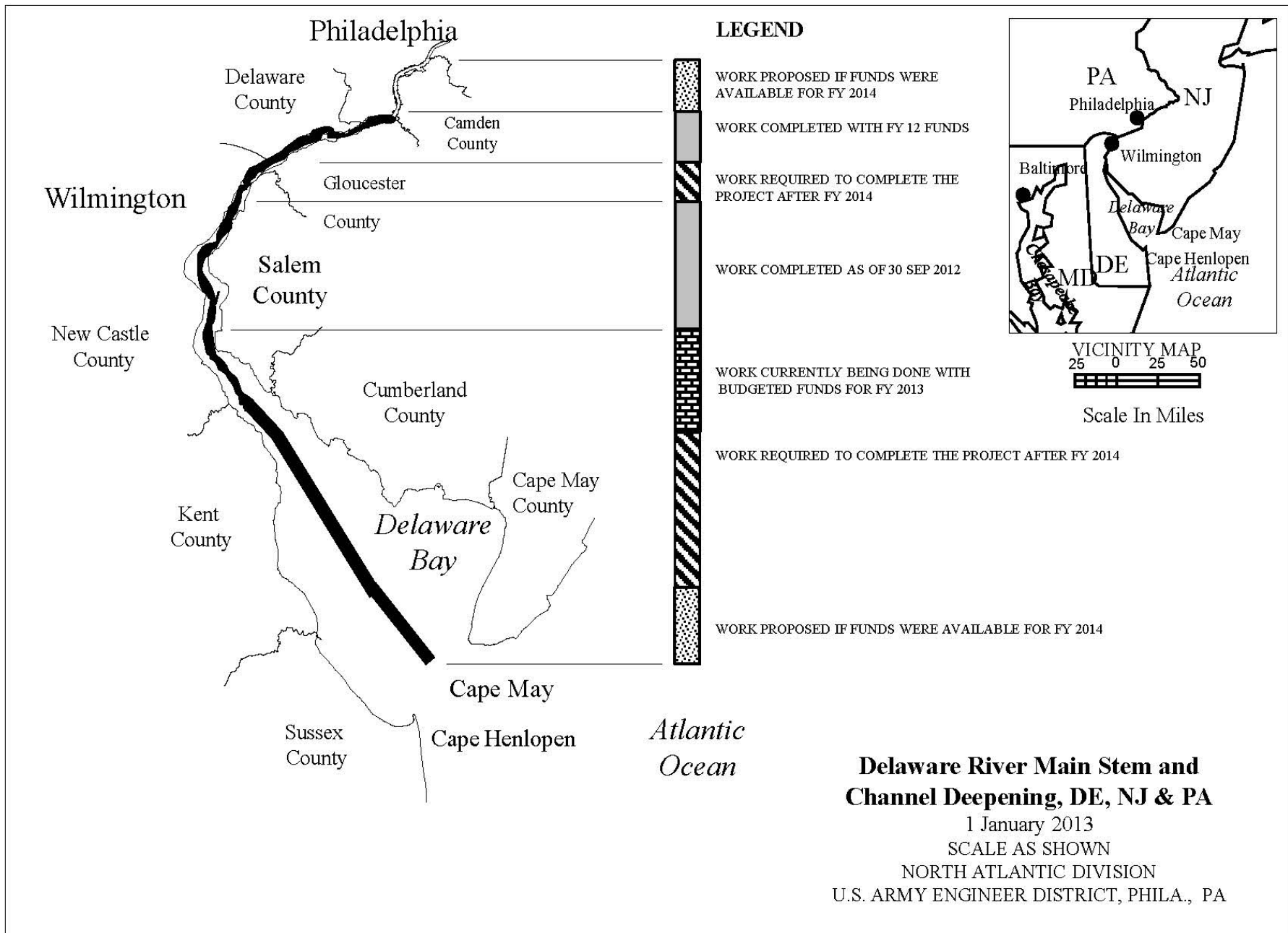
STATUS OF LOCAL COOPERATION: The Project Partnering Agreement (PPA) was executed on 23 Jun 2008. The Philadelphia Regional Port Authority (PRPA) is the non-Federal sponsor. Sponsor is willing to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$226,000,000 is an increase of \$3,000,000 from the latest estimate (\$223,000,000) presented to Congress (FY 2013). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$3,000,000
Total	\$3,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: As part of the preconstruction engineering and design (PED) effort a Supplemental Environmental Impact Statement (SEIS) was prepared in December 1996. The Final Supplemental Environmental Impact Statement was filed with U.S. Environmental Protection Agency in July 1997, and the Record of Decision was signed in December 1998. Additionally, an Environmental Assessment (EA) was completed in April 2009. The purpose of this EA was to evaluate the impacts of changes to the authorized project, which are the result of detailed Preconstruction, Engineering and Design (PED) studies, as well as changes to the existing conditions in the project area from those described in the 1992 EIS, 1997 SEIS, and 1998 Record of Decision (ROD), and to consolidate in one document the results of post-SEIS monitoring and data collection efforts. The conclusion of the 2009 EA was that any changes to the project or changes to the physical conditions where the project will be constructed would have no significant, adverse effects on the human environment, over and above the potential environmental effects already addressed in the earlier EIS, SEIS, and ROD. No significant adverse environmental effects are expected to occur as a result of the issues addressed in the EA. A second EA was completed in September 2011 to address changes to the affected environment and changes to the project since completion of the 2009 EA, which primarily included the potential listing of the Atlantic sturgeon as a Federally-listed endangered species. The EA concluded that the evaluated changes will have no significant, adverse effects on the human environment beyond the effects addressed in the earlier documents and a Finding of No Significant Impact (FONSI) was issued.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1992. Funds to initiate construction were appropriated in FY 1999.



Maryland

APPROPRIATION TITLE: Construction – Aquatic Ecosystem Restoration

PROJECT: Assateague Island, Maryland (Continuing)

LOCATION: The Town of Ocean City and adjacent areas of Worcester County comprise an area of 625 square miles including Assateague Island, Ocean City Inlet, and Chincoteague, Sinepuxent, Assawoman, and Isle of Wight Bays on the eastern shore of Maryland. Adjacent to Ocean City is the Assateague Island National Seashore and Assateague Island State Park.

DESCRIPTION: The project involves the short-term (initial) and long-term (renourishment) restoration of Assateague Island. The completed short-term restoration plan included dredging approximately 1.4 million cubic meters from Great Gull Bank and placing it on Assateague Island in the area between 2.5 kilometers and 12.0 kilometers south of the south jetty. The beach was widened varying distances based on the varying erosion rates. A low-storm berm was constructed to an approximate elevation of 3.3 meters National Geodetic Vertical Datum (NGVD) (averaging 0.8 meters in height) between approximately 5.1 kilometers and 7.9 kilometers south of the south jetty. The final placement and berm elevation was configured to minimize adverse impacts to the two federally-listed threatened species (piping plover and seabeach amaranth), that occur on the island, and to restore the integrity of the island. The continuing long-term phase of the project allows for the “mobile bypassing” of sand that would naturally have reached the island had the jetties never been built. Mobile bypassing will involve using a small mobile hopper dredge to remove sand that has been redirected to a number of sites, and then bypassing it to Assateague Island. This dredging takes place during the spring and fall of each year, using a small split-hull dredge built, owned, and operated by the USACE Wilmington District. This schedule will provide sediment to the island on a periodic basis that will more closely mimic natural processes.

AUTHORIZATION: Section 534 of Water Resources Development Act of 1996, PL 104-303.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	39,236,000			
Estimated Federal Partner (NPS) Cost	26,184,000	Initial construction	100	Dec 2002
Cash Contributions	26,035,000	Renourishment	23	2028
Other Costs	149,000			
Total Estimated Construction Cost	65,420,000			

Division: North Atlantic

District: Baltimore

Assateague Island, MD

SUMMARIZED FINANCIAL DATA: (Continued)	ACCUM PCT OF EST FED COST	PHYSICAL DATA
Allocations to 30 September 2010	17,244,000	Initial Beach Construction - 1,400,000 CY
Allocation for FY 2011	1,198,000	Annual Renourishment – 189,000 CY
Allocation for FY 2012	700,000	
Conference Allowance for FY 2013	1,200,000 5/	
Allocations through FY 2013	20,342,000 1/ 2/ 3/ 6/ 51	
Estimated Carry-in Funds	0 4/	
President's Budget for FY 2014	1,200,000 54	
Programmed Balance to Complete after FY 2014	17,694,000 7/	
Un-programmed balance to Complete after FY 2014	0	

1/ \$0 reprogrammed from the project.

2/ \$2,488 rescinded from the project.

3 /\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

4/ Estimated Unobligated "Carry-in" Funding. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried-into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: This project mitigates for damages caused by the Federal navigation channel at Ocean City Inlet. Construction of the jetties by the Corps of Engineers in 1934 is to stabilize the Ocean City Inlet interrupted the natural longshore transport of sand from Ocean City to Assateague, starving the northern end of Assateague Island of sand. The northern 1.5-7 miles of Assateague has eroded at an accelerated rate since then. It is estimated that the induced erosion rate for this section of the island was 10.8 feet per year. The island is at severe risk of breaching, which would result in adverse physical, biological, and economic impacts in the area and threaten the habitat of several endangered species such as the piping plover. Barrier island geologic integrity must be maintained to conserve this important component of the Western Hemisphere Shorebird Reserve Network and considered among the most important areas for migratory shorebirds. Prior to the restoration, 70% of seabeach amaranth habitat and 80% of Piping Plover habitat have been lost as compared to 1960's. The long term phase of the project is mitigating for the portion of the sand losses that are attributable to the inlet, not those due to natural erosion. The Ocean City Harbor and Inlet and Sinepuxent Bay MD project w/372 acres of barrier island habitat are protected by this mitigation. The project consists of initial construction of a beach berm of varying width at elevation 3.3 m National Geodetic Vertical Datum. Initial construction was completed in 2002 with the placement of 1.4M cubic yards (cy) of beach quality sand from an offshore borrow area. The authorized project also includes periodic nourishment. In accordance with the Chief's Report, the authorized project requires an estimated 189,000 cy of sand to be placed on the beach on a bi-annual basis to maintain the level of protection. This is the estimated average amount of sand that would have been bypassed across Ocean City Inlet by natural forces in the absence of the Federal navigation project. Periodic nourishment is authorized for a period of 50 years from the commencement of initial construction, and is scheduled to complete in 2028. The project has had to date 9 cycles of periodic nourishment: 2004 (180,000 cy), 2005 (113,000 cy), 2006 (160,000 cy), 2007 (188,000 cy), 2008 (115,000 cy), 2009 (153,000 cy), 2010 (141,000 cy), 2011 (129,000 cy), and 2012 (157,000 cy) placing a total of 1,335,000 cy to date. The project has been very successful at maintaining beach profiles required to sustain the required environmental habitat. Without continued periodic nourishment the natural habitat would be subject to severe damage if erosion of the shore protection project was allowed to continue and the minimum design template was compromised.

Division: North Atlantic

District: Baltimore

Assateague Island, MD

1 May 2013

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FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue dredging/restoration \$1,307,000 8/

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue dredging/restoration \$1,200,000

NON-FEDERAL COSTS: None.

STATUS OF LOCAL COOPERATION: The sponsor for the project is the National Park Service who administers the Assateague Island National Seashore. The National Park Service has provided lands, easements and rights-of-way for the initial construction work and has agreed to cost share 50% of the long-term work. An agreement between the Park Service and the Corps was executed in September 2001.

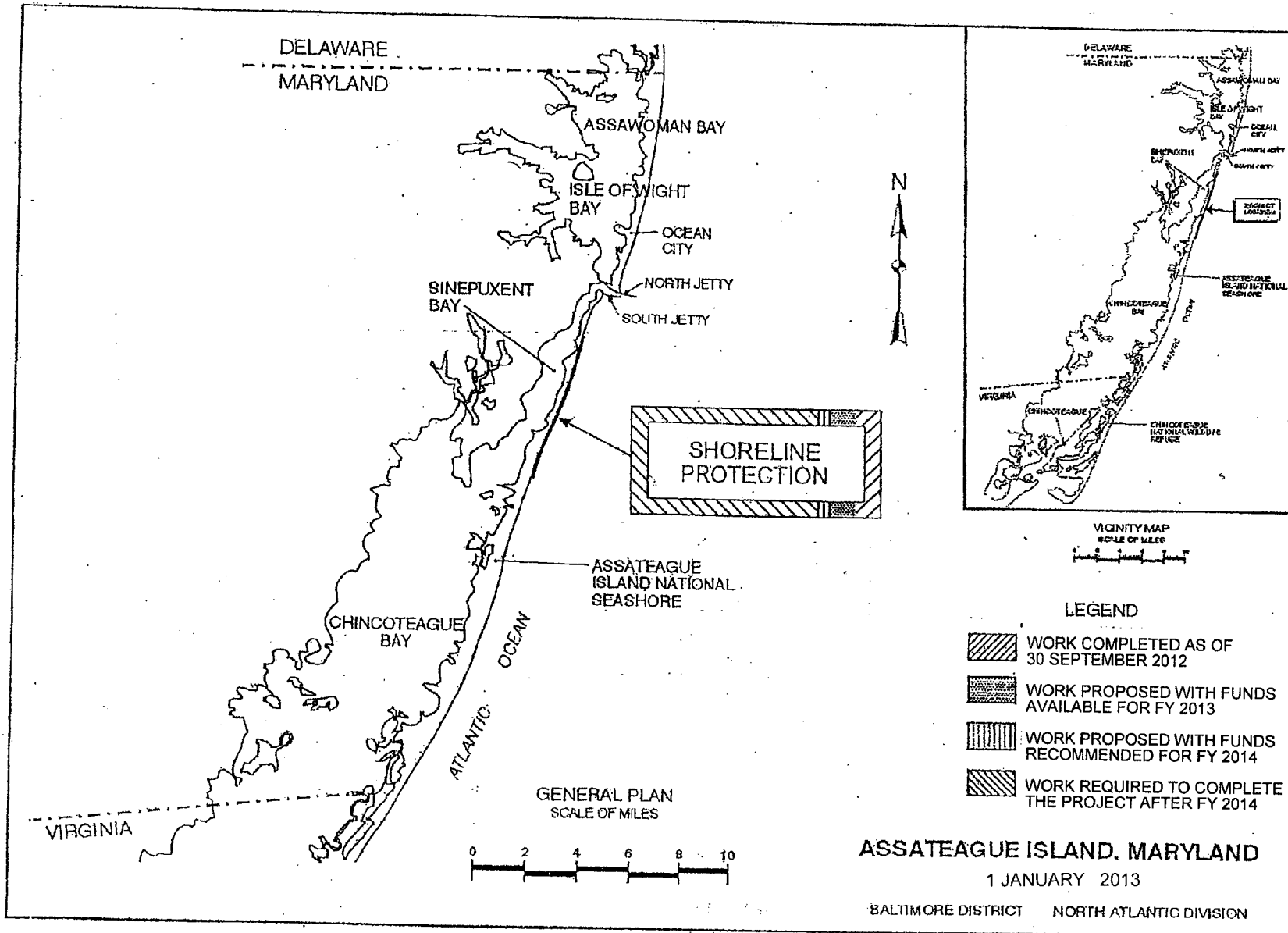
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$39,236,000 is an increase of \$786,000 from the latest estimate (\$38,450,000) presented to Congress (FY 2013). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$ 786,000
Total	\$ 786,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A draft Environmental Impact Statement was incorporated in the draft Integrated Interim Report dated May 1997. The final Environmental Impact Statement was incorporated in the final feasibility report completed in June 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001.

Project authorization and subsequent appropriations provided Federal funding for the initial construction phase of beach protection projects that reduce storm damages, but does not support follow-up work for such projects, except in those cases where the operation and maintenance of Federal navigation projects contributed to the erosion of the shoreline.



APPROPRIATION TITLE: Construction, General – Aquatic Ecosystem Restoration

PROJECT: Chesapeake Bay Oyster Recovery, Maryland & Virginia (Continuing)

LOCATION: In the Chesapeake Bay as located in the State of Maryland and the Commonwealth of Virginia

DESCRIPTION: The first phase of the project consisted of a multi-agency Federal and State of Maryland program to restore oyster populations in Maryland's portion of the Chesapeake Bay. This project included construction and rehabilitation of oyster reefs to create disease-free oyster habitat; construction of seed bars for production and collection of disease-free oyster seed or "spat;" planting disease-free spat in locations which best foster oyster reproduction and health; and monitoring the performance of the project to increase oyster populations. To date, 393 acres of oyster habitat have been created in Virginia, and 459 acres of habitat in Maryland.

The second phase of the project consists of producing a long-term master plan for future restoration sites, addressing the Executive Order 13508 goal to restore 20 tributaries to 20% to 40% of historic habitat (circa 1906-1911) by 2025. This recommendation builds upon the continuing short term restoration efforts and includes the construction of oyster habitat restoration sites in Tangier and Pocomoke Sounds and the Great Wicomico, Lynnhaven and Piankatank Rivers in Virginia, as well as in several Chesapeake Bay tributaries in Maryland.

AUTHORIZATION: Section 704(b) of Water Resources Development Act (WRDA) of 1986 (PL 99-662), as amended by Section 505 of WRDA 1996 (PL 104-303); Section 342 of WRDA 2000 (PL 106-541); Section 113 of the Energy and Water Development Appropriation Act, 2002; Section 126 of the Energy and Water Development Appropriations Act, 2006; and Section 5021 WRDA 2007 (PL 110-114).

REMAINING BENEFIT-REMAINING COST RATIO: The total benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The total benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	50,000,000			
Estimated Non-Federal Cost:	16,666,000	Entire Project	69	TBD
Cash Contributions	0			
Other Costs	16,666,000			
Total Estimated Project Cost	66,666,000			

Division: North Atlantic

District: Baltimore

Chesapeake Bay Oyster Recovery, MD & VA

SUMMARIZED FINANCIAL DATA: (Continued)

		ACCUM PCT OF EST FED COST
Allocations to 30 September 2010	\$ 25,641,000	
Allocation for FY 2011	3,989,000	
Allocation for FY 2012	4,510,000	
Conference Allowance for FY 2013	5,000,000	5/
Allocations through FY 2013	39,140,000	1/ 2/ 3/ 6/ 78
Estimated Carry-in Funds	0	4/
President's Budget for FY 2014	5,000,000	88
Programmed Balance to Complete after FY 2014	5,860,000	7/
Un-programmed Balance to Complete after FY 2014	\$ 0	

PHYSICAL DATA

New oyster bars construction	2,000 acres
Existing oyster bars rehabilitation	135 acres
Seed bars creation	100 acres
Hatchery Spat transplanted	10 billion

1/ \$1,141,000 reprogrammed from the project.

2/ \$10,365 rescinded from project.

3/ \$350,000 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried-into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The Chesapeake Bay oyster population has declined dramatically since the turn of the century, largely due to the parasitic diseases, MSX, Dermo, and overharvesting. These diseases kill oysters before they reach maturity and marketable size. As a result, there has been a collapse in the oyster industry, with the 1995 harvest equating to less than one percent of the harvest 100 years ago. More significantly, the reduced oyster population has adversely impacted water quality in the Bay, due to the smaller size and numbers of oyster beds to filter and clean the water. Activities to restore physical oyster habitat and maintain water quality are critical to the economic and environmental survival of the Chesapeake Bay. Restoration of oyster populations in the bay is a high priority of the State of Maryland, the Commonwealth of Virginia, and the Chesapeake Bay Program. Over the past 17 years, the Baltimore and Norfolk Districts have been engaged in oyster restoration efforts in the Chesapeake Bay region in Maryland and Virginia, respectively. During this period, the Corps of Engineers has constructed over 850 acres of new oyster habitat. In May 2009, Executive Order 13508 provided a renewed interest in Chesapeake Bay restoration on the national level, and oysters are considered a keystone species for such Bay restoration. As part of this project, the Corps has developed a long-term master plan to document the Corps' role in implementation of oyster restoration activities.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Fish and Wildlife Facilities:	Maryland	4,510,000
	Virginia	1,687,000
Planning, Engineering, and Design:	Maryland	200,000
	Virginia	600,000
Construction Management:	Maryland	501,000
	Virginia	143,000
Total		7,641,000 <u>8/</u>

8/ Includes unobligated carry-in from FY2012.

Division: North Atlantic

District: Baltimore

Chesapeake Bay Oyster Recovery, MD &VA

FISCAL YEAR 2014: The requested amount will be applied to continue Chesapeake Bay oyster restoration work within Maryland and Virginia as follows:

Fish and Wildlife Facilities:	Maryland	2,262,000
	Virginia	1,305,000
Planning, Engineering, and Design:	Maryland	230,000
	Virginia	875,000
Construction Management:	Maryland	208,000
	Virginia	120,000
Total		5,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

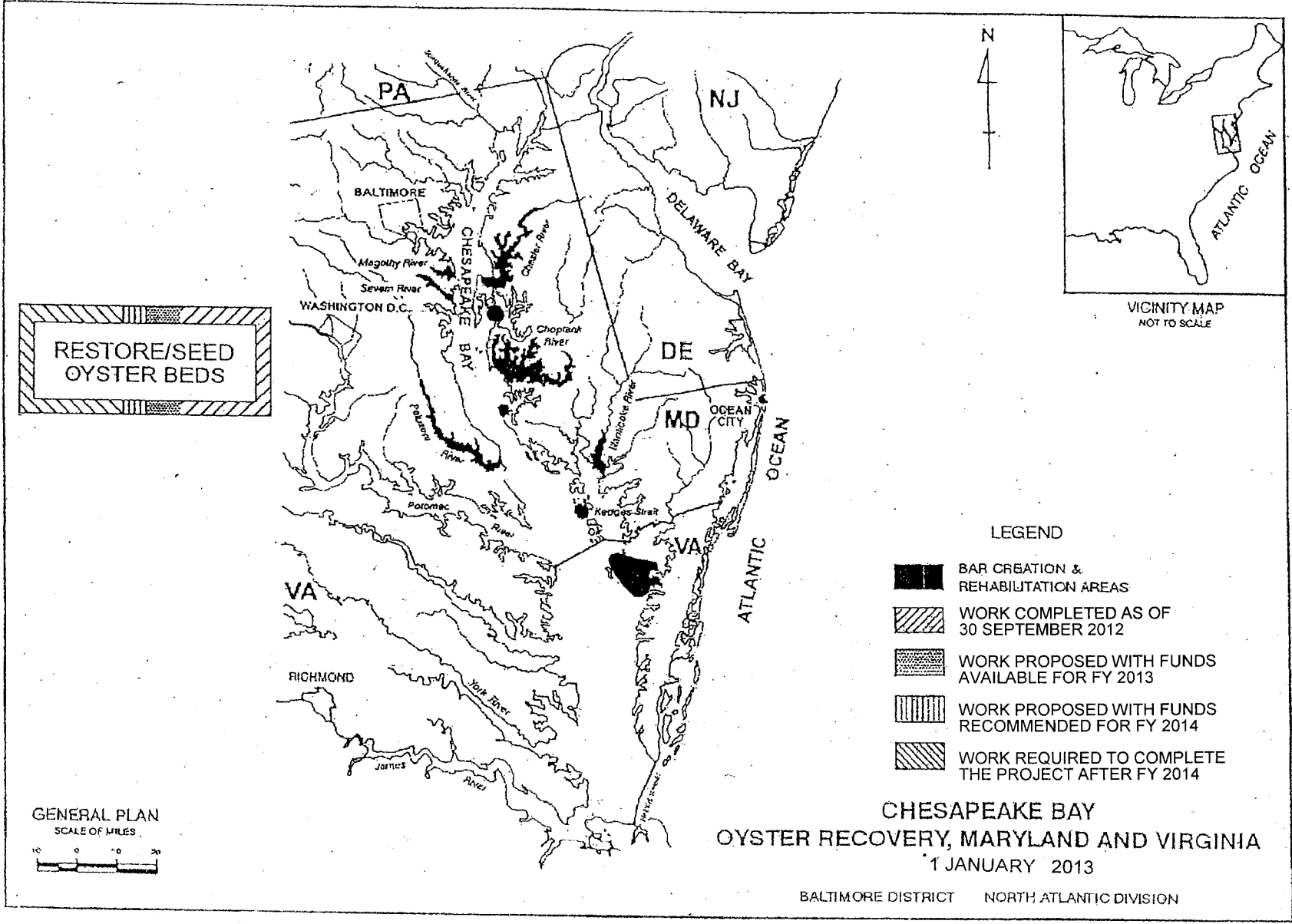
Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Pay 25 percent of the cost allocated to fish and wildlife restoration (by work-in-kind credits) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of fish and wildlife facilities.	\$16,666,000	\$0
Total Non-Federal Costs	\$16,666,000	

STATUS OF LOCAL COOPERATION: The State of Maryland and the Commonwealth of Virginia are the non-Federal project sponsors. The project cooperation agreement between the Corps of Engineers and the State of Maryland was executed in February 1997. An amendment to this agreement was executed in July 2002. The project cooperation agreement between the Corps and the Commonwealth of Virginia was executed in September 2001. To date, the States have fully complied with the requirements of local cooperation.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal estimate of \$50,000,000 is the same as the last estimate (\$50,000,000) presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment and finding of no significant impact was completed in January 1996 for the Maryland activities. Supplemental environmental efforts for the Maryland activities were completed in July 1999, June 2002, and June 2009. Separate environmental assessments and findings of no significant impacts were prepared in 2001, 2003 and 2005 for Virginia activities in the Tangier Sound, Great Wicomico River and the Lynnhaven River.

OTHER INFORMATION: The current authorized Federal program cost limit is expected to be exhausted in early FY 2016 with work suspended pending Congressional re-authorization. Section 5021 of WRDA 2007 increased the authorized limit for this project to \$50,000,000. Funds to initiate construction were appropriated in FY 1995.



APPROPRIATION TITLE: Construction, General – Aquatic Ecosystem Restoration

PROJECT: Poplar Island, Maryland (Continuing)

LOCATION: Poplar Island is a group of islands located in the upper middle Chesapeake Bay approximately 34 nautical miles southeast of the Port of Baltimore and 1 mile northwest of Tilghman Island, Talbot County, MD.

DESCRIPTION: The environmental restoration project consists of reconstructing Poplar Island to its approximate size in 1847—1,140 acres—using an estimated 40 million cubic yards of uncontaminated dredged material from maintenance dredging of the approach channels of the Baltimore Harbor and Channels navigation project. This restoration will be accomplished through the construction of approximately 35,000 feet of armored dikes, which will contain the dredged material needed to form tidal marsh wetlands and upland habitat and to protect the dredged material placement area from severe wave activity.

Section 3087 of WRDA 2007 authorized a 575-acre expansion of Poplar Island. The expansion would be approximately 29 percent wetlands, 47 percent uplands and 24 percent open water. The expansion would include a 5-foot raising of the existing uplands dikes on Poplar Island and would increase the island's overall dredged material placement capacity by 28 million cubic yards.

AUTHORIZATION: Section 537 of P.L. 104-303 (WRDA 1996), as amended by: Section 318 of P.L. 106-541 (WRDA 2000); and, Section 3087 of P.L. 110-114 (WRDA 2007).

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The benefit –cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		Entire Project (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	474,250,000	Entire Project	45	TBD
Estimated Non-Federal Cost:	192,750,000			
Cash Contributions	42,500,000			
Other Costs	150,250,000			
Total Estimated Project Cost	667,000,000			

Division: North Atlantic

District: Baltimore

Poplar Island, MD

SUMMARIZED FINANCIAL DATA: (Continued)	ACCUM PCT OF EST FED COST	PHYSICAL DATA
Allocations to 30 September 2010	193,661,000	Earth and rock dikes
Allocation for FY 2011	3,650,000	Wetlands created
Allocation for FY 2012	14,690,000	Uplands created
Conference Allowance for FY 2013	13,500,000 5/	35,000 feet
Allocations through FY 2013	225,501,000 1/ 2/ 3/ 6/ 47	736 acres
Estimated Carry-in Funds	0 4/	851 acres
President's Budget for FY 2014	18,400,000	
Programmed Balance to Complete after FY 2014	230,349,000 7/	
Un-programmed balance to Complete after FY 2014	0	

1/ \$1,615,000 reprogrammed to the project.

2/ \$5,244 rescinded from the project.

3 /\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

4/ Estimated Unobligated "Carry-in" Funding. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried-into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the study as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: Chesapeake Bay remote island habitat and wetlands are being lost at a very high rate, which adversely impacts Bay health. The Poplar Island project is an example of a continuing Chesapeake Bay restoration and protection effort designed and built to improve the health of the Bay. Islands are preferentially selected by many fish and wildlife species as nesting/production areas, and the lack of human disturbance and limited predators make islands more ecologically productive. Poplar Island was eroding at more than 13 feet per year before this restoration began and would have disappeared without this effort. The plan to restore the island using uncontaminated dredged material from maintenance dredging of the Baltimore Harbor and Channels navigation project was developed through the cooperative efforts of many state and Federal agencies, as well as private organizations. Total inflow of dredged material through 2012 is 21.4 million cubic yards (MCY) with 2.0 MCY expected in 2013 and another 2.0 MCY being placed with this FY 2014 budget request. The project has created 176 acres of tidal wetlands to date and another 111 acres will be established with this FY 14 budget request.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Construction management, monitoring, and stakeholder coordination.	\$ 2,100,000
Inflow of dredged material for wetlands and island cell development.	11,000,000
Continue design of wetland cells 3A & 3C.	400,000
Initiate Expansion Design	386,000
Total	\$ 13,886,000 <u>8/</u>

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Construction management;	
Construction management, monitoring, and stakeholder coordination.	\$ 2,600,000
Inflow of dredged material for wetlands and island cell development	11,300,000
Award and complete tidal inlet structures for cells 3A & 3C	2,000,000
Award and complete wetland planting of cells 3A & 3C.	1,500,000
Continue design of expansion component	1,000,000
Total	\$ 18,400,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Provide lands, easements, and rights-of-way	\$ 37,000	
Pay 25 percent of the original and 35 percent of the expansion cost allocated to fish & wildlife restoration (including \$150,213,000 in credits for in-kind services and materials) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of fish and wildlife facilities.	192,713,000	440,000
Total Non-Federal Costs	\$192,750,000	440,000

STATUS OF LOCAL COOPERATION: The State of Maryland is the non-Federal sponsor. By letter dated 16 May 1996, the State of Maryland stated its intent to be the non-Federal sponsor and participate in project cost sharing in accordance with the Water Resources Development Act of 1986. The Project Cooperation Agreement was executed in April 1997, amended 9 April 2002 to reflect in-kind services authorized by the Water Resources Development Act of 2000, and being amended December 2009 to reflect expansion authorized by WRDA 2007. To date, the State has fully complied with the local requirements on the project.

Division: North Atlantic

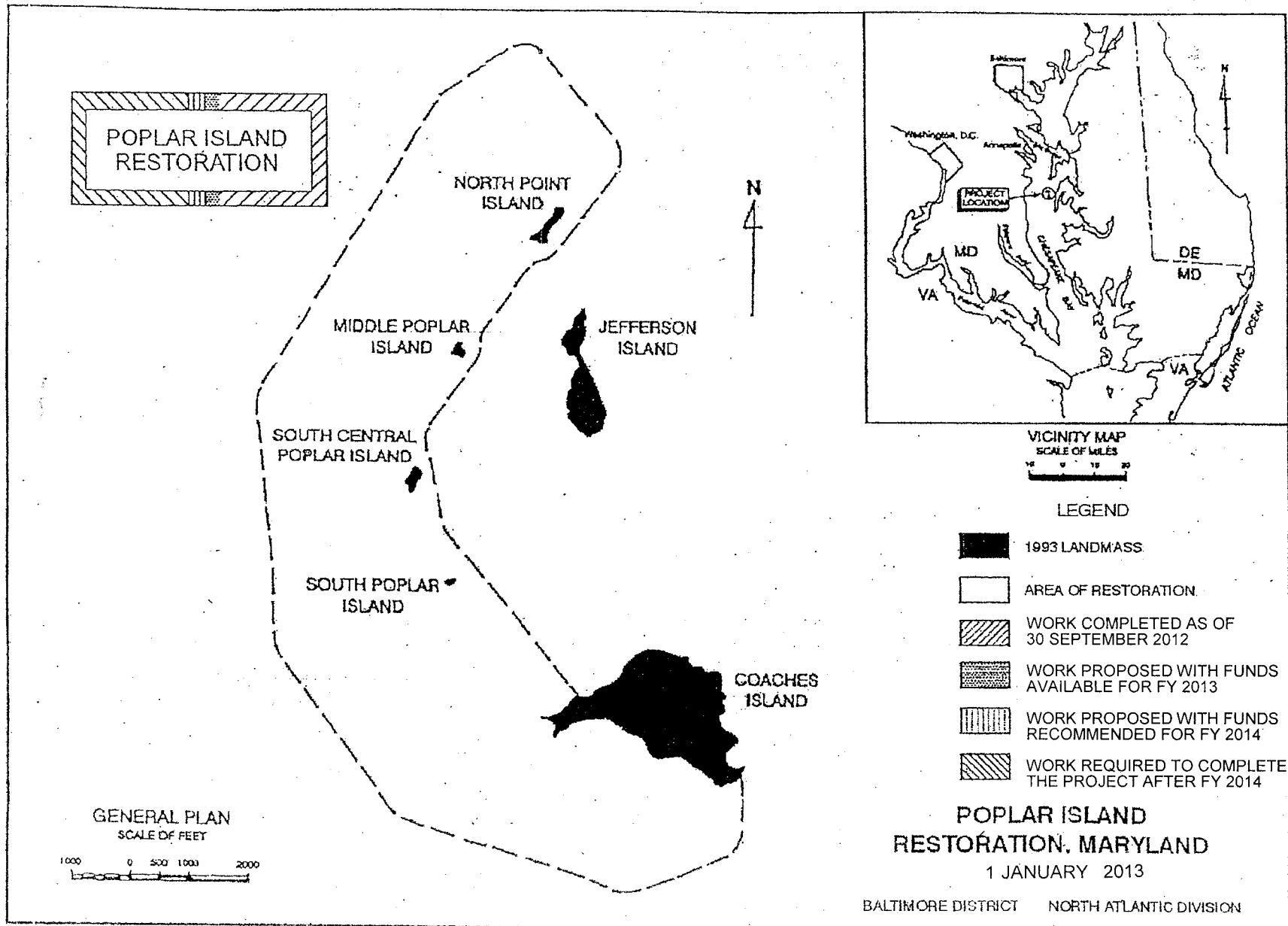
District: Baltimore

Poplar Island, MD

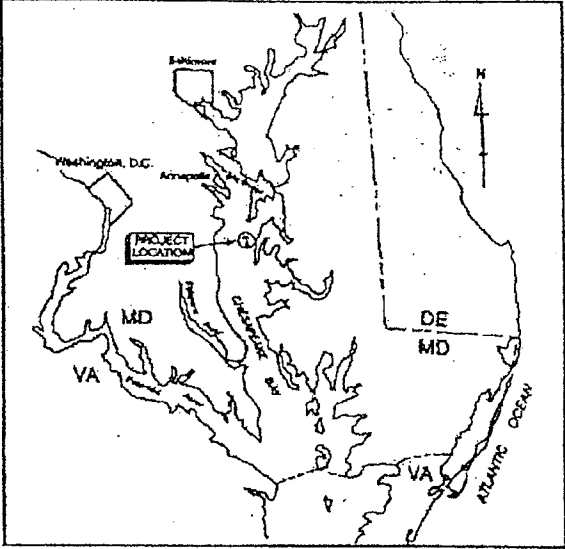
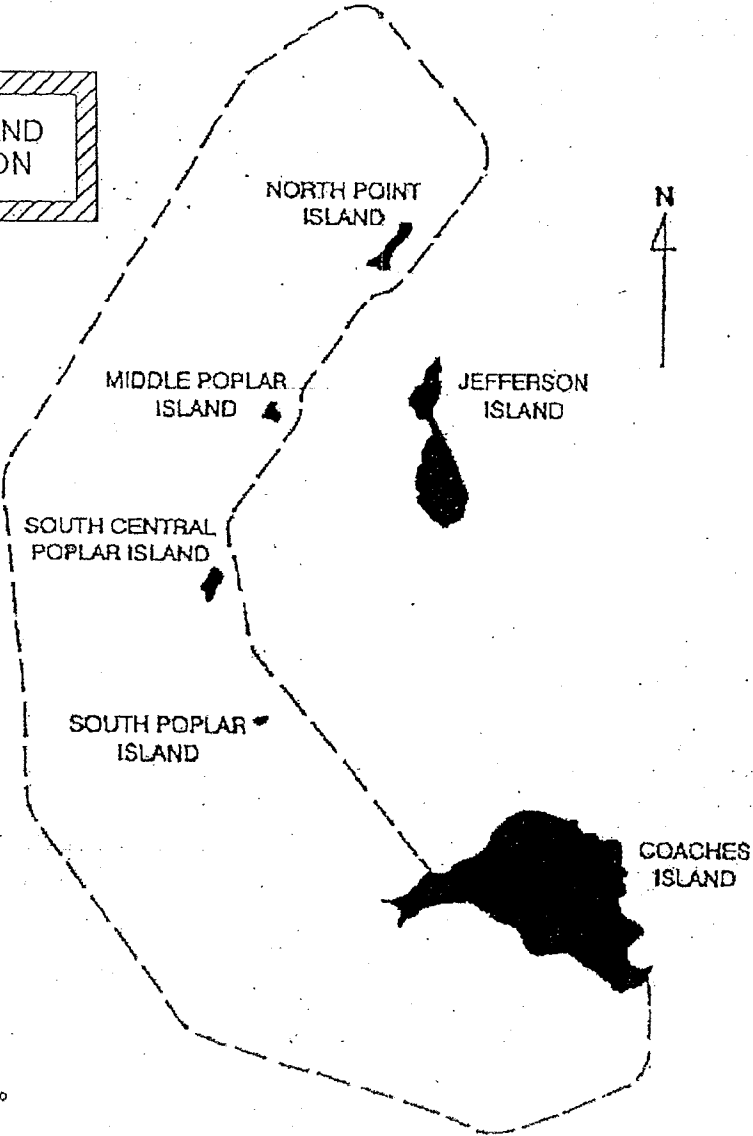
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The EIS was distributed for review and was finalized in February 1996 under the authority of Section 204 of the Water Resources Development Act of 1992.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$474,250,000 is the same as the last estimate (\$474,250,000) presented to Congress (FY 2013).

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1994. Planning for this project was accomplished under the authority of Section 204 of the Water Resources Development Act (WRDA) of 1992. Section 3087 of WRDA 2007 authorized expansion construction in accordance with the cost sharing provisions of section 204 WRDA 1992 (75-25). Section 2037 of WRDA 2007 amended Section 204 to provide that the additional work would be cost shared in accordance with Section 103(d)(7) of WRDA 1986 which provides for 65-35 cost sharing as opposed to the 75-25 cost sharing previously authorized. A new cost estimate as part of the Limited Reevaluation Report is being prepared. As part of the continuing wetlands development design process it was determined to be more effective and efficient to increase the size of cells 3a and 3c thereby eliminating the need and additional costs for cell 3b while maintaining the tidal wetlands development and delivery schedule. The expansion work is in the design phase and has not begun construction.



POPLAR ISLAND RESTORATION



Massachusetts

APPROPRIATION TITLE: Construction, General - Flood and Coastal Storm Damage Risk Reduction and Aquatic Ecosystem Restoration

PROJECT: Muddy River, Boston and Brookline, Massachusetts (Continuing)

LOCATION: The Muddy River is a 3.5 mile urban waterway located in eastern Massachusetts in the communities of Boston, Brookline and Newton. The Muddy River originates at Jamaica Pond and flows through the heart of Frederick Law Olmsted's famed "Emerald Necklace", one of the most carefully crafted park systems in America. The park is located next to several residential neighborhoods and some of the area's most prominent businesses and institutions such as the Museum of Fine Arts, Longwood Medical Center, Northeastern University and Wentworth, Simmons and Emmanuel Colleges.

DESCRIPTION: The flood risk management portion of the project involves dredging approximately 65,000 cubic yards of sediment to deepen the Muddy River, removal or replacement of undersized culverts and streambank protection which will provide flood damage reduction against the recurrence of a 20-year event. The ecosystem restoration portion of the project involves dredging approximately 135,000 cubic yards of sediment and restoration of riparian vegetation to improve water quality, enhance aquatic and riparian habitat, and promote recreational use of the river and surrounding parklands. Only flood risk management work is programmed. The project will be constructed in two phases. Phase I involves replacement of two undersized culverts, day-lighting two sections of the river and modification of a bridge and culvert headwall for flood risk management. Phase II involves dredging of the river for both flood risk management and ecosystem restoration.

AUTHORIZATION: Section 552 of the Water Resources Development Act of 2000, Public Law 106-541 dated 11 December 2000.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the flood risk management portion of the project is 3.9 to 1 at 7 percent. The remaining benefit-remaining cost ratio for the ecosystem restoration portion of the project is not applicable.

TOTAL BENEFIT-COST RATIO: The total benefit to cost ratio for the flood risk management portion of the project is 1.8 to 1 at 7 percent. The total benefit to cost ratio for the ecosystem restoration portion of the project is not applicable.

INITIAL BENEFIT-COST RATIO: The initial benefit to cost ratio for the flood risk management portion of the project is 3.2 to 1 at 5 7/8 percent (FY 2003). The initial benefit to cost ratio for the ecosystem restoration portion of the project is not applicable.

BASIS OF BENEFIT-COST RATIO: Flood risk management benefits are based on an approved Economic Update Report of the Muddy River Flood Risk Management Project, Boston, Massachusetts, dated May 2011. Benefits are expressed at January 2011 price levels. The initial benefit-cost ratio for the Aquatic Ecosystem Restoration portion of the project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA			ACCUMULATED PCT. OF EST. FED COST	STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 59,020,000		Flood Risk Management	15	TBD
Programmed Construction	36,910,000			Ecosystem Restoration	0	Unprogrammed
Un-programmed Construction	22,110,000			Entire Project	8	Unprogrammed
Estimated Non-Federal Cost		34,980,000				
Programmed Construction	19,875,000					
Cash Contribution	19,815,000					
Other Costs	60,000					
Un-programmed Construction	15,105,000					
Cash Contribution	15,075,000					
Other Costs	30,000					
Total Estimated Project Cost		\$ 94,000,000				
Allocations to 30 September 2010		\$ 23,171,000				
Allocation for FY 2011		(3,501,000)				
Allocation for FY 2012		3,920,000				
Conference Allowance for FY 2013		5,000,000				
Allocated Amount for FY 2013		5,000,000 <u>5/</u>				
Allocations through FY 2013		28,590,000 <u>1/ 2/ 3/ 6/</u>	48			
Estimated Carry-In Funds		4,000,000 <u>4/</u>				
President's Budget for FY 2014		8,000,000	62			
Programmed Balance to Complete after FY 2014		320,000 <u>7/</u>				
Un-programmed Balance to Complete after FY 2014		22,110,000				

1/ \$1,561,000 reprogrammed from the project.

2/ \$4,029,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$4,000,000. This amount, together with the Budget Amount shown above, will be used to perform work on the project as follows: Oversight of Phase I construction and design and award of Phase II construction contract.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$3,900,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The flood risk management portion of the project involves dredging 65,000 cubic yards of accumulated sediments, daylighting 700 linear feet of river and replacing 530 linear feet of undersized culverts. The ecosystem restoration portion of the project involves dredging 135,000 cubic yards of accumulated sediments and planting 3.5 acres of emergent vegetation.

JUSTIFICATION: During the past century the Muddy River watershed has experienced the effects of gradual urbanization and is now over 70 percent developed. The Muddy River is the only remaining small urban stream in Boston or Brookline that still provides significant aquatic habitat. Its location within one of the nation's premier historic park systems and close proximity to internationally known medical, cultural and educational institutions further adds to its significance. Accumulated sediment from urban runoff has contributed to poor water quality, loss of aquatic habitat, and proliferation of invasive aquatic and emergent wetland vegetation. Removal of nutrient rich sediment and invasive plant species will significantly improve water quality, restore 8 acres of open water habitat, create more diverse emergent and riparian habitat, and restore the aesthetic quality of the Muddy River. Flooding has worsened because there is little natural storage remaining in the watershed and the carrying capacity of the river has been restricted by undersized culverts, accumulated sediment, vegetation and debris. Several residential neighborhoods and some of the area's most prominent businesses and institutions are subject to frequent flood damage. In October 1996 a 20 to 25-year storm, caused widespread flooding along the Muddy River. The Kenmore Square Subway Station, part of the Massachusetts Bay Transportation Authority's Green Line, was flooded with over 30 feet of water causing \$51,000,000 in damages and disrupting public transportation services for about 6 months. Average annual damages for the Muddy River are estimated at about \$8,000,000. The proposed project would protect against damages from all floods up to an average recurrence frequency of once in 20 years, as well as reducing damages from larger, more infrequent floods. The average annual flood risk management benefits for the Muddy River are estimated at \$8,228,900 at a January 2011 price level.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Planning, Engineering and Design of Phase II	\$ 800,000
Construction Management of Phase I	634,000
Total	\$ 1,434,000 <u>8/</u>

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The budget amount plus carry-in funds of \$4,000,000 will be used as follows:

Award Construction Contract for Phase II	\$ 10,600,000
Initiate Construction Management of Phase II	50,000
Complete Planning, Engineering and Design of Phase II	750,000
Complete Construction Management of Phase I	600,000
Total	\$ 12,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the following requirements:

	Construction and Reimbursements	Maintenance, Repair, Rehabilitation and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights-of-way, and suitable borrow and dredged or excavated material disposal areas, and perform all relocations determined by the Federal Government to be necessary for the construction, operation and maintenance of the project.	\$ 90,000	
Pay 34.9 percent of the costs allocated to flood risk management and ecosystem restoration to bring the total non-Federal share of these costs to 35 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood risk management and ecosystem restoration facilities.	31,690,000	\$ 220,000
Pay all additional costs for the locally preferred plan to dredge Wards Pond instead of the Federally implementable plan of aeration.	3,200,000	
Total Non-Federal Costs	\$ 34,980,000	\$ 220,000

STATUS OF LOCAL COOPERATION: The City of Boston, Town of Brookline, Massachusetts Executive Office of Environmental Affairs (EOEA) and Massachusetts Department of Conservation and Recreation (DCR) are the local sponsors for the project. The City of Boston signed an agreement for design of the entire project on 13 June 2005. The sponsors entered into a Project Partnership Agreement (PPA) with the Corps on 17 February 2011. The current non-Federal cost estimate has increased \$5,165,000 from the estimate contained in the PPA. Project sponsors have expressed a willingness to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$59,020,000 is an increase of \$8,775,000 from the latest estimate (\$50,245,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 650,000
Actual Award Price of Phase I Construction Contract	8,125,000
Total	\$ 8,775,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment and Finding of No Significant Impact was completed on 1 October 2003.

OTHER INFORMATION: Funds to initiate Preconstruction Engineering and Design were appropriated in FY 2001. Funds to initiate construction of the project were first appropriated in FY 2003. It has been determined that the ecosystem restoration elements do not demonstrate environmental significance and are therefore not justified.

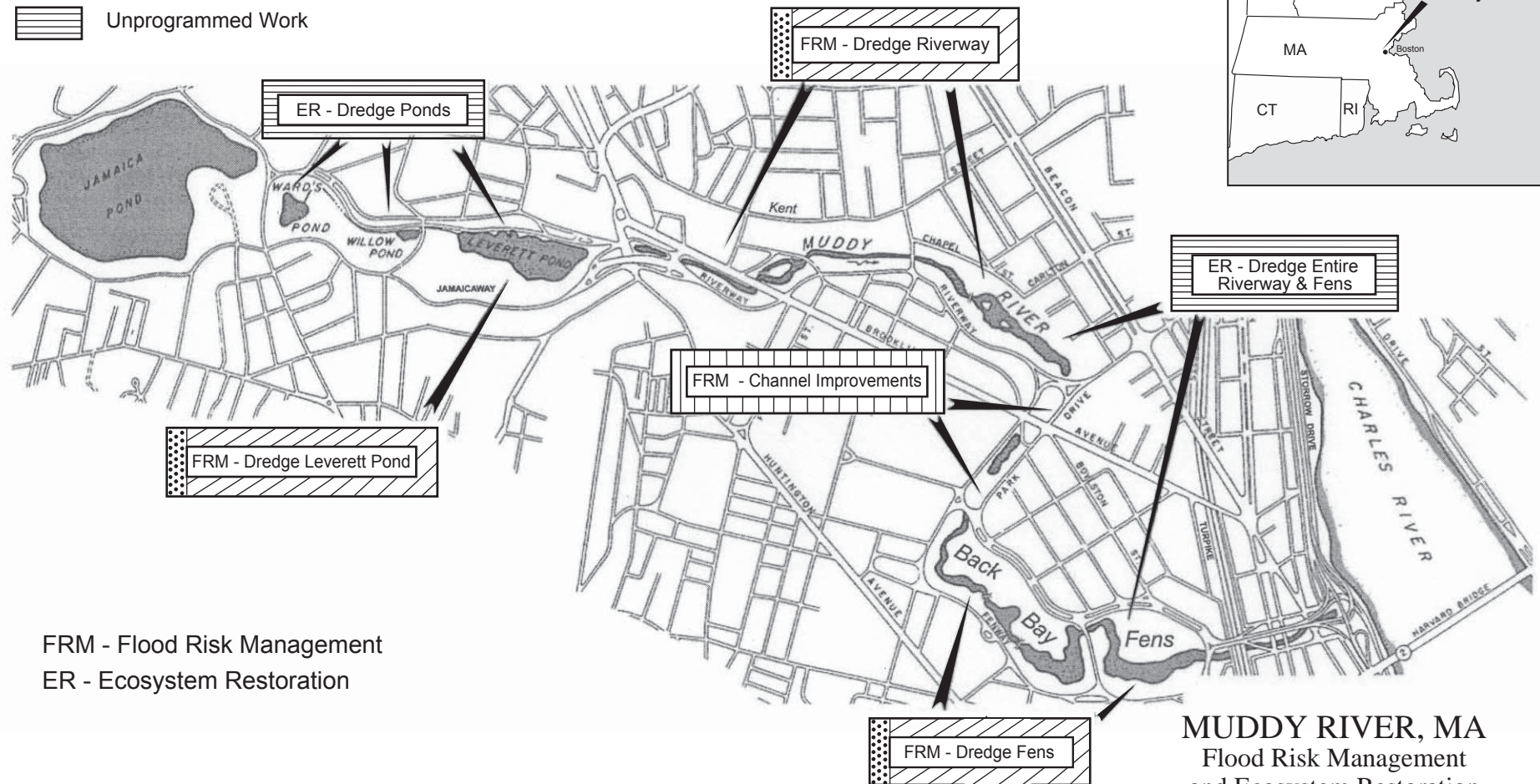
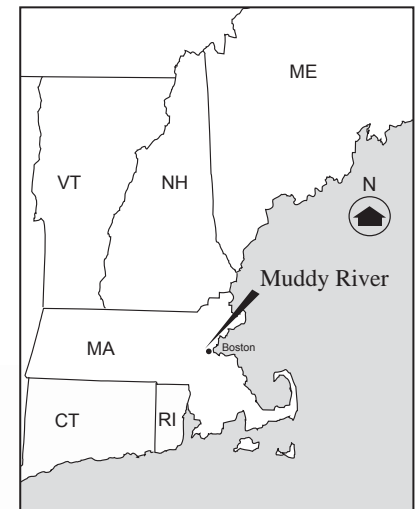
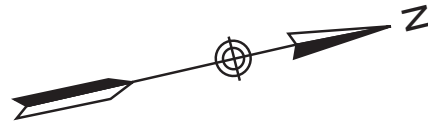
Division: North Atlantic

District: New England

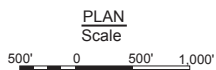
Muddy River, Boston and Brookline, MA

LEGEND

- (none) Work Completed as of 30 September 2012
- Work Underway with Funds available for FY 2013
- Work Proposed with Funds Requested for FY 2014
- Work Required to Complete the Project after FY 2014
- Unprogrammed Work



FRM - Flood Risk Management
 ER - Ecosystem Restoration



MUDDY RIVER, MA
 Flood Risk Management
 and Ecosystem Restoration
 1 January 2013
 North Atlantic Division
 New England District, Corps of Engineers

New Jersey

APPROPRIATION TITLE: Construction General – Navigation Mitigation

PROJECT: Cape May Inlet to Lower Township, New Jersey (Continuing)

LOCATION: The project is located on the Atlantic coast of New Jersey, extending from the southwest jetty of Cape May Inlet to 3rd Ave. in Cape May City. It includes the communities of the City of Cape May and Lower Township, and the US Coast Guard Training Center, all located in Cape May County. The project is approximately 38 miles southwest of Atlantic City.

DESCRIPTION: The project consists of initial beachfill (25 to 180-foot wide berm at elevation +8 feet NGVD) with periodic nourishment on a 2-year cycle, extension of 17 storm water outfalls, reconstruction of 7 groins and construction of two new groins, and a shoreline monitoring program for the project area. Construction of a 2,560-foot rubble mound weir-breakwater is deferred pending demonstration of need. The construction of two groins and placing beachfill and periodic nourishment are programmed while the construction of a weir breakwater is unprogrammed.

AUTHORIZATION: Water Resources Development Act of 1986

REMAINING BENEFIT-REMAINING COST RATIO: 3.8 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 2.8 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 2.6 to 1 at 7 percent

BASIS OF BENEFIT-COST RATIO: Cape May Inlet to Lower Township, New Jersey, July 2011 Economic Update – Level 1 Reaffirmation Report approved on October 21, 2011 at October 2011 price level.

SUMMARIZED FINANCIAL DATA:		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$89,160,000	Initial Construction	100	June 1991
Programmed Construction	\$ 79,212,000	Breakwaters	0	TBD
Initial Construction	\$ 5,930,000	Periodic Nourishment	38	2038
Periodic Nourishment	\$73,282,000	Entire Project	38	TBD
Unprogrammed Construction	\$ 9,948,000			
Initial Construction	\$ 9,948,000	PHYSICAL DATA:		
Periodic Nourishment	\$ 0	Beachfill: Elev +8 Feet (NGVD), 25-180 foot width		
		Groins: 7 existing and 2 new groins 360-786 feet		
		Weir Breakwater: 2,560 linear feet rubble mound		
		Periodic Nourishment: 180,000 cubic yards per year		

Division: North Atlantic

District Philadelphia

Cape May Inlet to Lower Township, NJ

1 May 2013

NAD - 71

SUMMARIZED FINANCIAL DATA (Continued)

Estimated Federal Cost (USCG)		\$ 51,530,000	
Programmed Construction		\$ 46,134,000	
Initial Construction		\$ 3,458,000	
Periodic Nourishment		\$42,676,000	
Unprogrammed Construction		\$ 5,396,000	
Initial Construction		\$ 5,396,000	
Periodic Nourishment		\$ 0	
Estimated Non-Federal Cost		\$ 3,336,000	
Programmed Construction		\$ 2,332,000	
Initial Construction		\$ 656,000	
Cash Contributions		\$ 656,000	
Other Costs		\$ 0	
Periodic Nourishment		\$ 1,676,000	
Cash Contributions		\$1,676,000	
Other Costs		\$ 0	
Unprogrammed Construction		\$ 1,004,000	
Initial Construction		\$ 1,004,000	
Cash Contributions		\$1,004,000	
Other Costs		\$ 0	
Total Estimated Programmed Construction Cost	\$127,678,000		7/
Initial Construction	\$ 10,044,000		
Periodic Nourishment	\$117,634,000		
Total Estimated Unprogrammed Construction Cost	\$ 16,348,000		
Initial Construction	\$ 16,348,000		
Periodic Nourishment	\$ 0		
Total Estimated Project Cost	\$144,026,000		
Initial Construction	\$ 26,392,000		
Periodic Nourishment	\$117,634,000		

SUMMARIZED FINANCIAL DATA:

		ACCUM PCT OF EST FED COST
Allocations to 30 September 2010	\$30,633,000 8/	
Allocation for FY 2011	\$ 9,279,000	
Allocation for FY 2012	\$ 200,000	
Conference Allowance for FY 2013	\$ 200,000 5/	
Allocations through FY 2013	\$40,312,000 1/ 2/ 3/ 6/	45
Estimated Unobligated Carry-In Funds	\$ 0 4/	
President's Budget for FY 2014	\$ 200,000	45
Programmed Balance to Complete after FY 2014	\$38,700,000 7/	
Unprogrammed Balance to Complete after FY 2014	\$ 9,948,000	

1/ \$2,402,000 reprogrammed to the project.

2/ \$30,349 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$150,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features. 100 percent of project costs are allocable to the restoration of sand losses from operation and maintenance of Cape May Inlet.

JUSTIFICATION: The project area has experienced substantial erosion since the construction of the Cape May Inlet jetties in 1911 by the Federal Government. The jetties interrupt the natural movement of sand along the coast which serves to replenish downdrift beach areas. The City of Cape May and State of New Jersey had spent nearly \$4 million since 1945 to combat the resulting erosion. This erosion had left Cape May with little or no protective beach, thus endangering many hotels, small businesses, prominent homes, and a U.S. Coast Guard Training Center. This project would partially restore the beaches of Cape May lost as the direct result of the Cape May Inlet jetties. The potential for future storm damages and maintenance of the seawall would be greatly reduced. The commercial tourism industry would also be enhanced by the provision of sufficient beach area for recreational usage. The project prevented approximately \$9 million worth of damages during the 3-5 January 1992 storm, and approximately \$500,000 in damages during the 7-8 January 1996 storm. Federal facilities have existed at the present site since the establishment of a U.S. Navy Section Base in 1918. The U.S. Coast Guard became the sole occupant in 1948 when the Recruit Training Center was transferred from Florida. In addition to being the sole site for Coast Guard recruit training for the entire nation, the site also includes a Group/Air Station complex, a Search and Rescue Station, a small boat maintenance facility, and berths for four cutters ranging from 82 to 210 feet in length. The Commandant of the U.S. Coast Guard (USCG) provides funds for a cost-shared project with the Corps of Engineers, because of the erosion at the Training Center and the need for a cooperative effort to solve the problem.

JUSTIFICATION: (continued)

The project consists of initial construction of a beach berm of varying width at elevation 6.75 NAVD. Initial construction was completed in 1991 with the placement of 1.4M cubic yards (cy) of beach quality sand from an offshore borrow area. The authorized project also includes periodic nourishment. In accordance with the Chief's Report, the authorized project requires an estimated 360,000 cy of sand to be placed on the beach on a 2-yr cycle to maintain the level of protection. This is the estimated average amount of sand that would have been bypassed across Cape May Inlet by natural forces in the absence of the Federal navigation project. Periodic nourishment is authorized for a period of 50 years from the commencement of initial construction, and is scheduled to end in 2038. The project has had 9 cycles of periodic nourishment: 1993 (415K cy), 1995 (330K cy), 1997 (366K cy), 1999 (400K cy), 2003 (267K cy), 2004 (290K cy), 2007 (190K cy), 2009 (234K cy), and 2012 (635K cy). The greater than normal quantity of sand placed in 2012 is attributable to the delay in periodic nourishment (since 2009) and greater than average erosion rates from wave action and coastal storms during the period. The project has been very successful at preventing storm damage in Cape May. In fact, nor'easters and hurricanes have caused little damage since completion of the project's initial construction and subsequent re-nourishments. This is especially apparent from the latest storm, Hurricane Sandy in Oct-Nov 2012. Without continued periodic nourishment, the City of Cape May and the US Coast Guard Training Center at Cape May (and its rescue cutter fleet) would be subject to severe damage if erosion of the shore protection project were allowed to continue and the minimum design template was compromised. The project is typically ranked highly in the budget development process because it is mitigating for the damages caused by the Federal navigation channel at Cape May Inlet. The average annual benefits are \$3,993,000 at 2012 price levels.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Project Monitoring	\$ 200,000
Total:	\$ 200,000 8/

8/ Includes no unobligated carry-in from FY 2012. All funds were obligated.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Project Monitoring	\$ 200,000
Total:	\$ 200,000

NON-FEDERAL COST: In accordance with Section 101 of the Water Resources Development Act of 1986, costs of constructing measures for mitigation of erosion damages attributable to the Federal navigation project at Cape May Inlet shall be shared in the same proportion as the cost sharing provisions applicable to the original project at Cape May Inlet. The original project was constructed at a Federal cost of approximately \$900,000 with a local contribution of \$100,000. The distribution of initial costs between the USCG and Cape May City is based on the ratio of benefits accrued by the feeder beach between the two locations. Costs for the remaining features of the recommended project will be allocated to Cape May City. As the project is authorized, the non-Federal sponsor must pay 10 percent of the costs not assigned to the Coast Guard.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Reimbursement Costs
Cash contributions equal to 10 percent of the initial construction cost and 10 percent of periodic nourishment and monitoring.	\$ 2,332,000	
Cash contributions equal to 10 percent of initial breakwater construction Costs (Deferred)	\$ 1,004,000	
Total Non-Federal Costs	\$ 3,336,000	\$0

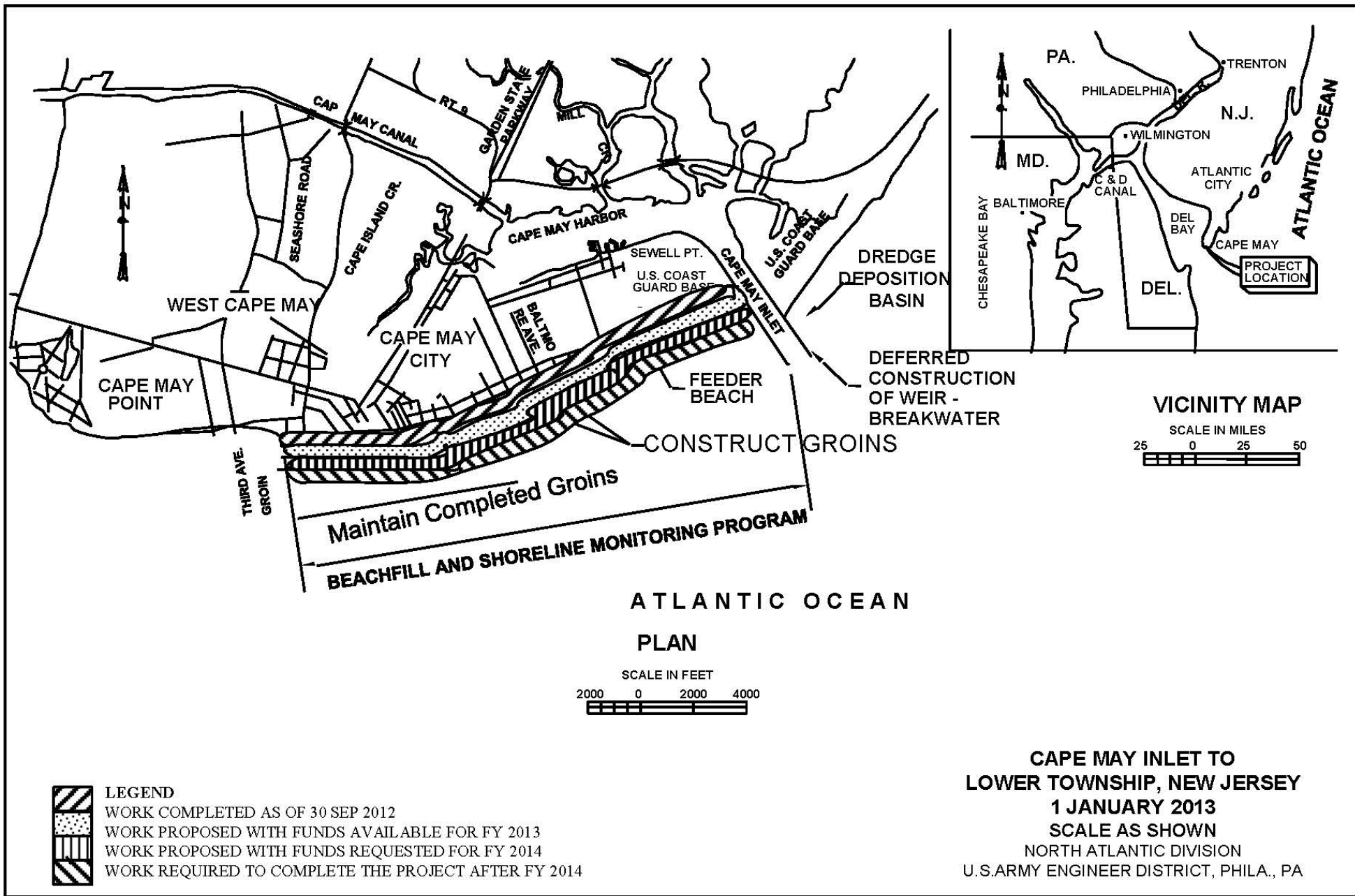
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey. A Memorandum of Agreement with the USCG was executed on 4 August 1988. A Local Cooperation Agreement with the State of New Jersey was executed on 31 October 1988. Sponsor is willing to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$89,160,000 is a decrease of \$2,160,000 from the latest estimate (\$91,320,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price De-escalation on Construction Features	(\$2,160,000)
Total	(\$2,160,000)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 8 October 1976 and a Final Supplement was filed with the Environmental Protection Agency on 14 August 1981. Listing of Piping Plover (*Charadrius Melodus*) as an endangered bird species in January 1986 and the recent determination by State wildlife officials that the species nests in the project area have necessitated informal consultation in accordance with Section 7 of the Endangered Species Act of 1973. A letter from U.S. Fish and Wildlife Service, dated 20 August 1987 determined that the proposed project is not likely to adversely affect the Piping Plover, provided an operational window is observed. Coordination with the Service is continuing.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1978. Funds to initiate construction were appropriated in FY 1986.



1 May 2013

NAD - 76

APPROPRIATION TITLE: Construction, General – Flood and Coastal Storm Damage Risk Reduction

PROJECT: Great Egg Harbor Inlet and Peck Beach, New Jersey (Continuing)

LOCATION: The project is located in Cape May County, New Jersey. Great Egg Harbor Inlet provides a tidal connection from the Atlantic Ocean to Great Egg Harbor Bay and the NJIWW. Peck Beach is occupied in its entirety by the City of Ocean City and extends from Great Egg Harbor Inlet southwest to Corson Inlet, a distance of about 8 miles.

DESCRIPTION: The project consists of providing initial beachfill, with subsequent periodic nourishment, with a minimum berm width of 100 feet at an elevation of +8.0 National Geodetic Vertical Datum (NGVD). The beachfill extends from Surf Road southwest to 34th Street with a 1,000-foot taper south of 34th Street. This plan required the initial placement of approximately 6.2 million cubic yards of material and subsequent periodic nourishment of approximately 1.1 million cubic yards every 3 years. The material for the initial construction and periodic nourishment is being taken from the ebb shoal area located approximately 5,000 feet offshore of the Great Egg Harbor Inlet. This periodic dredging of the ebb shoal area will help alleviate the navigation difficulties in the inlet. Additionally, the initial construction of the project required the extension of 38 storm drain pipes.

AUTHORIZATION: Committee Resolution on December 15, 1970 under the provisions of Section 201 of P.L. 89-298. Project reauthorized with provisions for construction of separable elements under Section 831(1) of the Water Resources Development Act of 1986, P.L. 99-662.

REMAINING BENEFIT-REMAINING COST RATIO: 7.1 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 5.3 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 4.7 to 1 at 8 7/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Great Egg Harbor Inlet and Peck Beach, New Jersey, July 2011 Economic Update – Level 1 Reaffirmation Report approved on October 31, 2011 at October 2011 price levels.

STATUS: (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Initial Beachfill (Phase 1)	100	Oct 1992
Initial Beachfill (Phase 2)	100	Mar 1993
Periodic Nourishment	11	2041
Entire Project	16	TBD

PHYSICAL DATA:

Beachfill: Elevation +8 feet (NGVD); 100-Foot Width
Periodic Nourishment: 1.1 million cy every three years

SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost	\$386,450,000
Initial Construction	\$ 22,540,000
Periodic Nourishment	\$363,910,000
Estimated Non-Federal Costs	\$208,074,000
Initial Construction	\$ 12,133,000
Cash Contributions	\$ 12,133,000
Other Costs	\$ 0
Periodic Nourishment	\$195,941,000
Cash Contributions	\$195,941,000
Other Costs	\$ 0
Total Estimated Project Cost	\$594,524,000
Initial Construction	\$ 34,673,000
Periodic Nourishment	\$559,851,000

		ACCUM. PCT. OF EST FED COST
Allocations to 30 September 2010	\$ 56,548,000	
Allocation for FY 2011	\$ 529,000	
Allocation for FY 2012	\$ 490,000	
Conference Allowance for FY 2013	\$ 7,000,000 5/	
Allocations through FY 2013	\$ 64,567,000 1/ 2/ 3/ 6/	17
Estimated Unobligated Carry-In Funds	\$ 0 4/	
President's Budget for FY 2014	\$ 500,000	17
Programmed Balance to Complete after FY 2014	\$321,383,000 7/	
Unprogrammed Balance to Complete after FY 2014	\$ 0	

1/ \$2,064,000 reprogrammed from the project.

2/ \$57,099 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$132,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The instability of Great Egg Harbor Inlet and the shoreline along Peck Beach is a significant problem. Peck Beach, a 8-mile-long barrier island along New Jersey's southern coastline contains the entire City of Ocean City. The primary problem at Ocean City is the vulnerability of the beach and the adjacent highly urbanized development to erosion and direct wave attack during major storms. Historical erosion rates for the beaches have averaged five feet per year with severe erosion rates up to 35 feet per year in some locations. In March 1962, a severe storm caused breaching and failing of bulkheads and dunes, and resulted in about \$15,000,000 damages of which \$4,000,000 was attributed to direct wave attack. It was noted that the area fronting the existing Federal shore protection for Ocean City sustained less damage than other locations. The storm of 28 to 30 March 1984 caused extensive damage to the beach, boardwalk, properties and buildings due to the vulnerable condition of the beaches. More recently, the storms of 30 and 31 October 1991 and 3 to 5 January 1992 caused extensive damages to the beach, boardwalk, properties and buildings. Since initial construction of the project was completed in March 1993, approximately \$20,000,000 worth of damages to the area were prevented during the 3-5 January 1992 storm, \$4,000,000 in damages to the boardwalk during Hurricane Felix in August 1995, and \$1,000,000 during the storm of 7-8 January 1996.

Beach erosion and loss of protective dunes have left Ocean City extremely vulnerable to inundations and direct wave attack from even minor storm events. The instability and shoaling of Great Egg Harbor Inlet also creates navigation difficulties for commercial and recreation craft, particularly those associated with low tides and ground swells and damages due to running aground. Unsafe navigation conditions due to excessive shoals at Great Egg Harbor Inlet required the State of New Jersey to commence emergency dredging operations in October 1989.

The project consists of initial construction of a beach berm of minimum 100-foot width at elevation 8.7 North Atlantic Vertical Datum (NAVD). Initial construction was completed in 1993 with the placement of 6.2M cubic yards (cy) of beach quality sand from a borrow area located at Great Egg Harbor Inlet. The authorized project also includes periodic nourishment. In accordance with the Chief's Report, the authorized project requires an estimated 1.1M cy of sand to be placed on the beach on a 3-year cycle to maintain the level of protection. Periodic nourishment is authorized for a period of 50 years from the commencement of initial construction, and is scheduled to end in 2041. The project has had 5 cycles of periodic nourishment: 1995 (2M cy), 1997 (800K cy), 2000 (1.35M cy), 2004 (1.6M cy), and 2010 (1.85M cy). The greater than normal quantity of sand placed in 2010 is attributable to the delay in periodic nourishment (since 2004). The project has been very successful at preventing storm damage in Ocean City. In fact, nor'easters and hurricanes have caused little damage since completion of the project's initial construction and subsequent re-nourishments. This is especially apparent from the latest storm, Hurricane Sandy in Oct-Nov 2012. Without continued periodic nourishment, Ocean City would be subject to severe damage if erosion of the shore protection project was allowed to continue and the minimum design template was compromised. The project is typically ranked highly in the budget development process because of its high BCR. The Life Safety Hazard Index is 241. The average annual benefits are \$31,835,000 (2012 price level).

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Project Monitoring	\$ 500,000
Complete 6 th Nourishment Cycle	\$6,500,000
Total:	\$7,000,000 8/

8/ Includes unobligated carry-in from FY 2012.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Project Monitoring	\$ 500,000
Total:	\$ 500,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide 35 percent of the initial construction costs assigned to project for flood and coastal storm damage reduction	\$ 12,133,000	
Provide during construction 35 percent of each periodic nourishment costs assigned to the project for flood and coastal storm damage reduction	\$195,941,000	
Bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the completed project.		\$32,900
Total Non-Federal Cost	\$208,074,000	\$32,900

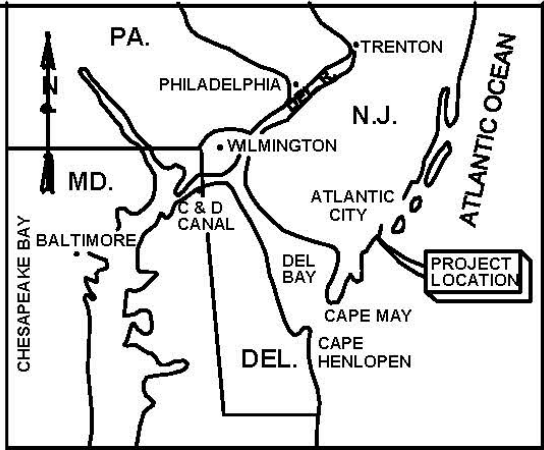
STATUS OF LOCAL COOPERATION: The State of New Jersey (New Jersey Department of Environmental Protection) is the non-Federal sponsor for the project. In a letter dated 28 September 1990, the state identified a funding source for the non-Federal costs and indicated that it was prepared to proceed with the final negotiations to sign the Local Cooperation Agreement. The state's financing plan was provided by letter dated 28 February 1991. The local cooperation agreement was executed on 18 September 1991. The State has provided the required cost sharing for the initial construction and previous periodic nourishment cycles. They have also indicated that they are prepared to provide the required cost share for the currently scheduled periodic nourishment cycle. The sponsor is willing to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$386,450,000 is a decrease of \$26,050,000 from the latest estimate (\$412,500,000) presented to Congress (FY 2013). This change includes the following items:

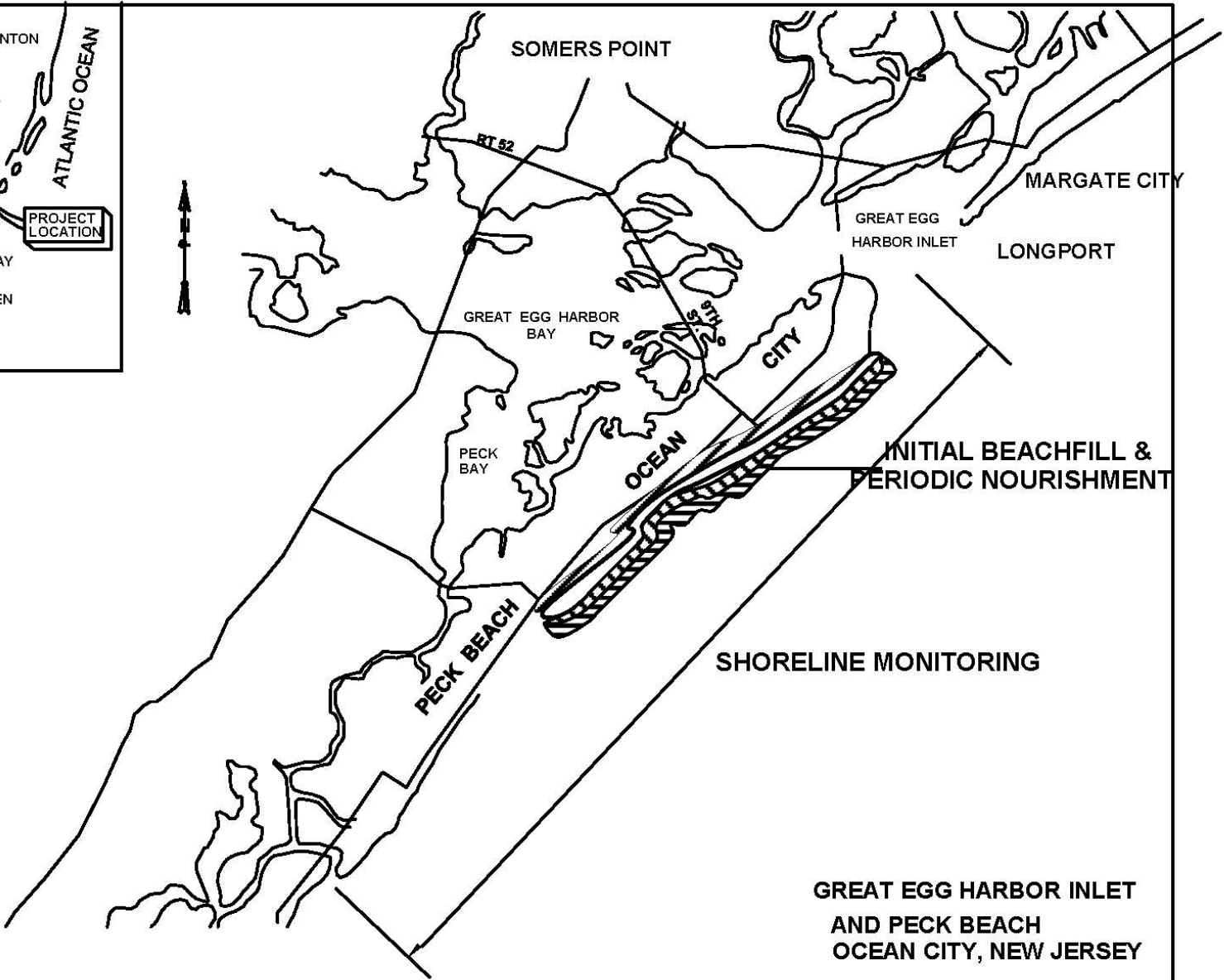
Item	Amount
Price Escalation on Construction Features	\$ 4,200,000
Other Estimating Adjustments (Computation error on Periodic Nourishment)	\$(30,250,000)
Total	\$ 26,050,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 13 November 1970 and a Final Supplemental Environmental Impact Statement (FSEIS) was filed with the Environmental Protection Agency (EPA) in August 1990. The Piping Plover (*Charadrius melodus*) was listed as an endangered bird species in January 1986 and a determination that the species nests in the project area necessitated informal consultation in accordance with Section 7 of the Endangered Species Act of 1973. A letter from the US Fish and Wildlife Service, dated 9 January 1989 directed the Corps to minimize impacts to the Piping Plover in the project area. A detailed plan to protect the Piping Plover was included in the FSEIS. On 31 August 1990, the Advisory Council on Historic Preservation informed the District that it did not concur with the Finding of No Effect issued by the New Jersey State Historic Preservation Office on 12 April 1989. A process Memorandum of Agreement to address cultural resources concerns relating to project effects on the shipwreck *Sindia* was executed on 4 April 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1973. Funds to initiate construction were appropriated in FY 1990.



VICINITY MAP



INITIAL BEACHFILL & PERIODIC NOURISHMENT

SHORELINE MONITORING

**GREAT EGG HARBOR INLET
AND PECK BEACH
OCEAN CITY, NEW JERSEY**



LEGEND
 WORK COMPLETED AS OF 30 SEP 2012
 WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2013
 WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
 WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014



PLAN

SCALE IN MILES

**1 JANUARY 2013
SCALE AS SHOWN**

**NORTH ATLANTIC DIVISION
U.S. ARMY ENGINEER DISTRICT, PHILA., PA**

1 May 2013

NAD - 82

APPROPRIATION TITLE: Construction, General – Aquatic Ecosystem Restoration

PROJECT: Lower Cape May Meadows, Cape May Point, NJ (Continuing)

LOCATION: The Project area, along the southern Atlantic coast of New Jersey, includes Lower Cape May Meadows and the Borough of Cape May Point and extends approximately 2.5 miles. The project area is entirely in Cape May County.

DESCRIPTION: The project area is approximately 350 acres containing Cape May Point State Park and the Nature Conservancy's Cape May Migratory Bird Refuge. The Meadows consists of important coastal freshwater wetlands, which are vital resting areas for shorebirds and birds of prey during their seasonal migration along the Atlantic flyway. The project restores and protects fish and wildlife habitat and provides flood and storm damage reduction throughout the entire study area. The plan consists of a dune/berm 20 feet wide extending for a total length of 10,050 feet; planting of 18 acres of dune vegetation; seaward restoration of 35 acres of emergent wetland; elimination of 95 acres of the nuisance plant *Phragmites australis*; planting of 105 acres of wetland vegetation; creation of drainage ditches; installation of two weir-flow control structures; creation of six fish reservoirs; and construction of elements to create 25 acres of tidal marsh. The project also includes 650,000 cubic yards of periodic nourishment every 4 years over the 50-year project life, and monitoring and adaptive management over a 5-year period for the Lower Cape May Meadows freshwater wetlands restoration element.

AUTHORIZATION: Section 101 (a) (25) of WRDA 1999.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost	\$117,167,000
Initial Construction	\$ 13,038,000
Periodic Nourishment	\$104,129,000
 Estimated Non-Federal Cost	 \$ 14,081,000
Initial Construction	\$ 6,575,000
Cash Contribution	\$6,419,000
Other	\$ 156,000
Periodic Nourishment	\$ 7,506,000
Cash Contribution	\$7,506,000
 Total Estimated Project Cost	 \$131,248,000

STATUS	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
(1 Jan 2013)		
Initial Beachfill	100	Dec 2005
Fish & Wildlife	100	Sept 2006
Periodic Nourishment	22	2054
Entire Project	34	TBD

PHYSICAL DATA:

Dune/berm: 20 feet wide, total length 10,050 ft
 Plantings: 158 acres of dune, emergent wetland, and wetland
 Creation of weir-flow control structures and fish reservoirs
 New tidal marsh: 25 acres
 Monitoring and adaptive management: 5 years
 Periodic Nourishment: 4 year cycle for 50 years with monitoring

ACCUM
PCT OF EST
FED COST

Allocations to 30 September 2010	\$18,345,000	
Allocation for FY 2011	\$ 8,920,000	
Allocation for FY 2012	\$ 7,497,000	
Conference Allowance for FY 2013	\$ 400,000 5/	
Allocations through FY 2013	\$35,162,000 1/ 2/ 3/ 6/	30
Estimated Unobligated Carry-In Funds	\$ 0 4/	
President's Budget for FY 2014	\$ 400,000	30
Programmed Balance to Complete after FY 2014	\$81,605,000 7/	
Unprogrammed Balance to Complete after FY 2014	\$ 0	

1/ \$1,706,511 reprogrammed from the project.

2/ \$67,489 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$722,927 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features. [63 percent of project costs are allocable to the restoration of sand losses from operation and maintenance of Cape May Inlet. As authorized, the project provides that this portion be cost shared 90 percent Federal and 10 percent non-Federal, and that the remaining 37 percent of costs, which are allocable to storm damage reduction, be cost shared 65 percent Federal and 35 percent non-Federal.

JUSTIFICATION: Lower Cape May Meadows has been severely impacted by shoreline erosion linked to the Federal navigation project at Cape May Inlet completed in 1911. Erosion has resulted in the direct loss of beach and unique freshwater wetland habitat. Erosion to the dune system has left the remaining freshwater ecosystem in the Meadows substantially degraded through saltwater intrusion and subsequent topographical alteration by allowing ocean water overtopping during storm events. Since 1991, the dunes protecting the wetlands have been breached six times, resulting in saltwater intrusion to the freshwater wetlands. Very few plant or animal species have the adaptations needed to survive such large fluctuations or range of salinities (freshwater to saltwater). The saltwater intrusion has also encouraged the subsequent proliferation of the nuisance plant species *Phragmites australis*, also known as common reed. These conditions have significantly reduced the ability of the wetlands to support the wildlife and endangered plant species which reside there. It is estimated that an additional 147 acres of habitat will be lost by the year 2050 if shoreline erosion is to continue unabated. Compounding the problem is the hydraulic/hydrologic relationship between Lower Cape May Meadows and the communities of Cape May Point and West Cape May. Lower Cape May Meadows serves as a buffer during storms between the ocean and the surrounding developed areas. When the Meadows area is inundated during storm events, the floodwaters flow into Cape May Point and the developed portions of Lower Township and West Cape May, flooding the low lying areas of these towns.

The project consists of initial construction of a beach berm of 20-foot width at elevation 6.7 North Atlantic Vertical Datum (NAVD) with a dune at elevation 16.7 NAVD, and construction of internal ecosystem restoration features. Initial construction of the storm damage reduction features of the project were completed in 2005 with the placement of 1.4M cubic yards (cy) of beach quality sand from an offshore borrow area. Initial construction of the ecosystem restoration features were completed in 2007 with the construction/creation of the following features: 3 large shallow ponds; control/elimination of the invasive plant phragmites throughout most of the site; wetland vegetation plantings; 4 shallow earthen water-retaining structures and the installation of an associated water control feature on each; deeper water fish reservoirs within existing ponds; 5 small ponds for frog spawning; islands within existing ponds which provide varied habitat for species; timber viewing platform; snake hibernacula; access road at landward toe of dune; outfall shield (and walkway access) to allow for water level control; dune crossovers for the endangered species, the piping plover; and parking lot improvements. The authorized project also includes periodic nourishment. In accordance with the Chief's Report, the authorized project requires an estimated 650,000 cy of sand to be placed on the beach on a 4-year cycle to maintain the level of protection. Periodic nourishment is authorized for a period of 50 years from the commencement of initial construction, and is scheduled to end in 2054. The project has had 1 cycle of periodic nourishment broken into 3 phases since adequate funding was not received in any one year to do the full renourishment: 2009 (70K cy), 2011 (360K cy), and 2012 (ongoing). The project has been very successful at preventing storm damage in the City of Cape May at project eastern end (Cove Beach), the Meadows tract (The Nature Conservancy's Cape May Migratory Bird Refuge and Cape May Point State Park), and the Borough of Cape May Point at the project western end. In fact, nor'easters and hurricanes have caused little damage since completion of the project's initial construction and subsequent re-nourishments. This is especially apparent from the latest storm, Hurricane Sandy in Oct-Nov 2012. Without continued periodic nourishment, the City of Cape May, the Meadows tract, and the Borough of Cape May Point would be subject to severe damage if erosion of the shore protection project was allowed to continue and the minimum design template was compromised. The project is typically ranked highly in the budget development process because it is an ecosystem restoration project in a highly sensitive environmental area.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Project Monitoring	\$ 400,000
Total	\$ 400,000 8/

8/ Includes unobligated carry-in from FY2012. .

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Project Monitoring	\$ 400,000
Total	\$ 400,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide all lands, easements, rights-of-way, and relocations.	\$ 156,000	
Provide initial construction costs assigned to non-mitigation portion of the project for hurricane and storm damage reduction and ecosystem restoration	\$ 3,249,000	
NON-FEDERAL COST: (continued)		
Provide initial construction costs assigned to mitigation portion of the project.	\$ 3,170,000	
Provide 35 percent of the costs of periodic renourishment allocable to storm damage reduction.	\$ 7,506,000	
Total Non-Federal Cost	\$14,081,000	

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement was signed with NJ Department of Environmental Protection on 28 July 2003. Sponsor is willing to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$117,167,000 is an increase of \$2,267,000 from the latest estimate (\$114,900,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$2,267,000
Total	\$2,267,000

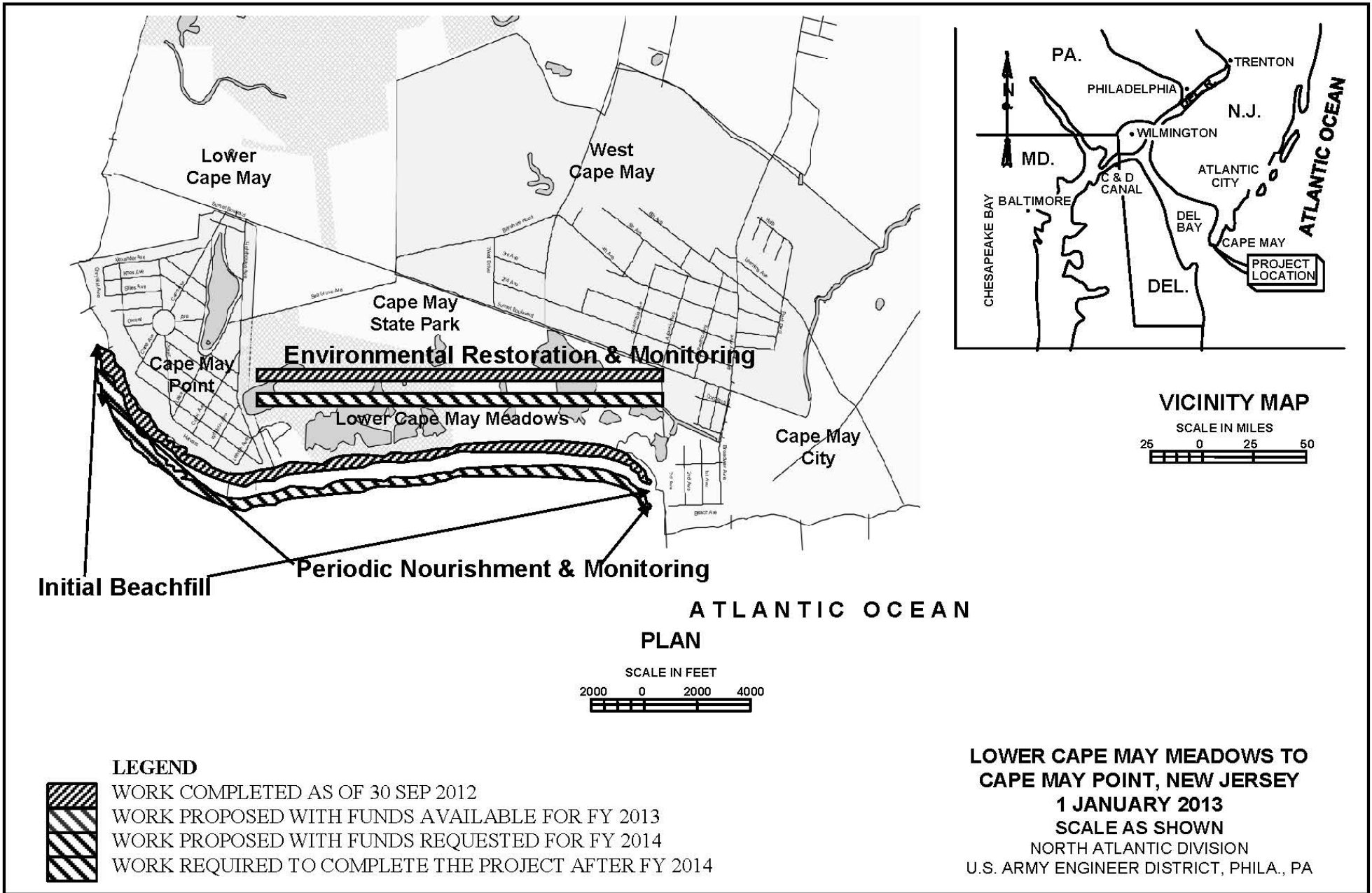
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in November 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Funds to initiate construction were appropriated in FY 2002.

Division: North Atlantic

District: Philadelphia

Lower Cape May Meadows, Cape May Point, NJ



APPROPRIATION TITLE: Construction, General - Flood and Coastal Storm Damage Risk Reduction

PROJECT: Raritan River Basin, Green Brook Sub-Basin, New Jersey (Continuing)

LOCATION: The Green Brook Sub-Basin project area is located within the Raritan River Basin in north-central New Jersey in Middlesex, Somerset and Union Counties. It drains approximately 65 square miles of primarily urban and industrialized area. It includes the following communities: Dunellen, Middlesex Borough, Piscataway, South Plainfield, Bound Brook, Bridgewater, Green Brook, North Plainfield, Warren, Watchung, Berkeley Heights, Plainfield and Scotch Plains. The project area is divided into three sub-areas: the lower, upper and Stony Brook portions of the sub-basin.

DESCRIPTION: The Project plan consists of a system of levees, floodwalls, closure gates and pump stations in the lower portion of the basin, channel modifications and dry detention basins in the upper portion of the basin, and channel modifications in the Stony Brook portion of the basin. The upper portion of the sub-basin has been deferred.

AUTHORIZATION: Water Development Act of 1986.

REMAINING BENEFITS-REMAINING COST RATIO: 1.9 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 7 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Benefits are from the analysis contained in the Final General Reevaluation Report (dated May 1997) at April 1996 price levels, and the Level 1 Economics Update Report (dated 9 June 2011) as updated in July 2012 for budget purposes.

SUMMARIZED FINANCIAL DATA:		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		492,037,000	Element 1a	99	FY 2013
Programmed Construction	417,037,000		Element 1b	7	TBD
Unprogrammed Construction	75,000,000		Element 1c	0	TBD
			Element 2	0	Indefinite
			Element 3	0	TBD
			Entire Project	33	Indefinite
Estimated Non-Federal Cost		164,012,000			
Programmed Construction	139,012,000				
Cash Contributions	89,012,000				
Other Costs	50,000,000				
Unprogrammed Construction	25,000,000				
Cash Contributions	10,000,000				
Other Costs	15,000,000				
Total Estimated Programmed Construction Cost	556,049,000				
Total Estimated Unprogrammed Construction Cost	100,000,000				
Total Estimated Project Cost	656,049,000				

PHYSICAL DATA

Element 1a is Bound Brook (Somerset County) portion lower basin. Element 1b is Boro of Middlesex portion of lower basin in Middlesex County. Element 1c includes all final portions remaining within the lower basin. Element 2 (Unprogrammed) is the Upper Basin, includes channel modifications, dry detention basins. Element 3 is the Stony Brook Portion of the basin.

Allocation to 30 September FY 2010	125,209,000			
Allocation for FY 2011	998,000			
Allocation for FY 2012	5,880,000			
Conference Allowance for FY 2013	1,000,000	5/		
Allocations through FY 2013	133,087,000	1/ 2/ 3/ 6/	27	
Estimated Unobligated Carry-in Funds	0	4/		
Budget Amount for 2014	11,000,000		32	
Programmed Balance to complete after FY 2014	272,950,000	7/		
Unprogrammed Balance to complete after FY 2014	75,000,000			

1/ \$590,300 reprogrammed from the project in prior FYs.

2/ \$199,000 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding. As of the date this Justification Sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$ 23,572,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The project area suffers annual flood damages of \$41,000,000 (Apr 96 P.L.) without the project. Most recently, the April 15-17, 2007 Nor'easter and September 16-18, 1999 Tropical Storm Floyd flooding were so extensive that the area was designated a Major Disaster Area. Eight deaths have been attributed to floods in the basin. In the recent April 2007 Nor'easter, thirty four people were injured and there were more than 1,000 people evacuated from their residences. In Bound Brook, five homes caught fire and burned to the ground the night of April 16th when high water prevented emergency personnel from reaching them. After the flood, FEMA and SBA spent about \$16.5 million on loans and grants for individuals and businesses statewide; another \$3.3 million was provided by FEMA as public assistance to help repair infrastructure and pay for police overtime. National Flood Insurance claims paid in Bound Brook totaled about \$19.8 million. Beyond the Federal dollars, the April flood cost private insurers \$160 million statewide for homeowner, auto, and other claims.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Construction Management/ Engineering and Design	\$ 1,000,000
Award of final contracts for Seg U and T	\$ 2,262,900
Total	\$ 3,262,900 <u>8/</u>

8/ Includes unobligated carry-in from FY2012

FISCAL YEAR 2014: The budget amount will be applied as follows:

Award Segment B3 contract	\$ 10,000,000
Construction Management/ Engineering and Design	\$ 1,000,000
Total	\$ 11,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, relocations and borrow excavated or dredged material disposal areas.	\$ 50,000,000	
Pay 25 percent of cost associated with non-structural flood protection	25,000,000	
Pay 6 percent of the costs allocated to flood control, to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	89,012,000	\$1,157,000
Total Non-Federal Costs	\$164,012,000	\$1,157,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

Division: North Atlantic

District: New York

Raritan River Basin, Green Brook Sub-Basin, NJ

STATUS OF LOCAL COOPERATION: The State of New Jersey Department of Environmental Protection provided a letter dated 17 April 1997 stating their support and endorsement of the project. Governor Whitman also provided a letter of support on 26 February 1998. The Green Brook Flood Control Commission has stated their strong support for the project in a letter dated 4 October 1995. Also, several counties and municipalities have adopted resolutions endorsing and supporting the project. The Project Cooperation Agreement was executed in June 1999; project support continues.

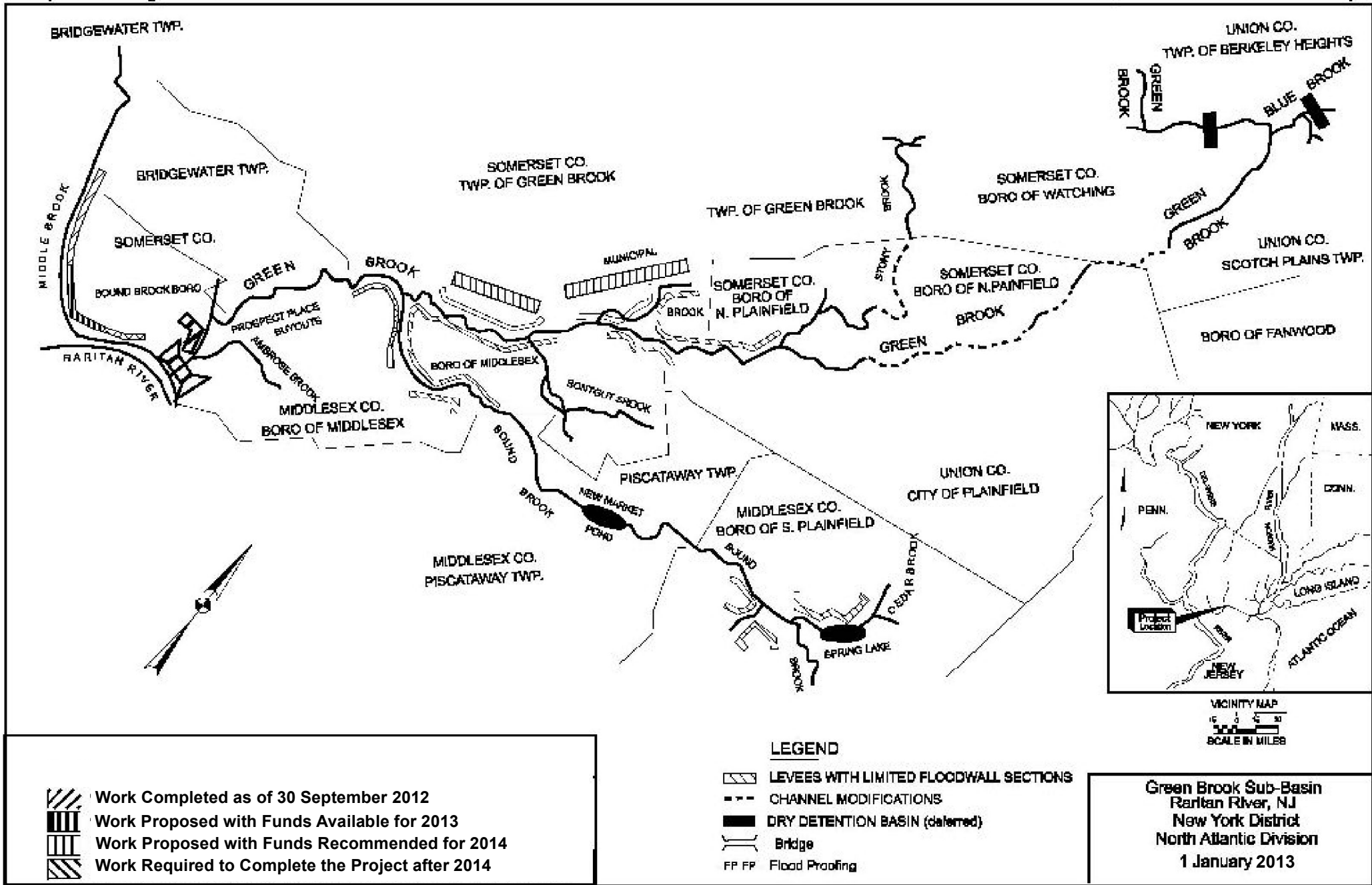
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$492,037,000 is an increase of \$182,637,000 from the latest estimate (\$309,400,000) presented to Congress in FY 2013. This change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$182,637,000

(Original construction cost was updated in the Economics Update Report (dated 9 June 2011) to account for new proposed mid-point of construction. See "Other Information").

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed in August 1980. A Supplemental Environmental Impact Statement with the Final General Reevaluation Report was released in May 1997 and the Record of Decision was issued in July 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988. Funds to initiate construction were appropriated in FY 1998. The project cost increase is a result of a revised construction schedule that extended the construction duration by approximately 12 years in order to be more consistent with historic funding stream. As a result of this extended construction duration there was additional escalation resulting in a significant cost increase. The Economics Update Report (dated 9 June 2011) as updated in July 2012 resulted in a change to the BCR from 1.1 to 1.3.



New York

APPROPRIATION TITLE: Construction, General – Flood and Coastal Storm Damage Reduction

PROJECT: Fire Island Inlet to Montauk Point, New York (continuing)

LOCATION: The overall project area extends from Fire Island Inlet easterly to Montauk Point along the Atlantic Coast of Suffolk County. The project is 83 miles long and comprises 70 percent of the total ocean frontage of Long Island. Fire Island Inlet is located about 50 miles by water east of the Battery, New York City.

DESCRIPTION: The project provides for beach erosion control and hurricane protection along five reaches of the Atlantic Coast of New York from Fire Island Inlet to Montauk Point. A reformulation study is currently underway to evaluate storm damage protection measures. An interim project at Westhampton Beach has been constructed prior to completion the reformulation effort. This interim project provides for 30 years of periodic nourishment to maintain a beach berm extending west from Groin 15 to Moriches Inlet at an elevation of 9.5 feet above mean sea level, backed by a dune with a height of +15 feet above msl. The Westhampton Beach Interim project also includes tapering of the existing westernmost two groins, construction of a new groin between groins 14 and 15, and beach fill as necessary within the existing groin field to promote sand transport. An interim project to protect the area West of Shinnecock Inlet was completed in March 2005 for initial beach fill, in conjunction with the second nourishment of the Westhampton Interim Project. This Interim project was completed as of 2011. A Breach Contingency Plan has been developed which permits the closing of any breaches of the barrier island with use of a pre-approved Project Cooperation Agreement format, provided that estimated breach costs are no greater than \$5 million. The study for an interim project along Fire Island was discontinued due to lack of a Non-Federal sponsor.

AUTHORIZATION: River and Harbor Act 14 July 1960, modified by the Water Resources Development Act of 1974, the Water Resources Development Act of 1986, and the Water Resources Development Act of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 4.4 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 2.9 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 2.6 to 1 at 7 percent (FY 1963).

BASIS OF BENEFIT-COST RATIO: Benefits are from the analysis contained in the Technical Support Document (dated May 1994; revised July 1995) at Dec 1993 price levels, and the Economics Update Report (dated 3 August 2011) and updated in May 2012 for budget purposes.

SUMMARIZED FINANCIAL DATA			STATUS: (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		591,100,000	Reach 2 (Moriches to Shinnecock)		
Programmed Construction	201,600,000		11 groins	100	Oct 1966
Initial Construction	67,000,000		4 groins	100	Nov 1970
Periodic Nourishment	134,600,000		8 groins	0	<u>1/</u>
Unprogrammed Construction	389,500,000		Westhampton Interim		
Initial Construction	113,400,000		Initial Construction	100	Dec 1997
Periodic Nourishment	276,100,000		Periodic Nourishment	50	2027
Estimated Non-Federal Cost		295,200,000	West of Shinnecock Interim		
Programmed Construction	83,200,000		Initial Construction	100	Mar 2005
Initial Construction	19,500,000		Periodic Nourishment	0	2011
Cash Contributions	18,800,000		Balance of Reach	0	<u>1/</u>
Other Costs	700,000		Reach 4 (Georgica)		
Periodic Nourishment	63,700,000		2 groins	100	Sep 1965
Cash Contribution	63,700,000		Beach Fill; 18.4 mi.	0	<u>1/</u>
Other Costs	0		Balance of Project		
Unprogrammed Construction	212,000,000		Dune/Beach Fill-39.7 mi	0	<u>1/</u>
Initial Construction	59,200,000		27 groins	0	<u>1/</u>
Cash Contributions	48,850,000		Studies for Interim Projects		
Other Costs	10,350,000		Fire Island	90	<u>2/</u>
Periodic Nourishment	152,800,000		West of Shinnecock	100	Dec 2002
Cash Contribution	152,800,000		Beach Contingency Plan	100	Jan 1996
Other Costs	0				
Total Estimated Programmed Construction	284,800,000				
Initial Construction	86,500,000				
Periodic Nourishment	198,300,000				
Total Estimated Unprogrammed Construction Cost	601,500,000				
Initial Construction	172,600,000				
Periodic Nourishment	428,900,000				
Estimated Project Cost	886,300,000				
Initial Construction	259,100,000				
Periodic Nourishment	627,200,000				

1/ Schedule dependent on outcome of Reformulation Study.

2/ Study terminated due to lack of a non-federal sponsor and environmental issues; will be addressed in Reform Study.

PHYSICAL DATA

Dunes and beach replenishment: 74 miles
Dunes: raise to elevation 20 feet above msl Beaches: widen to Total
Beaches minimum of 100 ft
Groins: 52
Periodic nourishment: 480,000 cubic yards/year

ACCUM.
PCT. OF EST.
FED. COST

SUMMARIZED FINANCIAL DATA (continued)

Allocations to 30 September 2010	94,418,000			
Allocation for FY 2011	(3,402,000)			
Allocation for FY 2012	750,000			
Conference Allowance for FY 2013	5,550,000	5/		
Allocations Through FY 2013	97,316,000	1/ 2/ 3/ 6/		16
Estimated Unobligated Carry-in Funds	1,010,000	4/		
President's Budget for FY 2014	300,000			17
Programmed Balance to Complete				
After FY 2014	103,984,000	7/		
Unprogrammed Balance to Complete				
After FY 2014	389,500,000			

1/ \$1,095,000 reprogrammed to the project in prior FYs.

2/ \$124,300 rescinded from the project.

3/ \$4,500,000 transferred to the Flood Control and Coastal Emergencies account in FY 11.

4/ Estimated Unobligated "Carry-in" Funding. As of the date this Justification Sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$1,010,000. This amount will be used to perform work on the project as follows: Continue reformulation study

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: Erosion has seriously reduced the width of the shoreline in the study area with consequent exposure of the shore and the mainland to wave attack and inundation damages. A recurrence of the hurricane tide of record (September 1938) when 45 lives were lost, would cause inundation and wave damage estimated at \$717,000,000 (April 1996 price levels). As a result of the 11 December 1992 storm, in the Westhampton area (Section 1B of Reach 2), over 200 residential structures were destroyed and two breaches of the barrier island occurred. Closure costs for these breaches in 1992 were approximately \$6,600,000. Initial construction at Reach 4 (Georgica) included 2 groins which were completed Sep 1965. Initial construction at Reach 2 (Moriches to Shinnecock) included total of 11 groins which were completed Oct 1966, and additional 4 groins which were completed Nov 1970 with 1,950,000 cy of fill. Reach 2 emergency fill of 60,000 cy was placed Jan 1993 for western breach action, and additional 1,567,000 cy fill was placed Nov 1993 for eastern breach action. The Westhampton Interim has a 30 year project life thru 2027; with nourishment cycles estimated every 4 years at 981,000 cy per nourishment. Initial construction of Westhampton Interim was completed Dec 1997 and included 2,518,592 cy fill west of groin 15, and additional 1,010,938 cy fill within groins 7 to 15. A total of 3 nourishment cycles have been completed to date at Westhampton Interim: Jan 2001 (981,000 cy fill), Jan 2005 (759,000 cy fill), Jan 2009 (627,000 cy fill). The West of Shinnecock Interim had a project life thru 2011. Initial construction of West of Shinnecock was completed Mar 2005 and included 610,000 cy fill. No nourishment cycles were ever completed at West of Shinnecock. Project life for West of Shinnecock is complete as of 2011; assessment is currently underway to determine a possible extension of the Interim project nourishment period.

JUSTIFICATION: (continued)

Both Westhampton and West of Shinnecock Interim projects helped prevent significant damages to the area, as they protected numerous shoreline properties and helped protect the area from barrier island breaches. If these projects were ever compromised or damaged without repair/nourishments, significant damages could occur in the area due to increased flooding of shoreline properties, increased risk of barrier island breaching which could lead to increased flooding of mainland properties, and sever impacts to emergency response services along the barrier island. The completion of the Reformulation Study will provide new recommendations for the entire project area.

FISCAL YEAR 2013:	The total unobligated dollars are being applied as follows:		
	Continue Westhampton Beach Interim (Required Monitoring)	\$300,000	
	Continue Reformulation Study	500,000	
	Urgent repair of two breaches in the Fire Island barrier island during the Superstorm Sandy event with funds that were budgeted to Initiate Nourishment (Contract #4 for Westhampton Interim Project (Nourishment not performed)	5,000,000	
	Total	\$ 5,800,000	<u>8/</u>

8/ Includes unobligated carry-in from FY2012

FISCAL YEAR 2014:	The Budget request amount plus carry-in funds of \$1,010,000 will be used as follows:		
	Continue Reformulation Study	1,010,000	
	Continue Westhampton Beach Interim (Required Monitoring)	300,000	
	Total	\$ 1,310,000	

NON-FEDERAL COSTS: Local interests are required to bear 30/35 percent of the total project cost including periodic nourishment for the Westhampton Interim project and 35 percent of the total project cost for the rest of the project, which includes the value of lands, easements, and rights-of-way.

Requirements of Local Cooperation:	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Provide all lands, easements, and rights-of-way, and relocations.	\$ 11,050,000	
Pay 30/35 percent of the first costs for the Westhampton Interim project and 35 percent of the first costs for the remainder of the project including creditable lands and easements and rights of way, and bear all costs of operation and maintenance and replacement of storm reduction facilities.	67,650,000	\$0
Pay 30 percent of the periodic nourishment costs for the Westhampton Interim project and 35 percent of the periodic nourishment cost for remainder of project	216,500,000	
Total Non-Federal Costs	\$ 295,200,000	\$0

Division: North Atlantic

District: New York

Fire Island Inlet to Montauk Point, NY

STATUS OF LOCAL COOPERATION: The agency responsible for local cooperation is the New York State Department of Environmental Conservation (NYSDEC). Assurances of local cooperation were executed by NYSDEC on 14 August 1963 and accepted by the Federal Government on 20 August 1963. A project cooperation agreement (PCA) for the Westhampton Interim project was executed in February 1996. A PCA for the West of Shinnecock Interim project was executed in December 2003.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$591,100,000 is the same as the latest estimate (\$591,100,000) presented to Congress (FY 2013).

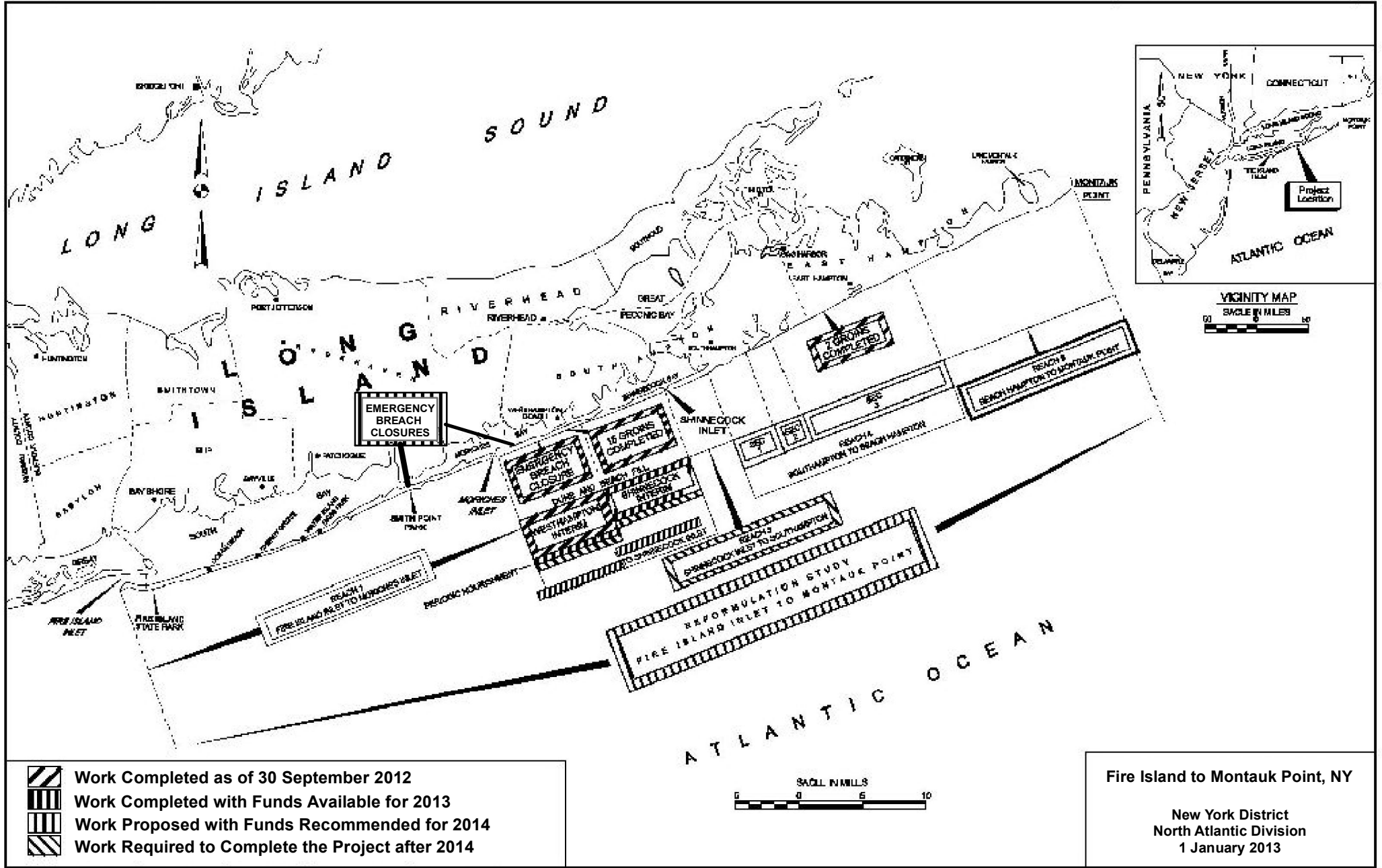
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (USEPA) on 28 January 1978. On 7 March 1978, the Department of the Interior (DOI), supported by other agencies referred the EIS to the Council on Environmental Quality (CEQ) as unacceptable. Subsequent to the strong objections on the projects final environmental impact statement, meetings were held between September 1978 and January 1980 with DOI, USEPA, U.S. Department of Commerce, and NYSDEC. Two public scoping meetings were held in October 1979. Subsequently, the Federal agencies agreed to a basis for the reformulation of the Fire Island to Montauk Point project, including a general agreement on the studies necessary to answer the outstanding concerns. An environmental analysis was included in Supplement No. 2 to GDM No. 1 to determine environmentally acceptable measures of beach protection for the critically eroded areas at Westhampton Beach.

OTHER INFORMATION: Initial planning and construction funds were appropriated in FY 1963. The work remaining to be done is completion of construction of Reach 2-Moriches Inlet to Shinnecock Inlet, Reach 4-Southampton to Beach Hampton, initiation of construction of Reach 1-Fire Island Inlet to Moriches Inlet, Reach 3-Shinnecock to Southampton, and Reach 5-Beach Hampton to Montauk, as well as the completion of the overall Reformulation effort.

The Corps of Engineers concurred with the request by the State of New York to initially construct 11 groins (Reach 2), and 2 groins (Reach 4) with beach fill to be added as necessary but not sooner than 3 years after groin completion. In recognition of the critical condition of the beaches due to earlier storms, the Corps recommended to the State in June 1967 that the 3 year observation period be waived and that construction of urgent hurricane protection be resumed. The State concurred and requested that work be undertaken on additional groins, replacement of beach fill and dunes in Reach 2, as well as construction of groins, drainage structures and dune fill in Reach 4. Suffolk County, however, did not endorse the placement of beach and dune fills. Continuing negotiations during FY 1969 resulted in agreement on a plan for construction for certain groins, drainage structures, beach fill, and dunes to an interim height of 16 feet in Reaches 2 and 4. In December 1973, the State requested planning for Reach 2 (Section 1b), (Westhampton Beach) and Reach 4 (Georgica Pond), indicating that it would provide funds. Planning resumed and assurances were requested from the State in October 1974. However, strong opposition developed with Suffolk County and the county legislature refusing to provide support. Subsequently, erosion of the shoreline downdrift of the groin field at Westhampton Beach accelerated to the point where Dune Road, the only access to the homes in this area, was under water during normal high tide. In 1984, a lawsuit was brought against Suffolk County, the State of New York and United States of America, which claimed that the groin field constructed in the early 1960's caused erosion and damage properties. In October 1994, the Village of Westhampton Dunes intervened and a settlement agreement was reached between the plaintiffs and the county, state and Federal governments to provide for storm damage protection as described in the Corps 1995 Decision Document for the Westhampton Interim project which includes periodic nourishment for a period of 30 years and coastal and environmental monitoring to insure project sustainability and minimize impacts to threatened and endangered species. In December 1992, two breaches occurred in the barrier island near Westhampton Beach, which were subsequently closed. The USEPA and DOI agreed in concept to the interim plan for Westhampton, provided that a full environmental assessment and/or environmental impact study was completed, and the reformulation of the overall project was reinstated.

OTHER INFORMATION: (continued)

At the direction of Congress, in 1993 the Reformulation was reinstated and evaluations for interim projects began. An Interim plan for severely eroded Westhampton Beach area was prepared in June 1994, which provides for a lower level protection than that provided in the original authorization. This interim plan has been designed such that it could be modified based on future recommendations in the pending Reformulation Study. The initial construction contract for the West of Shinnecock Interim project was awarded in September 2004 and completed in March 2005. The West of Shinnecock Inlet interim project includes beach fill with periodic nourishment for 6 years (thru 2011) and associated coastal and environmental monitoring as prescribed by the New York State permit. An interim plan for the Fire Island barrier island has been discontinued due to the lack of a non-federal sponsor and environmental concerns, which will be addressed during the Reformulation Study. Additionally, a Breach Contingency Plan was approved in January 1996 to provide for rapid response to breaches along the islands while awaiting completion of the Reformulation Study. The scope of the reformulation study has been modified over the years to capture agencies' concerns and ensure agreement in evaluating alternatives in light of changed conditions, new requirements, and a comprehensive vision for the overall project.



Fire Island to Montauk Point, NY

New York District
North Atlantic Division
1 January 2013

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: New York & New Jersey Harbor, New York and New Jersey (Continuing)

LOCATION: The Port of New York and New Jersey is located within the bi-state NY/NJ Harbor Estuary. The Federal navigation channels within the NY & NJ Harbor project include: Ambrose Channel; Anchorage Channel; Kill Van Kull and Newark Bay Channel; Arthur Kill Channel; Port Jersey Channel; and Bay Ridge Channel.

DESCRIPTION: This project consists of four separately authorized Federal navigation projects.

- 1.) The Kill Van Kull and Newark Bay Channels, NY and NJ project consists of deepening existing 35-foot project first to 40 feet and then to 45 feet MLW. This project is complete, except for unprogrammed work that includes dredging of Pierhead Channel and Port Newark in the vicinity of Port Newark and Port Elizabeth.
- 2.) The New York Harbor and Adjacent Channels, Port Jersey Channel, NJ project consists of deepening and realigning the non-Federal access channel to 41 feet MLW from the Federal Anchorage Channel to its head of navigation. This project is complete except for the unprogrammed work that includes the turning basin at the western end of the channel.
- 3.) The Arthur Kill, Howland Hook Marine Terminal, NY and NJ project consists of deepening the existing Federal 35-foot Arthur Kill Channel to 41 feet MLW from its confluence with the Kill Van Kull Channel to Howland Hook Marine Terminal in Staten Island, New York, and to 40 feet MLW from the Howland Hook Marine Terminal to the Williams Terminal oil facilities, New Jersey and New York, respectively. Also included within the Arthur Kill Channel are selected widenings and realignments. The Arthur Kill Project also provides for mitigation consisting of restoration and enhancement of approximately 23 acres of intertidal salt marsh. Apart from a segment of 40' channel south of the Goethals Bridge, all construction on this project is complete. The remaining work is programmed.
- 4.) The New York and New Jersey Harbor, NY and NJ, project consists of deepening the Ambrose Channel to 53 feet MLW; the Anchorage Channel, Kill Van Kull, Newark Bay, Port Jersey Channel, Bay Ridge Channel, and the Arthur Kill Channel to Howland Hook to 50 feet MLW or 52 feet MLW, if in rock or otherwise hard material. The project also includes mitigation for project impacts and the beneficial use of dredged material in restoring marsh islands (i.e. Elder's West and Yellow Bar) in Jamaica Bay, NY, and selective bulkheading. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Acts of 1986, 1996, 1999, and 2000.

REMAINING BENEFIT - REMAINING COST RATIO: 72.2 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 5.7 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 2.8 to 1 at 6 5/8 percent (FY 2002).

BASIS OF BENEFIT - COST RATIO: The benefit-to-cost ratio shown above applies to the consolidation of the four authorized projects. The analysis reflects annualized costs and benefits, adjusted to January 2011 price levels, and Economic Update Report, 9 June 2011 and updated in June 2012 for budget purposes.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT of EST FED. COST	STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)		\$1,407,800,000	Programmed work:		
Programmed Construction	\$1,333,300,000		KVK (a)		
Unprogrammed Construction	74,500,000		Phase I 40 ft.	100	Sep 1995
			Phase II 45 ft.	100	Dec 2004
Estimated Appropriation Requirement (USCG)	4,050,000		Port Jersey Channel (b)	100	Jul 2010
Estimated Total Appropriation Requirement	1,411,850,000		Arthur Kill Channel (c)	80	TBD
			NY & NJ Harbor (50 ft) (d)		
			Ambrose	100	Dec 2012
			Anchorage	100	Nov 2011
Unprogrammed work:			KVK	100	Mar 2011
Future Non-Federal Reimbursement	242,362,800		Newark Bay	100	Dec 2012
Programmed Construction	233,990,800		Port Jersey	100	Dec 2012
Unprogrammed Construction	8,372,000		Arthur Kill	90	FY 2014
			Bay Ridge	0	Indefinite
			Entire Project:	95	TBD
Estimated Federal Cost (Ultimate) (CoE)	1,165,437,200		PHYSICAL DATA		
Programmed Construction	1,099,309,200		a. Deepen the Kill Van Kill and Newark Bay from 35 ft to 40 ft then to 45 ft		
Unprogrammed Construction	66,128,000		b. Deepen the Port Jersey Channel to 41 ft.		
Estimated Non-Federal Cost	1,322,698,800		c. Deepen the Arthur Kill Channel from its confluence with the Newark Bay to the NYCT from 35 ft. to 41 ft and then from 35 ft to 40 ft to the TOSCO Terminal.		
Programmed Construction	1,297,906,800		d. NY & NJ Harbor: Deepen the above channels from their depths to 50 ft. deepen the Ambrose Channel from 45 ft. to 53 ft. the Anchorage Channel from 45 ft. to 50 ft. and the Bay Ridge Channel from 40 ft. to 50 ft. Turning areas are provided for the Bay Ridge, Arthur Kill and Port Jersey Channels, along with mitigation for loss of benthic habitat and air quality.		
Cash Contribution	739,541,000				
Other Costs	324,375,000				
Reimbursements:	233,990,800				
Unprogrammed Construction	24,792,000				
Cash Contribution	16,420,000				
Other Costs	0				
Reimbursements	8,372,000				
Total Estimated Programmed Construction Costs	\$2,635,256,800				
Total Estimated Unprogrammed Construction Costs	99,292,000				
Total Estimated Project Cost	\$2,734,548,800				

Division: North Atlantic

District: New York

New York and New Jersey Harbor, NY and NJ

SUMMARIZED FINANCIAL DATA: (continued)

		ACCUM PCT OF EST FED. COST
Allocations thru 30 September 2010	\$1,071,531,000	
Allocation for FY 2011	72,849,000	
Allocation for FY 2012	65,014,000	
Conference Allowance for FY 2013	68,000,000 5/	
Allocation through FY 2013	1,277,394,000 1/ 2/ 3/ 6/	91
Estimated Unobligated Carry-in Funds	0 4/	
Budget Amount for FY 2014	49,000,000	94
Programmed Balance to Complete after FY 2014	6,906,000 7/	
Unprogrammed Balance to Complete after FY 2014	74,500,000	

1/ \$3,786,000 reprogrammed (net) to the project in prior FYs.

2/ \$2,990,000 rescinded from the project.

3/ \$ 0 (zero) transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding. As of the date this Justification Sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED federal costs of \$13,188,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The Port of New York-New Jersey is the largest port on the East Coast, providing more than 228,000 port related jobs, \$12 billion in economic activity, and serves more than 17 million consumers in the States of New York and New Jersey. Through its intermodal links, the Port provides second day access to another 80 million consumers in the northeast and mid-western states (35% of the nation). The Port annually receives and ships over \$82 Billion (110 million long tons) of waterborne general cargo to all parts of the United States and throughout the world and receives petroleum and related products from ports in the Atlantic, and Gulf Coasts, the Caribbean, Africa, and the Persian Gulf.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue construction contracts		\$61,000,000
NY & NJ Harbor Deepening (50 Feet) Area S-AK-2	15,000,000	
NY & NJ Harbor Deepening (50 Feet) Area S-AK-3	46,000,000	
Planning, engineering, and design and Construction management		7,022,000
 TOTAL		 \$68,022,000 8/

8/ Includes unobligated carry-in from FY2012

Division: North Atlantic

District: New York

New York and New Jersey Harbor, NY and NJ

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate "base plus options" construction contracts Arthur Kill Channel, NJ, Contract No.4	\$25,000,000
Continue construction contracts NY & NJ Harbor Deepening (50 Feet) Area S-AK-3	\$20,000,000
Planning, engineering, and design and Construction management	\$4,000,000
TOTAL	\$49,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the Requirements listed below:

REQUIREMENTS OF LOCAL COOPERATION:	Payments during Construction and Reimbursement	Annual Operation, Maintenance and Replacement Costs
Pay 100 percent of costs to modify local service facilities, where necessary, for the construction of the project.	\$278,195,000	\$205,000
Pay 25-50 percent of the costs allocated to deep draft navigation during construction. <u>1/</u>	755,961,000	
Pay for all lands, easements, rights of way and relocations	46,180,000	
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction which is partially offset by a credit allowed for the value of lands, easements, rights of way, and relocation.	242,362,800	
Contribute 50 percent of the annual charges for interest and amortization of the Federal first cost of the Port Jersey 41-foot project and 50 percent of the operations and maintenance until the improvement is serving/benefiting multiple owners/properties. (Approximately\$3 million annually) This condition was met by non-federal interests in March 2010. If multiple owners are not established, the contribution could range to a maximum of \$145,629,000.	0	
Total Non-Federal Costs	\$1,322,698,800	\$205,000

1/ The cost sharing percentage of this project includes the cost sharing of the general navigation features deepening to 45 feet at 25 percent and deepening of those features from 45 feet to 50 feet at 50%

Division: North Atlantic

District: New York

New York and New Jersey Harbor, NY and NJ

STATUS OF LOCAL COOPERATION:

(1) On the Kill Van Kull and Newark Bay Channels element, a Project Cooperation Agreement for the 45-foot deepening project was executed for the Phase II deepening on 13 January 1999.

(2) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, the State of New Jersey and the Port Authority of New York and New Jersey (for the limited purpose of indemnification only) are the Non-Federal sponsors of the project. The project cooperation agreement was executed on 23 July 2002 with a modification of the agreement executed in July 11, 2007.

(3) On the Arthur Kill, Howland Hook Marine Terminal element, The Port Authority of New York and New Jersey is the non-Federal sponsor for the project. The PCA was executed on 25 July 2002.

(4) On New York and New Jersey Harbor element, the Port Authority of NY & NJ is the Non-Federal sponsor for the project. The project cooperation agreement was executed on 28 May 2004.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$1,407,800,000 is an increase of \$8,000,000 over the latest estimate (\$1,399,800,000) presented to Congress (FY 2013). This change includes the following item:

Item	Amount
Price escalation on construction features	\$8,000,000
Total	\$8,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

(1) On the Kill Van Kull and Newark Bay Channels element, the Final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 31 July 1981. A Supplemental EIS was filed with EPA on 14 February 1986. The Final Supplement to the EIS was filed with EPA on 13 February 1987. The Record of Decision was executed on 1 April 1987. An Environmental Assessment and Finding of No Significant Impact was issued on 30 April 1997 as part of the LRR for the Phase II deepening.

(2) On NY Harbor and Adjacent Channels, Port Jersey Channel element, the final EIS was filed with the Environmental Protection Agency (EPA) on 29 April 1988, and a final Environmental Assessment and Finding of No Significant Impact was issued June 2000. A Record-of-Decision was executed on 23 October 2000.

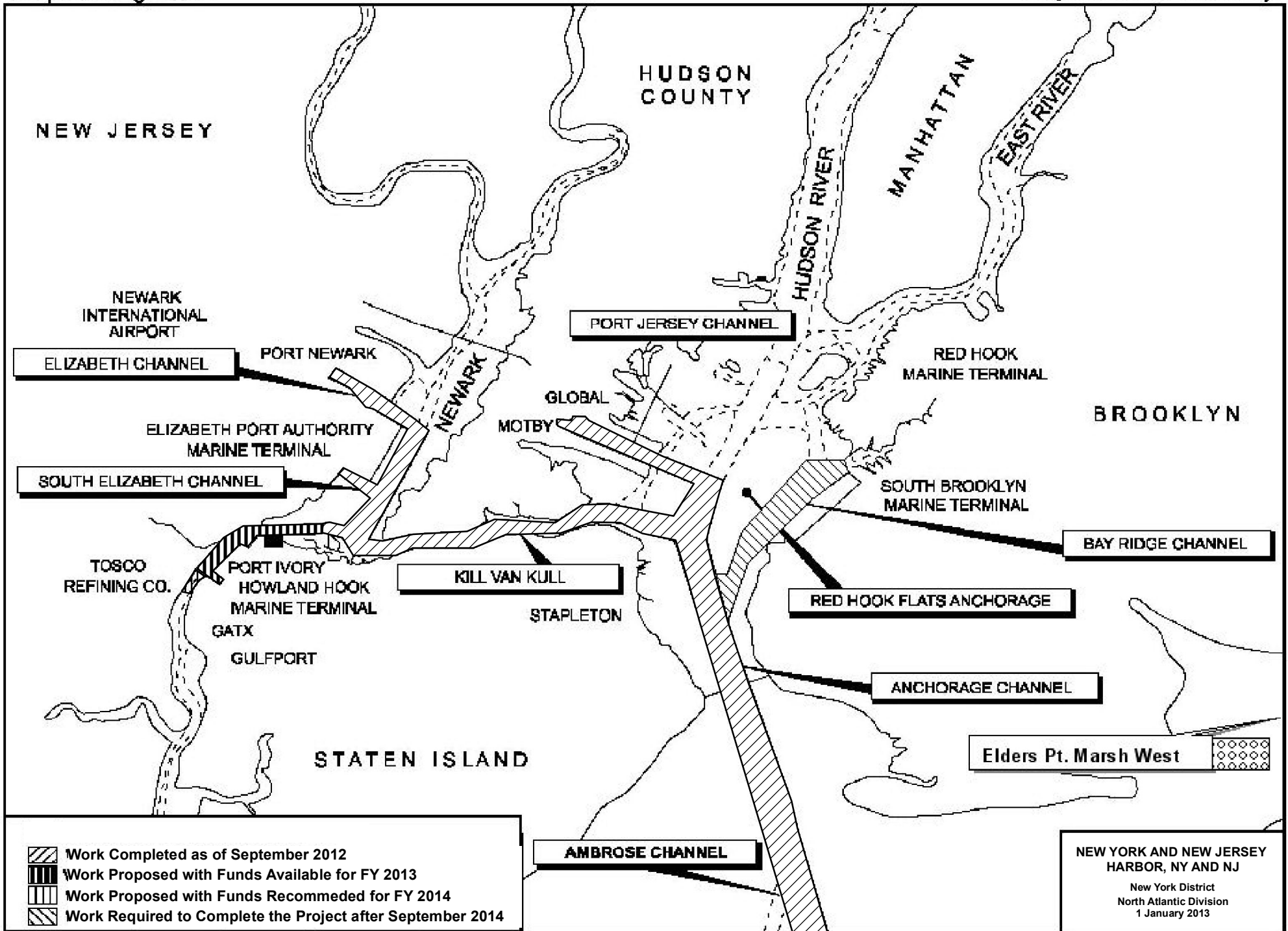
(3) On the Arthur Kill, Howland Hook Marine Terminal element, the Final Supplemental Environmental Impact Statement was filed with the Environmental Protection Agency on 16 September 1998. A Final Environmental Assessment for mitigation was issued in May 2001. The Record of Decision was executed on 29 August 2001.

(4) On the 50-foot project, New York and New Jersey Harbor Deepening element, the final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 29 December 1999. The Record-of-Decision was signed on 6 June 2002. An Environmental Assessment and Finding of No Significant Impact was issued in January 2004.

(5) An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were signed June 19, 2007 for the purpose of addressing impacts of Newark Bay Study Area (NBSA) instituted by USEPA in February 2004.

OTHER INFORMATION:

- (1) All project elements were being funded separately prior to FY 2002. Congressional direction provided to the Secretary of the Army in the Energy and Water Development Appropriations, FY 2002, Conference Report consolidated the four project elements with the 50-foot deepening project authorized by the Water Resources Development Act of 2000.
- (2) On the Kill Van Kull and Newark Bay Channels element, funds to initiate construction were appropriated in FY 1985.
- (3) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1994.
- (4) On the Arthur Kill, Howland Hook Marine Terminal element, funds for preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 2001.
- (5) On the 50-foot New York and New Jersey Harbor Deepening element, funds to initiate preconstruction engineering and design were appropriated in FY 2000 and funds to initiate construction were appropriated in FY 2002.
- (6) The Port Jersey Channel PCA was modified on 17 July 2007 to facilitate consolidated implementation of the cost-shared 41' channel with the State of New Jersey's advancement of the 50' channel.
- (7) The 50-foot New York and New Jersey Harbor Deepening PCA was modified on 21 Sep 09 and 12 Sept 11 to facilitate implementation of the beneficial reuse of the dredged material from the Ambrose Channel construction contracts through the construction of the Elders West and Yellow Bar Marsh Islands in Jamaica Bay, New York.
- (8) An Economic Update Report (EUR) was submitted by the New York District and approved by the Corps North Atlantic Division on January 14, 2011. The EUR corroborated prior estimates for project benefits and updated the prior project costs used in the BCR, which dated back to estimates from the various Project Cooperation Agreements, to current project costs on a present worth basis (P.L. January 2011).
- 9) The beneficial use of dredged material EDR for placing Ambrose sand at Yellow Bar Marsh, Jamaica Bay, NY was approved by the ASA(CW) on June 27, 2011.



Pennsylvania

APPROPRIATION TITLE: Construction, General – Flood and Coastal Storm Damage Reduction

PROJECT: Wyoming Valley, Pennsylvania (Levee Raising) (continuing)

LOCATION: Wyoming Valley is located in northeastern Pennsylvania and extends from Duryea on the Lackawanna River southwestward to Nanticoke on the Susquehanna River. The Wyoming Valley flood control projects are located on the Susquehanna River in Luzerne County and are the four contiguous existing Federal flood control projects at Plymouth, Kingston-Edwardsville, Swoyersville-Forty Fort, and Wilkes-Barre and Hanover Township, which together function as a flood control system within the Valley.

DESCRIPTION: The four original Federal flood control projects in the Wyoming Valley were designed to protect against a flood equal to the March 1936 event which had a peak flow of 232,000 cubic feet per second. The authorized collective modification of the original projects are designed to protect against flood flows of 318,500 cubic feet per second that would be caused by a recurrence of Storm Agnes. The authorized project includes raising existing levees and floodwalls between 3 and 5 feet, modifying closure structures, relocating utilities, and providing some new floodwalls and levees to maintain the integrity of the flood control system. The authorized project also includes recreation features and a flood mitigation plan to reduce project-related induced flooding impacts. All authorized and approved work is programmed.

AUTHORIZATION: Water Resources Development Acts of: 1986, 1988, 1992, 1996, and 2007.

REMAINING BENEFIT - REMAINING COST RATIO: 32.5 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 2.8 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 2.8 to 1 at 8 1/4 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Basis of the current benefit-cost ratios is from the Wyoming Valley Levee Raising Project Economic Update 2011 approved 2 August 2012.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$147,741,000			
Estimated Non-Federal Cost:	53,211,000	Levee Raising	100	Jan 2003
Cash Contributions	\$20,133,000	Entire Project	92	TBD
Other Costs	33,078,000			
Total Estimated Project Cost	\$200,952,000			

Division: North Atlantic

District: Baltimore

Wyoming Valley, PA

1 May 2013

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SUMMARIZED FINANCIAL DATA: (Continued)		ACCUM PCT OF EST FED COST
Allocations to 30 September 2010	134,614,000	
Allocation for FY 2011	878,000	
Allocation for FY 2012	546,000	
Conference Allowance for FY 2013	0	5/
Allocations through FY 2013	136,038,000	1/ 2/ 3/ 6/ 92
Estimated Carry-in-Funds	0	4/
President's Budget for FY 2014	1,000,000	93
Programmed Balance to Complete after FY 2014	10,703,000	7/
Un-programmed Balance to Complete after FY 2014	0	

PHYSICAL DATA

Swoyersville-Forty Fort: earth fill levee 16,500 ft by 3 to 5 ft; floodwall steel sheetpile 4,000 ft by 3 to 5 ft.
Plymouth: earth fill levee 8,600 ft by 2 to 4 ft; floodwall concrete 200 ft by 2 to 4 ft, steel sheetpile 200 ft by 2 to 4 ft, earth 500 ft by 2 to 4 ft; modify 2 pump stations.
Kingston-Edwardsville: earth fill levee 17,300 ft by 3 to 5 ft; floodwall concrete 200 ft by 2 to 4 ft, steel sheetpile 200 ft by 2 to 4 ft; modify 13 pump stations.
Wilkes-Barre and Hanover Township: earth fill levee 20,600 ft by 3 to 5 ft; floodwall concrete 500 ft by 3 to 5 ft, sheetpile 4,300 ft by 3 to 5 ft; modify 13 pump stations.
Mitigate project induced flood risks for 53 project area communities

1/ \$606,000 reprogrammed to project

2/ \$1,700 rescinded from the project.

3 /\$60,000 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

4/ Estimated Unobligated "Carry-in" Funding. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried-into FY 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$11,095,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The four existing local protection projects which comprise the Wyoming Valley system were constructed between 1935 and 1976 and provide protection for an area of 5,160 acres and a population of 225,000. Over the past 200 years at least 32 floods have been recorded which exceeded a stage of 25 feet at Wilkes-Barre compared to the flood stage of 22 feet. The discharge of 345,000 cubic feet per second during June 1972 (Storm Agnes) without the now completed Cowanesque and Tioga-Hammond Lakes projects in operation overtopped the protection and resulted in the greatest flood of record with damages at that time estimated to be \$730,000,000. In 2011 tropical storm Lee resulted in the flood stage level of 42.66 feet at Forty Fort surpassing the 1972 Agnes Storm of record and withstanding the flood crest 1.8 feet higher than current design level. It is estimated that the completed levee raising works prevented approximately \$5,000,000,000 in damages. Unfortunately, not all areas of the Wyoming Valley escaped unharmed. Nearly 3,000 properties in unprotected communities were flooded. The average annual benefits amount to \$27,143,000 essentially all for flood control, based on the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue relief construction and preparation of O&M manual	\$ 431,000
Total	\$ 431,000

8/ Includes unobligated carry-in from FY2012.

Division: North Atlantic

District: Baltimore

Wyoming Valley, PA

FISCAL YEAR 2014: The requested amount will be applied as follows:

Continue project induced flood mitigation work at Columbia County	\$634,000
Continue project induced flood mitigation work at Montour County	\$366,000
Total	\$1,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, and rights of way.	3,096,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	5,220,000	
Pay 21 percent of the costs(cash and work-in-kind) allocated to flood risk management to bring the total non-Federal share of these costs to 25 percent and bear all costs of operation, maintenance and replacement of flood risk management facilities.	38,875,000	234,000
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	6,021,000	51,000
Total Non-Federal Costs	\$53,211,000	\$285,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the Luzerne County Flood Protection Authority (LCFPA). The Pennsylvania Department of Environmental Protection has committed to provide 45 percent of the non-Federal share of project costs. Letters of intent to provide the required local cooperation requirements were furnished by Luzerne County (19 January 1995) and the Commonwealth of Pennsylvania (30 December 1994). A Project Cooperation Agreement was executed in October 1996. To date, the LCFPA has fully complied with the non-Federal sponsor requirements on the project.






COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$147,741,000 is an increase of \$16,741,000 from the latest estimate (\$131,000,000) presented to Congress (FY 2007). This change is based from WRDA 2007 Section 3144 that modified the original flood control project to include a review of opportunities that increase public access for economic redevelopment, recreation and aesthetics. The completed costs for the additional functional requirements are for the Toby Creek RCC Spillway Embankment Phase II construction contract, Wilkes-Barre 2c construction contract modifications; levee seepage relief wells contracts; as included in the following items;

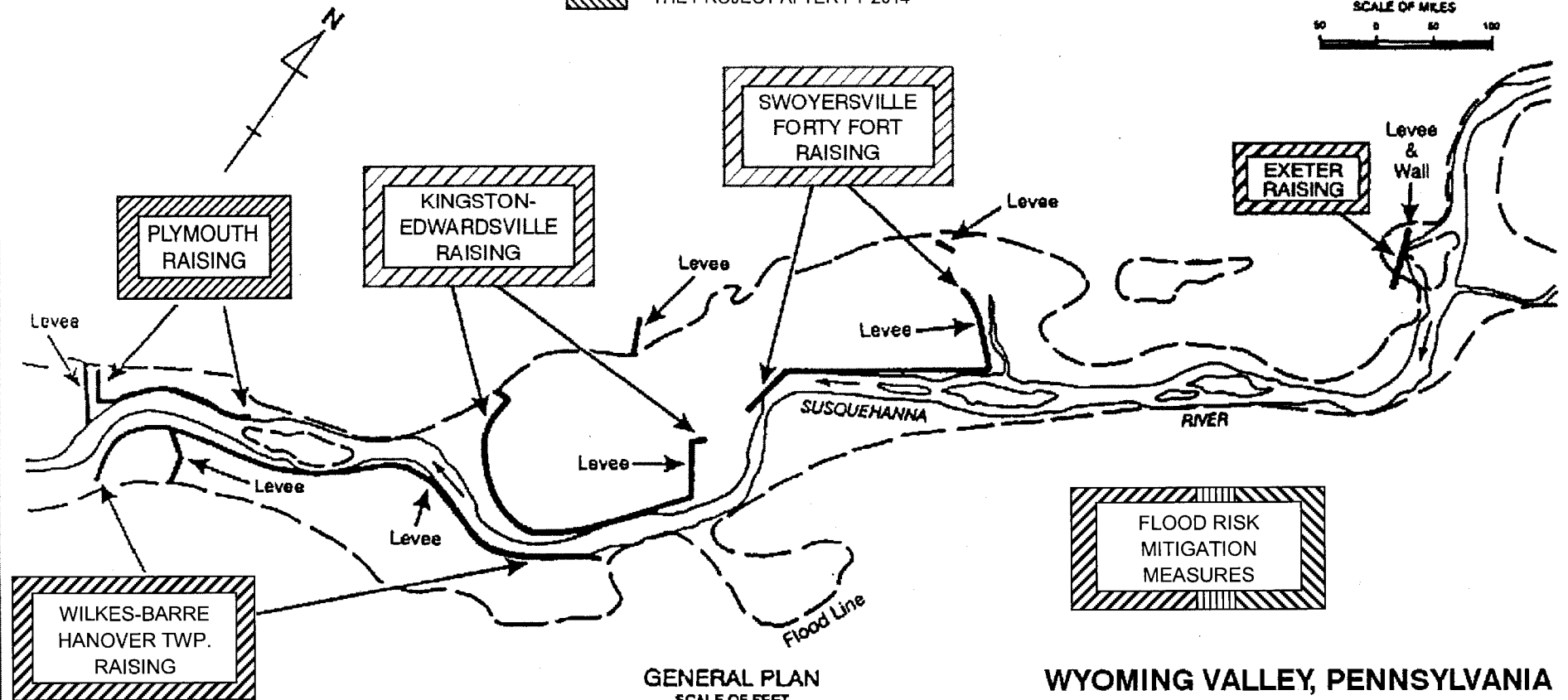
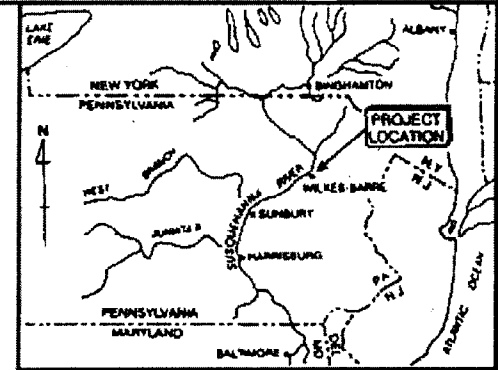
Item	Amount
Price Escalation on Construction Features	\$ 209,000
Design/Build Contract Changes to the Relief Wells	1,335,000
Additional Functions Added under General Authority	7,200,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	8,880,000
Price De-escalation on Real Estate	(883,000)
Total	\$ 16,741,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Supplemental Environmental Impact Statement is included in the final General Reevaluation Report approved September 2005. The Record of Decision was signed 15 November 2005.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984. Funds to initiate construction work were appropriated in FY 1995. The decrease in the amount of \$15,000,000 is the result of the inflatable dam not being constructed due to a denial of the permit under the Rivers and Harbors Act of 1899 (\$13.2 M); and the non-Federal sponsor decision to not remove the Bloomsburg railroad bridge (\$1.8 M).

LEGEND

-  FLOOD LINE FOR FLOOD OF RECORD JUNE 1972
-  WORK COMPLETED AS OF 30 SEPTEMBER 2012
-  WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2013
-  WORK PROPOSED WITH FUNDS RECOMMENDED FOR FY 2014
-  WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014



WYOMING VALLEY, PENNSYLVANIA

1 JANUARY 2013

BALTIMORE DISTRICT NORTH ATLANTIC DIVISION

Operation and Maintenance

Connecticut

O&M Justification Sheet

PROJECT NAME: Black Rock Lake, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1960.

LOCATION AND DESCRIPTION: Black Rock Lake is located on Branch Brook, about 2 miles upstream from its confluence with the Naugatuck River. The project is located in Thomaston and Watertown, Connecticut. Black Rock Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Housatonic River Basin. The project consists of an earth-filled dam, 933 feet long with a maximum height of 154 feet; an uncontrolled chute spillway, 140 feet wide with a maximum discharge capacity of 33,500 cubic feet per second; and a rectangular outlet conduit with 2 control gates. The reservoir provides a flood storage capacity of 8,755 acre-feet to control runoff from its net drainage area of 20.4 square miles. Construction of the dam and appurtenant structures was initiated in July 1967 and completed in July 1971.

CONFERENCE AMOUNT FOR FY 2013: \$518,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$96,000 O: \$570,000 T: \$666,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$578,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes a required five year cycle Periodic Inspection (\$108,000) and Periodic Assessment (\$75,000) of the project, as well as inspection of project bridges (\$9,000).

RC: \$50,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 64,000 visitors each year.

H: N/A

EN: \$38,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 173 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$217.2 million in flood damages since placed in service in 1971.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Colebrook River Lake, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1960.

LOCATION AND DESCRIPTION: Colebrook River Lake is located on the West Branch of the Farmington River, about 8.1 miles above its junction with the main stem of the Farmington River. The project is located in Colebrook, Connecticut and the pool extends into Sandisfield and Tolland, Massachusetts. Colebrook River Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with rock slope protection, 1,300 feet long with a maximum height of 223 feet; an earth-filled dike 1,240 feet long with a maximum height of 54 feet; an uncontrolled ogee weir spillway, 205 feet wide with a maximum discharge capacity of 96,000 cubic feet per second; and a 10-foot diameter outlet tunnel with 3 control gates. The reservoir provides a flood storage capacity of 97,700 acre-feet to control runoff from its net drainage area of 118 square miles. Construction of the dam and appurtenant structures was initiated in May 1965 and completed in June 1969. Recreational facilities were initiated in August 1969 and completed in June 1970.

CONFERENCE AMOUNT FOR FY 2013: \$884,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$92,000 O: \$652,000 T: \$744,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$622,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes a required five year cycle Periodic Inspection of the project (\$108,000), inspection of project bridges (\$10,000) and update of the emergency evacuation plan and inundation mapping for the saddle dike (\$6,000).

RC: \$61,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 115,000 visitors each year.

H: N/A

EN: \$57,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 388 fee owned acres of land.

WS: \$4,000 – Provides for minimal routine operation and maintenance activities relating to water supply at the project. This work includes additional operation of the gates for water releases during low flow periods of time and coordinating with local entities pertaining to these releases.

OTHER INFORMATION: Project has prevented an estimated \$92.8 million in flood damages since placed in service in 1969.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

Division: North Atlantic

District: New England

Colebrook River Lake, Connecticut

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hancock Brook Lake, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1960.

LOCATION AND DESCRIPTION: Hancock Brook Lake is located along Branch Brook, about 2 miles upstream from its confluence with the Naugatuck River. The project is located in Thomaston and Watertown, Connecticut. Hancock Brook Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Housatonic River Basin. The project consists of an earth-filled dam with an impervious core and stone slope protection, 630 feet long and a maximum height of 57 feet; an uncontrolled ogee weir spillway, 100 feet wide with a maximum discharge capacity of 16,600 cubic feet per second; and an un-gated rectangular outlet conduit. The reservoir provides a flood storage capacity of 4,030 acre-feet to control runoff from its net drainage area of 12 square miles. Construction of the dam and appurtenant structures was initiated in July 1963 and completed in August 1966.

CONFERENCE AMOUNT FOR FY 2013: \$415,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$103,000 O: \$308,000 T: \$411,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$318,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes update of the emergency action plan and new inundation mapping (\$15,000).

RC: \$50,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 15,000 visitors each year.

H: N/A

EN: \$43,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. The project consists of 707 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Hancock Brook Dam and the Rail Road Dike portion of the project were assigned Dam Safety Assurance Classification (DSAC) ratings of III in November 2009. The principle issue is seepage for both the dam and dike. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented an estimated \$52.5 million in flood damages since placed in service in 1966.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hop Brook Lake, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1960.

LOCATION AND DESCRIPTION: Hop Brook Lake is located on Hop Brook, about 1.4 miles upstream from its confluence with the Naugatuck River. The project is located in Waterbury, Middlebury and Naugatuck, Connecticut. Hop Brook Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Housatonic River Basin. The project consists of an earth-filled dam with an impervious core and stone slope protection, 520 feet long with a maximum height of 97 feet; an earth-filled dike 440 feet long with a maximum height of 33 feet; an uncontrolled broad crested spillway weir, 200 feet wide with a maximum discharge capacity of 23,000 cubic feet per second; and a rectangular outlet conduit with 2 control gates. The reservoir provides a flood storage capacity of 6,970 acre-feet to control runoff from its net drainage area of 16.4 square miles. Construction of the dam and appurtenant structures was initiated in December 1965 and completed in December 1968.

CONFERENCE AMOUNT FOR FY 2013: \$956,000 2/

BUDGET FOR FY 2014: M: \$238,000 O: \$830,000 T: \$1,068,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$703,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintaining service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes a required five year cycle Periodic Inspection of the project (\$108,000), inspection of project bridges (\$12,000), and survey of reservoir rim with removal of vegetation along spillway channel embankments (\$25,000).

RC: \$275,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 221,000 visitors each year.

H: N/A

EN: \$90,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 538 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Hop Brook Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of II in 2005. The principle issue is seepage. The rating of II is defined as Urgent (Unsafe or Potentially Unsafe). A grouting contract was awarded in September 2009, using ARRA Construction funds, to address the seepage issue at the dam. Project has prevented an estimated \$108.5 million in flood damages since placed in service in 1968.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be use to perform work on the study as follows: N/A

Division: North Atlantic

District: New England

Hop Brook Lake, Connecticut

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Hop Brook Lake, Connecticut

1 May 2013

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O&M Justification Sheet

PROJECT NAME: Long Island Sound (LIS) Dredged Material Management Plan (DMMP), Connecticut and New York

AUTHORIZATION: Public laws authorizing existing federal navigation projects adjacent to LIS in Connecticut and New York. The Governors of these states, in a joint letter dated 8 February 2005, requested the Corps to develop a regional DMMP for the LIS Region.

LOCATION AND DESCRIPTION: LIS is located between the State of Connecticut and Long Island, New York. There are 55 existing Federal navigation projects that require periodic maintenance dredging in the LIS region, extending from Throggs Neck to Block Island Sound. Existing disposal sites include selected ocean and 404 sites in LIS, and in-water/upland sites including beach nourishment consistent with existing authorizations. The U.S. Environmental Protection Agency (EPA) Region I and II, as well as the New York District are cooperating in the preparation of the DMMP. Dredging and management of dredged material is vital to the economic and environmental well being of both states. However, basic differences exist between the states over the designation of open water disposal sites in LIS. The interests of all stakeholders are best served by development of a comprehensive plan to address future dredged material disposal needs and management protocols in a regional DMMP. The states in partnership with the Corps, EPA and other local, state and federal agencies will form a team committed to an open and inclusive process for developing the DMMP. This partnership will insure that all parties contribute resources and achieve consensus for alternative disposal options, including reducing sediment sources and contaminant loading, and developing beneficial reuses for dredged material, with the goal of reducing or eliminating the need for open water disposal.

CONFERENCE AMOUNT FOR FY 2013: \$2,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$500,000 T: \$500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$500,000 – Funds will be used to continue preparation of the DMMP; including screening of disposal alternatives and continued work on the Programmatic Environmental Impact Statement.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$3,200,000. This amount, together with the Budget Amount shown above, will be used to perform work on the FY 2014 project as follows: complete the draft Programmatic Environmental Impact Statement and draft DMMP as well as conduct public hearings.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Long Island Sound (LIS) Dredged
Material Management Plan (DMMP),
Connecticut and New York

O&M Justification Sheet

PROJECT NAME: Mansfield Hollow Lake, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1941.

LOCATION AND DESCRIPTION: Mansfield Hollow Lake is located on the Natchaug River, about 5.3 miles upstream from its confluence with the Willimantic River. The project is located in the towns of Windham and Chaplin, Connecticut, and is part of a comprehensive system of flood control projects designed to protect life and property within the Thames River Basin. The project consists of an earth-filled dam with stone slope protection, 14,050 feet long and a maximum height of 68 feet; 6 earth-filled dikes with a total length of 2,656 feet and a maximum height of 53 feet; an uncontrolled ogee weir spillway, 690 feet wide with a maximum discharge capacity of 106,600 cubic feet per second; and 5 rectangular outlet conduits with 26 control gates. The reservoir provides a flood storage capacity of 52,000 acre-feet to control runoff from its net drainage area of 159 square miles. Construction of the dam and appurtenant structures was initiated in 1949 and completed in 1952.

CONFERENCE AMOUNT FOR FY 2013: \$595,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$175,000 O: \$906,000 T: \$1,081,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$979,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes an update of the emergency action plan and inundation mapping (\$15,000), and spillway foundation explorations and installation of drain holes (\$450,000).

RC: \$68,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 276,000 visitors each year.

H: N/A

EN: \$34,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 2,470 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Mansfield Hollow Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of II in 2005. The principle issue is seepage. The rating of II is defined as Urgent (Unsafe or Potentially Unsafe). Dam Safety Construction funds are currently being used to evaluate the seepage problem. Dikes A and B at Mansfield Hollow Dam were assigned DSAC ratings of III in 2009. The principle issue for the dikes is seepage. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented an estimated \$101.6 million in flood damages since placed in service in 1952.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A.

Division: North Atlantic

District: New England

Mansfield Hollow Lake, Connecticut

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: New Haven Harbor, Connecticut

AUTHORIZATION: Rivers and Harbors Acts of 1882, 1899, 1910, 1912, 1930, 1935, 1945, 1946, 1949, 1955 and 1986.

LOCATION AND DESCRIPTION: New Haven Harbor is the largest commercial port in Connecticut. The harbor is located on the north shore of Long Island Sound and extends about 3 miles north to the City of New Haven, with the City of West Haven and Town of East Haven located along the outer harbor. Principal streams entering the harbor are the Quinnipiac River on the northeast, the Mill River on the north and the West River to the west. The existing project provides for a 35-foot main ship channel, 500 feet wide from deep water in Long Island Sound to inside the outer breakwaters, then 400 feet wide to the upper harbor, then 800 feet wide to the I-95 bridge at the mouth of the Quinnipiac River with a 1200-foot wide maneuvering basin at its center; a 16-foot anchorage in the upper harbor located west of the main channel; a 12-foot channel to and up the West River with a 6-foot anchorage at its mouth; a 12-foot channel in the Mill River and both its branches; an 18-foot channel leading to a 16-foot channel in the Quinnipiac River; and a stone breakwater and dike at Sandy Point separating the outer and inner harbors. Construction of the project was completed in 1950 and the project was last maintained in 2004.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$8,600,000 O: \$0 T: \$8,600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$8,600,000 - Funds will be used to advertise and award a fully funded contract to perform minimal critical maintenance dredging of New Haven Harbor. Maintenance dredging of critical shoals within the 35-foot entrance channel and 35-foot turning basin would require the removal of about 990,000 CY of material with placement at the Central Long Island Sound open water disposal site. Failure to dredge will cause delays and hazardous conditions to one of New England's largest commercial ports, resulting in significant economic impacts.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: In 2010, waterborne commerce totaled 10 million tons. The most common products are petroleum, iron and steel, non-ferrous metal products, cement, and sand and gravel. It has been over 8 years since the project was last dredged.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Northfield Brook Lake, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1960.

LOCATION AND DESCRIPTION: Northfield Brook Lake is located along Northfield Brook, about 1.3 miles upstream from its confluence with the Naugatuck River. The project is located in the Town of Thomaston, Connecticut. Northfield Brook Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Housatonic River Basin. The project consists of an earth-filled dam with an impervious core and stone slope protection, 810 feet long and a maximum height of 118 feet; an uncontrolled ogee weir spillway, 72 feet wide with a maximum discharge capacity of 8,800 cubic feet per second; and a 3-foot diameter outlet conduit with a control gate. The reservoir provides a flood storage capacity of 2,430 acre-feet to control runoff from its net drainage area of 5.7 square miles. Construction of the dam and appurtenant structures was initiated in May 1963 and completed in October 1965. Construction of recreational facilities were initiated in November 1966 and completed in August 1967.

CONFERENCE AMOUNT FOR FY 2013: \$438,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$91,000 O: \$343,000 T: \$434,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$305,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes.

RC: \$87,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 45,000 visitors each year.

H: N/A

EN: \$42,000 - Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 208 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$75.8 million in flood damages since placed in service in 1965.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Stamford Hurricane Barrier, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1960.

LOCATION AND DESCRIPTION: The Stamford Hurricane Barrier is located along the East and West Branches of Stamford Harbor and Westcott Cove in the City of Stamford, Connecticut. The project provides for the construction of the East Branch Barrier, which consists of 2,850 feet of earth-filled dike with rock slope protection, a 90-foot wide gated opening for navigation and a 45,000 gallon per minute pump station to handle interior drainage. The project includes protection along the West Branch of Stamford Harbor, consisting of 1,349 feet of concrete wall, 160 feet of sheet pile bulkhead wall, 2,950 feet of earth-filled dike and a 229,500 gallon per minute pump station. The project also includes protection along Westcott Cove consisting of 4,400 feet of earth-filled dike and two pump stations with a total capacity of 85,500 gallons per minute. Project construction was completed in January 1969. The project is operated and maintained by the City of Stamford, with the exception of the navigation gate, which is operated and maintained by the Corps of Engineers.

CONFERENCE AMOUNT FOR FY 2013: \$563,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$360,000 O: \$319,000 T: \$679,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$661,000 – Provides for minimal routine essential operation and maintenance activities necessary to operate the gates and protect life and property in downtown Stamford during coastal flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and gate operation. Includes funding to replace the transformer, repair concrete and upgrade security fencing (\$240,000).

RC: N/A

H: N/A

ES: \$18,000 - Provides for ERGO Cycle V environmental compliance and re-assessments, including correction of deficiencies.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$38.4 million in flood damages since placed in service in 1969.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Thomaston Dam, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1944.

LOCATION AND DESCRIPTION: Thomaston Dam is located along the Naugatuck River, 30.4 miles upstream from its confluence with the Housatonic River. The project is located in Thomaston, Litchfield, Harwinton and Plymouth, Connecticut. Thomaston Dam is part of a comprehensive system of flood control projects designed to protect life and property within the Housatonic River Basin. The project consists of an earth-filled dam with an impervious core and stone slope protection, 2,000 feet long and a maximum height of 142 feet; an uncontrolled side channel spillway, 435 feet wide with a maximum discharge capacity of 132,200 cubic feet per second; and a 10-foot diameter horseshoe-shaped outlet conduit with 2 control gates. The reservoir provides a flood storage capacity of 42,000 acre-feet to control runoff from its net drainage area of 97.2 square miles. Construction of the dam and appurtenant structures was initiated in May 1958 and completed in November 1960.

CONFERENCE AMOUNT FOR FY 2013: \$783,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$123,000 O: \$699,000 T: \$822,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$653,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections, patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$9,000) and seepage analysis along the dam foundation and conduit (\$90,000).

RC: \$93,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 160,000 visitors each year.

H: N/A

EN: \$76,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 849 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Thomaston Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of III in March 2009. The principle issue is seepage. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented an estimated \$829 million in flood damages since placed in service in 1960.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: West Thompson Lake, Connecticut

AUTHORIZATION: Authorized by the Flood Control Act of 1960.

LOCATION AND DESCRIPTION: West Thompson Lake is located along the Quinebaug River, in the Town of Thompson, Connecticut. West Thompson Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Thames River Basin. The project consists of an earth-filled dam with stone slope protection, 2,550 feet long and a maximum height of 69.5 feet; an earth-filled dike 1,650 feet long with a maximum height of 30 feet; an uncontrolled L-shaped ogee weir spillway, 320 feet wide with a maximum discharge capacity of 63,000 cubic feet per second; and a 12-foot diameter horseshoe-shaped outlet conduit with 3 control gates. The reservoir provides a flood storage capacity of 26,800 acre-feet to control runoff from its net drainage area of 173.5 square miles. Construction of the dam and appurtenant structures was initiated in August 1963 and completed in October 1965.

CONFERENCE AMOUNT FOR FY 2013: \$655,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$196,000 O: \$483,000 T: \$679,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$549,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$13,000) and update of the emergency action plan and inundation mapping (\$15,000).

RC: \$93,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 146,000 visitors each year.

H: N/A

EN: \$37,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 1,672 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$56.5 million in flood damages since placed in service in 1965.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Delaware

O&M Justification Sheet

PROJECT NAME: IWW, Delaware River to Chesapeake Bay, Delaware and Maryland

AUTHORIZATION: HD 63-196 in 1919 and modified by Section 3 of the R & H Act of 1927, by R & H Comm. Doc. 71-41 and SD 71-151 in 1930, by HD 72-201, HD 73-18, and HD 73-24 in 1935, and by SD 83-123 in 1954 and modified by H.R. 5314 (WRDA 1990).

LOCATION AND DESCRIPTION: The waterway extends from Reedy Point on the Delaware River, about 41 miles downstream from Philadelphia, Pa. through a sea level canal westward to the Elk River, thence following the Elk River and the upper Chesapeake Bay to deep water near Pooles Island. Maintenance consists of 46 miles of channels (35' x 450'), an anchorage and turning basin on Back Creek and at Chesapeake City, and the Delaware City Branch channel (8' x 50' x 2 miles). The project consists of maintenance and repair of 5 high level bridges; maintenance of entrance jetties at Reedy Point; maintenance of roads and drainage ditches along canal banks, upland disposal areas, and maintenance of stabilized channel banks through rip-rap replacement and bulkhead repair.

CONFERENCE AMOUNT FOR FY 2013: \$17,375,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$16,218,000 O: \$2,700,000 T: \$18,918,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$18,918,000. Funds will be used for minimal routine operation and maintenance of the project, including dispatching, channel exams, and to meet operational safety requirements for five high height highway bridges. Funding will also be used to maintain buildings, grounds, utilities, canal banks & dredge material containment facilities, routine operations of bridges, maintenance dredging of critical shoals within the 46 mile the navigation channel; periodic inspection of Summit and Reedy Point Bridges, corrosion protection of Delaware City Bridge, load rating analysis of Reedy Point & Summit Bridges, O&M of the SR-1 Bridge, and Installation of an Impervious Barrier at Pearce Creek Confined Disposal Facility.

FRM: NA

RC: NA

H: NA

EN: NA

WS: - NA

OTHER INFORMATION: The Corps of Engineers took ownership of the Senator Roth Bridge (SR-1) in May 2012 in accordance with Section 3044 of the Water Resources Development Act of 2007. Commerce on the waterway averages over 12 million tons annually.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Wilmington Harbor, New Castle County, Delaware

AUTHORIZATION: The existing project, adopted as HD 54-66 in 1896 and 1899, and modified by HD 67-114 in 1922, by HD 71-20 in 1930, by HD 73-32 in 1935, by HD 76-658 in 1940, by SD 86-88 in 1960, and further modified pursuant to the authority of Section 107 of the River and Harbor Act of 1960 (PL 86-645).

LOCATION AND DESCRIPTION: Wilmington Harbor provides for a channel with depths of 38, 35, 21, 10, and 7 feet from the Delaware River to Newport, DE, a turning basin 2050 feet long, 640 feet wide and 38 feet deep opposite the Wilmington Marine Terminal, and jetties at the mouths of Christina and Brandywine Rivers. The project extends from the Delaware ship channel upstream, a length of about 9.9 miles.

CONFERENCE AMOUNT FOR FY 2013: T: \$4,305,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$5,040,000 O: \$365,000 T: \$5,405,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,405,000. Funds will be used for operation and maintenance activities for the project, including critical minimal maintenance dredging, monthly channel examination surveys and dredge material containment facility maintenance and dike construction by both hired labor and leased equipment contract.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The Port of Wilmington is a full-service deep water port handling over 400 vessels per year with an annual import/export cargo tonnage of 5 million tons. The port contributes significantly to the Delaware's economic vitality by creating 5,800 jobs resulting in \$225,000,000 in annual personal income, annual business revenues of \$213,000,000, and annual state and local taxes totaling \$23,000,000 annually. The port is the number one gateway in the United States for imports of fresh fruit, and juice concentrates, the world's largest banana port, and is a key mid-Atlantic distribution hub for imported beef. Largest dockside cold storage and controlled atmosphere facility in the United States.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

District of Columbia

O&M Justification Sheet

PROJECT NAME: Potomac and Anacostia Rivers, DC and MD (Drift Removal)

AUTHORIZATION: River and Harbor Act of 27 October 1965, 89th Congress.

LOCATION AND DESCRIPTION: System Code 0207 - Potomac and Anacostia Removal of Drift Project is located within Washington, DC, Prince Georges County, Maryland and Fairfax County, Virginia. The collection and removal effort is a year round effort and consists of performing routine patrols throughout the harbor and also responding to emergency calls from Coast Guard and Navy activities, state and local government activities, and commercial business concerns for the removal of drift material deemed hazardous to the safe navigation of both commercial and recreational marine vessels.

CONFERENCE AMOUNT FOR FY 2013: \$875,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$875,000 O: \$0 T: \$875,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$875,000 - Funding will provide minimal drift collection and removal operations to support safe passage, free of obstructions, on the Potomac and Anacostia Rivers.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This work provides safe navigation, free of obstruction, for security and commercial traffic on the Potomac and Anacostia Rivers adjacent to Washington, D.C.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Washington Harbor, DC

AUTHORIZATION: River and Harbor Committee, Document 22, 74th Congress. 1st Session, August 30, 1935.

LOCATION AND DESCRIPTION: System Code 0207- Washington Harbor Project is located within Washington, DC. The project provides for a channel in the Potomac River from Giesboro Point to Key Bridge, a second channel from Giesboro Point to the end of Washington Channel, and a third channel from the mouth of the Anacostia River to the foot of 15th Street, S.E., with turning basins opposite the Washington Navy Yard (800 feet wide and 2,400 feet long) and at the head of the Anacostia Channel (400 feet square). Channel dimensions are 24 feet deep and 400 feet wide except upstream from Anacostia Bridge where the width is reduced to 200 feet and from Giesboro Point to a point 3,000 feet downstream of Arlington Memorial Bridge and above Easby Point where channel dimensions are 20 feet deep and 200 feet wide. The project also provides for the operation and maintenance of the inlet and outlet gates to the tidal basin

CONFERENCE AMOUNT FOR FY 2013: \$25,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$25,000 O: \$0 T: \$25,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$25,000 - Funding will provide for gate inspection and maintenance, and minimal removal of debris adjacent to the gates, which control the flow of water into and out of the Tidal Basin.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The Tidal Basin flushes water in the Washington channel to improve water quality in the channel. The basin is also part of West Potomac Park and is a focal point of the National Cherry Blossom Festival held each spring, which brings in more than 1.5 million visitors. The Jefferson Memorial, the Martin Luther King, Jr. National Memorial, the Franklin Delano Roosevelt Memorial, and the George Mason Memorial are situated adjacent to the Tidal Basin.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Maine

O&M Justification Sheet

PROJECT NAME: Disposal Area Monitoring, Connecticut, Maine, Massachusetts, New Hampshire, New York and Rhode Island

AUTHORIZATION: Section 404 of the Clean Water Act of 1972 and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972.

LOCATION AND DESCRIPTION: The project involves the management and monitoring of 10 regional open-water dredged material disposal sites located along coastal New England. These sites serve over 90 percent of the disposal needs for dredging projects in New England and portions of New York. This includes projects such as Boston, New Haven, Portsmouth, Portland, Providence, New London, Mamaroneck, Port Chester, Milton and many other smaller harbors and navigation projects. Disposal sites in New England receive an average of 1.5 million cubic yards of dredged material per year from Federal, State and private dredging projects. Disposal costs would increase dramatically without access to the regional open-water sites. Surveys, along with sediment sampling and testing, are performed to assure that disposal at these regional sites does not result in hazards to navigation, that capping projects are successful and that unacceptable environmental damage does not occur.

CONFERENCE AMOUNT FOR FY 2013: \$1,050,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,050,000 T: \$1,050,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,050,000 – Funds will be used to perform minimal annual disposal site monitoring; including condition surveys, sediment sampling and testing, repositioning of disposal site buoys and preparation of several monitoring study reports.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Discontinuing monitoring would jeopardize ability to continue open water disposal in entire New England region and New York-Long Island Sound.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Disposal Area Monitoring, Connecticut,
Maine, Massachusetts, New Hampshire,
New York and Rhode Island

Maryland

O&M Justification Sheet

PROJECT NAME: Baltimore Harbor and Channels, MD & VA

AUTHORIZATION: House Document 799, 64th Congress, 1st Session, August 8, 1917; River and Harbors Committee Document 11, 70th Congress, 1st Session, July 3, 1930; House Document 741, 79th Congress, 2nd Session, March 2, 1945; House Document 86, 85th Congress, 1st Session, July 3, 1958; House Document 181, 94th Congress, 1st Session, December 31, 1970: Water Resources Development Act of November 17, 1986.

LOCATION AND DESCRIPTION: The project channels are located in the Chesapeake Bay from Virginia to Maryland. The authorized system of channels include: a uniform main channel 50 feet deep, and generally 800 (in Maryland) or 1,000 (in Virginia) feet wide through the Chesapeake Bay from the Virginia Capes at the mouth of the Bay to Fort McHenry in the Port of Baltimore, a distance of 175 miles; Depths of 50, 49, and 40 feet are authorized in the 600-foot wide branch channels of Curtis Bay, Northwest Branch East Channel, and Northwest Branch West Channel, respectively; southern approach and connecting channels 35 feet deep and 600 feet wide leading from the Port of Baltimore to the Inland Waterway from Delaware River to Chesapeake Bay, Delaware and Maryland, Baltimore Harbor branch channels ranging from 22, 35 and 42 feet deep and 200 to 600 feet wide in Curtis Creek and Ferry Bar; and Baltimore Harbor anchorages 30 and 35 feet deep. The project also includes a straightened Tolchester Channel S-Turn and a 50-foot deep turning basin; 35 and 42-foot deep anchorages; and 42 and 36 feet deep and 400 to 500-foot wide channels into Dundalk, Seagirt, and South Locust Point.

CONFERENCE AMOUNT FOR FY 2013: \$15,757,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$20,923,000 O: \$1,170,000 T: \$22,093,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$22,093,000 - Funding will provide for the restoration of authorized dimensions through maintenance dredging of the waterway. Channels scheduled for maintenance dredging include the Craighill, Brewerton, Curtis Bay, Ft McHenry, and Brewerton Extension channels. Funds will also provide for conducting condition surveys to report channel conditions to the USCG, NOAA, ship pilots and other navigation users and to continue studies on the Dredged Material Management Plan to bring new containment facilities on line to avoid shortfalls in dredged material placement capacity.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: 38% of US roll-on roll-off cargo comes through Port of Baltimore. Baltimore Harbor is the 2nd largest coal port on east coast and is home port to U.S. Naval Reserve vessels, and is used for military deployments. The USCG has fleet of buoy tenders, patrol boats, and ship yard facility in the Harbor. Recent severe ship groundings have resulted in higher risk congestion as pilots slow ship speeds and juggle one way traffic schemes. In 2011, the Port of Baltimore saw a 15 percent increase in cargo from 2010 which marked the greatest increase of growth by any major U.S. port. The Port's public and private marine terminals saw 37.8 million tons of cargo cross their docks in 2011, up from 32.8 million tons in 2010. The total dollar value amount of that cargo was more than \$51.4 billion.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ \$400,000, from Baltimore Harbor carryover funds, may be used to reconcile the Nanticoke River NW Fork, DE and MD project and fund maintenance dredging in the upper Nanticoke River, Sussex County DE. The funds were available for reconciliation, due to extremely good bids on the Baltimore Harbor project in FY 2012. The balance of carryover and Operating plan amount for FY 2013 will be sufficient to meet the Baltimore Harbor contract needs in FY 2013.

Division: North Atlantic

District: Baltimore

Baltimore Harbor and Channels, MD & VA

O&M Justification Sheet

PROJECT NAME: Baltimore Harbor, MD – Collection and Removal of Drift

AUTHORIZATION: River and Harbor Act of 30 June 1948.

LOCATION AND DESCRIPTION: System Code 0206 - The Baltimore Harbor Collection and Removal of Drift Project is located within Baltimore City, and Baltimore and Anne Arundel Counties, Maryland. The collection and removal effort is a year round effort and consists of performing routine patrols throughout the harbor and also responding to emergency calls from Coast Guard and Navy activities, state and local government activities, and commercial business concerns for the removal of drift material deemed hazardous to the safe navigation of both commercial and recreational marine vessels.

CONFERENCE AMOUNT FOR FY 2013: \$325,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$325,000 O: \$0 T: \$325,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$325,000 - Funding will provide minimal drift collection and removal operations to support the Port of Baltimore to ensure that commercial vessels have safe passage free of obstructions.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The Port of Baltimore provides approximately 16,700 jobs and has an estimated regional economic value of \$5.6 billion. The Port imports approximately 22.4 million tons of foreign cargo, with an estimated value of \$30.2 billion.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Cumberland, MD & Ridgeley, WV

AUTHORIZATION: Flood Control Act of 22 June 1936 and the Flood Control Act of 24 July 1946 described in House Document No. 101, 73rd Congress, 1st Session.

LOCATION AND DESCRIPTION: System Code 0207 - The project is located in Cumberland, Maryland and Ridgeley, West Virginia. The protective works consist of about 1.6 miles of channel improvements along Wills Creek; 1.7 miles of channel improvement along the North Branch Potomac River; 3 pumping stations; 8 pressure conduits; an industrial water-supply dam; reconstruction of a railroad bridge; track relocations; and reconstruction of piers and abutments for three highway bridges. The project protects Cumberland, Maryland and Ridgeley, West Virginia, against flood discharges 28 percent greater than the maximum flood of record (March 1936). Federal maintenance is provided for the channels of Wills Creek and the North Branch Potomac River. Operation and maintenance of the Federal project is performed by the City Engineering Department of Cumberland under contract with the Baltimore District Corps of Engineers.

CONFERENCE AMOUNT FOR FY 2013: \$115,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$150,000 T: \$150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$150,000 - Funding will provide for flood risk management operation cost for project, which includes salaries, critical stream gages and contracts.

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 10,000. Flood damages prevented through FY2012 are \$38 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Jennings Randolph Lake, MD & WV

AUTHORIZATION: Flood Control Act of 23 October 1962 (PL 87-874) and described in House Document 469, 87th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0207- Jennings Randolph Lake project, located in Garrett County, Maryland, and Mineral County, West Virginia, on the North Branch Potomac River, is 7.9 miles upstream from the mouth of Savage River at Bloomington, MD. The dam is a rolled earth and rockfill structure rising 296 feet from the streambed and extending 2,130 feet across the valley. The project includes a rolled earth and rockfill dike 900 feet long on the left (north) bank, and a spillway with tainter gates along the ridge between the dike and the dam. Outlet works are provided in the right (south) abutment. With a full conservation pool, the lake, controlling a drainage area of 263 square miles, is about 5.5 miles long and has a surface area of 952 acres. Forty-five percent of the storage space in the project is allocated for water supply storage, owned by the Washington Suburban Sanitary Commission, District of Columbia, and Fairfax County. The Corps operates and maintains six recreation areas, and two recreation areas are operated and maintained by Mineral County and the Maryland Department of Natural Resources under real estate lease.

CONFERENCE AMOUNT FOR FY 2013: \$1,724,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$619,000 O: \$1,295,000 T: \$1,914,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$1,330,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$341,000 - Funding will provide for operation and maintenance, which includes salaries for permanent and seasonal staff, utilities, supplies and contracts.

H: NA

EN: \$213,000 - Funding will provide natural resources protection and conservation, eco-system management, and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: \$30,000 - Funding will provide for water supply coordination.

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 90,000. Flood damages prevented through FY2012 are \$401.9 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Wicomico River, MD

AUTHORIZATION: House Document 20, 51st Congress, 1st Session, September 19, 1890, modified by House Document 569, 61st Congress, 2nd Session, June 25, 1910; House Document 1509, 63rd Congress, 3rd Session, March 2, 1919; Senate Committee, 75th Congress, 3rd Session, August 26, 1937; and House Document 619, 81st Congress, 2nd Session, September 3, 1954.

LOCATION AND DESCRIPTION: System Code 0206- The Wicomico River Federal navigation project is located in Wicomico and Somerset Counties, Maryland. The project provides for a channel 14 feet deep and 150 feet wide from the Chesapeake Bay to Salisbury, including a 100 foot wide channel with turning basins all 14 feet deep in the north and south prongs, and a 60 foot wide channel 6 feet deep from deep water in the river to Webster Cove, with a T-shaped basin in the cove 100 feet wide and 400 feet long; and extension of the basin 200 feet long and 100 feet wide on each side. The total project length is 37 miles and different reaches of the project require dredging each year.

CONFERENCE AMOUNT FOR FY 2013: \$1,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,500,000 O: \$0 T: \$1,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,500,000 - Funding will provide for the removal of minimal critical shoals through maintenance dredging of the waterway. Channels in the upper river near Salisbury are scheduled for maintenance dredging.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The Wicomico River navigation project serves the Port of Salisbury, third largest port in MD, and provides 10 facilities for grain exports and petroleum imports, which are vital to the economy of the Delmarva Peninsula of DE, MD, VA. The project produces over \$10 million in transportation savings when compared to land based alternatives via congested bridge access. A waterway committee of almost 100 commercial users and interests actively promotes the development and maintenance of this waterway. In 2010 barge traffic provided the Port of Salisbury 791 thousand tons of commerce consisting of primarily petroleum products. Salisbury also provides shipyard facilities to service and construct barges, tugs, and cruise ships.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Massachusetts

O&M Justification Sheet

PROJECT NAME: Barre Falls Dam, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1941.

LOCATION AND DESCRIPTION: Barre Falls Dam is located along the Ware River in the Town of Barre, Massachusetts, about 31.9 miles above the confluence of the Swift River. The dam is located about 13 miles northwest of Worcester, Massachusetts. Barre Falls Dam is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with rock slope protection, 885 feet long with a maximum height of 69 feet; 3 earth-filled dikes with rock and gravel slopes, totaling 3,215 feet in length; an uncontrolled ogee weir spillway, 60 feet wide with a maximum discharge capacity of 16,300 cubic feet per second; and a 9.7-foot diameter horseshoe-shaped outlet conduit with 2 control gates. The reservoir provides flood storage capacity of 24,000 acre-feet to control runoff from its net drainage area of 55 square miles. Construction of the dam and appurtenant structures was initiated in May 1956 and completed in May 1958.

CONFERENCE AMOUNT FOR FY 2013: \$646,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$115,000 O: \$670,000 T: \$785,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$667,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes installation of piezometers in the main embankment (\$120,000).

RC: \$52,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintain project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 82,000 visitors each year.

H: N/A

EN: \$66,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 557 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$53.2 million in flood damages since placed in service in 1958.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Birch Hill Dam, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Acts of 1936 and 1938.

LOCATION AND DESCRIPTION: Birch Hill Dam is located along the Millers River, 27.3 miles above its junction with the Connecticut River. The dam lies about 1.3 miles east of South Royalston, Massachusetts and 7.5 miles northwest of Gardner, Massachusetts. Birch Hill Dam is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with an impervious core and rock slope protection, 1,400 feet long with a maximum height of 56 feet; an uncontrolled ogee weir spillway, a total of 1,190 feet wide with a maximum discharge capacity of 56,600 cubic feet per second; and 4 rectangular outlet conduits with 8 control gates. The reservoir provides a flood storage capacity of 49,900 acre-feet, to control runoff from its net drainage area of 175 square miles. Construction of the dam and appurtenant structures was initiated in June 1940 and completed in February 1942.

CONFERENCE AMOUNT FOR FY 2013: \$1,022,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$299,000 O: \$489,000 T: \$788,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$656,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; replacement of two underground storage tanks with double wall above ground tanks (\$155,000), as well as maintenance service contracts for snow and debris removal, and vegetation control.

RC: \$50,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 272,000 visitors yearly.

H: N/A

EN: \$82,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 4,394 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Birch Hill Dam and the Winchenden Dike portion of the project were assigned Dam Safety Assurance Classification (DSAC) ratings of III in September and November 2009 (respectively). The principle issues at the dam are seepage and seismic, the issue at the dike is seepage. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented \$78.2 million in flood damages since placed in service in 1942.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Birch Hill Dam, Massachusetts

O&M Justification Sheet

PROJECT NAME: Buffumville Lake, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1941.

LOCATION AND DESCRIPTION: Buffumville Lake is located along the Little River, about 1.3 miles upstream from its confluence with the French River and about 8 miles northeast of Southbridge, Massachusetts. The project is located in the Towns of Oxford and Charlton, Massachusetts. Buffumville Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Thames River Basin. The project consists of an earth-filled dam with stone slope protection, 3,255 feet long with a maximum height of 66 feet; an earth-filled dike with stone slope protection, a total length of 610 feet and a maximum height of 15 feet; an uncontrolled ogee weir spillway, 220 feet wide with a maximum discharge capacity of 29,800 cubic feet per second; and 3 rectangular outlet conduits with 1 control gate. The reservoir provides a flood storage capacity of 12,720 acre-feet to control runoff from its net drainage area of 26.5 square miles. Construction of the dam and appurtenant structures was initiated in September 1956 and completed in June 1958.

CONFERENCE AMOUNT FOR FY 2013: \$599,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$184,000 O: \$416,000 T: \$600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$490,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes an update of the emergency evacuation plan and inundation mapping for the dike (\$15,000) as well as video inspection of the toe drain (\$20,000).

RC: \$71,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 237,000 visitors each year.

H: N/A

EN: \$39,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 480 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$128.6 million in flood damages since placed in service in 1958.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Buffumville Lake, Massachusetts

O&M Justification Sheet

PROJECT NAME: Cape Cod Canal, Massachusetts

AUTHORIZATION: Rivers and Harbors Acts of 1927, 1935, 1945 and 1958; and amended by the Public Works Administration Program in 1933 and 1935, the Permanent Appropriations Repeal Act of 1934, and the Emergency Relief Program in 1935. The canal was purchased from the Boston, Cape Cod and New York Canal Company in accordance with a contract dated 29 July 1921.

LOCATION AND DESCRIPTION: The Cape Cod Canal is located about 50 miles south of Boston, Massachusetts and extends across a narrow neck of land joining Cape Cod to the mainland. The project provides for a channel 32 feet deep and 540 to 800 feet wide extending about 17.5 miles from deep water in Buzzards Bay to deep water in Cape Cod Bay. The project also includes navigation improvements in East Boat Basin and Onset Bay, and construction of two high-level highway bridges and a vertical lift railroad bridge, which cross the canal. Major rehabilitation of the Bourne and Sagamore Highway Bridges was completed in 1965 and 1980 respectively. Major rehabilitation of the vertical-lift railroad bridge was completed in 2004.

CONFERENCE AMOUNT FOR FY 2013: \$8,694,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,102,000 O: \$6,727,000 T: \$9,829,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,453,000 – Provides for minimal routine essential operation and maintenance of the Cape Cod Canal Project, including the canal, two highway bridges and vertical-lift Railroad Bridge. These funds are also being used to perform required inspection of the Bourne Highway Bridge (\$330,000) and Railroad Bridge (\$420,000), as well as upgrade the digital radar system used for vessel traffic control (\$800,000).

FRM: N/A

RC: \$2,349,000 – Provides for minimal normal operation and maintenance of recreation facilities at the Cape Cod Canal. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 2,951,000 visitors each year.

H: N/A

EN: \$27,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands; including vegetation plantings, wildlife habitat preservation and managing nature trails. Funding also provides for monitoring of endangered Piping Plover nesting areas on project lands (\$15,000). The project consists of 1,655 fee owned acres of land.

WS: N/A

OTHER INFORMATION: The Bourne and Sagamore Highway Bridges are the only two vehicular accesses from mainland Massachusetts to Cape Cod and are crossed by nearly 40 million vehicles annually. In 2010, waterborne commerce totaled 7.8 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Cape Cod Canal, Massachusetts

O&M Justification Sheet

PROJECT NAME: Charles River Natural Valley Storage Areas, Massachusetts

AUTHORIZATION: Authorized by the Water Resources Development Act of 1974.

LOCATION AND DESCRIPTION: The Charles River is located in eastern Massachusetts and extends inland about 80 miles from Boston Harbor southwesterly towards the Massachusetts and Rhode Island state line. The watershed covers approximately 307 square miles and project lands are located in 16 communities. The project provides for Federal acquisition and perpetual protection of 17 crucial natural valley storage areas totaling 8,115 acres in the middle and upper portion of the watershed. These areas provide natural flood storage to minimize the potential of flood losses within the watershed. Land acquisition began in May 1977 and was completed in September 1983.

CONFERENCE AMOUNT FOR FY 2013: \$322,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$51,000 O: \$250,000 T: \$301,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$158,000 – Provides for minimal routine essential operation and maintenance activities necessary to project the 17 natural valley storage areas from encroachment. Activities include data collection, environmental compliance, boundary surveys and real estate inspections.

RC: \$41,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities including maintaining project trails for visitor safety. The project provides recreation opportunities to an average of 183,000 visitors per year.

H: N/A

EN: \$102,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of the project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 3,221 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$3.2 million in flood damages since completed in 1983.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be use to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Conant Brook Dam, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1960.

LOCATION AND DESCRIPTION: Conant Brook Dam is located along Conant Brook, a tributary of Chicopee Brook, about 2 miles southeast of the Town of Monson, Massachusetts, in Hampden County. Conant Brook Dam is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with rock slope protection, 1,050 feet long with a maximum height of 85 feet; an earth-filled dike 980 feet in length; an uncontrolled ogee weir spillway, 100 feet wide with a maximum discharge capacity of 10,750 cubic feet per second; and a 36-inch diameter outlet conduit. The reservoir provides a flood storage capacity of 3,740 acre-feet, to control runoff from its net drainage area of 7.8 square miles. Construction of the dam and appurtenant structures was initiated in June 1964 and completed in December 1966.

CONFERENCE AMOUNT FOR FY 2013: \$285,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$69,000 O: \$246,000 T: \$315,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$249,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes seepage studies (\$37,000).

RC: \$50,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 16,000 visitors each year.

H: N/A

EN: \$16,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. The project consists of 469 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Conant Brook Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of III in September 2009. The principle issue is seepage. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented an estimated \$3.4 million in flood damages since placed in service in 1966.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be use to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: East Brimfield Lake, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1941.

LOCATION AND DESCRIPTION: East Brimfield Lake is located along the Quinebaug River, about 64.5 miles upstream from its confluence with the Shetucket River. The project is located in the Towns of Holland, Sturbridge and Brimfield, Massachusetts. The project is part of a comprehensive system of flood control projects designed to protect life and property within the Thames River Basin. The project consists of an earth-filled dam with stone slope protection, 520 feet long and a maximum height of 55 feet; an uncontrolled ogee weir spillway, 75 feet wide with a maximum discharge capacity of 15,520 cubic feet per second; and a 10.5-foot diameter horseshoe-shaped outlet conduit with 2 control gates. The reservoir provides flood storage capacity of 32,220 acre-feet to control runoff from its net drainage area of 67.5 square miles. Construction of the dam and appurtenant structures was initiated in May 1958 and completed in June 1960.

CONFERENCE AMOUNT FOR FY 2013: \$523,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$163,000 O: \$391,000 T: \$554,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$468,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events and preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes inspection of project bridges (\$17,000).

RC: \$53,000 – Provides for minimal routine operation and maintenance activities necessary to support recreation facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. Project provides recreation opportunities to an average of 62,000 visitors each year.

H: N/A

EN: \$33,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 2,070 fee owned acres of land.

WS: N/A

OTHER INFORMATION: East Brimfield Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of III in November 2009. The principle issue is seepage. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented an estimated \$129.0 million in flood damages since placed in service in 1960.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hodges Village Dam, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1941.

LOCATION AND DESCRIPTION: Hodges Village Dam is located along the French River, about 15 miles upstream from its confluence with the Quinebaug River. The project is located in the Town of Oxford, Massachusetts. Hodges Village Dam is part of a comprehensive system of flood control projects designed to protect life and property within the Thames River Basin. The project consists of an earth-filled dam with stone slope protection, 2,140 feet long and a maximum height of 54.5 feet; 4 earth-filled dikes with stone slope protection, a total length of 2,560 feet and a maximum height of 16 feet; an uncontrolled ogee weir spillway, 125 feet wide with a maximum discharge capacity of 25,800 cubic feet per second; and 2 rectangular outlet conduits with 2 control gates. The reservoir provides a flood storage capacity of 13,250 acre-feet to control runoff from its net drainage area of 31.1 square miles. Construction of the dam and appurtenant structures was initiated in March 1958 and completed in December 1959. Major rehabilitation of the dam was completed in July 2000.

CONFERENCE AMOUNT FOR FY 2013: \$607,000 2/

BUDGET FOR FY 2014: M: \$164,000 O: \$465,000 T: \$629,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$531,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and preserve project infrastructure. Activities include data collection, environmental compliance, project inspections, patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes inspection of project bridges (\$8,000), an update of the emergency action plan and inundation mapping (\$15,000) and inspection of the toe drain and automation of the relief wells (\$30,000).

RC: \$67,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 193,000 visitors each year.

H: N/A

EN: \$31,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 867 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project prevented an estimated \$153.6 million in flood damages since placed in service in 1959.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Hodges Village Dam, Massachusetts

O&M Justification Sheet

PROJECT NAME: Knightville Dam, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Acts of 1936 and 1938.

LOCATION AND DESCRIPTION: Knightville Dam is located along the Westfield River, about 27.5 miles above its junction with the Connecticut River and approximately 4 miles north of Huntington, Massachusetts. Knightville Dam is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with an impervious core and rock slope protection, 1,200 feet long with a maximum height of 160 feet; an uncontrolled ogee weir spillway, 400 feet wide with a maximum discharge capacity of 83,000 cubic feet per second; and a 16-foot diameter outlet conduit with 3 control gates. The reservoir provides a flood storage capacity of 49,000 acre-feet to control runoff from its net drainage area of 162 square miles. Construction of the dam and appurtenant structures was initiated in August 1939 and completed in December 1941.

CONFERENCE AMOUNT FOR FY 2013: \$750,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$166,000 O: \$507,000 T: \$673,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$578,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes replacement of an underground storage tank with a double wall above ground tank (\$60,000).

RC: \$50,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 42,000 visitors each year.

H: N/A

EN: \$45,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 2,430 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$335.9 million in flood damages since placed in service in 1941.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Knightville Dam, Massachusetts

O&M Justification Sheet

PROJECT NAME: Littleville Lake, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1958.

LOCATION AND DESCRIPTION: Littleville Lake is located along the Middle Branch of the Westfield River, about one mile above its confluence with the main stem of the Westfield River and two miles north of Huntington, Massachusetts. Littleville Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with an impervious core and rock slope protection, 1,360 feet long and a maximum height of 164 feet; an earth-filled dike 935 feet in length; an uncontrolled ogee weir spillway, 400 feet wide with a maximum discharge capacity of 92,000 cubic feet per second; an 8-foot diameter horseshoe-shaped outlet conduit with 2 control gates for flood control; and a 4-foot diameter outlet conduit with 1 butterfly and 6 sluice gates for water supply. The reservoir provides a flood storage capacity of 32,400 acre-feet to control runoff from its net drainage area of 52.3 square miles. Construction of the dam and appurtenant structures was initiated in June 1962 and completed in September 1965.

CONFERENCE AMOUNT FOR FY 2013: \$813,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$157,000 O: \$6050,000 T: \$762,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$653,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$9,000), replacement of an underground storage tank with a double wall above ground tank (\$80,000) and investigate seepage potential along conduits and survey dam and saddle dike crests to assess overtopping risk (\$55,000).

RC: \$50,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 33,000 visitors each year.

H: N/A

EN: \$55,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 1,567 fee owned acres of land.

WS: \$4,000 – Provides for minimal routine operation and maintenance activities relating to water supply. This work includes additional operation of the gates for water releases during low flow periods of time and coordinating with local entities pertaining to these releases.

OTHER INFORMATION: Littleville Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of III in March 2009. The principle issue is seepage. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented an estimated \$148.6 million in flood damages since placed in service in 1965.

Division: North Atlantic

District: New England

Littleville Lake, Massachusetts

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: New Bedford Hurricane Barrier, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1958.

LOCATION AND DESCRIPTION: The New Bedford Hurricane Barrier is located in Buzzards Bay in southeastern Massachusetts, along the north shore of Clark Cove and at the mouth of New Bedford Harbor. The project is located in the Cities of New Bedford and Fairhaven, Massachusetts. The project consists of an earth-filled dike, which extends 4,500 feet across New Bedford and Fairhaven Harbor in the vicinity of Palmer Island, with a 150-foot wide gate opening to accommodate navigation. The project also includes an earth-filled dike extension, 3,600 feet long, which protects the western waterfront, as well as 5,800 feet of earth dike to protect Clark Cove and 3,100 feet of earth dike to protect Fairhaven. Project construction was completed in January 1966. The project is operated and maintained by the City of New Bedford, with the exception of the navigation gate, which is operated and maintained by the Corps of Engineers.

CONFERENCE AMOUNT FOR FY 2013: \$365,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$245,000 O: \$189,000 T: \$434,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$434,000 – Provides for minimal routine essential operation and maintenance activities necessary to operate the gates and protect life and property in downtown New Bedford and Fairhaven during coastal flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and gate operation.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$24.1 million in flood damages since placed in service in 1966.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Tully Lake, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Acts of 1936 and 1938.

LOCATION AND DESCRIPTION: Tully Lake is located along the East Branch of the Tully River, about 3.9 miles above its junction with the Millers River. The project is located in the Town of Royalston, Massachusetts. Tully Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with an impervious core and rock slope protection, 1,570 feet long and a maximum height of 62 feet; an uncontrolled ogee weir spillway, 255 feet wide with a maximum discharge capacity of 32,700 cubic feet per second; and a 6-foot diameter outlet conduit with 2 control gates. The reservoir provides a flood storage capacity of 22,525 acre-feet to control runoff from its net drainage area of 50 square miles. Construction of the dam and appurtenant structures was initiated in March 1947 and completed in September 1949.

CONFERENCE AMOUNT FOR FY 2013: \$644,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$303,000 O: \$491,000 T: \$794,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$677,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintaining service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$10,000), upgrade of crane controls (\$20,000) and replacement of two underground storage tanks with double wall above ground tanks (\$155,000).

RC: \$62,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 119,000 visitors each year.

H: N/A

EN: \$55,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 1,258 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$28.2 million in flood damages since placed in service in 1949.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: West Hill Dam, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1944.

LOCATION AND DESCRIPTION: West Hill Dam is located along the West River in Massachusetts, about three miles above its confluence with the Blackstone River and 2.5 miles northeast of Uxbridge, Massachusetts. West Hill Dam is part of a comprehensive system of flood control projects designed to protect life and property within the Blackstone River Basin. The project consists of an earth-filled dam with rock slope protection, 2,400 feet long and a maximum height of 48 feet; 4 earth-filled dikes with rock and gravel slopes, totaling 1,910 feet in length; an ogee weir spillway, 50 feet long with a maximum discharge capacity of 8,900 cubic feet per second; and 3 rectangular outlet conduits. The reservoir provides a flood storage capacity of 12,440 acre-feet to control runoff from its net drainage area of 27.9 square miles. Construction of the dam and appurtenant structures was initiated in June 1959 and completed in June 1961. Construction of recreational facilities was completed in June 1967. Major rehabilitation of the dam was completed in July 2003.

CONFERENCE AMOUNT FOR FY 2013: \$690,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$170,000 O: \$531,000 T: \$701,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$579,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$8,000).

RC: \$87,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintain project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 73,000 visitors each year.

H: N/A

EN: \$35,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 557 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$96.7 million in flood damages since placed in service in 1961.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Westville Lake, Massachusetts

AUTHORIZATION: Authorized by the Flood Control Act of 1941

LOCATION AND DESCRIPTION: Westville Lake is located along the Quinebaug River, about 56.7 miles upstream from its confluence with the Shetucket River. The project is located in the Towns of Sturbridge and Southbridge, Massachusetts. Westville Lake is part of a comprehensive system of flood control projects designed to protect life and property within the Thames River Basin. The project consists of an earth-filled dam with stone slope protection, 560 feet long and a maximum height of 78 feet; an uncontrolled ogee weir spillway, 200 feet wide with a maximum discharge capacity of 24,500 cubic feet per second; and 3 rectangular outlet conduits with a control gate. The reservoir provides a flood storage capacity of 11,100 acre-feet to control runoff from its net drainage area of 99.5 square miles. Construction of the dam and appurtenant structures was initiated in April 1960 and completed in August 1962.

CONFERENCE AMOUNT FOR FY 2013: \$584,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$169,000 O: \$437,000 T: \$606,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$510,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$30,000).

RC: \$66,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 64,000 visitors each year.

H: N/A

EN: \$30,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 578 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Westville Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of I in May 2009. The principle issue is seepage. The rating of I is defined as Urgent and Compelling (Unsafe). Dam Safety Construction funds are currently being used to study the seepage at the dam. Project has prevented an estimated \$53.7 million in flood damages since placed in service in 1962.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

New Hampshire

O&M Justification Sheet

PROJECT NAME: Blackwater Dam, New Hampshire

AUTHORIZATION: Authorized by the Flood Control Acts of 1936 and 1938.

LOCATION AND DESCRIPTION: Blackwater Dam is located along the Blackwater River, about 8.2 miles upstream from its junction with the Contoocook River. The project is located in the Towns of Webster and Salisbury, New Hampshire. Blackwater Dam is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Merrimack River Basin. The project consists of an earth-filled dam with rock slope protection, 1,650 feet long with a maximum height of 28 feet; an uncontrolled ogee weir spillway, 240 feet wide with a maximum discharge capacity of 32,800 cubic feet per second; and 4 rectangular outlet conduits with 4 control gates, one of which is plugged. The reservoir provides a flood storage capacity of 46,000 acre-feet to control runoff from its net drainage area of 128 square miles. Construction of the dam and appurtenant structures was initiated in May 1940 and completed in November 1941.

CONFERENCE AMOUNT FOR FY 2013: \$799,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$219,000 O: \$514,000 T: \$733,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$596,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes an update of the emergency evacuation plan and inundation mapping (\$15,000), hydraulic flood gate repairs (\$25,000) and re-lining the interior of project conduits with a multi layer epoxy (\$80,000).

RC: \$55,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 12,000 visitors each year.

H: N/A

EN: \$82,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 3,580 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$77.5 million in flood damages since placed in service in 1941.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Blackwater Dam, New Hampshire

O&M Justification Sheet

PROJECT NAME: Edward McDowell Lake, New Hampshire

AUTHORIZATION: Authorized by the Flood Control Acts of 1936 and 1938.

LOCATION AND DESCRIPTION: Edward MacDowell Lake is located along Nubanusit Brook, a tributary of the Contoocook River. The project is located in the Towns of Peterborough, Hancock, Dublin and Harrisville, New Hampshire. Edward MacDowell Lake is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Merrimack River Basin. The project consists of an earth-filled dam with rock slope protection, 11,000 feet long with a maximum height of 67 feet; an uncontrolled ogee weir spillway, 100 feet wide with a maximum discharge capacity of 16,600 cubic feet per second; and a 7-foot square outlet conduit with 3 control gates. The reservoir provides a flood storage capacity of 12,800 acre-feet to control runoff from its net drainage area of 44 square miles. Construction of the dam and appurtenant structures was initiated in March 1948 and completed in March 1950.

CONFERENCE AMOUNT FOR FY 2013: \$762,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$121,000 O: \$451,000 T: \$572,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$453,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes.

RC: \$72,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 144,000 visitors each year.

H: N/A

EN: \$47,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 1,194 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Edward MacDowell Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of II in September 2009. The principles issues are stability and seepage. The rating of II is defined as Urgent (Unsafe or Potentially Unsafe). Project has prevented an estimated \$20.8 million in flood damages since placed in service in 1950.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Edward McDowell Lake, New Hampshire

O&M Justification Sheet

PROJECT NAME: Franklin Falls Dam, New Hampshire

AUTHORIZATION: Authorized by the Flood Control Acts of 1936 and 1938.

LOCATION AND DESCRIPTION: Franklin Falls Dam is located along the Pemigewasset River, about 2.5 miles upstream of Franklin, New Hampshire, in the Towns of Franklin, Hill, Bristol, Sanborton and New Hampton, New Hampshire. The project is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Merrimack River Basin. The project consists of an earth-filled dam with rock slope protection, 1,740 feet long with a maximum height of 140 feet; an uncontrolled ogee weir spillway, 546 feet wide with a maximum discharge capacity of 243,000 cubic feet per second; and a 22-foot diameter horseshoe-shaped outlet conduit with 4 control gates. The reservoir provides a flood storage capacity of 154,000 acre-feet to control runoff from its net drainage area of 1,000 square miles. Construction of the dam and appurtenant structures was initiated in November 1939 and completed in October 1943.

CONFERENCE AMOUNT FOR FY 2013: \$868,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$179,000 O: \$684,000 T: \$863,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$709,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintaining service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes a required five year cycle Periodic Inspection of the project (\$108,000), a Periodic Assessment (\$75,000) and inspection of project bridges (\$11,000).

RC: \$75,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. Project provides recreation opportunities to an average of 101,000 visitors each year.

H: N/A

EN: \$79,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. The project consists of 3,897 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Franklin Falls Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of III in March 2009. The principle issues are overtopping and seepage. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented an estimated \$178.4 million in flood damages since placed in service in 1943.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hopkinton-Everett Lakes, New Hampshire

AUTHORIZATION: Authorized by the Flood Control Act of 1938.

LOCATION AND DESCRIPTION: Hopkinton Lake is located along the Contoocook River, about 17.3 miles upstream of its junction with the Merrimack River and one-half mile upstream from the Village of West Hopkinton, New Hampshire. Everett Lake is located along the Piscataquog River, about 16 miles upstream of its junction with the Merrimack River and about 1.3 miles southeast of the Village of East Weare, New Hampshire. Hopkinton-Everett Lakes are operated as part of a comprehensive system of flood control projects designed to protect life and property within the Merrimack River Basin. Hopkinton Lake consists of an earth-filled dam with rock slope protection, 790 feet long with a maximum height of 76 feet; 4 earth-filled dikes with a total length of 16,300 feet; an uncontrolled ogee weir spillway, 300 feet wide with a maximum discharge capacity of 135,000 cubic feet per second; and three 11-foot square outlet conduits with 6 control gates. Everett Lake consists of an earth-filled dam with rock slope protection, 2,000 feet long with a maximum height of 115 feet; an uncontrolled ogee weir spillway, 175 feet wide with a maximum discharge capacity of 68,000 cubic feet per second; and an 8-foot diameter outlet conduit with 3 control gates. The two reservoirs provide a total flood storage capacity of 92,500 acre-feet to control runoff from their net drainage areas of 446 square miles. Construction of the dams were initiated in November 1959 and completed in December 1962.

CONFERENCE AMOUNT FOR FY 2013: \$1,343,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$356,000 O: \$1,007,000 T: \$1,363,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,036,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes updating the Interim Risk Reduction Measures Plan (\$2,000).

RC: \$170,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The projects provide recreation opportunities to an average of 178,000 visitors each year.

H: N/A

EN: \$157,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. Projects consist of 7,992 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Everett Dam and Dikes P1 and P2 portions of the project were assigned Dam Safety Assurance Classification (DSAC) ratings of III in March 2009. The principle issue for both the dam and dikes is seepage. The rating of III is defined as High Priority (Conditionally Unsafe). Projects have prevented an estimated \$217.1 million in flood damages since placed in service in 1962.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Otter Brook Lake, New Hampshire

AUTHORIZATION: Authorized by the Flood Control Act of 1954

LOCATION AND DESCRIPTION: Otter Brook Lake is located along Otter Brook, about 4.9 miles upstream from its junction with the Ashuelot River. The project is located in the Town of Keene, New Hampshire. Otter Brook Lake is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with an impervious core and rock slope protection, 1,288 feet long with a maximum height of 133 feet; an uncontrolled ogee weir spillway, 145 feet wide with a maximum discharge capacity of 40,000 cubic feet per second; and a 6-foot diameter horseshoe-shaped outlet conduit with 3 control gates. The reservoir provides a flood storage capacity of 18,320 acre-feet to control runoff from its net drainage area of 47.2 square miles. Construction of the dam and appurtenant structures was initiated in September 1956 and completed in August 1958. Major rehabilitation of the dam involving construction of a new concrete spillway weir using mechanical fuse plugs was completed in June 2006.

CONFERENCE AMOUNT FOR FY 2013: \$943,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$245,000 O: \$420,000 T: \$665,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$540,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes.

RC: \$90,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreation facilities at the project. Activities include maintenance of project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 77,000 visitors each year.

H: N/A

EN: \$35,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 458 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$41.5 million in flood damages since placed in service in 1958.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Surry Mountain Lake, New Hampshire

AUTHORIZATION: Authorized by the Flood Control Acts of 1936 and 1938.

LOCATION AND DESCRIPTION: Surry Mountain Lake is located along the Ashuelot River, about 34.6 miles upstream from its junction with the Connecticut River and 5 miles north of Keene, New Hampshire. The project is located in the Towns of Surry and Gilsum, New Hampshire. Surry Mountain Lake is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with an impervious core and rock slope protection, 1,800 feet long with a maximum height of 86 feet; an uncontrolled ogee weir spillway, 338 feet wide with a maximum discharge capacity of 50,000 cubic feet per second; and a 10-foot diameter horseshoe-shaped outlet conduit with 2 control gates. The reservoir provides a flood storage capacity of 33,000 acre-feet to control runoff from its net drainage area of 100 square miles. Construction of the dam and appurtenant structures was initiated in August 1939 and completed in October 1941.

CONFERENCE AMOUNT FOR FY 2013: \$776,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$198,000 O: \$465,000 T: \$663,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$525,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$9,000).

RC: \$85,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 108,000 visitors each year.

H: N/A

EN: \$53,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. Funding includes a dwarf wedge mussel study and inventory (\$12,000). The project consists of 1,695 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$101.3 million in flood damages since placed in service in 1941.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

New Jersey

O&M Justification Sheet

PROJECT NAME: Barnegat Inlet, New Jersey

AUTHORIZATION: HD 73-19 as modified by HD 74-85, HD 79-358 and Supplemental Appropriations Act of 1985

LOCATION AND DESCRIPTION: The project is located on the Atlantic coast of New Jersey about 33 miles north of Atlantic City. The project consists of 2 jetties (north and south), a navigation channel 300-foot wide and 10-foot deep, a channel extending from the gorge in the inlet to Oyster Creek Channel to deep water in Barnegat Bay. Oyster Creek Channel is maintained at 8 feet deep and 200 feet wide. Project length is 4.5 miles.

CONFERENCE AMOUNT FOR FY 2013: T: \$415,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$420,000 O: \$0 T: \$420,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$420,000. Funds will be used to perform minimal critical maintenance dredging of the inlet channel two times per year with Government Plant from SAW and perform channel exams.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This project is valuable to the nation because it provides a safe, reliable, and efficient navigation channel for one of the most dangerous inlets on the east coast. The US Coast Guard designates this Inlet as a "Surf Station", requiring special qualifications for their rescuers due to the hazardous category of the inlet. The Coast Guard is located on the waterway and must have a reliable channel to fulfill their Homeland Security requirements and conduct critical life safety and search and rescue operations. They have conducted over 1,150 assistance/rescue cases and saved numerous lives. A safe navigation channel through the inlet is critical to the large Fishing Fleet which consists of full-time commercial vessels, charter and recreational vessels and contributes \$30 million of economic value to the nation and over \$25 million per year in direct fish value (NMFS data, 2011). This Inlet requires dredging at least two times a year with the Government dredge Currituck to keep a minimum channel open for navigation and to prevent closure.. Additional dredging operations are required to increase the percentage of channel availability and maintain a safe channel. Material dredged from the inlet is beneficially used by placing material in the near-shore zone in support of the Federal beach-fill project along Long Beach Island.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Cold Spring Inlet, New Jersey

AUTHORIZATION: HD 59-338 as modified by HD 77-262

LOCATION AND DESCRIPTION: Cold Spring Inlet connects the New Jersey Intracoastal Waterway with the Atlantic Ocean at Cape May, NJ. The project provides for 2 jetties; an entrance channel 25 feet deep and 400 feet wide from the ocean to 500 feet harbor-ward of the end of the jetties; and a channel 20 feet deep and 300 feet wide from the entrance channel to deep water in Cape May Harbor. Project length is about 2.25 miles.

CONFERENCE AMOUNT FOR FY 2013: T: \$395,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$375,000 O: \$0 T: \$375,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$375,000. Funds will be used to perform channel exams and minimal critical maintenance dredging by Government plant, at least twice per year.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: : This project is valuable to the nation because it provides a safe, reliable, and efficient navigation channel for the largest Fishery Landing in New Jersey (the 13th largest in the U.S.), contributing \$81 million annually in direct fish value (NMFS, 2011) and over \$300 million of economic value to the nation each year. The Inlet also serves the only U.S. Coast Guard enlisted training base in the U.S. The Coast Guard Station Cape May is also located on the waterway and must have a reliable channel to fulfill their Homeland Security requirements and conduct critical life-safety, search and rescue operations. The USCG has conducted 1,155 assistance/rescue cases and saved 4 lives. Keeping the Inlet clear of obstructions and safe for navigating within dangerous tidal currents is critical to the mission of the Coast Guard cutters and other vessels that use the inlet. Shoaling in the entrance channel requires dredging at least twice a year to maintain authorized depths. Material dredged from the inlet is beneficially used by placing material in the near-shore zone in support of the adjacent Federal beach-fill project along Cape May.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Delaware River in the Vicinity of Camden, New Jersey

AUTHORIZATION: The existing project, which is a modification to the Delaware River from Philadelphia to the Sea project, was adopted as House Document No. 63-1120 in 1919 and modified by House Document No. 70-111 in 1930 and House Document No. 77-353 in 1945. Section (3a) of the Water Resources Development Act of 1988 authorized the modification of the existing Delaware River in the Vicinity of Camden, New Jersey project. The project document referenced in the authorizing legislation is House Document 100-167 (Delaware River, Philadelphia to Wilmington, Pennsylvania and Delaware). Federal participation in the latest modification work (to 40') within Beckett Street Terminal was accomplished as a result of the project sponsor furnishing assurances of compliance with Section 221 of the Flood Control Act of 1970 (Public Law 91-611) and, entering into a Local Cooperation Agreement as per the Water Resources Development Act of 1986 (PL 99-662).

LOCATION AND DESCRIPTION: This project is located adjacent to the east channel edge of the Delaware River, Philadelphia to Sea project at Camden Marine and Beckett Street Terminals in Camden, New Jersey

CONFERENCE AMOUNT FOR FY 2013 T: \$15,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 **O:** \$15,000 **T:** \$15,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$15,000 Funds will be used to monitor the project.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The existing project, for which there is Federal interest and local support, provides a 40-foot deep, irregular but generally trapezoidal shaped access channel to Berths #3 and #4 at Beckett Street Terminal. This channel provides access from the 40' x 400' wide east channel of the Delaware River "Philadelphia to the Sea" project. The approach channel has lengths of 4,560 feet along the east edge of the Delaware River Shipping Channel and 1,630 feet along the west edge of the berthing area at the Beckett Street Terminal. The width of the channel varies from 1410 feet to 1660 feet. The approach angle is 45 degrees from the south and the departure angle is 45 degrees to the north.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Delaware River Philadelphia to the Sea, NJ, PA & DE

AUTHORIZATION: HD 61-733 and modified by HD 71-304, River and Harbors Committee DOC 73-5, SD 75-159, HD 76-580, HD 77-340, HD 83-358 and HD 85-185

LOCATION AND DESCRIPTION: The Delaware River Philadelphia to the Sea federal navigation project is 102 miles long, extending from Allegheny Avenue, Philadelphia, southward to the entrance of Delaware Bay. Annual maintenance dredging is performed to maintain current authorized depth of 40 feet.

CONFERENCE AMOUNT FOR FY 2013: \$23,290,000

BUDGETED AMOUNT FOR FY 2014: M: \$17,745,000 O: \$2,000,000 T: \$19,745,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$19,745,000. Funds will be used for condition surveys, critical annual unit price contract maintenance dredging, maintenance dredging with Dredge McFarland (40 training days), instrumentation reading, dredge material containment facility maintenance and dike construction, groundwater monitoring, leased equipment contracts, and real estate coordination.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This is a 40-foot deep draft project, provides safe navigation for large vessels that provide access to the fifth largest port complex in the United States, handling over 120 million tons of high value cargo per year to the nation and \$3.5 billion into the regional economy. The port area is home to the largest petrochemical complex on the east coast with seven oil refineries. These refineries along the Delaware River provide 75% of the East Coast capacity, or a capability of processing 1.1 million barrels per day. The port provides more than 54,000 high paying jobs in the area. This project is designated as one of the nation's Strategic Military Ports.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Manasquan River, New Jersey

AUTHORIZATION: HD 70-482 as modified by HD 77-356 and PL 99-662

LOCATION AND DESCRIPTION: The Manasquan River connects the New Jersey Intracoastal Waterway with the Atlantic Ocean. This navigation project provides for 2 jetties; a channel 14 feet deep and 250 feet wide from the ocean to the inner end of the north jetty; and a channel 12 feet deep and 100 to 300 feet wide extending to within 300 feet of the railroad bridge. Project length is 1.5 miles.

CONFERENCE AMOUNT FOR FY 2013: T: \$300,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$315,000 O: \$0 T: \$315,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$315,000. Funds will be used to perform channel exams, critical minimal maintenance dredging by Government plant, twice per year, and to monitor the project.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This project is valuable to the nation because it provides a safe, reliable, and efficient navigation channel for a critical inlet in the state of New Jersey. Each year thousands of boats pass through the Inlet generating millions of dollars of business and commerce. Both recreational and commercial fishermen heavily use the Inlet generating over \$128 million of economic value to the nation and over \$22 million in direct fish value annually (NMFS, 2011). During summer months, at least 500 boats pass through the Inlet each day (USCG, 2010). The US Coast Guard Station, Manasquan is located on the waterway and must have a reliable channel to fulfill their Homeland Security requirements and conduct critical life-safety, search and rescue operations. A beach nourishment project updrift of the inlet significantly increased shoaling at the inlet entrance and caused safety problems for commercial and recreational users of the inlet. Depending on beachfill placement operations, the inlet should be dredged two times per year to provide a safe navigation channel. Material dredged from the inlet is beneficially used by placing material in the near shore zone in support of the adjacent Federal beachfill project to the north.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: New Jersey Intracoastal Waterway, New Jersey

AUTHORIZATION: HD 76-133, as modified by PL 99-662

LOCATION AND DESCRIPTION: New Jersey Intracoastal Waterway navigation project extends 117 miles from the Manasquan River to Delaware Bay and is used by USCG, commercial and recreational vessels.

CONFERENCE AMOUNT FOR FY 2013: T: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$260,000 O: \$0 T: \$260,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: Funds of \$260,000 will be used to perform channel exams, coordinate shoaled areas and to monitor the project as needed.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This project is valuable to the nation because it provides a safe, reliable, and efficient navigation channel for the East Coast's largest and 5th most valuable commercial fishing fleet in the U.S. (Cape May/Wildwood) and nine U.S. Coast Guard Stations. The USCG must have a reliable channel to fulfill their Homeland Security requirements and conduct search and rescue operations. Other commercial users are head-boats and tour-boats that operate over various portions of the waterway. The DRBA operates a ferry service between Cape May, NJ and Lewes, DE. The ferries dock in the Cape May Canal. Almost 1.5 million passengers and \$17.2 million in revenues are dependent on maintenance dredging to keep the four vessels operating. Discontinuance of this ferry service would result in vehicle detours of 183 miles. The South Jersey economy is heavily dependent on recreational and commercial fishing and tourism, and these industries rely on the maintained channels of the NJIWW. Maintenance dredging removes only the most critical shoals in the waterway. This project is an important waterway for the USCG and the industries that utilize the 117 mile Federal channel. As part of the American Recovery and Reinvestment Act, the bulkhead along the west side of the Point Pleasant Canal was rehabilitated between 2009 and 2012.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Newark Bay, Hackensack and Passaic Rivers, NJ

AUTHORIZATION: Adopted 1922, modified 1943, 1954, 1964, 1966, 1975 and 1985.

LOCATION AND DESCRIPTION: Newark Bay is an estuary about 1.25 miles wide and 6 miles long extending southerly from the confluence of the Hackensack and Passaic Rivers to the New York and New Jersey channels. Newark Bay contains the Port Newark/Elizabeth Marine terminal operated by the Port Authority of NY & NJ. The subject of this fact sheet is the 40 and 45 foot depth projects within the Newark Bay, primarily the port channels. The channels authorized to a 40 Ft. depth of the federal project are Port Newark (PN) channel, the Port Newark Pierhead (PNPH) channel and a section of Main channel. The Elizabeth channel is authorized to a depth of 45 deep.

CONFERENCE AMOUNT FOR FY2013: T: \$450,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$5,000,000 O: \$0 T: \$5,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,000,000

Funds will be used for maintenance dredging of critical shoals in Port Channels (40 ft. Depth), New Jersey. This project is cost-shared with the Port Authority (non-Fed sponsor) who will provide their piece of cost-share (\$10M) for maintenance dredging.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION:

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Passaic River Flood Warning Systems, NJ

AUTHORIZATION: The Water Resources Development Act of 1976 authorized the study of the Passaic flooding problem. The Water Resources Development Act of 1990 authorized the recurring operational and maintenance costs for the computerized flood warning system.

LOCATION AND DESCRIPTION: Passaic Basin, Northern New Jersey. The Basin has a history of significant chronic flooding. The system provides critical rain and stream gage information for weather forecasts and warnings; immediate information access by first responders for mitigation action; a network to receive instantaneous watches/warnings; and a forum of quarterly meetings for multi-agency coordination. The system integrates information flow and flood mitigation activities for multi-level response from federal, state, and local agencies, including five New Jersey counties and 12 high-risk municipalities.

CONFERENCE AMOUNT FOR FY13: T: \$587,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$0 O: \$605,000 T: \$605,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0

FRM: \$605,000

Funds will be used to maintain existing stream and rain gauges, and associated computer hardware and software components, to ensure they are fully functional and reporting accurate data to local Emergency Management Offices. Funds will also be used to repair or replace damaged equipment as required and to provide user training and coordination. The efforts are important to provide accurate and timely reports and affect intergovernmental coordination and emergency planning. The net result is a reduced threat to life and property in the event of serious flooding.

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This critical Flood Warning System is operated and maintained through an Economy Act Agreement with the National Oceanic and Atmospheric Administration – National Weather Service and other federal and state agencies; specifically the U.S. Geological Survey, and the New Jersey Department of Environmental Protection.

Historical background of the Passaic Flood Warning System: Upon completion of the construction of the PFWS in the late 1980's, the local sponsor (NJDEP) became responsible for the O&M of the system however, several issues led Congress to enact legislation (through WRDA 1992) to return ownership and O&M responsibilities to USACE (with a provision for 100% Federal funding, O&M). Through the Economy Act, USACE has obtained technical services from the NOAA-NWS under an Inter-Agency Agreement (IAA). Originally the technical services from NOAA-NWS was agreed to under a Memorandum of Understanding (MOU), the first of which was signed in 1997 and renewed every 5 years since. The current agreement is under an Inter-Agency Agreement as required by OMB.

Division: North Atlantic District: New York Passaic River Flood Warning Systems, NJ

O&M Justification Sheet

PROJECT NAME: Passaic River Flood Warning Systems, NJ

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total dollars estimated to be carried into FY 2014 from prior appropriations for use on this study/project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Raritan River to Arthur Kill Cut-Off, NJ

AUTHORIZATION: The Federal navigation project for Raritan River to Arthur Kill Cut-Off Channel, New Jersey was adopted in 1935.

LOCATION AND DESCRIPTION: Project is located in Raritan Bay at the southern tip of Staten Island, NY and Perth Amboy, NJ. The project is located in a busy deep draft commercial harbor and port. The project connects the Raritan River channel with the southern end of the NY&NJ channel. The project provides for a channel 20 feet deep and 800 feet wide approximately 1 mile in length.

CONFERENCE AMOUNT FOR FY2013: T: \$60,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$220,000 O: \$0 T: \$220,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$220,000

Funds will be used to complete engineering and design for the next cycle of maintenance dredging including completion analysis of material for acceptability at ocean disposal site (HARS). Plans and Specifications will be completed for the next cycle.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The project is located in a busy deep draft commercial harbor and port. Project is dredged approximately every 10 years. It was last dredged in 2000 with the removal of 154,325 CY of material. Close to two million tons of commodities pass through this waterway annually including tankers drafting up to 20 feet. Half the commodities are petroleum products and the other half is stone and gravel.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Raritan River, NJ

AUTHORIZATION: Authorized by the Rivers and Harbors Act of 1919 and subsequently modified by the Rivers and Harbors Acts of 1930, 1937 and 1940.

LOCATION AND DESCRIPTION: Raritan River is located about 24 miles by water south of the Battery, New York City. It joins both Lower Raritan Bay and New York & New Jersey Channels. The existing navigation project provides for a main channel and 25 feet depth. The length is about 13.8 miles.

CONFERENCE AMOUNT FOR FY2013: T: \$220,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$0 O: \$100,000 T: \$100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$100,000

Funds will be used for minimal caretaker activities including preparation of Controlling Depth Reports and condition status communications to stakeholders. The next maintenance cycle for dredging will need to remove the critical shoals affecting navigational safety on this deep draft waterway.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Commerce on the waterway included the fuel oil delivery of the 1.09 million tons of petroleum product of 1.59 tons of thru traffic. Three terminal facilities are located on the Raritan River ship and receive petroleum products by vessel and barge. A total of 11M barrels of petroleum and 3,000,000 tons of commerce are carried by this waterway. The Raritan River waterfront is undergoing revitalization efforts by the county. Risk of oil spills increases if channel is not maintained.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study/ project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Shark River, NJ

AUTHORIZATION: Authorized by the Rivers and Harbors Act of 1945

LOCATION AND DESCRIPTION: Shark River Federal project is located between Avon-by-the-Sea and Belmar, New Jersey. Shark River Federal project is a 1.7 mile coastal inlet and back-bay channel, comprised of a channel 18 feet deep below Mean Low Water (MLW) and 150 feet wide across the bar at the ocean inlet; then decreasing in depth to 12 feet below MLW and width of 100 feet between the ocean and the bay and then 8 ft deep below MLW to the upper limits of the Bay to the Belmar Boat Basin.

CONFERENCE AMOUNT FOR FY2013: T: \$400,000 2/
BUDGET FOR FY2014: M: \$500,000 O: \$0 T: \$500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$500,000

Funds will be used to monitor channel conditions, publish a Controlling Depth Report, and coordinate with the U.S. Coast Guard and other users of the inlet. Funds will also be used to remove minimal critical Ocean bar and spot shoaling at the dangerous ocean entrance to inlet.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Providing navigation access is important as the waterway services Shark River lobstering and commercial vessels, a large recreational fishing fleets and over 300 private craft. It is a Critical Harbor of Refuge and an extremely active inlet. Shoaling impedes access for US Coast Guard and recreation boaters to the municipal marinas.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New York

Shark River, NJ

O&M Justification Sheet

PROJECT NAME: Shoal Harbor and Compton Creek, NJ

AUTHORIZATION: Authorized by the Rivers and Harbors Act of 3 September 1954, Public Law No. 780, 83rd Congress, Chapter 1264, H.R.9859.

LOCATION AND DESCRIPTION: Shoal Harbor and Compton Creek are located adjacent to Lower Raritan Bay in the vicinity of western Sandy Hook Bay. The existing navigation project provides for a main Shoal Harbor channel that begins at -12 feet mean low water (MLW), extending from deep water in Sandy Hook Bay. Then the channel becomes -8 feet below MLW, continuing inland for approximately 1,000. At this point, the Compton Creek portion of the project has not been constructed and is therefore inactive.

CONFERENCE AMOUNT FOR FY2013: T: \$0 2/

BUDGETED AMOUNT FOR FY2014: M: \$20,000 O: \$0 T: \$20,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$20,000

Funds will be used for caretaker activities to publish survey data and respond to stakeholders including important ferry service and fishing industry located at Belford, NJ. Funds will also be used to update environmental information as needed. The waterway is used by a large fishing fleet and commuter ferry business to New York City.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: 700,000 ferry passengers safety at risk if poorly maintained channel. Economic development of ferry businesses and surrounding community will be impacted. Project also services a large commercial fishing fleet with seafood products wharf facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study/project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

New York

O&M Justification Sheet

PROJECT NAME: Almond Lake, NY

AUTHORIZATION: Flood Control Act of 22 June 1936, amended by Flood Control Act of 28 June 1938 and described in House Document No. 702, 77th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- Almond Lake is located near Hornell, New York on Canacadea Creek, a tributary of the Canisteo River, which flows into the Chemung River, which flows into the Susquehanna River. The dam is an earthfill structure, 1,260 feet long rising 90 feet above the streambed, with a gated outlet conduit in the left abutment, and a concrete spillway in a natural saddle beyond the left abutment. The reservoir has a storage capacity of 14,800 acre-feet at spillway crest and has an area of 490 acres when filled to that level. The project controls a drainage area of 56 square miles or 36 percent of the watershed of the Canisteo River upstream from Hornell. An additional portion of the watershed is controlled by Arkport Dam. The project forms part of the protection for Hornell, Canisteo, and Addison and reduces flood heights at other localities on the Canisteo and Chemung rivers. Steuben County operates and maintains the Kanakadea Recreation Area under a real estate agreement.

CONFERENCE AMOUNT FOR FY 2013: \$635,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$95,000 O: \$481,000 T: \$576,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$550,000 - Funding will provide for minimal flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$15,000 - Funding will provide for coordination with the recreation leasee.

H: NA

EN: \$11,000 - Funding will provide minimum natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 300,000. Flood damages prevented through FY2012 are \$143.5 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Arkport Dam, NY

AUTHORIZATION: Flood Control Act of 22 June 1936, amended by Flood Control Act of 28 June 1938 and described in House Document 702, 77th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- Arkport Dam is located near Hornell, New York on the Canisteo River, a tributary of the Chemung River, which flows into the Susquehanna River. The dam is an earthfill structure, 1,200 feet long, rising 113 feet above the streambed, with a concrete spillway and an ungated outlet in the right abutment. This project is normally a dry dam; however, water is impounded after heavy rains. The project forms part of the protection for Hornell, Canisteo, and Addison, and reduces flood heights at other localities on the Canisteo and Chemung Rivers.

CONFERENCE AMOUNT FOR FY 2013: \$352,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$110,000 O: \$324,000 T: \$434,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$430,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

REC: NA

H: NA

EN: \$4,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 300,000. Flood damages prevented through FY2012 are \$49 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Bay Ridge and Red Hook Channels, NY

AUTHORIZATION: Rivers and Harbors Act of 1890 modified in 1894, 1896, 1905, 1909, 1910 and 1930

LOCATION AND DESCRIPTION: A channel, 40 ft. deep, of the following widths: 1,200 ft. from the Narrows to Bay Ridge Avenue, Brooklyn, thence 1,750 ft. to the junction of Bay Ridge and Red Hook Channels, and thence 1,200 ft. through Red Hook Channel to its junction with Buttermilk Channel. In the entrance to Gowanus Creek, the width narrows uniformly to 500 ft. at 28th Street, Brooklyn. Length – about 4.0 miles.

CONFERENCE AMOUNT FOR FY2013: \$60,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$200,000 O: \$100,000 T: \$300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$300,000

Funds will be used for engineering and design for future maintenance dredging cycle on the critical minimal shoals. Delay in next required maintenance of deep-draft high-use channels will lead to draft restrictions and proportionate increased costs and increased risk to users. Funds will also be used for caretaker status to monitor channel conditions, publish Controlling Depth Reports and coordinate with the USCG and the Port.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Over 1,000 vessel trips carrying over 2 million tons pass through this busy high use commercial channel connecting New York Harbor with the Brooklyn piers. Traffic includes receipt of foreign freight traffic of primarily cocoa beans and coffee as well as well as domestic receipt of petroleum products and crude materials.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Buttermilk Channel, NY

AUTHORIZATION: Rivers and Harbor Acts in 1902, modified in 1935 & 1962

LOCATION AND DESCRIPTION: The project is located in NY Harbor and provides for a channel 1000 feet wide; 500 feet wide and 40 feet deep along the easterly side and 500 feet wide and 35 feet deep along the westerly side with suitable widening at the junctions with the East River and Anchorage Channels; additional width of 2,100 feet to a depth of 35 feet at the junction with Anchorage and Red Hook Channels. The total length of the project is approximately 2.3 miles.

CONFERENCE AMOUNT FOR FY2013: \$60,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$400,000 O: \$0 T: \$400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$400,000

Initiate Engineering and Design, including sampling and testing for ocean placement in outyear. Continue environmental coordination and provide stakeholders updated information on condition of the federal channel.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: More than 17,000,000 short tons of petroleum products are transported. Deepwater channel transporting over 23.2 Million tons of freight annually. Over 790 upbound/downbound vessel trips reported. Project strategically connects East and Hudson Rivers, is close to Governors Island, and a major marine evacuation route in emergency situations related to Homeland Security

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: NAD

District: NAN

Project Name: Buttermilk Channel, NY

O&M Justification Sheet

PROJECT NAME: East River, NY

AUTHORIZATION: Rivers and Harbors Act of 1869 and subsequently modified by the River and Harbors Act of 1877, 1899, 1916, 1922 and 1970.

LOCATION AND DESCRIPTION: East River is located to the east of Manhattan, NY. East River Navigation project is a main channel 16 miles long, 1,000 ft. wide that meanders from the Upper New York Bay to the Long Island Sound. There are three short branch channel off of the main channel; 1) east of Welfare Island, 2) east of South Brother Island, called South Brother Island channel and 3) a channel west of South Brother Island.

CONFERENCE AMOUNT FOR FY2013: \$150,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$100,000 O: \$0 T: \$100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$100,000

Funds will be used to initiate Engineering and Design for the next maintenance dredging cycle and for Caretaker status which includes activities such as: publishing a Controlling Depth Report, monitoring conditions of the Federal channel, and coordinate with Coast Guard and local stakeholders.

FRM: NA

RC: NA

HYD: NA

EN: NA

WS: NA

OTHER INFORMATION: 25 Million tons of through traffic use this channel annually. Two terminal facilities: a Con Edison Electric generating plant and a 1,090 MW Astoria Generating Station receive fuel by vessel for plant consumption. Risk of oil spills if channels not maintained. High shoal rate in channel. Last dredged in FY 06. Testing for ocean disposal required in 2010 for 2011 dredging. Dredging Delay will affect the safe delivery of petroleum products; users will have to travel light-loaded or wait for tides.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: East Rockaway Inlet, NY

AUTHORIZATION: Authorized by the Rivers and Harbors Act of 1930, Public Law 520, with recommendations contained in House Doc. 19, 71st Congress.

LOCATION AND DESCRIPTION: East Rockaway Inlet is located along the south shore of New York City. The periodic maintenance of the channel is necessary to restore navigational safety to the multiple users of this dynamic, rapidly shoaling inlet where fuel tanker groundings have occurred numerous times during the past decade.

CONFERENCE AMOUNT FOR FY2013: \$100,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$220,000 O: \$0 T: \$220,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$220,000

Engineering and Design (including Plans & Specs) to prepare for the next minimal critical dredging cycle and to monitor channel conditions, publish controlling depth reports and coordinate with local interests

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Waterway typically used to transport 150,000 tons of freight, with 72,000 tons of petroleum products annually. Commerce to five fuel oil terminals at Oceanside, Inwood and Lawrence supply industry and home heating fuel to a significant portion of the region's market. Commercial fishing fleet also are located in Oceanside. Delay of dredging affects safe delivery of petroleum products;

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2014 from prior appropriations for use on this study/project effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: East Sidney Lake, NY

AUTHORIZATION: Flood Control Act of 22 June 1936, amended by Flood Control Act of 28 June 1938 and described in House Document No. 702, 77th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- East Sidney Lake is located on Ouleout Creek, about 5 miles above the confluence of the creek with the Susquehanna River near Unadilla, NY. The dam is a combined earthfill and concrete gravity type structure; 2,010 feet long, rising 146 feet from firm rock and 130 feet above the streambed, with a spillway and five gate-controlled outlets in the concrete section. The reservoir has a storage capacity of 33,550 acre-feet at spillway-crest and has an area of 1,100 acres when filled to that level. The project controls a drainage area of 102 square miles, 5 percent of the watershed of the Susquehanna River upstream from Binghamton, NY, exclusive of the separately controlled Chenango River. The project forms part of the protection for Binghamton, and it reduces flood heights throughout the Susquehanna River basin. The Town of Sidney, NY operates and maintains the East Sidney Recreation Area under a real estate agreement.

CONFERENCE AMOUNT FOR FY 2013: \$662,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$135,000 O: \$547,000 T: \$682,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$650,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$19,000 - Funding will provide for coordination with the recreation leasee.

H: NA

EN: \$13,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 305,000. Flood damages prevented through FY2012 are \$284.8 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hudson River Channel, NY

AUTHORIZATION: Rivers and Harbors Acts of 1913 and modified in 1917 and 1937

LOCATION AND DESCRIPTION: A channel 45 ft. deep, suitably widened at bends, from deep water in Upper New York Bay to W. 40th St., Manhattan, and thence 48 ft. deep, 2,000 ft. wide to 59th St. Length – about 6 miles. A channel 40 ft. deep for the full width of the river, extending from deep water in Upper New York Bay off Ellis Island to W. 59th St., Manhattan. Length – about 6 miles. A channel, 30 ft. deep, 750 ft. wide, along the Weehawken-Edgewater waterfront. Length – about 5 miles.

CONFERENCE AMOUNT FOR FY2013: T: \$0 2/

BUDGETED AMOUNT FOR FY2014: M: \$250,000 O: \$0 T: \$250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$250,000

Funds will be used for preliminary engineering and design for future maintenance dredging cycle and for caretaker activities which includes: monitoring conditions of the Federal channel, publishing a Controlling Depth Report, and coordination with USCG and local stakeholders.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION:

Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$1,863,000. This amount remaining from the Department of Defense Appropriations Act, 2008 will be used in future fiscal years for expenses relating to dredging of the project.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hudson River, NY (Maintenance)

AUTHORIZATION: House Document 719, 81st Congress, 2nd Session (Jun 1910) and modified by House Document 350, 88th Cong., 1st Session (Mar 1925); House Document 210, 70th Cong., 1st Session (Jul 1930); SD 155, 72nd Cong., 2nd Session (Aug 1935); House Document 572, 75th Cong., 3rd Session (Jun 1930); and PL 780, 83rd Cong., 2nd Session (Sep 1954).

LOCATION AND DESCRIPTION: The Hudson River, New York federal navigation project consists of a channel approximately 155 miles in length extending from New York City, N.Y. to its upstream terminus at Waterford, N.Y. The Hudson River Maintenance project provides for maintenance of the 32 feet deep navigation channel extending approximately 145 miles from New York City to Albany, N.Y.; thence 27 feet deep approximately 1000 feet; continuing with a 14 feet deep navigation channel extending approximately 10 miles upstream from Albany to the intersection with the New York State Barge Canal System at Waterford, N.Y.

CONFERENCE AMOUNT FOR FY2013: \$4,500,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$1,700,000 O: \$400,000 T: \$2,100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,100,000

Funds to perform PCS and hired labor channel maintenance; complete environmental clearances and engineering and design; and award a fully funded maintenance dredging contract to provide critical minimal dredging for the Castleton to Hudson reaches.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION:

Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$3,000,000. This amount, together with the Budget Amount shown above, will be used to perform work on the FY 2014 study / project as follows: Award a fully funded FY14/15 Maintenance Dredging contract for the Castleton to Hudson reaches of the high use, deep draft, federal navigation channel.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hudson River, NY (O&C)

AUTHORIZATION: House Document 719, 81st Congress, 2nd Session (Jun 1910) and modified by House Document 350, 88th Cong., 1st Session (Mar 1925); House Document 210, 70th Cong., 1st Session (Jul 1930); SD 155, 72nd Cong., 2nd Session (Aug 1935); House Document 572, 75th Cong., 3rd Session (Jun 1930); and PL 780, 83rd Cong., 2nd Session (Sep 1954).

LOCATION AND DESCRIPTION: The Hudson River O&C project provides for operation and care of the Troy Lock and Dam located on the Hudson River, Troy, New York approximately 2.5 miles below the upstream limit of the Hudson River Federal Navigation Channel at Waterford, N.Y.

CONFERENCE AMOUNT FOR FY2013: \$2,050,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$250,000 O: \$1,850,000 T: \$2,100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,100,000

Funds will be used to operate the navigation lock at a minimum level of service to match NYS Canal Corporation operations and to perform maintenance essential to meeting operational, safety, environmental and security requirements.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION:

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Jamaica Bay, NY

AUTHORIZATION: Rivers and Harbors Act of 1910 and subsequently modified by the Rivers and Harbors Act of 1945 and 1950.

LOCATION AND DESCRIPTION: Jamaica Bay federal navigation channel/Rockaway Inlet is located along the south shore of New York City. The entrance channel only is approximately 2 miles in length and is the gateway to the Jamaica Bay Wildlife Reserve.

CONFERENCE AMOUNT FOR FY2013: T: \$100,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$100,000 O: \$0 T: \$100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$100,000

Funds will be used to coordinate channel conditions with stakeholders and prepare for the next maintenance dredging cycle for this important project.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The Jamaica Bay navigation channel provides for the safe delivery for approximately 700,000 tons of petroleum products and it also supports the sewage sludge transportation from two New York City water pollution control plants. In addition to navigation benefits, maintenance dredging of federal navigation channel in the past has provided sand for beneficial use in marsh island restoration and beach replenishment in and around the Jamaica Bay Wildlife Complex, including marshlands, and other beneficial use sites.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Mattituck Harbor, NY

AUTHORIZATION: Rivers and Harbors Act of 1896 and subsequently modified in 1935 and 1964.

LOCATION AND DESCRIPTION: The existing federal navigation project provides for a channel, 7 ft deep, from the Long Island Sound to the Village of Mattituck in the Town of Southold, 100 ft wide at the entrance and 80 ft wide thereafter. It is a shallow draft mainly recreational channel.

CONFERENCE AMOUNT FOR FY2013: T: \$0 2/

BUDGETED AMOUNT FOR FY2014: M: \$0 O: \$20,000 T: \$20,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$20,000

Funds will be used for the most basic caretaker activities to monitor channel conditions and re-initiate coordination with stakeholders. Erosion east of the inlet and shoaling to the west of the jetties will be monitored.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION:

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2014 from prior appropriations for use on this study/project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: New York and New Jersey Channels, NY

AUTHORIZATION: Rivers and Harbors Act of 1922; then modified in 1933, 1935, 1950, 1965 and 1985

LOCATION AND DESCRIPTION: A channel 37 ft. deep, in rock and 35 ft. deep in soft material, with widths varying between 500 to 800 feet wide through Lower New York Bay, Raritan Bay and Arthur Kill passing north of Shooters Island and protected by a dike on its northern side to the junction of the channel into Newark Bay; under the Kill Van Kull Newark Bay Channel, New York and New Jersey authorized for deepening to 45 feet (47 feet in rock) and 800 ft. wide from the vicinity of Shooter Island and junction with Newark Bay through the Kill Van Kull to Constable Hook; thence 1,300 ft. wide from a point opposite the east end of Constable Hook to a point near the intersection along the New Jersey Pierhead line and thence 3,070 ft. wide through Kill Van Kull to Upper New York Bay with suitable easing of the bends and junctions. Length – about 31.0 miles; two anchorages 38 ft. deep to accommodate 5 vessels each, one in the vicinity of Sandy Hook and the other south of Perth Amboy; two secondary channels 30 ft. deep and 400 ft. wide, one south of Shooters Island and the other in Raritan Bay connecting with Raritan River, have been completed under previous projects and are maintained under the project. A local cooperation agreement was signed on 30 May 1986 with the Port Authority of New York and New Jersey for the Kill Van Kull, Newark Bay deepening project.

CONFERENCE AMOUNT FOR FY2013: T: \$7,297,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$5,869,000 O: \$0 T: \$5,869,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,869,000

Funds provide for maintenance dredging of several of the most critical shoals in the Arthur Kill Reach, controlling depth reports and communication of risk to stakeholders. Failure to implement the project means more vessel calls will be required to handle the cargo volume passing through the Port of NY and NJ and greater potential navigational safety concerns. Dredging the most critical shoals in the Arthur Kill and/or Ward Point/Seguine Point Reaches is needed in FY14 to restore authorized dimensions and reduce risk to the public

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: . IWR WCS 2010 rpts 117.7 Million tons of thru traffic, including petroleum products (74.7 million tons), chemical products, manufactured goods, ore, scrap, food and farm products. Over 100 fuel terminals (IWR Port Series, 2000). Perth Amboy Anchorage provides secure holding site for vessels by USCG. Last maintenance dredging in FY09 removed only a portion of the critical shoals.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New York

New York and New Jersey Channels, NY

O&M Justification Sheet

PROJECT NAME: New York & New Jersey Harbor, New York and New Jersey

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Acts of 1986, 1996, 1999, and 2000

LOCATION AND DESCRIPTION: The Port of New York and New Jersey is located within the bi-state NY/NJ Harbor Estuary. The constructed Federal navigation channels within the NY & NJ Harbor project include: Ambrose Channel; Anchorage Channel; Kill Van Kull; portions of Newark Bay Channel and Arthur Kill Channel; and Port Jersey Channel. The New York and New Jersey Harbor, NY and NJ, project was constructed to the following depths: Ambrose Channel to 53 feet MLW; the Anchorage Channel, Kill Van Kull, Newark Bay, Port Jersey Channel, and the Arthur Kill Channel to Howland Hook to 50 feet MLW or 52 feet MLW, if in rock or otherwise hard material.

CONFERENCE AMOUNT FOR FY2013: \$0 2/

BUDGETED AMOUNT FOR FY2014: M: \$100,000 O: \$0 T: \$100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$100,000

Caretaker status to monitor channel conditions, publish Controlling Depth Reports, estimate incremental volumes of maintenance material, and coordinate with local partners.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The Port of NY&NJ is the largest container Port on the east coast and critical to both the national and regional economy, with goods arriving in the Port distributed to over 100 million people. There is a critical and urgent need for 50 ft channels depths to allow the safe & efficient use of Port by post-Panamax containerships, which dominate container operations worldwide. USCG facility utilizes project channels. The construction phase of the overall \$2.7 billion project is nearing completion. This O&M effort prepares for the future project operation, and maintenance dredging of the completed deepened channel elements.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study/project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: New York Harbor, NY

AUTHORIZATION: R&H Act in 1884, 1910, 1917, 1930, 1935, 1937, 1958, 1965, 1984

LOCATION AND DESCRIPTION: The Historic Area Remediation Site (HARS) is an ocean placement site approximately 16 square nautical miles in area, located in the Atlantic Ocean. This project also includes maintenance of the Main entrance channels and major anchorages in the Port of NY&NJ. Main Ship Channel, 30 ft. deep, 1,000 ft. wide, extending from Bayside Channel to deep water in the Lower Bay off West Bank Light.

CONFERENCE AMOUNT FOR FY2013: T: \$5,857,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$6,740,000 O: \$0 T: \$6,740,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$6,740,000

Allows management and monitoring of the only long-term disposal site available for federal and private NY dredging projects, as well as technical studies needed for continued use of the site; analysis of the sampling and testing for Sandy Hook Channel will be completed.

Completion of plans and specifications for Sandy Hook Channel and minimal critical maintenance dredging of this channel within the NY Harbor project will be performed.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION:

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: New York Harbor, NY & NJ (Drift Removal)

AUTHORIZATION: R&H Act of 1915, modified in 1917, 1930, expanded in the WRDA '90.

LOCATION AND DESCRIPTION: New York & New Jersey Harbor-Estuary, including adjacent and tributary waters, and Long Island Sound. Drift collection vessels are used on a daily basis (one vessel works on each weekend day) to collect large floating drift that is a threat to the many deep-draft cargo carriers and petroleum tankers, as well as the growing number of high-speed passenger commuter ferries, cruise ships and recreational vessels. Consistent with WRDA 1990, floatables expanded project authorization; floatables especially those resulting from heavy rain events are simultaneously effectively and efficiently collected with the wooden drift and debris to protect the shoreline and beaches of the harbor-estuary.

CONFERENCE AMOUNT FOR FY2013: \$9,236,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$9,300,000 O: \$0 T: \$9,300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$9,300,000

Funds will be used to operate and manage the drift collection mission. Drift collection vessels are used on a daily basis (one vessel works on each weekend day) to collect large floating drift that is a threat to the many deep-draft cargo carriers and petroleum tankers, as well as the growing number of high-speed passenger commuter ferries, cruise ships and recreational vessels.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Removal of over 500,000 cubic feet of drift and floatables results in the avoidance of approximately \$25,000,000 of damages to the many cargo vessels, tankers, barges, passenger commuter ferries, cruise ships, and recreational vessels. Consistent with the authorization in WRDA '90, floatables are collected so they do not escape the harbor and pollute the New Jersey and New York bathing beaches.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$500,000 . This amount, together with the Budget Amount shown above, will be used to perform work on the FY 2014 study / project as follows: To cover boat downtime in the beginning of the FY.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: New York Harbor, NY (Prevention of Obstructive Deposits)

AUTHORIZATION: Harbor Supervision Act (June 29, 1888) (33 U.S.C. 441-453)

LOCATION AND DESCRIPTION: New York & New Jersey Harbor-Estuary, including adjacent and tributary waters, and Long Island Sound. This continuing maintenance project under the enforcement and compliance authority provided to the District Engineer as the Supervisor of the Harbor (33 U.S.C. 451b) involves the detection, investigation, and prevention of hazards and obstructions to navigation, including failing piers and bulkheads which are the key source of drift and debris. This project provides for investigating deteriorating structures so that the responsible owner can be found and made to eliminate the hazard, or potential hazard, to safe navigation before it becomes a Federal cost. The U.S. Attorney's Office of the Department of Justice brings cases in Federal Court when needed to have the responsible party correct and remove the hazard.

CONFERENCE AMOUNT FOR FY2013: \$1,045,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$0 O: \$1,100,000 T: \$1,100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,100,000

Funds will be used to implement inspections, investigations and enforcement actions involving hazards and obstructions to navigation. This reduces overall Federal cost and avoids serious jeopardy to the large volume of commercial and recreational vessel traffic in New York and New Jersey Harbor and its associated channels.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION:

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study / project effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Shinnecock Inlet, NY

AUTHORIZATION: The Shinnecock Inlet - Federal Navigation Project is authorized by the Rivers and Harbors Act of 1960, in accordance with the recommendations contained in House Document No. 126, 86th Congress, 1st Session.

LOCATION AND DESCRIPTION: Shinnecock Inlet is a coastal inlet located on the South Shore of Long Island, in the Town of Southampton, NY. The existing federal navigation project includes an entrance channel, 10 ft deep (MLW) and 200 ft wide and an inner channel 6 ft deep, 100 ft wide connecting to the Long Island Intracoastal Waterway. It also includes a deposition basin 20 feet deep mean low water (MLW), 600 feet wide and 600 feet long and existing jetties and revetments.

CONFERENCE AMOUNT FOR FY2013: \$0 2/

BUDGETED AMOUNT FOR FY2014: M: \$0 O: \$20,000 T: \$20,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$20,000

CARETAKER STATUS. Begin preliminary engineering and design for future maintenance dredging, monitor conditions of the Federal channel and inlet, publish a Controlling Depth Report, and coordinate with Coast Guard and othe local stakeholders.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Second only to Montauk as a NY commercial fishing center with over 10 Million pounds of fish landings per year. Project is also a critical harbor of refuge.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study/project effort is \$148,000. This amount, together with the Budget Amount shown above, will be used to perform work on the FY 2014 study/project as follows: Funds will be used to conduct engineering and design for the next dredging cycle.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New York

Shinnecock Inlet, NY

O&M Justification Sheet

PROJECT NAME: Southern New York Flood Control Projects, NY

AUTHORIZATION: Flood Control Act of 22 June 1936, as amended by the Flood Control Act of 28 June 1938, House Document No. 702, 77th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- These 10 projects are located on a number of tributaries of the North Branch of the Susquehanna River in Oxford, Avoca, Binghamton, Canisteo, Corning, Elmira, Hornell, Lisle, Whitney Point Village and Addison, New York. The Southern New York Local Flood Protection Projects provide for a variety of Federally-constructed channels, levees, floodwalls, check dams and other drainage structures and flood protection treatments. The Federal Government retains responsibility for maintenance of at least some portions of these projects based on the authorizing language. Local interests are responsible for the remaining maintenance.

CONFERENCE AMOUNT FOR FY 2013: \$686,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$299,000 O: \$501,000 T: \$800,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$800,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 100,000. Flood damages prevented through FY2012 are \$1.672 billion.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Whitney Point Lake, NY

AUTHORIZATION: Flood Control Act of 22 June 1936, amended by Flood Control Act of 28 June 1938 and described in House Document No. 702, 77th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- Whitney Point Lake is located near Whitney Point, New York, on the Otselic River, a tributary of the Tioughnioga River, which discharges into the Chenango River, which discharges into the Susquehanna River at Binghamton, New York. The dam is an earthfill structure, 4,900 feet long, rising 95 feet above the streambed, with a concrete spillway and a gated outlet in the left abutment. The reservoir has a storage capacity of 86,440 acre-feet at spillway crest and will extend about 12 miles upstream when filled to that level. The project controls a drainage area of 255 square miles, the entire watershed of the Otselic River, and 16 percent of the Chenango River watershed upstream from Binghamton. The project forms part of the protection for Binghamton and reduces flood heights on the lower Chenango River and throughout the Susquehanna River Valley downstream from Binghamton. The Broome County Department of Parks and Recreation operates and maintain Dorchester Park under a real estate agreement.

CONFERENCE AMOUNT FOR FY 2013: \$780,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$145,000 O: \$565,000 T: \$710,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$650,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$34,000 - Funding will provide for coordination with the recreation leasee.

H: NA

EN: \$26,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 300,000. Flood damages prevented through FY2012 are \$718 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Pennsylvania

O&M Justification Sheet

PROJECT NAME: Alvin R. Bush Dam, PA

AUTHORIZATION: Flood Control Act of 3 September 1954 and described in House Document 29, 84th Congress, 1st Session.

LOCATION AND DESCRIPTION: System Code 0205- Alvin R. Bush Dam is located on Kettle Creek approximately 8.4 miles above the mouth and about 15 miles above Renovo, Pennsylvania, in Clinton County. The earth and rockfill dam has a maximum height of 165 feet above the streambed and a top length of 1,350 feet. The outlet works include a horseshoe-shaped tunnel, 13 feet in diameter, with 3 service gates. The spillway is uncontrolled and located in rock adjacent to the right abutment. The reservoir has a storage capacity of 75,000 acre-feet at spillway crest, and the pool at this elevation extends upstream for a distance approximately 8.8 miles. The permanent pool covers 160 acres and extends for 2.2 miles. The project controls a drainage area of 226 square miles or about 92 percent of the Kettle Creek watershed. The recreation facilities are operated and maintained by the Commonwealth of Pennsylvania, Department of Conservation and Natural Resources as Kettle Creek State Park under a real estate agreement.

CONFERENCE AMOUNT FOR FY 2013: \$747,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$155,000 O: \$544,000 T: \$699,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$660,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$18,000 - Funding will provide for coordination with the recreation leasee.

H: NA

EN: \$21,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 125,000. Flood damages prevented through FY2012 are \$272.2 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Aylesworth Creek Lake, PA

AUTHORIZATION: Flood Control Act of 23 October 1962 (PL 87-874) and described in Senate Document 141, 87th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- Aylesworth Creek Lake is located in Archbald Borough, PA on Aylesworth Creek, approximately one mile above its confluence with the Lackawanna River. The earth and rockfill dam has a maximum height above the streambed of 90 feet and a top length of 1,270 feet. An 80-foot-wide spillway, having a discharge capacity of 10,000 cubic feet per second, was cut in the south bank. The outlet conduit is uncontrolled and consists of a 490-foot-long, 36-inch-diameter vitrified clay pipe encased in reinforced concrete. An auxiliary dike was required on the north bank of Aylesworth Creek to prevent flow from the lake into the Mayfield Creek drainage basin during high lake elevations. The dike is 410 feet long and has a maximum height of 28 feet. The reservoir extends about 4,600 feet upstream and inundates 87 acres at spillway crest with an elevation of 1,150 feet above mean sea level. Lackawanna County operates and maintains Aylesworth Park under a real estate agreement.

CONFERENCE AMOUNT FOR FY 2013: \$351,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$50,000 O: \$224,000 T: \$274,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$245,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$20,000 - Funding will provide for coordination with the recreation leasee.

H: NA

EN: \$9,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 280,000. Flood damages prevented through FY2012 are \$9 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Beltzville Lake, Pennsylvania

AUTHORIZATION: This project was authorized via HD 622, 87th Congress, 2nd Session (1962)

LOCATION AND DESCRIPTION: The project is located on Pohopoco Creek, a tributary of the Lehigh River, about 4.5 miles from the confluence with the Lehigh River and 4 miles east of Lehigh, Pennsylvania. Project purposes are flood control, recreation, and water supply. The project was completed in 1971 and consists of a flood control, zoned earth-fill embankment, a controlled outlet works and an open channel emergency spillway. The controlled reservoir capacity is 68,250 acre-feet as a spillway crest, with 1,390 acre-feet of inactive storage, 41,200 acre-feet for water supply, water quality control and recreation. The Corps manages the overlook and visitor center and the lands immediately adjacent to the dam structure. Recreation Facilities: Public-use areas include boat launching, picnicking, bathing beach and sanitary facilities provided by the Corps of Engineers and completed during FY 1972. Recreation available includes swimming, boating, fishing, hunting, and hiking. The Commonwealth of Pennsylvania manages, under leases, the recreation facilities constructed by the Corps and the remainder of the project lands. The Corps manages the overlook and visitor center and the lands immediately adjacent to the dam structure.

CONFERENCE AMOUNT FOR FY 2013: T: \$1,570,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$75,000 O: \$1,175,000 T: \$1,250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,230,000 will be used for minimal routine operations and maintenance of the dam and related facilities, including project buildings, grounds and equipment; continuing evaluation data gathering, dam safety efforts, required inspections, real estate, water control and water quality data collection and analysis.

RC: NA

H: NA

EN: \$20,000 will be used to meet the basic stewardship activities at the project. This includes evaluation of improving fee owned land from degraded to transitioning status, review of the status of invasive plant species, threatened and endangered species, and continuation of good stewardship practices. It also includes continued verification of all data related to the level 1 inventory and OMBIL reporting requirements.

WS: NA

OTHER INFORMATION: A Screening for Dam Safety Portfolio Risk Assessment (SPRA) was conducted in 2009 resulting in a Dam Safety Action Classification (DSAC) rating of III for this project. As a result of the DSAC III rating, an Interim Risk Reduction Measures Plan (IRRMP) was prepared in FY2012. A seepage analysis was also conducted in FY2012.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Blue Marsh Lake, Pennsylvania

AUTHORIZATION: This project was authorized via HD 522, 87th Congress, 2nd Session (1962)

LOCATION AND DESCRIPTION: The project is located on Tulpehocken Creek, a tributary of the Schuylkill River, about 6 miles northwest of Reading, Pennsylvania. Project purposes are flood control, water supply, and recreation. The project was completed in 1980 and consists of a flood control earth and rock fill dam, 1775 ft in length rising 98 ft above the creek bed, with a spillway approximately 1,500 feet south of the dam. The project has capacity of 50,010 acre-feet at spillway crest with 3,000 acre-feet of inactive storage, 14,620 acre-feet for water supply and recreation and 32,390 acre feet for flood control. The facility includes a low level outlet works, the emergency spillway, three high level saddle dikes located in low points in the reservoir rim, and a levee and interior drainage system to protect the settlement of Bernville, northwest of the Blue Marsh Dam.

CONFERENCE AMOUNT FOR FY 2013: T: \$2,688,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$267,000 O: \$2,537,000 T: \$2,804,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$915,000 will be used for routine O&M which includes the operation buildings, the dam and related structures, grounds & equipment, management of public-use areas such as access roads, parking lots, picnic areas and an overlook area. Other specific work includes continuing evaluation gathering, dam safety efforts, required inspections, real estate (NAB), water-control and water-quality data collection and analysis.

RC: \$1,570,000 will be used for management of eight Project Site Areas; four developed Day Use Areas, one Scenic Viewing Area, three Land Access points as well as multiple small access areas for such activities as picnicking, boating (launching ramps), fishing, hunting, sightseeing, swimming (bathing beach with concession), hiking and various winter sports. Funding also includes contracted Maintenance Tasks, Law Enforcement Agreements, Water Quality analysis, Real Estate Management and Maintenance of Recreation features. Allocated funding will allow the operation of our facilities to meet the needs of 85% of our previous visitation and permit the Corps of Engineers to keep areas open for most of the recreation season.

H: NA

EN: \$319,000 funding will be used to accomplish management of Natural Resources to include; planting 1200 native seedlings, creating 25 acre shrub wetland area, plant/maintain 20 acres of food plots, manage 100 acres of upland native grass, coordination of 2800 acres leased to state conservation agency, continue efforts to detect, control and reduce invasive species on 3952 acres of fee lands, inspect 16 miles of boundary line adjacent to residential properties to locate and resolve encroachment issues and continue verification of inventoried resource acreage and for maintenance of Natural Resource Facilities.

WS: NA

OTHER INFORMATION: A Screening for Dam Safety Portfolio Risk Assessment (SPRA) was conducted in 2009 resulting in a Dam Safety Action Classification (DSAC) rating of III for the Blue Marsh project and a DSAC III rating for the Bernville Protective Works. As a result of the DSAC III ratings, an IRRMP was prepared in FY2012. The Bernville Levee Accreditation as required by FEMA will be initiated in FY2013. The recreation program at the project attracts almost 900,000 visitors a year, with an economic benefit to the local community of \$9.44 million in visitor spending. The project provides an environmental benefit by protecting 6,162 acres of land and 1,150 acres of water. Over 4,000 educational contacts are made each year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: Philadelphia

Blue Marsh Lake, Pennsylvania

O&M Justification Sheet

PROJECT NAME: Cowanesque Lake, PA

AUTHORIZATION: Flood Control Act of 3 July 1958 (PL 85-500), 85th Congress and described in House Document 394, 84th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- Cowanesque Lake is located in Tioga County, Pennsylvania, on the Cowanesque River approximately 2 miles upstream of the confluence with the Tioga River at Lawrenceville, PA. The embankment consists of earth and rockfill, 3,100 feet in length, rising 151 feet above the streambed, with a 400-foot long spillway in the right abutment. The outlet works consist of an excavated approach channel, a combined intake and gate structure, a 15-foot diameter horseshoe tunnel, and a concrete outlet structure with a stilling basin. A conservation lake is maintained at elevation 1080 NGVD having a surface area of 1090 acres, and a length of 4.2 miles. Seventy-nine percent of the conservation storage space is allocated for water supply storage owned by the Susquehanna River Basin Commission. The Corps operates and maintains three major recreation areas on Cowanesque Lake.

CONFERENCE AMOUNT FOR FY 2013: \$2,269,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$313,000 O: \$1,681,000 T: \$1,994,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$1,251,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$615,000 - Funding will provide for operation and maintenance of recreation facilities and services, which includes salaries for permanent and seasonal staff, utilities, supplies and contracts.

H: NA

EN: \$107,000 - Funding will provide minimum natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: \$21,000 - Funding will provide for water supply coordination.

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 295,000. Flood damages prevented through FY2012 are \$198.6 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Curwensville Lake, PA

AUTHORIZATION: Flood Control Act of 3 September 1954 and described in House Document 29, 84th Congress, 1st Session.

LOCATION AND DESCRIPTION: System Code 0205- Curwensville Dam is located on the West Branch Susquehanna River about 0.6 miles upstream from Curwensville, Pennsylvania. The dam is an earthfill structure 2,850 feet long, rising 131 feet above the streambed, with a spillway and a gate-controlled outlet. The reservoir has a storage capacity of 124,200 acre-feet at spillway crest and extends 14 miles upstream when filled to that level. The Commonwealth of Pennsylvania furnished assurances that it would coordinate the operation of its George B. Stevenson Dam with the operation of Curwensville Dam, Alvin R. Bush Dam, and Foster Joseph Sayers Dam, in order to secure optimum flood control benefits through operation as a system. Fifty-seven percent of the conservation storage space is allocated for water supply storage, owned by the Susquehanna River Basin Commission. Clearfield County operates and maintains the recreation area under a real estate agreement.

CONFERENCE AMOUNT FOR FY 2013: \$825,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$141,000 O: \$662,000 T: \$803,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$700,000 - Funding will provide for minimal flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$44,000 - Funding will provide for coordination with the recreation leasee.

H: NA

EN: \$37,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: \$22,000 - Funding will provide for water supply coordination.

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 130,000. Flood damages prevented through FY2012 are \$228.2 million

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Delaware River, Philadelphia to Trenton, PA & NJ

AUTHORIZATION: The original project was adopted as House Rivers and Harbors Committee Document 71-3 in 1930. Several modifications occurred through the years. The last two, HD 83-358 in 1954 and SD 95-88 in 1976, resulted in the current project operated and maintained by the Government

LOCATION AND DESCRIPTION: The waterway extends from Allegheny Avenue in Philadelphia, PA about 30.5 miles upstream to the Penn Central Railroad Bridge at Trenton, NJ.

CONFERENCE AMOUNT FOR FY 2013: T: \$920,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,735,000 O: \$1,000,000 T: \$4,735,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,735,000. Funds will be used to perform channel exams, critical minimal maintenance dredging utilizing the Dredge McFARLAND (30 training days), dredge material containment facility maintenance and DIKE construction, and environmental support activities.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Approximately 7,000 vessels transit this deep draft navigation project annually carrying close to 8.5 million tons of various commodities such as steel, petroleum, chemicals, gypsum, fruit and coal. Several major chemical companies, a Hess oil refinery, the National Gypsum Plant and two major deep draft Marine Terminals (Tioga Terminal and the Port of Bucks County) are based along this waterway. The results of an economic impact study for the Port of Bucks County completed in November 2008 indicated that over 9,000 jobs in Pennsylvania and New Jersey are dependent on safe and economical river depths. Furthermore, the Port of Bucks generates a total of \$1.4 billion in total economic activity in the region. Recent channel examinations identify a significant loss of depth along the lower reaches of the 40-foot channel. The failure of the State of New Jersey to provide suitable disposal areas to support maintenance dredging operations along this section of the river has been a longstanding problem. A loss of navigability would have severe impacts on the regional economy.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Foster J. Sayers Dam, PA

AUTHORIZATION: Flood Control Act of 3 September 1954 and described in House Document 29, 84th Congress, 1st Session.

LOCATION AND DESCRIPTION: System Code 0205 - Foster Joseph Sayers Dam is located on Bald Eagle Creek approximately one mile upstream from Blanchard and 14 miles above the mouth at Lock Haven, Pennsylvania. The dam is of earthfill construction with a maximum height of 100 feet above the streambed and a top length of 6,835 feet. It has a gated outlet tunnel for the regulation of flood flows. The spillway, located in rock in a saddle adjacent to the left abutment, is uncontrolled. The reservoir has a storage capacity of 99,000 acre-feet at spillway crest, and will extend upstream for 10.0 miles. The project reduces flood heights on Bald Eagle Creek below the dam and along the West Branch below Lock Haven. The project also maintains a pool of 1,730 acres during the recreation season. The Commonwealth of Pennsylvania furnished assurances that it would coordinate the operation of its George B. Stevenson Dam with the operation of Curwensville Dam, Alvin R. Bush Dam, and Foster Joseph Sayers Dam, in order to secure optimum flood control benefits through operation as a system. The Commonwealth of Pennsylvania, Department of Conservation and Natural Resources (DCNR) operates and maintains the recreation area, Bald Eagle State Park, under a real estate lease.

CONFERENCE AMOUNT FOR FY 2013: \$898,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$153,000 O: \$640,000 T: \$793,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$710,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$20,000 - Funding will provide for coordination with the recreation leasee.

H: NA

EN: \$63,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 125,000. Flood damages prevented through FY2012 are \$153.4 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Francis E. Walter Dam & Reservoir, Pennsylvania

AUTHORIZATION: Parent Project authorized by HD 79-587 (1946), modified by HD 87-522 (1962)

LOCATION AND DESCRIPTION: The project is located on the Lehigh River, just below the mouth of Bear Creek, about 6 miles above White Haven, Pennsylvania and approximately 77 miles above the junction of the Lehigh and Delaware Rivers at Easton, Pennsylvania. Project purposes are flood control and recreation. The project consists of an earth and rock filled dam with a concrete spillway of 139,000 cfs capacity and a gate controlled outlet tunnel of 10,000 cfs capacity. The reservoir capacity is 108,000 acre-feet for flood management with a conservation pool of 2,000 acre-feet capacity. Recreation facilities also include a boat launch area, hiking trails and provision for fishing and hunting. Whitewater and fishing industries in the area utilize dam releases.

CONFERENCE AMOUNT FOR FY 2013: T: \$1,156,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$80,000 O: \$874,000 T: \$954,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$885,000 will be used for minimal routine operations & maintenance which includes the operation buildings, the dam and related structures, grounds & equipment, management of public-use areas such as access roads, parking lots, picnic areas and an overlook area. Other specific work includes continuing evaluation gathering, dam safety, real estate, required inspections, water control data collection and analysis, water quality data collection and analysis and implementing Interim Risk Reduction Measures as required.

RC: NA

H: NA

EN: \$69,000 will be use for management of Natural Resource to include of restoration work on 15 acres of quarried lands including planting grasses, native shrubs & trees Work will be accomplished by onsite personnel & volunteers. The restored area will provide nesting, feeding, and breeding habitat for resident and migratory aquatic and terrestrial wildlife species utilizing the adjacent wetlands and habitats. The funding also includes review of the status of invasive plant species, threatened and endangered species, and continuation of good stewardship practices. It also includes continued verification of all data related to the level 1 inventory and OMBIL reporting requirements.

WS: NA

OTHER INFORMATION: A Screening for Dam Safety Portfolio Risk Assessment (SPRA) was conducted in 2006 resulting in a Dam Safety Action Classification (DSAC) rating of III for this project. An Interim Risk Reduction Measures Plan (IRRMP) was prepared in 2010. American Reinvestment and Recovery Act (ARRA) funds in the amount of \$3.7M (Construction General) were used to construct a comprehensive grout curtain improvement in the right abutment of the dam to reduce seepage (completed in 2010). Additional piezometers to monitor seepage were also installed using ARRA funds. An updated Water Control Manual was finalized in 2012. A Periodic Assessment of the Dam was also conducted in 2012.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: General Edgar Jadwin Dam and Reservoir, Pennsylvania

AUTHORIZATION: This project was authorized via HD 113, 80th Congress, 1st Session (1948).

LOCATION AND DESCRIPTION: The project is located in Wayne County, Pennsylvania along the Dyberry Creek, a tributary of the Lackawaxen River, about 3 miles upstream of Honesdale, PA and approximately 30 miles above the junction of the Lackawaxen and Delaware Rivers. This flood risk management project was completed and placed into service in 1960. The facility consists of an earth and rock fill dam with a low-level un-gated outlet works, and an emergency spillway. The dam is 1255 feet long with a top width of 40 feet, and a top elevation of 1082 ft NGVD, approximately 112 feet above the natural streambed. The outlet tunnel has a capacity of 2,500 cfs and the chute-type spillway has a capacity of 69,000 cfs capacity. Reservoir capacity is 24,500 acre-feet for flood control, with no conservation pool. There is no permanent pool and no provisions have been made for recreational use, however, low impact opportunities such as hunting, stream fishing, hiking and bird watching are enjoyed by visitors to the project lands.

CONFERENCE AMOUNT FOR FY 2013: T: \$320,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$60,000 O: \$260,000 T: \$320,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$320,000 will be used for minimal routine operations and maintenance, water control data collection and analysis, real estate, continuing evaluation gathering and dam safety efforts. .

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: A Screening for Dam Safety Portfolio Risk Assessment (SPRA) was conducted in 2009 resulting in a Dam Safety Action Classification (DSAC) rating of II for this project. As a result of the DSAC II rating, a required Interim Risk Reduction Measures Plan (IRRMP) was prepared in FY2012.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Prompton Lake, Pennsylvania

AUTHORIZATION: This project was authorized via HD 80-113, 80th Congress (1948), modified by HD 87-522 (1962)

LOCATION AND DESCRIPTION: The project is located on Lackawaxen River within the Borough limits of Prompton, PA, four miles upstream from Honesdale, PA; approximately 30 miles above the confluence of the Lackawaxen and Delaware Rivers. Project purposes are flood control, water supply and recreation. The project consists of a flood control earth and rock filled dam, 140 feet high and 1,226 feet long on the crest. The reservoir has a capacity of 20,300 acre-feet for flood control, 28,000 acre feet of excess storage with a conservation pool of 3400 acre-feet capacity. The project also includes recreational public use facilities maintained by the Corps include access roads, parking lot, sanitary facilities, boat launch, a hiking/nature trail and provision for boating (10 H.P. limit) and fishing.

CONFERENCE AMOUNT FOR FY 2013: T: \$492,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$35,000 O: \$440,000 T: \$475,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$465,000 will be used for routine operations & maintenance which includes the operation buildings, the dam and related structures, grounds & equipment, management of public-use areas such as access roads, parking lots. Other specific work includes continuing evaluation gathering, dam safety efforts, required inspections, real estate (NAB), water-control and water-quality analyses.

RC: NA

H: NA

EN: \$10,000 will be used to meet basic stewardship activities at the project including evaluation of improving fee owned land from degraded to transitioning status, review of the status of invasive plant species, threatened and endangered species, continuation of good stewardship practices, and continued verification of all data related to the level 1 inventory and OMBIL reporting requirements.

WS: NA

OTHER INFORMATION: The project received a Dam Safety Action Classification (DSAC) III Rating in 2005. FY06 Construction (CG) Funds were used for construction of Phase I of modifications to the dam. These modifications were done to protect the structure and downstream communities from the effects of the estimated Probable Maximum Flood (based on revised criterion since initial construction). Phase I work in the spillway and outlet works was completed in July 2007 and the construction of a crest wall across the top of dam was completed in the spring of 2008. Phase II modifications to the project were completed in July 2012 using American Recovery and Reinvestment Act funds. Phase II modifications included spillway modifications (spillway widening, MSE wall, cut-off wall, control sill, soil nail wall, spillway erosion issues, etc), completion of an access road and bridge over the new spillway and construction of a new Operations building.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Raystown Lake, PA

AUTHORIZATION: Flood Control Act of 23 October 1962 (PL 87-874) and described in House Document 565, 87th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- Raystown Lake is located on the Raystown Branch about 5.5 miles upstream from its confluence with the Juniata River. The dam is an earth and rockfill structure with a maximum height of 225 feet and a top length of 1,700 feet. There is a two-bay gated spillway with two tainter gates, 45 feet wide by 45 feet high, to control flood flows. The overflow section is cut through rock at elevation 812 m.s.l., and has crest length of 1,630 feet in the spur of Terrace Mountain. At the overflow section crest, the reservoir will extend 34 miles to the vicinity of Saxton and inundate 10,800 acres. The recreation lake is 27 miles long and inundates 8,300 acres. The project encompasses 29,700 total acres. The flood control storage available above the elevation of the recreation lake is 248,000 acre-feet. Continental Cooperative Services, of Harrisburg, Pennsylvania constructed a 20 megawatt conventional hydropower facility which uses scheduled water releases from Raystown Dam to produce an average annual output of 77 million kilowatt hours, or enough to supply approximately 7,700 typical rural homes. The U.S. Army Corps of Engineers operates and maintains 12 public access areas. Additionally, there are four recreation real estate concession leases.

CONFERENCE AMOUNT FOR FY 2013: \$4,206,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,033,000 O: \$2,612,000 T: \$3,645,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$1,213,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$1,930,000 - Funding will provide for operation and maintenance of recreation facilities and services, which includes salaries for permanent and seasonal staff, utilities, supplies and contracts.

H: NA

EN: \$502,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 95,000. Flood damages prevented through FY2012 are \$269.6 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Stillwater Lake, PA

AUTHORIZATION: Flood Control Act of 18 August 1941 (Public Law 77-228).

LOCATION AND DESCRIPTION: System Code 0205- Stillwater Lake is located in Susquehanna County on the Lackawanna River four miles north and upstream from Forest City, PA. The dam is an earthfill structure, 1,700 feet long and rises 75 feet above the streambed, with a spillway and gate controlled outlet. The reservoir has a storage capacity of 11,600 acre feet at spillway crest, and controls a drainage area of 36.8 square miles. The project reduces flood heights on the Lackawanna River, downstream of the dam and on the Susquehanna River, downstream from its confluence with the Lackawanna River. Additionally, the Pennsylvania-American Water Company utilizes Stillwater as a source of water supply for the Forest City Water Purification Plant on infrequent occasions. The intake facility is located immediately downstream of the reservoir on the Lackawanna River. The Pennsylvania Fish and Boat Commission operate and maintain a boat launch at the lake under a real estate agreement.

CONFERENCE AMOUNT FOR FY 2013: \$511,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$85,000 O: \$340,000 T: \$425,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$419,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: NA

H: NA

EN: \$6,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 285,000. Flood damages prevented through FY2012 are \$195.4 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Tioga-Hammond Lakes, PA

AUTHORIZATION: Flood Control Act of 3 July 1958, (Public Law 85-500), substantially in accordance with House Document 394, 84th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205- The Tioga-Hammond Lakes project is located just upstream of Tioga, Pennsylvania. The Tioga-Hammond Lakes project consists primarily of two separate dams, one on Tioga River, and one on Crooked Creek. Both dams are located approximately two miles upstream of the confluence of the two streams. The lakes are joined by a gated connecting channel in a saddle of the ridge separating the two streams. An uncontrolled spillway in Hammond Dam serves both reservoirs. A gated outlet conduit is provided in the left abutment of Tioga Dam for the control of flows for both reservoirs. Tioga Dam is of earth and rockfill construction, 2,738 feet in length, and has a maximum height of 140 feet above the streambed. Hammond Dam is of earth and rockfill construction, 6,000 feet in length and has a maximum height of 122 feet above the streambed. An additional project feature is the Mansfield local flood protection project which consists of channel improvements, levees, and pumping stations which provide protection to the borough of Mansfield during high water events. The Corps operates and maintains the Ives Run and Lambs Creek recreation areas, as well as two overlooks.

CONFERENCE AMOUNT FOR FY 2013: \$2,496,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$784,000 O: \$1,418,000 T: \$2,202,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$1,212,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: \$793,000 - Funding will provide for operation and maintenance of recreation facilities and services, which includes salaries for permanent and seasonal staff, utilities, supplies and contracts.

H: NA

EN: \$197,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 300,000. Flood damages prevented through FY2012 are \$531.5 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: York Indian Rock Dam, PA

AUTHORIZATION: Flood Control Act of 22 June 1936, amended by Flood Control Act of 28 June 1938 and described in House Document No. 702, 77th Congress, 2nd Session.

LOCATION AND DESCRIPTION: System Code 0205 - The protective works for York, Pennsylvania, consist of Indian Rock Dam about 3 miles upstream from York, and channel improvements on Codorus Creek in the city of York. Indian Rock Dam is an earth and rock structure 1,000 feet long rising 83 feet above the streambed, with a side-channel spillway and gated outlet conduit in the right abutment. The normally dry reservoir area has a storage capacity of 28,000 acre-feet at spillway crest and controls a drainage area of 94 square miles. The Codorus Creek project consists chiefly of 22,969 feet of channel improvement including channel widening and deepening, flood walls, levees, protection of bank slopes, and removal of a mill dam which increased channel capacity to 24,000 cubic feet per second. The two components protect the community against flood discharges about 33 percent greater than the record flood of August 1933. Tropical storm Agnes (June 1972) filled the flood control reservoir and produced spillway flow.

CONFERENCE AMOUNT FOR FY 2013: \$729,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$153,000 O: \$570,000 T: \$723,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$710,000 - Funding will provide for flood risk management operation and maintenance costs, which includes salaries for on-site staff, utilities, supplies, critical stream gages and contracts.

RC: NA

H: NA

EN: \$13,000 - Funding will provide natural resources protection and conservation, eco-system management and meet responsibilities for safety and compliance with natural resources laws and regulations.

WS: NA

OTHER INFORMATION: Operation of the project provides benefit to a population at risk of 20,000. Flood damages prevented through FY2012 are \$55 million.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Rhode Island

O&M Justification Sheet

PROJECT NAME: Fox Point Hurricane Barrier, Rhode Island

AUTHORIZATION: Authorized by the Flood Control Act of 1958. Section 2866 of the National Defense Authorization Act for Fiscal Year 2007 (PL 109-364, dated October 17, 2006) transferred responsibility of the project to the Corps of Engineers.

LOCATION AND DESCRIPTION: The Fox Point Hurricane Barrier is located across the Providence River in Providence, Rhode Island, about one mile from the downtown area. The barrier is a 700-foot long concrete structure, 25 feet high and contains a 214-foot long pumping station and three 40 foot by 40 foot tainter gates. The pumping station contains five 4,500 horsepower pumps. When closed, the gates prevent entry of tidal floodwaters into the city. The project was completed in 1966 and turned over to the City of Providence to operate and maintain.

CONFERENCE AMOUNT FOR FY 2013: \$2,030,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,420,000 O: \$330,000 T: \$1,750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: NA

FRM: \$1,750,000 – Provides for minimal routine essential operation and maintenance activities necessary to operate the barrier gates and protect life and property in downtown Providence during coastal flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and gate operation. Funding includes rehabilitation of one of the five pumps used to operate the project (\$1,200,000) and preparation of an Environmental Assessment to determine potential impacts of continued operation of the project on the environment (\$50,000).

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: In accordance with the National Defense Authorization Act of 2007, O&M responsibility of the project was transferred to the Corps in January 2010. Project has prevented an estimated \$2.5 million in flood damages since placed in service in 1966.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Woonsocket Local Protection Project, Rhode Island

AUTHORIZATION: Authorized by the Flood Control Act of 1944. Section 2875 of the National Defense Authorization Act for FY 2008 (PL 110-181, dated January 28, 2008) transferred responsibility of the project to the Corps of Engineers.

LOCATION AND DESCRIPTION: The Woonsocket Local Protection Project is located along the Blackstone River in north central Rhode Island, extending about 8,300 feet downstream from the Massachusetts state line to Woonsocket Falls Dam in the center of Woonsocket. The project was authorized by the Flood Control Act of 1944 and completed in April 1960. The project was turned over to the City of Woonsocket to operate and maintain in accordance with the Assurance Agreement dated 8 May 1963. Project consists of widening, deepening and straightening of the river channel for a distance of 8,300 feet upstream of Woonsocket Falls Dam, along with construction of a pumping station, 1,115 feet of earth dike and 316 feet of concrete floodwall. The project included replacement of the Woonsocket Falls Dam with a concrete overflow structure 266 feet wide and equipped with four tainter gates. The project was designed to protect against the flood of record (August 1955).

CONFERENCE AMOUNT FOR FY 2013: \$679,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$412,000 O: \$347,000 T: \$759,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$759,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling releases from Woonsocket Falls Dam; as well as maintenance service contracts for snow and debris removal, and vegetation control along dike slopes and adjacent to floodwalls. Funding includes upgrading the electrical wiring and replacing panels at two pump stations (\$170,000), removing sediment from the forebay at the Hamlet Pump Station (\$50,000), work to comply with National Environmental Policy Act (NEPA) requirements (\$60,000), and installation of strain gages and piezometers (\$100,000).

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: In accordance with the National Defense Authorization Act of 2008, Operations and Maintenance responsibility of the project was transferred to the Corps in January 2009. Project has prevented an estimated \$160.7 million in flood damages since placed in service in 1960.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Vermont

O&M Justification Sheet

PROJECT NAME: Ball Mountain Lake, Vermont

AUTHORIZATION: Authorized by the Flood Control Acts of 1944 and 1954. Fish passage facility was authorized by Section 872 of WRDA 1986.

LOCATION AND DESCRIPTION: Ball Mountain Dam is located along the West River, 29 miles above its junction with the Connecticut River in Brattleboro, Vermont. Dam is located about two miles north of Jamaica, Vermont and is operated as part of a comprehensive system of flood control projects within the Connecticut River Basin. Project consists of an earth-filled dam with rock slope protection, 915 feet long with a maximum height of 265 feet; an uncontrolled ogee weir spillway, 235 feet wide with a maximum discharge capacity of 150,000 cubic feet per second; and a 13.5-foot diameter outlet conduit with 3 control gates. The reservoir provides 54,690 acre-feet of flood storage capacity to control runoff from its 172 square miles of drainage area. Construction of the dam and appurtenant structures was initiated in May 1957 and completed in November 1961. Construction of recreation facilities was initiated in June 1975 and completed in June 1977. Fish passage facility work began in June 1992 and completed in February 1993.

CONFERENCE AMOUNT FOR FY 2013: \$1,016,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$307,000 O: \$696,000 T: \$1,003,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$752,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as service contracts for snow and debris removal, vegetation control along dam slopes. Funding includes a required five year cycle Periodic Inspection of the project (\$93,000) and inspection of project bridges (\$18,000).

RC: \$115,000 – Provide for minimal routine operation and maintenance activities necessary to support recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 37,000 visitors yearly.

H: N/A

EN: \$136,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. Also included is the maintenance of the projects fish passage facility. Funding also provides for the preparation of a Master Plan (\$85,000). The project consists of 965 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Ball Mountain Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of II in 2005. The principle issues are seepage and stability. The rating of II is defined as Urgent (Unsafe or Potentially Unsafe). Dam Safety Construction Appropriation funds are currently being used to study seepage and stability issues at the dam. Project has prevented an estimated \$162.3 million in flood damages since placed in service in 1961.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

Division: North Atlantic

District: New England

Ball Mountain Lake, Vermont

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Narrows of Lake Champlain, VT and NY

AUTHORIZATION: Adopted 1917

LOCATION AND DESCRIPTION: The Narrows of Lake Champlain navigation project extends from the northern terminus of the New York State Champlain Barge Canal at Lock 12 in Whitehall, NY northward approximately 13.5 miles to Benson Landing, VT. The project provides for a channel 12 ft. deep, approximately 13.5 miles in length and generally 200 ft. wide from Whitehall, NY to Benson Landing, VT. The existing project is considered 77% complete, with a channel 12 ft. deep at LLL and minimum width of 150 ft. having been excavated throughout the entire length of improvement, except in the vicinity of the Elbow (Putts Rock and Putts Leap) where the width is 110 ft. and fender booms were installed to protect vessels from rock outcrops. The uncompleted work is inactive.

CONFERENCE AMOUNT FOR FY2013: \$30,000 2/

BUDGETED AMOUNT FOR FY2014: M: \$20,000 O: \$10,000 T: \$ 30,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$30,000

Funds to perform inspection and realignment of fender booms, perform PCS, and remove critical hazards to navigation.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Annual maintenance of the channel and fender booms is required to keep channel safe in the areas where the project was only constructed to 55% of its authorized width.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study/project effort is \$0 This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: North Hartland Lake, Vermont

AUTHORIZATION: Authorized by the Flood Control Acts of 1938 and 1941.

LOCATION AND DESCRIPTION: North Hartland Lake is located along the Ottauquechee River, 1.5 miles above its junction with Connecticut River, and one-mile northwest of North Hartland, Vermont. North Hartland Lake is operated as part of a system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth and rock-filled dam with rock slope protection, 1,640 feet long with a maximum height of 185 feet; an earth and rock-filled dike 2,110 feet long with a maximum height of 52 feet; an uncontrolled ogee weir spillway, 465 feet wide with a maximum discharge capacity of 160,900 cubic feet per second; a 14.25-foot diameter horseshoe shaped outlet conduit with 4 control gates through the dam; and a 36-inch diameter outlet conduit with a control gate through the dike. The reservoir provides flood storage capacity of 74,150 acre-feet to control runoff from its drainage area of 220 square miles. Construction of the dam and appurtenant structures was initiated in June 1958 and completed in June 1961.

CONFERENCE AMOUNT FOR FY 2013: \$1,001,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$304,000 O: \$591,000 T: \$895,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$719,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes a required five year cycle Periodic Inspection of the project (\$108,000), a Periodic Assessment (\$75,000) and inspection of project bridges (\$15,000).

RC: \$132,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 306,000 visitors each year.

H: N/A

EN: \$44,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 1,464 fee owned acres of land.

WS: N/A

OTHER INFORMATION: North Hartland Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of III in September 2009. The principle issues are seepage and seismic. The rating of III is defined as High Priority (Conditionally Unsafe). Project has prevented an estimated \$151.7 million in flood damages since placed in service in 1961.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

Division: North Atlantic

District: New England

North Hartland Lake, Vermont

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: North Springfield Lake, Vermont

AUTHORIZATION: Authorized by the Flood Control Acts of 1938 and 1941.

LOCATION AND DESCRIPTION: North Springfield Lake is located in the Town of Springfield, Vermont, along the Black River, about 8.7 miles above its junction with the Connecticut River. North Springfield Lake is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of two earth and rock-filled dams with rock slope protection. The Main Dam is 2,940 feet long with a maximum height of 120 feet, and the North Branch Dam is 900 feet long with a maximum height of 75 feet. The Main Dam has an uncontrolled side channel spillway with an ogee weir, 384 feet wide with a maximum discharge capacity of 117,200 cubic feet per second, and a 12.75-foot diameter horseshoe shaped outlet conduit with 3 control gates. The North Branch Dam has an uncontrolled broad crested spillway weir, 200 feet wide with a maximum discharge capacity of 1,600 cubic feet per second, and an 8-inch diameter outlet conduit. The reservoir provides flood storage capacity of 51,100 acre-feet to control runoff from its drainage area of 158 square miles. Construction of the dam and appurtenant structures was initiated in May 1958 and completed in November 1960.

CONFERENCE AMOUNT FOR FY 2013: \$854,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$269,000 O: \$531,000 T: \$800,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$687,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$9,000).

RC: \$68,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 38,000 visitors each year.

H: N/A

EN: \$45,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 1,361 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$134.9 million in flood damages since placed in service in 1960.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

North Springfield Lake, Vermont

O&M Justification Sheet

PROJECT NAME: Townshend Lake, Vermont

AUTHORIZATION: Authorized by the Flood Control Acts of 1944 and 1954. Fish passage facility was authorized by Section 872 of WRDA 1986.

LOCATION AND DESCRIPTION: Townshend Lake is located along the West River, about 19.1 miles above its junction with the Connecticut River in Brattleboro, Vermont, and two miles west of Townshend, Vermont. The reservoir extends upstream about four miles, and is operated as part of a system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth-filled dam with rock slope protection, 1,700 feet long with a maximum height of 133 feet; and a horseshoe-shaped concrete outlet conduit with a maximum discharge capacity of 22,100 cubic feet per second. The reservoir provides a flood storage capacity of 33,700 acre-feet to control runoff from its net drainage area of 106 square miles. Construction of the dam and appurtenant structures was initiated in November 1958 and completed in June 1961. Construction of recreation facilities was initiated in October 1969 and completed in September 1971. Fish passage facility work began in June 1992 and was completed in February 1993.

CONFERENCE AMOUNT FOR FY 2013: \$770,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$284,000 O: \$520,000 T: \$804,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$666,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; as well as maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes required inspection of project bridges (\$10,000), evaluation of options to repair depression on left side of outlet works wing wall (\$15,000) and to ensure proper functioning of relief wells by performing soundings along with pump and check valve testing (\$75,000).

RC: \$93,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities at the project. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to 23,000 visitors each year.

H: N/A

EN: \$45,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines. The project consists of 1,010 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Project has prevented an estimated \$137.1 million in flood damages since placed in service in 1961.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Union Village Dam, Vermont

AUTHORIZATION: Authorized by the Flood Control Acts of 1936 and 1938.

LOCATION AND DESCRIPTION: Union Village Dam is located along the Ompompanoosuc River, about 4 miles upstream from its junction with the Connecticut River. The dam lies about one-fourth mile north of Union Village, Vermont and 11 miles north of White River Junction, Vermont. Union Village Dam is operated as part of a comprehensive system of flood control projects designed to protect life and property within the Connecticut River Basin. The project consists of an earth and rock-filled dam, 1,100 feet long with a maximum height of 170 feet; an uncontrolled ogee weir spillway, 388 feet wide with a maximum discharge capacity of 84,900 cubic feet per second; and a 13-foot diameter outlet conduit with 2 control gates. The reservoir provides a flood storage capacity of 38,400 acre-feet to control runoff from its net drainage area of 126 square miles. Construction of the dam and appurtenant structures began in March 1947 and was completed in June 1950.

CONFERENCE AMOUNT FOR FY 2013: \$683,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$231,000 O: \$640,000 T: \$871,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$764,000 – Provides for minimal routine essential operation and maintenance activities necessary to protect downstream life and property during flooding events, and to preserve project infrastructure. Activities include data collection, environmental compliance, project inspections and patrols, and controlling reservoir releases; maintenance service contracts for snow and debris removal, and vegetation control along dam slopes. Funding includes a required five year cycle Periodic Inspection of the project (\$93,000), inspection of project bridges (\$8,000) and installation of piezometers in the right dam abutment (\$150,000).

RC: \$71,000 – Provides for minimal routine operation and maintenance activities necessary to support the recreational facilities. Activities include maintaining project trails and other recreation areas for visitor safety. The project provides recreation opportunities to an average of 46,000 visitors each year.

H: N/A

EN: \$36,000 – Provides for minimal routine operation and maintenance activities necessary to maintain the environmental integrity of project lands. Activities include patrols to check for encroachment onto project lands, and maintaining boundary lines as well as a pest management program. The project consists of 991 fee owned acres of land.

WS: N/A

OTHER INFORMATION: Union Village Dam was assigned a Dam Safety Assurance Classification (DSAC) rating of II in September 2009. The principle issue is seepage. The rating of II is defined as Urgent (Unsafe or Potentially Unsafe). Project has prevented an estimated \$56.6 million in flood damages since placed in service in 1950.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: New England

Union Village Dam, Vermont

Virginia

O&M Justification Sheet

PROJECT NAME: Atlantic Intracoastal Waterway – ACC Route, VA

AUTHORIZATION: River and Harbor Act of 3 March 1899 and modified by Acts of 25 July 1912, 3 March 1925, 3 July 1930, 26 June 1934 and 2 March 1945.

LOCATION AND DESCRIPTION: The Albemarle and Chesapeake Canal (ACC), on the Atlantic Intracoastal Waterway (AIWW), is a naturally protected navigation route that generally parallels the Atlantic Ocean between the Southern Branch of the Elizabeth River and the Virginia-North Carolina state line in the North Landing River, a distance of 27 miles. This project provides for a channel 12 feet deep with widths of 90 feet in land cuts and from 125 to 250 feet in rivers. Operation of a tidal guard lock at Great Bridge and a highway bridge at North Landing are done under a services contract. This project has been operated by contractors since 1983 under the Complete Sourcing Program.

CONFERENCE AMOUNT FOR FY 2013: \$2,260,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,160,000 T: \$2,160,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,160,000 Funds will be used for the bare bones level of operations, including routine operational maintenance, on the waterway to operate the bridge, lock, canal, and reservation for commerce traffic and navy military fuel barges. This amount of funding includes no out-of-scope maintenance items.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The waterway is of critical importance, especially to the U.S. Navy which transports over 55 million gallons of jet fuel yearly from the Craney Island Fuel Depot in Portsmouth, VA to the Oceana Naval Air Station in Virginia Beach, VA. Failure to fund the project will result in the Navy being unable to meet the fuel demand of the Oceana Naval Air Station. The Navy has stated that trucking this much fuel would not be feasible on a long-term basis. In addition, commercial and recreation vessels travel the waterway in lieu of the Atlantic Ocean to preclude risking the dangerous waters off Cape Hatteras. An average of over 875,000 tons of commerce passes through the Great Bridge Lock yearly.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Atlantic Intracoastal Waterway – Dismal Swamp Canal Route, VA

AUTHORIZATION: River and Harbor Act of 3 March 1899 and modified by Acts of 25 July 1912, 3 March 1925, 3 July 1930, 26 June 1934 and 2 March 1945.

LOCATION AND DESCRIPTION: The Dismal Swamp Canal (DSC), on the Atlantic Intracoastal Waterway (AIWW), is a naturally protected navigation route that generally parallels the Atlantic coast between Norfolk, VA and the Pasquotank River in NC. The canal is the oldest operating artificial waterway in the United States. The DSC was placed on the National Register of Historical Places and registered as an ASCE Landmark in 1988 and in 2004 it was included in the National Park Service's Underground Railroad Network to Freedom Program. The authorized depth of the canal is 10 feet; however, the project is currently maintained at a minimum depth of 6 feet. The project also consists of one highway drawbridge and navigation lock at Deep Creek, VA, one highway drawbridge and navigation lock at South Mills, NC and three water control structures. To minimize costs, the two navigation locks and two bascule bridges are operated only four times daily between 8:30 a.m. and 3:30 p.m.

CONFERENCE AMOUNT FOR FY 2013: \$1,110,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,170,000 T: \$1,170,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$540,000 Funding to operate the bridges and locks, on minimum basis of 8 hours a day, 7 days a week, a maximum of four lock and bridge openings daily. This minimal level of funding includes routine operational maintenance in connection with project operations, and no out-of-scope maintenance items.

FRM: \$630,000 Funding to operate 3 water control structures along the Dismal Swamp Canal. These structures must be operated to prevent flooding in adjacent commercial and residential districts, even if lock and bridge operations are not performed. In addition, this level of operation is mandated by public law to control water levels in Lake Drummond.

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The DSC provides navigation needs for vessels to travel the protected waterways of the AIWW in lieu of traveling through the Currituck Sound. The water control structures are manned in conjunction with the locks and bridges to control the water levels in Lake Drummond as required by Public Law 93-402.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: Norfolk

Atlantic Intracoastal Waterway-DSC Route, VA

O&M Justification Sheet

PROJECT NAME: Chincoteague Inlet, VA

AUTHORIZATION: Section 107 of the River and Harbor Act of 14 July 1960

LOCATION AND DESCRIPTION: Chincoteague Inlet is located on the Eastern Shore of Virginia in Accomack County. It is the largest commercial port on the Eastern Shore and supports over 3,000 vessels a year. The project supports all types of commercial fishing. Failure to maintain the channel would result in direct economic losses to commercial users as well as local businesses. The project also supports the U.S. Coast Guard and NASA Wallops Island Flight Facility.

CONFERENCE AMOUNT FOR FY 2013: \$329,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$710,000 O: \$0 T: \$710,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$710,000 Funding is for the USACE Dredge CURRITUCK to dredge only the most critical shoaling that occurs throughout the year over the length of the project, with dredging assignments to remove the most critical shoals when they occur. A portion of the funding is also used to perform channel examination surveys to monitor and report the channel conditions to users, and to coordinate with the Coast Guard on buoy and channel marker placements.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The project provides the primary access from the Atlantic Ocean to the critical harbor of refuge at Chincoteague and other Federal navigation projects in the area. U.S. Coast Guard Station and USCG Group Eastern Shore are located on Chincoteague Inlet. NASA Goddard Space Flight Center, Mid-Atlantic Regional Spaceport, and the U.S. Navy use the project for training operations, range control, payload recovery, and oceanographic missions. \$8.2 million of annual income depend upon this project (Accomack Co.)

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Gathright Dam and Lake Moomaw, VA

AUTHORIZATION: The 1964 Flood Control Act.

LOCATION AND DESCRIPTION: Gathright Dam and Lake Moomaw, located 43 miles above the mouth of the Jackson River, and 17 miles upstream of Covington, Virginia, are operated to reduce flood damages at downstream locations, augment low flow conditions, and provide for water-based recreation. As a major dam within the James River Basin, the project is part of the overall strategy for water control and flood risk reduction within the basin.

CONFERENCE AMOUNT FOR FY 2013: \$2,203,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,262,000 T: \$2,262,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,262,000 Funding will provide the basic level of operation of the project for Flood Risk Management, including operation of the dam, intake tower, water treatment plant, wastewater treatment plant, and support facilities. This level of funding provides the normal level of water management activities, gauging, coordination with the U.S. Geological Survey, other agencies and stakeholders, as well as a basic level of operational maintenance, but no backlog maintenance items. Water quality and low flow augmentation goals are accomplished as part of operation of the dam and reservoir.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The requested funding is necessary for the District to ensure the continued operation, safety and integrity of Gathright Dam through the budget year. Although funded for Flood Risk Management, the project also provides improved water quality through low flow augmentation. Recreation services are provided at sites operated by the U.S. Forest Service. Since completion of the project and beginning of operation in 1982, the project has prevented over \$286 million in flood damages.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hampton Roads Drift Removal, VA

AUTHORIZATION: Section 102 of the River and Harbor Act of 1950.

LOCATION AND DESCRIPTION: The project area includes Hampton Roads, the harbors of Norfolk and Newport News, and tributary waters in Virginia. The project provides for the collection and removal of floating debris for the protection of navigation. Removal of debris 7 days a week is essential for the safety of the port, U.S. Coast Guard operations, the U.S. Navy vessels based in Norfolk, and commercial shipping traffic exceeding 60 million tons annually. The project also provides for disposal of debris at Craney Island. The principal tributaries are the James River, Elizabeth River, and Nansemond River. The harbor area involves a total water surface of about 75 square miles, with approximately 32 miles of developed waterfront and 300 terminal facilities.

CONFERENCE AMOUNT FOR FY 2013: \$1,682,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,458,000 O: \$0 T: \$1,458,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,458,000 Funds will be used to operate and manage the drift collection system for the waters of Hampton Roads and tributaries. The activities are considered maintenance, whereby the drift collection vessels are used to remove floating debris and dispose of it within the Craney Island facilities. This project provides for an efficient and cost effective method of preventing collisions with hulls and critical vessel appendages and possible sinking of military, commercial and pleasure vessels within Norfolk Harbor and branches.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The budget amount for FY 2014 will enable debris collection daily, 7 days a week. The channels supported by this project support an average of over 100,000 vessel trips annually. The removal of debris from the waterways reduces pollution and subsequent impact to marine habitat and wetlands in the Elizabeth River, Nansemond River, and James River.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hampton Roads, Prevention of Obstructive Deposits, VA

AUTHORIZATION: The Act of June 29, 1888, amended August 28, 1958, provides for preservation of the tidal waters of Hampton Roads and adjacent or tributary waters.

LOCATION AND DESCRIPTION: The project provides for detection and prevention of the illegal deposit into navigable waters of waste, oil, sludge, refuse, and other types of debris from vessels and shore installations. The Corps of Engineers Supervisor of the Harbor, in coordination with U. S. Coast Guard, Department of Justice, and other Federal and State agencies, is designated to conduct the program. The jurisdiction of the Supervisor of the Harbor of Hampton Roads includes Hampton Roads and reaches of Chesapeake Bay, the Atlantic Ocean located in Virginia and tidal portion of their tributaries, including the James River, York River, Rappahannock River, and south shore of the Potomac River.

CONFERENCE AMOUNT FOR FY 2013: \$75,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$88,000 T: \$88,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$88,000 Provides daily patrol, investigation, and coordination with US Coast Guard, Dept of Justice, and other Federal and State agencies to execute this program.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: In prior fiscal years, the elimination of services allowed the potential for unrestricted deposits in all tidal waterways of Virginia. In one year alone, over 750 phone calls were received for action to which the Corps could not respond. The budgeted amount in FY 2014 will enable the program to continue. This project contributes directly to national commerce and economic benefits by providing an efficient, cost-effective method of ensuring refuse and other injurious materials do not get into navigable waters of Hampton Roads and contributes to the safe passage of over 100,000 vessel trips annually. The prevention of waste and refuse deposits into the waterways also reduces water pollution and subsequent impacts to marine habitat and wetlands in the Chesapeake Bay and its tributaries.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: James River, VA

AUTHORIZATION: River and Harbor Act of 5 July 1884. The project was modified by the River and Harbor Acts of 13 June 1902, 3 March 1905, 3 July 1930, 26 August 1937, 2 March 1945, 17 May 1950 and 23 October 1962.

LOCATION AND DESCRIPTION: The James River channel provides approximately 90 miles of deep-draft navigation from Hampton Roads, VA to Richmond, VA. The project provides for a channel 25 feet deep, 300 feet wide from Hampton Roads to Hopewell, VA, approximately 70 miles, and 25 feet deep, 200 feet wide from Hopewell to Richmond Deepwater Terminal, approximately 15 miles. Thence, 18 feet deep, 200 feet wide from Richmond Deepwater Terminal to the head of navigation at the Richmond locks, approximately 5 miles.

CONFERENCE AMOUNT FOR FY 2013: \$3,948,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,600,000 O: \$201,000 T: \$3,801,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,801,000 Funds will be used to dredge the more critical shoaled areas within the length of the project. This amount of funding will enable a basic, minimal level of maintenance within the channel and will not enable removal of all shoals that are expected within the budget year. The funding will provide for channel surveys of most shoals along the river, and reporting to the U.S. Coast Guard and other agencies and stakeholders, to ensure river pilots and vessel operators have updated information and proper buoy placement for safe navigation. A portion of the funding will also be used to coordinate with environmental agencies and assure that all necessary permits and clearances are maintained in an up to date status so that maintenance dredging may proceed without delays.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Local Sponsor is the Virginia Port Authority. The project supports deep-draft commercial navigation to the Ports of Hopewell and Richmond, and numerous industries along the river. The channel is dredged, at different locations, annually. Higher-than-normal shoaling in FY 2011 and 2012 forced the Virginia Pilots Association to continue a draft restriction on the vessels transiting the project.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Lynnhaven Inlet, VA

AUTHORIZATION: Authorized by the River and Harbor Act of 23 October 1962, except the side channel into Long Creek which was approved by the Chief of Engineers in 1982 under authority of Section 107 of the River and Harbor Act of 1960.

LOCATION AND DESCRIPTION: Lynnhaven Inlet is located on the Chesapeake Bay within the City of Virginia Beach. The navigation project provides access to the Chesapeake Bay and Atlantic Ocean for commercial fishing vessels, pilot vessels, charter fishing boats, head boats, and a wide range of private recreational vessels. The project is used by the pilot boats for both the Virginia and Maryland Pilots based inside the inlet, to transport pilots from their dock to deep draft ships transiting the Chesapeake Bay. The project requires annual maintenance of critical shoals and full maintenance dredging on intervals of about three years.

CONFERENCE AMOUNT FOR FY 2013: \$100,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$400,000 O: \$0 T: \$400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$400,000 Funding is for the USACE Dredge CURRITUCK to dredge only the most critical shoaling that occurs throughout the year over the length of the project, with dredging assignments to remove the most critical shoals when they occur. A portion of the funding is also used to perform channel examination surveys to monitor and report the channel conditions to users, and to coordinate with the Coast Guard on buoy and channel marker placements.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The dredged material is predominantly sand, and for most dredging events is used for beach nourishment at Ocean Park and Cape Henry Beaches. The City has fulfilled all requirements of the project under the cooperation agreement, including the provision of adequate dredged material facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Norfolk Harbor, VA

AUTHORIZATION: Norfolk Harbor was authorized by the 1876 River and Harbor Act, and modified by numerous River and Harbor Acts through the 1986 WRDA. The Craney Island Dredged Material Management Area was authorized by the River and Harbor Act of 1946.

LOCATION AND DESCRIPTION: Norfolk Harbor includes the deep draft channels in the Elizabeth River, Hampton Roads, and the lower Chesapeake Bay. The project also includes the Craney Island Dredged Material Management Area, constructed on 2,500 acres of river bottom in Hampton Roads adjacent to the City of Portsmouth, Virginia. Craney Island is the primary dredged material placement area for the construction and maintenance of navigation channels in the Hampton Roads port complex. Craney Island provides essential dredged material placement capacity for the Federal navigation channels, U.S. Navy facilities, Virginia Port Authority facilities, and various other commercial port facilities.

CONFERENCE AMOUNT FOR FY 2013: \$10,077,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$11,802,000 O: \$624,000 T: \$12,426,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$12,426,000 Funds will be used to dredge only the minimum critical shoaling expected within the Norfolk Harbor and Atlantic Ocean Channels. Funds will also be used to maintain the containment dikes, roads, and buildings at Craney Island that are essential to provide adequate capacity for dredged material from all navigation projects. In addition, funding will be used for as many as seven surveys of channel elements, reporting accurate channel conditions to the U.S. Coast Guard, pilots, vessel operators and other stakeholders, coordinating with the Coast Guard on buoy and channel marker placement, and plans for dredging.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The project supports several commercial port facilities, a major DOD Strategic Port, and U.S. Naval facilities. Over 60 million tons of commerce are moved annually on the channels that are part of the Norfolk Harbor project. A portion of the cost to maintain the Craney Island Dredged Material Management Area is recovered by a system of toll charges for the use of the facility. A toll of \$6.81 per cubic yard is collected to use the Craney Island Rehandling Basin, of which \$1.38 is given to the Treasury. For direct placement of material, a toll of \$1.38 per cubic yard is collected, all of which is given to the Treasury. The Norfolk Harbor project includes Norfolk Harbor Channel with the Elizabeth River and its branches, Channel to Newport News, Thimble Shoal Channel, and the Atlantic Ocean Channel outside the mouth of the Chesapeake Bay.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: Norfolk

Norfolk Harbor, VA

O&M Justification Sheet

PROJECT NAME: Rudee Inlet, VA

AUTHORIZATION: River and Harbor Act of 14 July 1960, Section 107, modified under Section 354 of the 1996 WRDA.

LOCATION AND DESCRIPTION: Rudee Inlet is located in Virginia Beach, Virginia and provides access to the Atlantic Ocean. The project provides navigation and a critical harbor of refuge for commercial fishing boats, charter sport fishing vessels, research vessels from Virginia Marine Science Museum, U.S. Navy craft, several tour boats, and various transient vessels en route up and down the Atlantic coast. Several maintenance dredging events are required per year to ensure the entrance channel portion of the project remains open for safe navigation. Dredged material is placed on the oceanfront beach and serves as a major source of nourishment material.

CONFERENCE AMOUNT FOR FY 2013: \$100,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$400,000 O: \$0 T: \$400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$400,000 Funding is for the USACE Dredge CURRITUCK to dredge only the most critical shoaling that occurs throughout the year over the length of the entrance channel, with dredging assignments to remove the most critical shoals when they occur. With the shallow draft Dredge CURRITUCK or similar vessel, the dredged material is placed in the surf zone of the Hurricane Protection project at Virginia Beach, contributing a significant source of nourishment material. A portion of the funding is also used to monitor and report the channel conditions to users, and to coordinate with the Coast Guard and local sponsor.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Rudee Inlet is also a Critical Harbor of Refuge, and is the only such harbor between Oregon Inlet, NC and the mouth of the Chesapeake Bay. The City of Virginia Beach as local sponsor contributes a cost share percentage of 28% which represents the recreational benefits of the project.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Water and Environmental Certifications, VA

AUTHORIZATION: Not applicable. Each project covered under this program has its own authorization.

LOCATION AND DESCRIPTION: Provides funding for coordination and renewal of water quality and other environmental certifications for navigation projects not otherwise included in the budget. The location includes all potential navigation maintenance dredging projects within Norfolk District area of operations. Projects that are supported by this program will include active navigation projects that are due for maintenance but not funded in this budget cycle for maintenance dredging.

CONFERENCE AMOUNT FOR FY 2013: \$110,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$130,000 T: \$130,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$130,000 Critical activities to acquire water quality and environmental certifications, and conduct required coordination, in preparation for execution of up to three out-year projects.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The program recognizes that there is essential advance work needed to support the maintenance of critical navigation projects during the years before the projects need to be dredged and are funded for maintenance dredging.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Waterway on the Coast of Virginia, VA

AUTHORIZATION: River and Harbor Act of 25 June 1910, River and Harbor Act of 2 March 1945 and Section 201 of the Flood Control Act of 1965.

LOCATION AND DESCRIPTION: The channel in Virginia is 6 feet deep and 60 feet wide from the Maryland-Virginia line in Chincoteague Bay to the Chesapeake Bay, about 90 miles long. It is a portion of the 145 mile channel from the Delaware Bay at Roosevelt Inlet, Delaware, to the Chesapeake Bay, Virginia. Its primary functions are to provide transient vessels a protected north-south route and to connect Eastern Shore harbors to each other and to the Atlantic Ocean.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$100,000 T: \$100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$100,000 Funds are required for basic coordination with local sponsors, stakeholder groups and the U.S. Coast Guard. Caretaker coordination has become increasingly important as channel shoaling increases.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Funding provided in the FY 2012 Work Plan is being used for a very limited dredging of shoals that impede access to the Coast Guard station at Wachapreague, VA. Funding for this project in FY14 will enable continued coordination with the Coast Guard, stakeholders and channel users for the critical channel segments that serve Wachapreague, VA and vicinity.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: North Atlantic

District: Norfolk

Waterway on the Coast of Virginia, VA

NORTHWESTERN DIVISION

**NORTHWESTERN DIVISION
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JUSTIFICATION OF ESTIMATE

INVESTIGATIONS

COLORADO

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Cache La Poudre River, Greeley, Colorado (Completion)	1,449,000	1,029,000	55,000	65,000	0 2/	300,000 1/	0

Omaha District

The Cache La Poudre River is a left bank tributary to the South Platte River with headwaters in Rocky Mountain National Park. The Cache La Poudre River basin, which drains 1,890 square miles and includes the City of Greeley, is subject to severe flooding caused by intense rainfall from localized thunderstorms in May through September. The potential for floods is also increased from May through July due to rapid snowmelt from the Rocky Mountains. The City of Greeley has experienced fifteen major floods over the past 100 years, most recently in 1999 and 1983. The 100-year discharge is 10,800 cfs at Greeley. The 1983 discharge was recorded at 8,200 cfs, however, the 1904 flood event discharge was estimated to be 18,000 cfs. The City has incurred considerable expense over the last 20 years in replacing six bridges, with improved bridges designed to pass the 100 year flood event, however, there are no existing flood control structures in the Greeley reach, leaving the City vulnerable to continued flooding. There are approximately 630 residential and 234 non-residential structures in the 500-year floodplain with an estimated total value of \$272,400 (x1000). The estimated annual damages are \$2,379 (x1000). In addition to the threat of flooding and loss of life, another major concern in the Cache La Poudre basin is the degradation of habitat in the riparian corridor. The Colorado Department of Natural Resources characterizes the Cache La Poudre River through Greeley as a low elevation cottonwood-willow riparian habitat community. This type of ecological system provides the most important wildlife habitat in Colorado in terms of species diversity and abundance. The reach of the Cache La Poudre River through Greeley has been designated as critical wildlife habitat by the Colorado Division of Wildlife. Channelization, gravel mining, wetland destruction, water quality issues, and many other human influences have had a major impact on the quality of riparian habitat along the Cache La Poudre River and the wildlife dependent on this waterway. The major goals of the study and subsequent project(s) is to reduce the potential for damage to existing properties in the flood plain, reduce the threat for loss of life, restore riparian habitat in the river corridor, and improve opportunities for recreation along the channel. The cost share sponsor is the City of Greeley, Colorado. The Feasibility Cost Sharing Agreement (FCSA) was signed on December 27, 2005.

This study is not included in the Fiscal Year 2013 President's Budget; however non-Federal cost-sharing funds will be used to continue the feasibility study during Fiscal Year 2013 and conduct an Alternatives Formulation Briefing. The funds budgeted for Fiscal Year 2014 will be used to complete the feasibility phase of the study. The feasibility phase is estimated to cost \$2,430 (x1000), which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,664,000
Reconnaissance Phase (Federal)	234,000
Feasibility Phase (Federal)	1,215,000
Feasibility Phase (Non-Federal)	1,215,000

The study authority is a resolution adopted by the Committee on Public Works, U.S. Senate on March 22, 1971.

Division: Northwestern

District: Omaha

Cache La Poudre River, Greeley, CO

The reconnaissance phase was completed September 2005 and the FCSA was executed on December 27, 2005. The study has strong support from the City of Greeley, the state of Colorado, and many others (including the town of Eaton, Colorado Department of Transportation, Colorado Division of Wildlife, City of Evans, Greeley Urban Renewal Authority, and the Poudre River Trail Corridor). The feasibility study schedule for completion is Fiscal Year 2015.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

KANSAS

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Brush Creek Basin, Kansas and Missouri (Completion)	1,362,000	1,023,000	50,000	60,000	0 2/	229,000 1/	0

Kansas City District

The Brush Creek Basin study area includes 20 square miles of urban Kansas City, Missouri and Johnson County, Kansas. The basin has experienced considerable flooding in many locations over the years since construction in the Plaza was complete. Flooding in 1998 damaged private residences and public structures in many parts of the basin not protected by the completed Federal project. Lives were lost in a reach downstream of the Federal project in the flood of October 1998, and also upstream on the Kansas side of the state line. Tributaries such as Town Fork Creek in Missouri and Rock Creek in Kansas are two of the larger areas in the basin that still experience damages. The project has significant water resources challenges and opportunities that require a watershed perspective, including flood risk management, ecosystem restoration, water quality and environmental justice. The Basin is subjected to frequent severe and life threatening flooding, including significant loss of life in the 1998 flood. Very high risk areas remain to be formulated into a comprehensive flood risk management plan for the watershed, especially in the city of Kansas City, Missouri. The local sponsors, City of Kansas City, Missouri, and Johnson County, Kansas, strongly support this study and are providing the full local financial share, and will do so throughout all phases of the project. The Feasibility Cost Share Agreement (FCSA) was signed August 2005.

This study is not included in the Fiscal Year 2013 President's budget. The funds requested for Fiscal Year 2014 plus any carry-in funds will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$2,338 (x1000), which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Funds requested will also be used for Independent External Peer Review (IEPR). The estimated cost for IEPR is \$150,000. The IEPR cost an exception to the 50-50 cost share and is completely federally funded. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	2,456,000
Reconnaissance Phase (Federal)	118,000
Feasibility Phase (Federal)	1,244,000
Feasibility Phase (Non-Federal)	1,094,000

The study authority is the Resolution of the Committee on Transportation and Infrastructure, U.S. House of Representatives, adopted July 24, 2002, Docket 2698.

The reconnaissance phase was completed with the signing of the FCSA in August 2005. The feasibility study is scheduled for completion in Fiscal Year 2015.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

Division: Northwestern

District: Kansas City

Brush Creek Basin KS & MO

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Manhattan, Kansas (Completion)	1,329,000	729,000	100,000	200,000	0 2/	300,000 1/	0

Kansas City District

The city of Manhattan and adjacent areas of Riley County, and Pottawatomie County, Kansas, are located around the confluence of the Big Blue River (which flows generally south) and the Kansas River (which flows generally east). This Section 216 study examines an existing 50-year old levee originally constructed by the Corps of Engineers which now actively serves to reduce risk of river flooding within the City of Manhattan, Kansas. The terrain inside the Manhattan levee is relatively flat resulting in widespread flood damages from even small amounts of flooding. Flooding in 1993 damaged several hundred residences outside the levee even though the existing levee did not overtop. The City received an estimated \$1,380 (x1000) in flood damages and nearby areas of Pottawatomie County received an estimated \$144,000 in flood damages. The 1993 flood elevation came close to the top of the existing levee with a peak discharge that should have had significantly more freeboard margin. Subsequent analysis has revealed that the levee provides significantly less than the authorized level of protection. Given the large population and over \$800,000 (x1000) in investment behind the levee, the risk and consequences of an overtopping, and potentially an associated catastrophic failure are much higher than is acceptable. Local protection at Manhattan, Kansas, was authorized in the 1954 Flood Control Act as part of the Missouri River Basin comprehensive plan. Construction began May 4, 1961, and the project was turned over to the City of Manhattan for operation and maintenance in July 1963. The Federal construction cost was \$2,488 (x1000). Nearly 29,000 feet of levee and 4,100 feet of channel modification reduce the risk of floods from the Kansas and the Big Blue Rivers. The preliminary results of the feasibility study indicate that a modest levee raise and other reliability improvements will result in significant flood damage reduction benefits and lowered risk. The non-Federal sponsor, City of Manhattan, Kansas, requested a review of the completed works in a May 4, 2000 letter based on the 1993 flood event. The City of Manhattan strongly supports this study and is providing the full local financial share, and will do so throughout all phases of the project. The Feasibility Cost Share Agreement (FCSA) was signed November 2005.

This study is not included in the Fiscal Year 2013 President's budget. The funds requested for Fiscal Year 2014 plus any carry-in funds will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$2,117 (x1000), which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Funds requested will also be used for Independent External Peer Review (IEPR). The estimated cost for IEPR is \$201,000. The IEPR cost is an exception to the 50-50 cost share and is completely federally funded. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,287,000
Reconnaissance Phase (Federal)	170,000
Feasibility Phase (Federal)	1,159,000
Feasibility Phase (Non-Federal)	958,000

The study authority is Section 216 of the 1970 Flood Control Act (PL 91-611).

Division: Northwestern

District: Kansas City

Manhattan, KS

The reconnaissance phase was completed with the signing of the FCSA in November 2005. The feasibility study is scheduled for completion Fiscal Year 2015.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

MISSOURI

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Missouri River Degradation, Missouri and Kansas	2,907,000	935,000	200,000	529,000	200,000 2/	450,0001/	593,000

Kansas City District

The Missouri River between miles 340 and 400 in the Kansas City reach has exhibited significant degradation or down cutting of the riverbed. This phenomenon has been observed by evaluation of Missouri River gage data collected over a long period of time. In other reaches of the Missouri River from Rulo, Nebraska to St. Louis, Missouri, data indicates that the river bed is relatively stable. Degradation within the Kansas City reach has affected water supply intakes and outfall structures and has potential to destabilize the navigation structures, flood control structures, and other public infrastructure along the river. Continued degradation could impact Federal interest in maintaining the Bank Stabilization and Navigation Project (BSNP) and the existing Kansas City's Metropolitan Flood Protection System by causing bank instability that could lead to levee overtopping and levee failures during flood events. Degradation of the river has occurred during past flood events. The riverbed did not fully recover to pre-flood elevations following the 2007 flood event, indicating flood events are a contributing factor to the continued down cutting. Information gathered during the 2011 flood indicates that this flood has broadened the area of impact. Emergency repairs (rock placement at the toe to stabilize banks at critical levee/floodwall units) were implemented during the flood event due to significant scour resulting from the flood. The degradation is a serious and systemic issue, such that localized emergency repairs to avoid bank failures during flood events may become necessary on a more frequent basis. The sponsor is Mid-America Regional Council, a regional planning agency located in Kansas City Missouri. Mid-America Regional Council is supported with funding from 17 stakeholder entities that represent a wide cross section of interests, including water supply, transportation, local municipalities, levee districts, rail, etc. The reconnaissance study establishing a Federal interest in the project was completed August 2009. The Feasibility Cost Share Agreement (FCSA) was signed November 1, 2010.

Fiscal Year 2013 funds are being used to conduct a re-scoping charette at which a path forward was developed using risk-based assumptions, lowered estimated costs, and a shorter schedule. The Decision Management Plan (DMP) concerning a Viable Array and the associated Risk Register will guide study efforts, culminating in a decision on an array of alternatives at an In-Progress Review (IPR) meeting with the Vertical Team (VT) to be held in August of 2013. At the IPR meeting the criteria and steps necessary for completion of the screening and arriving at a Tentatively Selected Plan (TSP) will be established. Fiscal Year 2014 funds, plus any carry-in funds, will be used to develop the necessary information to screen the array of alternatives. Evaluation criteria, public involvement and project coordination activities will be continued, economic, engineering, technical, and environmental analysis of the selected array of alternatives will be conducted leading to an additional IPR in FY14, and the TSP will be identified. In accordance with the Corps Planning Modernization this study was re-scoped and the study cost has been revised. The preliminary estimated cost of the re-scoped feasibility phase is \$4,456 (x1000) which is cost shared on a 50-50 percent basis by Federal and non-Federal interests. Funds requested will also be used for Independent External Peer Review (IEPR). The estimated cost for IEPR is \$300,000. The IEPR cost is an exception to the 50-50 cost share and is completely federally funded. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,986,000
Reconnaissance Phase (Federal)	529,000
Feasibility Phase (Federal)	2,378,000
Feasibility Phase (Non-Federal)	2,078,000

The study authority is Section 216 of the Flood Control Act of 1970 "Review of Completed Projects".

The reconnaissance phase was completed with the signing of the FCSA on November 1, 2010. The feasibility study schedule for completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

MONTANA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to in FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Yellowstone River Corridor, Montana	6,102,000	3,991,000	625,000	241,000	200,000 2/	750,000 1/	295,000

Omaha District

The Yellowstone River Corridor Study is to determine the cumulative hydrologic, biological and socioeconomic impacts along the corridor from Gardiner, Montana, to the confluence of the Missouri River, as authorized by Section 431 of Water Resources Development Act of 1999. The Yellowstone River corridor, defined linearly as approximately 600 river miles in Montana and North Dakota and laterally from the channel as the upper riverine terrace formed from historic fluvial processes, has been subject to natural and human factors affecting sustainable use and conservation of resources. Flooding in 1996 and 1997 caused damage to private property and public facilities with a subsequent increase in requests for regulatory approvals under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act as well as for Corps of Engineers emergency technical assistance. Given the natural and cultural heritage of this river corridor, public and private sector and environmental interests have raised issues regarding the long-term effects of bank stabilization and the potential for adverse cumulative impacts.

The primary goal of this study is to develop a set of publicly-supported river corridor management recommendations that address effects of channel modifications on the human community and riparian ecosystem along the Yellowstone River corridor. The corridor study will be used to formulate management and protection objectives based on a cumulative effects analysis and stakeholder input, evaluate trade-offs among objectives, and assess impacts of the management objectives to help determine their acceptability as contrasted with potential long-term riparian deterioration. For this study, the corridor has been divided into sub-reaches based on hydrogeomorphic characteristics for comparative analyses of altered vs. unaltered reaches; these comparison studies will form the foundation for the cumulative effects analysis of past, present, and potential future land use changes. In accordance with Section 431 of P.L. 106-53, this study is to be performed in consultation with the United States Fish and Wildlife Service (USFWS), United States Geological Survey, Natural Resources Conservation Services (NRCS) and with full participation of the State of Montana, tribal, and local entities; the study should also provide for public participation. Funding for the consultation efforts of the USFWS and NRCS during the study should be obtained by each respective agency. . The cost share sponsor is the Custer County Conservation District, the fiscal agent for the Yellowstone River Conservation District Council. The sponsor has provided approximately \$2,000,000 in in-kind services through Fiscal Year 2012. The Feasibility Cost Sharing Agreement (FCSA) was signed on January 22, 2004.

Fiscal Year 2013 funds will be used to continue the cumulative effects study, specifically completion of the fisheries study, hydrology and hydraulic analysis and floodplain mapping. The funds budgeted for Fiscal Year 2014 would be used to conduct a comprehensive socio-economic study of economic activities and trends along the Yellowstone River corridor. The socio-economic study is the final technical study element needed before initiating the cumulative effects analysis of how human activities have historically affected (and are anticipated to affect in the future) the physical characteristics and natural habitats along the river. Completion of the cumulative effects analysis will include formulation of a series of best management practices that promote restoration and conservation of habitats in balance with future activities, so that informed economic investment decisions can be made in a sustainable manner. The preliminary estimated cost of the feasibility phase is \$7,591,000, which is to be shared on a 75/25 percent basis by Federal and non-Federal interests. All or part of the non-Federal share may be

Division: Northwestern

District: Omaha

Yellowstone River Corridor, MT

in-kind services. This preliminary estimated cost does not include an amount for Independent External Peer Review (IEPR). This watershed study will not result in a decision document therefore an IEPR is not required under EC 1165-2-209. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 8,000,000
Reconnaissance Phase (Federal)	409,000
Feasibility Phase (Federal)	5,693,000
Feasibility Phase (Non-Federal)	1,898,000

The study authority is Section 431 of the Water Resources Development Act of 1999 (P.L. 106-53).

The reconnaissance phase was completed with the signing of the FCSA on January 22, 2004. The feasibility study schedule for completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

OREGON

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Lower Columbia River Ecosystem Restoration, Oregon and Washington	3,811,000	1,508,000	738,000	362,000	300,000 2/	450,000 1/	453,000

Portland District

The Lower Columbia River Ecosystem Restoration comprehensive watershed study extends from the mouth of the Columbia River—where there is a 43-foot deep-draft Federal navigation channel that runs to the Portland metropolitan area—to a shallow draft channel upstream to river mile 145 at Bonneville Lock and Dam. The Columbia River’s estuary is classified as nationally significant under the National Estuary Program (NEP). The river divides the states of Oregon and Washington throughout this area. The lower Columbia River basin system includes flood damage reduction, navigation, fish and wildlife, environmental restoration, hydropower, bank protection, recreation and water supply improvement purposes. Competing water resource requirements and significant environmental degradation has occurred within the lower Columbia River basin system. Human modifications to the system have changed the hydrologic regime. Storm water run-off pollution from agricultural and forest practices and increased development, and substantial losses of instream, riparian and wetland habitats have caused a reduction in the abundance of fish and wildlife resources, such as resting and rearing areas, and a diminished food web. Thirteen different populations of anadromous salmonids—that use the estuary and reproduce in the Columbia River basin—have been listed as threatened or endangered under the Endangered Species Act (ESA). Such listings have broad implications to existing water resource uses, and future developments. The updated proposed action for the Columbia River Federal Power System includes planning and restoration efforts in the Columbia River estuary to help avoid jeopardy rulings under the ESA for these listed species. Historic losses of 52,000 acres of wetland/marsh habitats, 13,800 acres of riparian forest habitat and 27,000 acres of forested wetland habitat downstream of Portland have significantly impacted this ecosystem’s ability to produce and sustain fish and wildlife resources. Much of this wetland loss can be attributed to the 84,000 acres encompassed by diking districts and the 20,000-acre increase in urban development that has occurred along the lower Columbia River. The purpose of this ongoing study is to investigate and recommend appropriate solutions to accomplish a comprehensive watershed approach for addressing restoration and water resource opportunities in the lower Columbia River basin. The study is not limited to the tidally influenced areas but is ecosystem-wide in scope. A comprehensive, long-range approach to address water resource problems and opportunities for the lower Columbia River is needed. Some of the key areas to be addressed in this comprehensive study include wetland/riparian habitat restoration and stream and fisheries habitat improvement. It is imperative that reversals of these impactful trends occur now before further urban growth causes irreparable impairment of current water uses and ecosystem functions, and while regional interest and financial support is high. The comprehensive watershed study would serve as the catalyst to bring together and implement current efforts by a number of governmental and private organizations including the NEP, six state agencies from Oregon and Washington, four Federal agencies, recreation, ports, industry, agriculture, labor, commercial fishing, environmental interests and citizens. The project has the potential to add up to 10,000 acres of Estuarine / Riverine emergent and forested wetland, consistent with the Lower Columbia River Estuary Partnerships Comprehensive Conservation Management Plan and Washington State recovery plans. The states of Oregon and Washington are joint sponsors for the study and understand the cost sharing provisions as evidenced by the 16 December 2003 signed Feasibility Cost Share Agreement (FCSA).

Fiscal Year 2013 funds are being used to host a re-scoping meeting and continue the feasibility phase of the study including continued screening and refining of potential actions and alternatives for the identified sites; developing costs and benefits for potential actions, providing more detailed planning, analysis and evaluation, including initial design, for long-range larger projects, developing National Environmental Policy Act documentation for habitat restoration, working closely with cost-share partners to define specific study requirements, initiating and continuing conceptual alternatives and feasibility design development to include large scale ecosystem restoration, habitat creation, and potential habitat conservation.

The funds requested for Fiscal Year 2014 plus any carry-in funds would be used to continue the feasibility study. In accordance with the Corps Planning Program Modernization, this study is being re-scoped and the study cost has increased. The preliminary estimated revised cost of the feasibility phase is \$7,040,000, of which \$6,840,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests and an additional \$200,000 will be 100% Federally funded for the required Independent External Peer Review. The feasibility phase cost has increased from \$6,200,000, in the Fiscal Year 2013 budget submission, by an estimated \$840,000 to \$7,040,000. The cost increase is due to the study scope, initially envisioned as a comprehensive watershed study framework document to inform and guide a holistic approach to restoration, changed to now focus on developing alternatives and choosing specific sites for specific authorization to implement restoration of the Lower Columbia River. Discussions are underway with the project sponsors to further refine this estimate and revise the FSCA as necessary. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$7,231,000
Reconnaissance Phase (Federal)	191,000
Feasibility Phase (Federal)	3,620,000
Feasibility Phase (Non-Federal)	3,420,000

The original authorization for this study is Resolution of the Senate Committee on Environment and Public Works dated 28 June 2000.

The reconnaissance phase was completed in Aug 2001. The FCSA was signed 16 December 2003. The feasibility study completion date is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Willamette River Basin Review, Oregon	TBD	1,881,000	5,000 3/	32,000 4/	200,000 2/	200,000 1/	TBD

Portland District

The Willamette River Basin located in northwestern Oregon is approximately 12,000 square miles and houses 70% of Oregon's population. During the last 70 years, this basin has been highly developed including 13 Corps reservoirs to control floods, generate power, and provide water for navigation, irrigation, low flow augmentation and fish and wildlife conservation. Many miles of levees and channel improvements have also been constructed within the basin. The estimated number of people living throughout the basin in the 100-year floodplain is 125,000, with 500,000 people living in the 500-year floodplain. Present concerns in the basin include flood damages, fish and wildlife conservation, Municipal and Industrial (M&I) water supply, irrigation, and development of additional recreation opportunities. Projected irrigation development in the basin has not materialized at the rate previously envisioned and urban development has increased dramatically, putting a higher demand on water supply for M&I purposes. The feasibility study will determine if modifying the operation and storage allocations of the existing Corps system of 13 reservoir projects would better serve current and anticipated water resource needs. Strong local interests seek a re-examination of Corps reservoirs with a view toward utilizing additional project purposes and modifying reservoir operation. The State of Oregon has expressed strong support for the study because of its desire to implement a new Comprehensive Management Plan for the basin. Demand for M&I water supply in the Willamette River basin is growing rapidly. Several municipalities in the upper Willamette River basin need to make significant investment decisions regarding future water supply. The State of Oregon listed existing Willamette River basin reservoirs as the most likely alternative sources if storage allocation and other related issues can be resolved by the study. Additional impacts to water reallocation opportunities were introduced when the National Marine Fisheries Services (NOAA Fisheries) listed three species of anadromous fish in March 1999. The Corps completed a Biological Assessment in April 2000, which was then supplemented in 2007. On July 11, 2008, NOAA Fisheries and U.S. Fish and Wildlife Service issued Biological Opinions (BiOps), concluding that the continued operation of the Willamette River reservoirs jeopardize the survival of Federally listed species in the basin. The BiOps included "reasonable and prudent alternatives" (RPAs) the Corps (and the other two Action Agencies) should undertake to avoid jeopardy to the listed species and support their recovery. These actions may significantly modify structures and operation of the existing Corps Willamette River basin projects in multiple functional areas, including improvement of fish passage, temperature control facilities, upstream and downstream habitat restoration, and flow augmentation. The Columbia River Fish Mitigation (CRFM) project is being used to respond to the BiOps and RPAs. The Willamette River Basin Review continues to be a water reallocation study but will have to consider all influences within the basin including the BiOps actions required under the CRFM project. The CRFM project has preliminarily determined that approximately one third of the 1.6M acre-feet of irrigation allocation may be reserved for ESA listed species. With this determination, the Willamette River Basin Review water reallocation study can proceed with the understanding that the study scope will address the remaining two thirds allocation or 1.1M acre-feet. The first increment of work will include a small-scale study to create a report for reallocating existing conservation storage for a single use for the cities of Cottage Grove and Creswell. The results of the small-scale study will provide information regarding standardized costing, the needed processes and an understanding of the appropriate players to be engaged for the next increment of work, the basin wide reallocation study. The State of Oregon is the sponsor for the study and understands the cost share provisions as evidenced by the 31 May 1996 signed Feasibility Cost Share Agreement (FCSA).

Fiscal Year 2013 funds are being used to re-scope the study utilizing Planning Modernization directives, initiate the small-scale reallocation study, initiate environmental clearance documentation, and conduct public meetings. The funds requested for Fiscal Year 2014 plus any carry-in funds would be used to complete the small-scale re-allocation study. Funding for the next increment of the study, for the basin wide reallocation study, will be considered as a new budget decision. The estimated cost of the feasibility phase will be determined during the re-scoping meeting in FY13. Following the re-scoping of the study, the FCSA will be modified as necessary. A summary of study cost sharing is as follows:

Total Estimated Study Cost:	\$ TBD
Reconnaissance Phase (Federal):	834,000
Feasibility Phase (Federal):	TBD
Feasibility Phase (Non-Federal):	TBD

The authority for this study is Resolution of the House Committee on Public Works & Transportation, 8 September 1988.

The reconnaissance phase of the study was completed in May 1996. The FCSA was signed 31 May 1996. The feasibility study schedule for completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Reprogrammed funds in Fiscal Year 2011.

4/ Reprogrammed funds in Fiscal Year 2012.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

WASHINGTON

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Grays Harbor, Washington (Completion)	1,642,000	367,000	75,000	800,000	0 2/	400,000 1/	0

Seattle District

The Grays Harbor, Washington, navigation project is an existing 24.3-mile deep draft navigation channel that begins on Washington State's Pacific coast, 45 miles north of the mouth of the Columbia River and 110 miles south of the Strait of Juan de Fuca. Deepening of the channel to -38 feet mean lower low water (MLLW), and other improvements, were authorized by Section 202 of the Water Resources Development Act of 1986, Public Law 99-662. A General Design Memorandum was completed in February 1989, recommending deepening of the project to -36 feet MLLW, and widening the turning basins to serve vessels exporting timber. The deepening to -36 feet MLLW and widening was completed in 1999. The Port of Grays Harbor has experienced dramatic growth in cargo volume over the last several years, increasing from 280,000 metric tons in 2006 to 1,400 (x1000) metric tons in 2010 and expected to double to 2,800 (x1000) metric tons by 2016. Diversity of goods has also expanded and the Port now exports logs, lumber, aluminum, bio diesel, crude oil, other bulk cargos, and vehicles. The increase in exports from the Port has created jobs in one of the State's most economically depressed regions, where unemployment approaches 13%. As the Port has grown, the number of vessels and their size has grown as well, exacerbating the economic impacts of light loading and tidal delays caused by insufficient channel depth. The sponsor, the Port of Grays Harbor, has requested a re-evaluation of the project to allow deepening the channel to the -38 foot MLLW depth authorized by Congress. Deepening the channel would increase efficiency of, and reduce costs to, ships calling on the Port, allowing for the continued growth that provides and economic boost to the region and the State. The study would culminate in a document similar to a limited re-evaluation report and would not require any additional Congressional authorization. The Feasibility Cost Share Agreement (FCSA) was executed in May 2011, between the Department of the Army and the Port of Grays Harbor.

This study is not included in the Fiscal Year 2013 President's budget. The funds requested for Fiscal Year 2014 would be used to complete the final report and the Environmental Impact Statement. In accordance with the Corps Planning Program Modernization, this study has revised its study costs. The estimated cost of the feasibility phase is \$2,738 (x1000), to be shared on a 50-50 percent basis by Federal and non-Federal interests. All or part of the non-Federal share may be in-kind services. Federal cost includes an Independent External Peer Review, estimated at approximately \$200,000. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,911,000
Reconnaissance Phase (Federal)	173,000
Feasibility Phase (Federal)	1,469,000
Feasibility Phase (Non-Federal)	1,269,000

The study authority is Section 202 of the Water Resource Development Act 1986 (PL 99-662).

The reconnaissance phase completion was September 2010 and the FCSA was executed May 2011. The feasibility study is scheduled for completion in Fiscal Year 2014.

Division: Northwestern

District: Seattle

Grays Harbor, WA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Puget Sound Nearshore Marine Habitat Restoration, Washington (Completion)	11,307,000	8,162,000	1,458,000	637,000	850,000 2/	200,000 1/	0

Seattle District

The Puget Sound Nearshore study area is located along 2,500 marine shorelines of the 15,000 square mile basin of Puget Sound, Washington. The study team concluded that the shoreline has been shortened by 690 miles with the loss of 305 coastal embayments, 115 miles of delta, 120 miles of beaches and 93% of freshwater-oligohaline wetland areas throughout Puget Sound. A multi-agency team of Federal, State and local planners, scientists, and engineers have evaluated over 700 potential restoration sites and have now proposed a list of 19 sites for inclusion in the Tentatively Selected Plan. When completed, these sites will total nearly 5,000 acres of restored habitat, including critical habitat to support 13 species listed as endangered or threatened under the Endangered Species Act, as well as numerous Treaty protected Tribal fisheries. The Puget Sound Action Agenda, which is the over-arching State and Federal document that prioritizes actions for Puget Sound recovery, specifically lists the Puget Sound Nearshore study as a key near-term action. The proposed restoration projects recommended in the draft Feasibility Report would support key salmon recovery goals as outlined in the National Oceanic and Atmospheric Administration's Salmon Recovery Plan, under the Endangered Species Act. The project has broad based support from Tribes, the State of Washington, and other key stakeholders. The Feasibility Cost Share Agreement (FCSA) was executed September 2001, between the Department of the Army and the State of Washington Department of Fish and Wildlife. FCSA Amendment No. 1 was executed March 2009, and FCSA Amendment No. 2 was executed April 2012.

FY 2013 funds are being used to complete the draft Feasibility Report, an Environmental Impact Statement, and reviews for the Agency Decision Milestone. The funds requested in FY 2014 would be used to complete the National Environmental Policy Act documentation and Civil Works Policy Reviews of the final Feasibility Report. In accordance with the Corps Planning Program Modernization, this study has reduced its study costs. The preliminary estimated cost of the feasibility phase is \$21,976,000, to be shared on a 50-50 percent basis by Federal and non-Federal interests, except for an estimated \$388,000 for Independent External Peer Review that is 100% Federal. All or part of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$22,101,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	11,182,000
Feasibility Phase (Non-Federal)	10,794,000

The study authority is Section 209 of the Flood Control Act of 1962 (P.L.84-874).

The reconnaissance phase was completed in December 2000. The FCSA was executed September 2001, Amendment No. 1 was executed March 2009, and Amendment No. 2 was executed April 2012. The feasibility study is scheduled for completion in Fiscal Year 2014.

Division: Northwestern

District: Seattle

Puget Sound Nearshore Marine Habitat Restor, WA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014
 SURVEYS - NEW

	Total Estimated Federal Cost \$	Allocations Prior to FY 2013 \$	Allocation in FY 2013 \$	Budgeted Amount for FY 2014 \$	Additional to Complete After FY 2014 \$
Seattle Harbor, Washington (Completion)	100,000	0	0 2/	100,000 1/	0

Seattle District

Seattle Harbor study area is located between the East, West, and Duwamish Waterways navigation channel, which is located in Puget Sound's Elliott Bay in Seattle, WA. The harbor provides access to existing container terminals and other marine industrial users. A reconnaissance study would review existing major study documents related to the modification of the East and West Waterways, and investigate depths between -34 and -55 feet Mean Lower Low Water (MLLW). This study would determine potential deepening of the East and West Waterways of Seattle Harbor, to allow existing post panamax and potentially larger vessels to access existing container terminals. The results of the reconnaissance study would be used to assist in the determination of Federal interest. The current authorization does not provide current users adequate depth for unrestricted access to existing container terminals. The 34 foot authorized depth on the West Waterway and the stage 1 area of the East Waterway to 51 feet MLLW and stage 2 area of the East Waterway to 39 feet MLLW result in tidal delays at existing container terminals. A substantial competitive threat for the Port is coming from Prince Rupert in Canada. Some cargo and associated job loss has already occurred as a result of this international competition and Prince Rupert is aggressively pursuing increased market share of cargo destined for American markets. An initial appraisal under Section 216 completed March 2012 recommended preparation of a reconnaissance report. Fiscal Year 2014 work would include initiation and completion of the reconnaissance study report (905b). Port of Seattle is the potential non-Federal sponsor for the feasibility portion of the study.

The study authority is Section 216 of the Flood Control Act of 1970.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Skokomish River Basin, Washington	3,720,000	2,033,000	37,000	150,000	0 2/	650,000 1/	850,000

Seattle District

The Skokomish River, located in Mason County, Washington is the primary drainage basin for the southeast region of the Olympic Peninsula, carrying flow from its headwaters in the Olympic Mountains to its outlet in Hood Canal. The basin consists of 80 mainstream river miles and 260 miles of tributaries. The purpose of the study is to investigate opportunities for ecosystem restoration in a highly degraded system. Human activities have altered the Skokomish River's hydrologic and sediment processes and reduced the fisheries resource, resulting in the listing of four salmonid species under the Endangered Species Act (ESA) including Puget Sound Chinook Salmon, Hood Canal Summer Chum Salmon, Steelhead, and Bull Trout. The clearing of log jams, removal of riparian trees, disturbance of the streambanks, bank protection, side-channel closures, and flow alterations from Cushman Dam have contributed to an altered deposition pattern and limited habitat connectivity throughout the basin. Aggradations in the system limits channel capacity in the mainstream and causes the river flow to run subsurface during the summer low flow period. As a result, passage and migration corridors are blocked for endangered fish species during spawning season and fish are stranded out of the channel during high flow events. The ESA-listed salmon species would benefit from spawning, rearing, and migration habitat improvements to nationally recognized critical habitat, as well as nesting and rearing habitat for bald eagles. The primary improvements will likely be to the channel capacity and restoration of a continuous low flow channel to maintain fish passage for listed species as well as reconnections of isolated off channel habitats on Forest Service, private, and tribal lands. This study is also included in the Puget Sound Action Agenda and the State and Federal plan for Puget Sound recovery. The Feasibility Cost Share Agreement (FCSA) was executed July 2006 between the Department of the Army, Mason County, and the Skokomish Indian Tribe.

This study is not included in the Fiscal Year 2013 President's budget. Fiscal Year 2014 funds, plus any carry-in funds, will be used to continue Feasibility in accordance with the scope and schedule as aligned with the vertical team. In accordance with the Corps Planning Program Modernization, this study has been re-scoped and the study costs have increased. The estimated cost of the feasibility phase is \$6,472 (x1000), to be cost-shared on a 50-50 percent basis by the Corps of Engineers and the non-Federal sponsors. All or part of the non-Federal share may be in-kind services. Federal cost includes an Independent External Peer Review, estimated at approximately \$500,000. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 6,706,000
Reconnaissance Phase (Federal)	234,000
Feasibility Phase (Federal)	3,486,000
Feasibility Phase (Non-Federal)	2,986,000

The study authority is Section 209 of the Flood Control Act of 1962 (PL 87-874).

The reconnaissance phase was completed March 2000 and the FCSA was executed July 2006. The feasibility study completion date is TBD.

Division: Northwestern

District: Seattle

Skokomish River, WA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

CONSTRUCTION

IOWA

APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Missouri River Fish and Wildlife Recovery, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Tributaries (Continuing)

LOCATION: The Missouri River mainstem and its tributaries.

DESCRIPTION: Within the Missouri River basin, planned activities will recover and provide protection to species listed under the Endangered Species Act (ESA), and the ecosystems on which they depend, to address the effects of the operation of the Missouri River Mainstem Reservoir System, the Missouri River Bank Stabilization and Navigation Project (BSNP), and the Kansas River Project. Between Sioux City, Iowa and the mouth of the Missouri River, planned activities will also provide for mitigation of fish and wildlife habitat losses specifically resulting from the construction and operation of the Missouri River BSNP.

AUTHORIZATION: All existing authorized Corps of Engineers projects along the Missouri River and tributaries - including the Water Resources Development Acts (WRDA) of 1986, 1988, 1999, & 2007; National Industrial Recovery Act of 1933; Flood Control Acts of 1938, 1944, 1954; River and Harbor Act of 1945; as amended.

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	Status (1 Jan 2013) Entire Project	PERCENT COMPLETE 16%	PHYSICAL COMPLETION SCHEDULE TBD
Estimated Federal Cost	\$3,739,687,000				
Estimated Non-Federal Other Costs	0				
Total Estimated Project Cost	3,739,687,000				
Allocations to 30 September 2010	418,945,000				
Allocation for FY 2011	84,524,000				
Allocation for FY 2012	72,888,000				
Conference Allowance for FY 2013	72,000,000	<u>5/</u>			
Allocations through FY 2013	648,357,000	<u>1/2/3/6/</u>	18%		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	70,000,000		19%		
Programmed Balance to Complete after FY2014	3,021,330,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY2014	0				

1/ \$16,852,000 reprogrammed from the project.

2/ \$1,071,000 rescinded from the project.

3/ \$350,000 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$700,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The U.S. Fish & Wildlife Service (USFWS) 2003 Amended Biological Opinion (BiOp) concluded that the Corps' operation of the Missouri River Mainstem Reservoir System, Bank Stabilization and Navigation Project (BSNP) and Kansas River Project jeopardizes the continued existence of the endangered pallid sturgeon. Funding will be used to implement elements of the Reasonable and Prudent Alternative to Jeopardy for the pallid sturgeon, and actions necessary to preclude jeopardizing two other species listed under the ESA: the endangered interior least tern and threatened piping plover. These measures to avoid jeopardy to the listed species include enhanced and accelerated shallow water habitat construction and floodplain connection for the pallid sturgeon, enhanced emergent sandbar habitat construction for nesting tern and plover, additional pallid sturgeon propagation support, more comprehensive population assessment for the three species, an intensive research, monitoring and evaluation program for the species, and an adaptive management strategy that includes USFWS participation in a Missouri River Recovery Implementation Committee (MRRIC) that includes diverse stakeholder participation.

Division: Northwestern

District: Omaha/Kansas City

Missouri River Fish and Wildlife Recovery,
IA, KS, MO, MT, NE, ND, SD, and Tributaries

1 May 2013

NWD-37

Below Sioux City, the project will restore and/or preserve natural ecosystem functions of the Missouri River floodplain. Terrestrial habitats will include wetlands, prairie grass and bottomland hardwood plantings. Some existing levees will be relocated away from the river or breached to reconnect the floodplain. Chutes and backwater areas will be excavated or dredged and river banklines modified to increase aquatic habitats and riverine diversity. As originally conceived, the program would establish approximately 120 individual mitigation sites, creating a riparian corridor over time. Lands required for implementation will be acquired from willing sellers to the maximum extent possible.

FISCAL YEAR 2013: The total unobligated dollars are being used to first address the highest priority efforts to comply with the USFWS BiOp requirements followed by critical mitigation efforts below Sioux City. Selected mitigation sites will also be prioritized to also best respond to overlapping requirements of the BiOp. Design work on the fish passage phase of the Lower Yellowstone Intake project will continue in FY 2013. Current estimated execution plan includes effort as follows:

Item	Amount	
Program Management Activities	\$ 5,900,000	
Lower Yellowstone Intake	2,000,000	
Endangered Species Research and Evaluation	17,500,000	
MRRIC Coordination	1,800,000	
NEPA Activities	2,100,000	
Shallow Water Habitat Construction	26,589,000	
Emergent Sandbar Habitat (terns and plovers)	6,300,000	
Real Estate Acquisition	<u>15,000,000</u>	
Total	\$77,189,000	<u>8/</u>

FISCAL YEAR 2014: The requested amount will be used to first address the highest priority efforts to comply with the USFWS BiOp requirements followed by critical mitigation efforts below Sioux City. Selected mitigation sites will also be prioritized to also best respond to overlapping requirements of the BiOp. Construction on the fish passage phase of the Lower Yellowstone Intake project will begin in FY 2014. Current estimated execution plan includes effort as follows:

Item	Amount
Program Management Activities	\$ 5,500,000
Lower Yellowstone Intake	20,000,000
Endangered Species Research and Evaluation	14,700,000
MRRIC Coordination	1,800,000
NEPA Activities	3,000,000
Shallow Water Habitat Construction	10,000,000
Emergent Sandbar Habitat (terns and plovers)	3,000,000
Real Estate Acquisition	<u>12,000,000</u>
Total	\$70,000,000

8/ Includes unobligated carry-in from FY 2012.

Division: Northwestern

District: Omaha/Kansas City

Missouri River Fish and Wildlife Recovery,
IA, KS, MO, MT, NE, ND, SD, and Tributaries

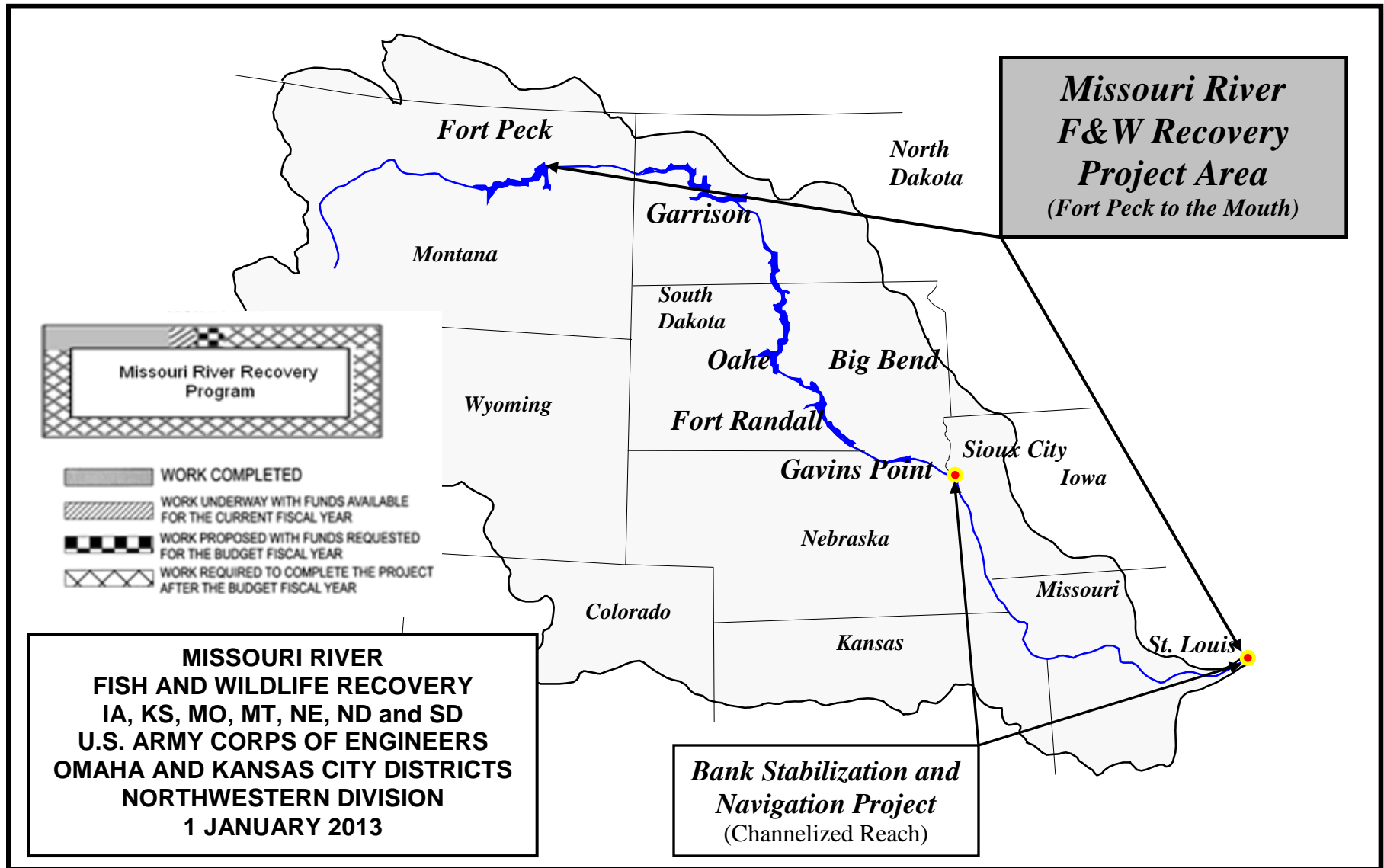
NON-FEDERAL COSTS: Not applicable

STATUS OF LOCAL COOPERATION: Endangered Species Act (ESA) recovery is a Federal responsibility. The 1986 and 1999 authorizing acts for the mitigation below Sioux City provides that the entire cost of the project, including all lands, easements, rights-of-way, and relocations, and all operation and maintenance costs be borne by the Federal Government with no costs to either local or state governments. Therefore, there is no non-Federal sponsor for the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal estimate of \$3,739,687,000 is the same as last presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The 2003 Amended Biological Opinion was prepared in response to the Corps' proposed revision of the Missouri River Master Water Control Manual as discussed in the supporting National Environmental Policy Act (NEPA) documents. However, the scope of the Amended Biological Opinion is broader than dam operations. Both programmatic and site-specific NEPA documents are being prepared to fulfill NEPA responsibilities for compliance with the 2003 Amended Biological Opinion. The Missouri River Mitigation Project Final Environmental Impact Statement (EIS) was filed with the U.S. Environmental Protection Agency on 23 December 1982. A supplement to the EIS was completed to allow acquisition and habitat development on the 118,650 acres authorized in WRDA 1999. The Record of Decision was signed 12 June 2003.

OTHER INFORMATION: Funds to initiate pre-construction engineering and design of the BSNP mitigation project were appropriated in FY 1990. Initial construction funds for the BSNP mitigation project were appropriated in FY 1992. Funding for the combined ESA and mitigation efforts, now known as Missouri River Fish and Wildlife Recovery, were first appropriated in FY 2005.



KANSAS

APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Turkey Creek Basin, Kansas City, Kansas and Missouri (Continuing)

LOCATION: The 23 square mile urban Turkey Creek basin drains Johnson and Wyandotte Counties in Kansas, and a portion of Kansas City, Missouri. Turkey Creek parallels Interstate Highway 35 for much of its length and flows through a tunnel into the Kansas River approximately three miles upstream of its confluence with the Missouri River.

DESCRIPTION: The plan of improvement consists of approximately ten thousand feet of urban channel modification, a levee section, the raising of two railroad bridges, 12.7 acres of riparian planting and four large drainage interceptor pipelines. A dual flood threat exists in the affected area, which consists of Turkey Creek over-bank flow and localized hillside runoff. Either flood source can cause considerable damage. The channel modification addresses the channel flooding threat, and the interceptors address the hillside component.

AUTHORIZATION: Section 101 of the Water Resources Development Act of 1999 (PL 106-53) and Section 123 of the Consolidated Appropriations Act of 2003.

REMAINING BENEFIT – REMAINING COST RATIO: 2.5 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 5.625 (FY 2004)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest economic update approved in August 2011 at 2011 price levels.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$75,961,000	Entire Project	69	TBD
Estimated Non-Federal Cost		45,539,000			
Cash Contribution	24,684,000				
Other Costs	20,855,000				
Total Estimated Project Cost		121,500,000			
Allocations to 30 September 2010		44,336,000			
Allocation for FY 2011		11,975,000			
Allocation for FY 2012		6,000,000			
Conference Allowance for FY 2013		4,000,000	<u>5/</u>		
Allocations through FY 2013		66,311,000	<u>1/2/3/6/</u> 87%		
Estimated Unobligated Carry-In Funds		0	<u>4/</u>		
Presidents Budget for FY 2014		6,000,000	95%		
Programmed Balance to Complete after FY 2014		3,650,000	<u>7/</u>		
Unprogrammed Balance to Complete after FY 2014		0			

1/ \$0 reprogrammed to (from) the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$1,960,206 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Channel Modification: 10,000 feet, Levee: 2,800 feet, Tunnel: 1,300 feet, Railroad Bridge Raises: 2 each, Interceptors: 16,000 feet, and Riparian Planting: 12.7 Acres.

JUSTIFICATION: The Turkey Creek basin is a 23-square-mile area within Kansas City, Kansas and suburbs in Johnson and Wyandotte Counties. The basin is nearly 100 percent urbanized, and a significant amount of development exists within the flood plain. Commercial and industrial investment, valued at over \$139,000,000, along with residential and other property valued at approximately \$9,000,000, are subject to flood damage. There are almost 500 businesses within the project area accounting for more than 6,000 jobs. Phasing of channel construction to coincide with widening of Interstate Highway 35 by the Kansas Department of Transportation (KDOT) resulted in significant project cost savings. KDOT's work on the channel is complete. A dual flood threat exists in the project area that consists of Turkey Creek over-bank flows and localized hillside runoff. Either flood source can cause considerable damage. Average annual damages without the project are estimated at \$11,700,000, and with the project at \$3,200,000. Six damaging floods have occurred since 1977. The flood of

Division: Northwestern

District: Kansas City

Turkey Creek Basin, KS & MO

1 May 2013

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JUSTIFICATION (Continued)

record occurred in July 1993 causing one fatality and damages estimated at \$20,000,000 in 1993. Another flood of similar magnitude to the 1993 event occurred in October of 1998. The recent severe floods have occurred at night and on weekends when the commercial industrial corridor was inactive. A flood of similar magnitude occurring during normal business hours has the potential to result in multiple fatalities. The authorized project includes construction of channel modifications with a one-percent level of protection and tributary floodwater diversion. The average annual benefits are \$8,487,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue Kansas Interceptors Construction	\$4,100,000	
Continue Channel Construction	200,000	
Engineering, Design and Construction Mgmt	<u>1,000,000</u>	
Total	\$5,300,000	<u>8/</u>

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Complete Kansas Interceptors Construction	\$500,000
Complete Channel Construction	4,500,000
Initiate Missouri Interceptor Design	700,000
Construction Mgmt	<u>300,000</u>
Total	\$6,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated material disposal areas.	4,300,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	6,918,000	

Division: Northwestern

District: Kansas City

Turkey Creek Basin, KS & MO

	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation (continued)		
Pay 100% of the cost allocated to the Mission Road Interceptor and increasing the level of protection of the Missouri Interceptor from 10 years to 15 years (Locally Preferred Plan).	4,637,000	
Credit allowed based on prior work.	5,000,000	
Pay costs allocated to flood control to bring the non-Federal share of flood control costs to 35 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	24,684,000	112,000
Total Non-Federal Costs	45,539,000	112,000

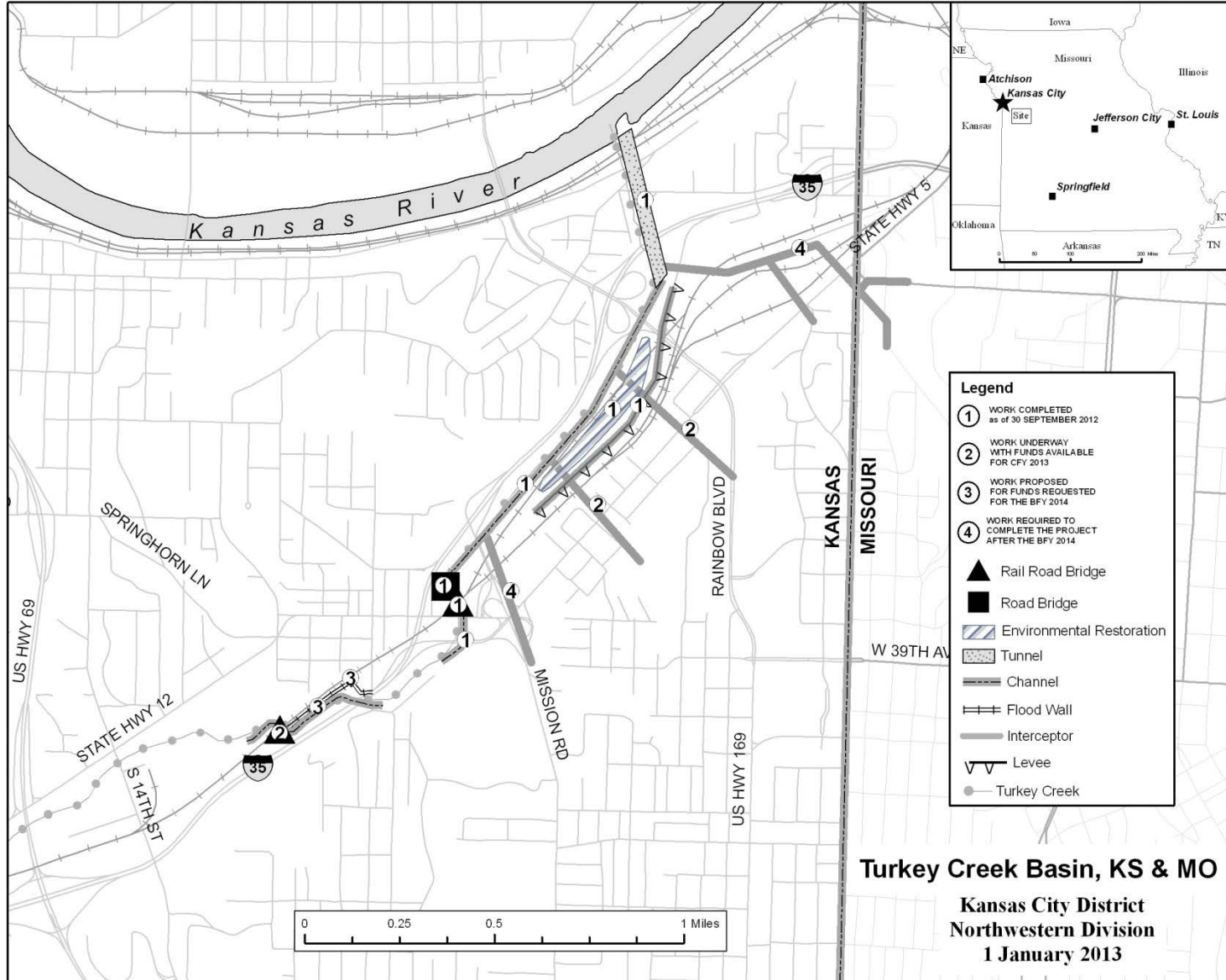
STATUS OF LOCAL COOPERATION: The City of Kansas City, Missouri and the Unified Government of Wyandotte County and Kansas City, Kansas expressed their intent to sponsor the project and a statement of financial capabilities in letters provided in January 2003 and November 2002 respectively. The Project Cooperation Agreement was signed 17 July 2006, following completion of tunnel work initiated by the Sponsor.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$75,961,000 is an increase of \$788,000 from the latest estimate (\$75,173,000) presented to Congress (FY 2013). This change includes the following items.

Post Contract Award and Other Estimating Adjustments	\$788,000
Total	\$788,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Revised Environmental Assessment, dated January 2003, concluded that no significant impacts, which would adversely affect the quality of the environment, were identified for the plan for flood protection measures for the lower Turkey Creek Basin. The District Commander signed a Finding of No Significant Impact February 4, 2003.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1998 and funds to initiate construction were appropriated in FY 2004.



MISSOURI

APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Blue River Channel, Kansas City, Missouri (Completion)

LOCATION: The project is located along the Blue River and tributaries in Kansas City, Jackson County, Missouri, and extends from near its mouth (located at Missouri river mile 358.0) to 63rd Street, channel mile 12.5.

DESCRIPTION: The project plan consists of a channel modification along 12.5 miles of the Blue River channel providing flood protection for a once in 30-year flood and reducing flooding for less frequent events.

AUTHORIZATION: Section 201 of the 1970 Flood Control Act (PL 91-611)

REMAINING BENEFIT - REMAINING COST RATIO: N/A - Project construction is substantially complete.

TOTAL BENEFIT-COST RATIO: 2.7 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 6 5/8 percent (FY 1979).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest economic update approved in July 2007 at 2007 price levels.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$248,133,000	Entire Project	98	2015
Estimated Non-Federal Costs		38,292,000			
Cash Contribution	0				
Other Costs	38,292,000				
Total Estimated Project Cost		\$286,425,000			
Allocations to 30 September 2010		237,189,000			
Allocation for FY 2011		3,992,000			
Allocation for FY 2012		2,940,000			
Conference Allowance for FY 2013		1,000,000	5/		
Allocations through FY 2013		245,121,000	1/2/3/6/ 98%		
Estimated Unobligated Carry-In Funds		0	4/		
Presidents Budget for FY 2014		3,012,000	100%		
Programmed Balance to Complete after FY 2014		0	7/		
Unprogrammed Balance to Complete after FY 2014		0			

Division: Northwestern

District: Kansas City

Blue River Channel, Kansas City, MO

1/ \$0 reprogrammed to (from) the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Bridge Alterations at Federal Cost: Railroad Bridges - Modify – 15, \$23,868,000; Bridge Alterations at Non-Federal Cost: Highway Bridges - Modify – 4, \$7,502,000; and Channel Improvement: Length Main Stem, Blue River Channel, 12.5 miles.

JUSTIFICATION: The Blue River basin lies completely in the Kansas City Metropolitan Region, with a 2000 population of 1,776,000 persons. The basin drains an area of 272 square miles and is subject to cloudbursts, prolonged rainstorms, floods, and extended drought periods. The maximum flood of record in the basin occurred in September 1961 and caused an estimated \$8,000,000 in damages. An August 1982 flood caused an estimated \$3,300,000 in damages, and an October 1986 flood along the Brush Creek tributary of the river caused an estimated \$209,000 in damages in the lower flood plain. A major flood occurred on the lower portion of the river in May 1990 and caused damages estimated at \$100,800,000. The July 1993 flood was not severe in this basin, causing damages estimated at \$60,000. The authorized project would have prevented all but minor damages caused by the 1961 event, and all damages caused by the later events. The channel project provides for about a 30-year level of protection to 3,400 acres in the lower basin, including the Blue River Valley Industrial District. The average annual benefits are \$55,581,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Item	Amount	
Continue Construction Habitat Mitigation	\$400,000	
Continue Channel Construction	1,900,000	
Planning, Engineering, and Design	300,000	
Construction Management	<u>200,000</u>	
Total	\$2,800,000	<u>8/</u>

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Item	Amount
Complete Construction	\$2,412,000
Planning, Engineering, and Design	300,000
Construction Management	<u>300,000</u>
Total	\$3,012,000

NON-FEDERAL COSTS: Local interests are required to furnish without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project; hold and save the United States free from damages due to construction; perform without cost to the United States necessary highway, highway bridge, and utility alterations required in connection with this project; maintain and operate the project after completion in accordance with regulations prescribed by the Secretary of the Army; and adequately inform all affected persons, at least annually, that the project will not provide complete flood protection. The investment is broken down as follows:

Requirements of Local Cooperation:	Payments During Construction Costs	Annual Operation, Maintenance and Replacement
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$19,171,000	\$67,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities.	\$19,121,000	\$43,000
Total Non-Federal Costs	\$38,292,000	\$111,000

STATUS OF LOCAL COOPERATION: The Section 221 Local Cooperation Agreement was signed by the Kansas City District Engineer on 8 September 1983. The City of Kansas City, Missouri provided all the rights-of-way for Stages 1 and 2 constructions that have been completed. Acquisitions for Stage 3 construction are substantially complete.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$248,133,000 is a decrease of \$2,426,000 from the latest estimate (\$250,559,000) presented to Congress (FY 2013). This change includes the following items.

Post Contract Award and Other Estimating Adjustments	(\$2,426,000)
Total	(\$2,426,000)

Division: Northwestern

District: Kansas City

Blue River Channel, Kansas City, MO

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Final statement on Blue River Basin plan made in connection with preauthorization studies was filed with the Council on Environmental Quality (CEQ) on 13 November 1970. A more complete draft statement on the Blue River Basin plan, including specific information on the impacts of the Blue River Channel, was filed with the CEQ on 11 April 1974. The final statement was forwarded to HQUSACE on 24 October 1974, and was filed with the CEQ on 8 September 1975.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1973 and funds to initiate construction were appropriated in FY 1979.



APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Kansas Citys, Missouri and Kansas (Continuing)

LOCATION: The existing Kansas Citys, Missouri and Kansas Local Protection Project consists of a system of seven levee units along both banks of the Missouri and Kansas Rivers in the Kansas City Metropolitan area.

DESCRIPTION: The North Kansas City (NKC) Levee Unit is located along the left bank of the Missouri River in North Kansas City, MO. Design deficiency corrections to address underseepage concerns are required at two locations, the Harlem area and the National Starch area. Modifications include the construction of relief wells and collector piping.

The Fairfax-Jersey Creek Unit is located on the left bank of the Kansas River and the right bank of the Missouri River in Kansas City, KS. Design deficiency modifications are proposed at the Board of Public Utilities (BPU) floodwall to provide stability reinforcements and underseepage control needed to provide the originally authorized level of performance. Reconstruction modifications are required at the 1,400-foot long Jersey Creek Sheet-pile Wall. Portions of this wall require replacement and 590 feet of new wall is needed.

The Argentine Unit is located on the right bank of the Kansas River in Kansas City, KS. Proposed reconstruction modifications include raising the unit height and replacing or modifying three pump stations and several closure and drainage structures.

The East Bottoms Unit is located on the right bank of the Missouri River in Kansas City, Missouri. Reconstruction modifications for underseepage improvements are needed including relief wells and buried collector pipeline.

AUTHORIZATION: 1936 and 1944 Flood Control Acts; Sec 1001 (28) Water Resources Development Act 2007.

REMAINING BENEFIT – REMAINING COST RATIO: 5.9 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 5.4 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 8.0 to 1 at 5.125 percent (FY 2010)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Level I Economic Update approved in June 2012 at 2012 price levels.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		68,120,000	Entire Project	5%	TBD
Estimated Non-Federal Cost		36,680,000			
Cash Contribution	33,212,000				
Other Costs	3,468,000				
Total Estimated Project Cost		104,800,000			
Allocations to 30 September FY 2010		2,075,000			
Allocation for FY 2011		2,994,000			
Allocation for FY 2012		490,000			
Conference Allowance for FY 2013		7,734,000	<u>5/</u>		
Allocations through FY 2013		13,293,000	<u>1/2/3/6/</u>	19%	
Estimated Unobligated Carry-In Funds		0	<u>4/</u>		
Presidents Budget for FY 2014		11,000,000		32%	
Programmed Balance to Complete after FY 2014		43,827,000	<u>7/</u>		
Unprogrammed Balance to Complete after FY2014		0			

1/ \$0 reprogrammed to (from) the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$2,025,177 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: NKC Levee: underseepage control improvements in 2 areas (Harlem and National Starch sites) Deficiency Correction; Fairfax-Jersey Creek levee unit includes: (1) BPU 1,446 linear feet (lf) of floodwall strengthening – Deficiency Correction and (2) Jersey Creek Sheet-pile Wall 1,400 lf Reconstruction; East Bottoms Levee – underseepage improvements; and Argentine Levee – levee raise to provide original authorized protection.

JUSTIFICATION: NKC levee under-seepage control design deficiency (NKC Levee Unit): Failure will result in major life safety threats and property damage. Design deficiencies pose a risk of under-seepage failure for the NKC levee unit under major flood events. The project modification will provide added under-seepage control keeping pressures within appropriate design criteria. NKC levee unit provides protection to a wide range of businesses plus railroad yards, Kansas City Missouri drinking water supply facilities, and the entire downtown Kansas City airport. The unit protects approx \$3,000,000,000 total investment and over 25,000 employees and 5,000 residents. Almost all of the North Kansas City community is located within the unit.

Division: Northwestern

District: Kansas City

Kansas Citys, MO & KS

1 May 2013

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Fairfax Board of Public Utilities (BPU) floodwall foundation design deficiency (Fairfax-Jersey Creek Levee Unit): Failure will result in major life safety threats and property damage. There is a significant risk of floodwall failure which will affect entire Fairfax-Jersey Creek protected area under the extreme flood conditions. The BPU power plant which serves much of Kansas City, Kansas is adjacent to the floodwall. Overall, the Fairfax Industrial District is a major manufacturing hub including large a General Motors plant and several other Fortune 500 corporations, along with many smaller businesses. Approximately \$3,000,000,000 total investment and 11,000 employees are protected by this unit.

Jersey Creek Sheet-pile Wall – Reconstruction – Failure will result in major life safety threats and property damage. This site poses a risk of sheetpile failure which would affect the entire Fairfax-Jersey Creek protected area under extreme flood conditions. Reconstruction includes replacing the wall located along the Missouri and Kansas Rivers confluence adjacent to the Fairfax Industrial District. Overall, the Fairfax Industrial District is a major manufacturing hub including a large General Motors plant and several other Fortune 500 corporations along with many smaller businesses. Approximately \$3,000,000,000 total investment and 11,000 employees are protected by this unit.

Argentine Unit – Reconstruction – Failure will result in major life safety threats and property damage. The unit poses a high risk of levee overtopping and failure which will affect a large residential and business area of Kansas City, KS. Reconstruction includes raising the unit located along the Kansas River and modifying or replacing three pump stations and several closure and drainage structures. Approximately \$2,500,000,000 total investment, 10,700 employees, and over 3,400 residents are protected by this unit.

East Bottoms Unit – Reconstruction – Failure will result in major life safety threats and property damage. The unit poses a risk of underseepage failure which will affect a large industrial, business, and residential area of Kansas City, MO. Reconstruction includes the installation of relief wells and buried collector piping. Approximately \$4,500,000,000 total investment, 20,100 employees, and over 3,200 residents are protected by this unit.

The average annual benefits are \$41,336,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Initiate Fairfax-Jersey Creek Sheetpile Construction	2,100,000	
Initiate Fairfax-BPU Floodwall Construction	4,100,000	
Continue East Bottoms Design	200,000	
Complete Fairfax-Jersey Creek Sheetpile Design	534,000	
Complete Fairfax-BPU Floodwall Design	379,000	
Construction Management	<u>455,000</u>	
Total	\$7,768,000	<u>8 / 9/</u>

8/ Includes unobligated carry-in from FY2012.

9/ The work items have been adjusted between the four non-Federal Sponsors to maintain progress on the overall project completion.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate Argentine Unit Design	100,000
Initiate East Bottoms Construction	775,000
Continue Fairfax-BPU Floodwall Construction	6,130,000
Complete East Bottoms Design	95,000
Complete Fairfax-Jersey Creek Sheetpile Construction	3,420,000
Construction Management	<u>480,000</u>
Total	\$11,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation: Provide lands, easements, rights of way, and borrow and excavated material disposal areas which may be reduced for credit allowed based on prior work after reductions for such credit have been made in the required cash payments.	\$2,215,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	1,253,000	
Pay for Plans and Specifications for Relocations of utilities and roads	0	
Pay the costs allocated to flood control to bring the non-Federal share of flood control costs to 35 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	33,212,000	\$93,000
Total Non-Federal Costs	\$36,680,000	\$93,000

Division: Northwestern

District: Kansas City

Kansas Citys, MO & KS

STATUS OF LOCAL COOPERATION: The following is the status of cost sharing agreements:

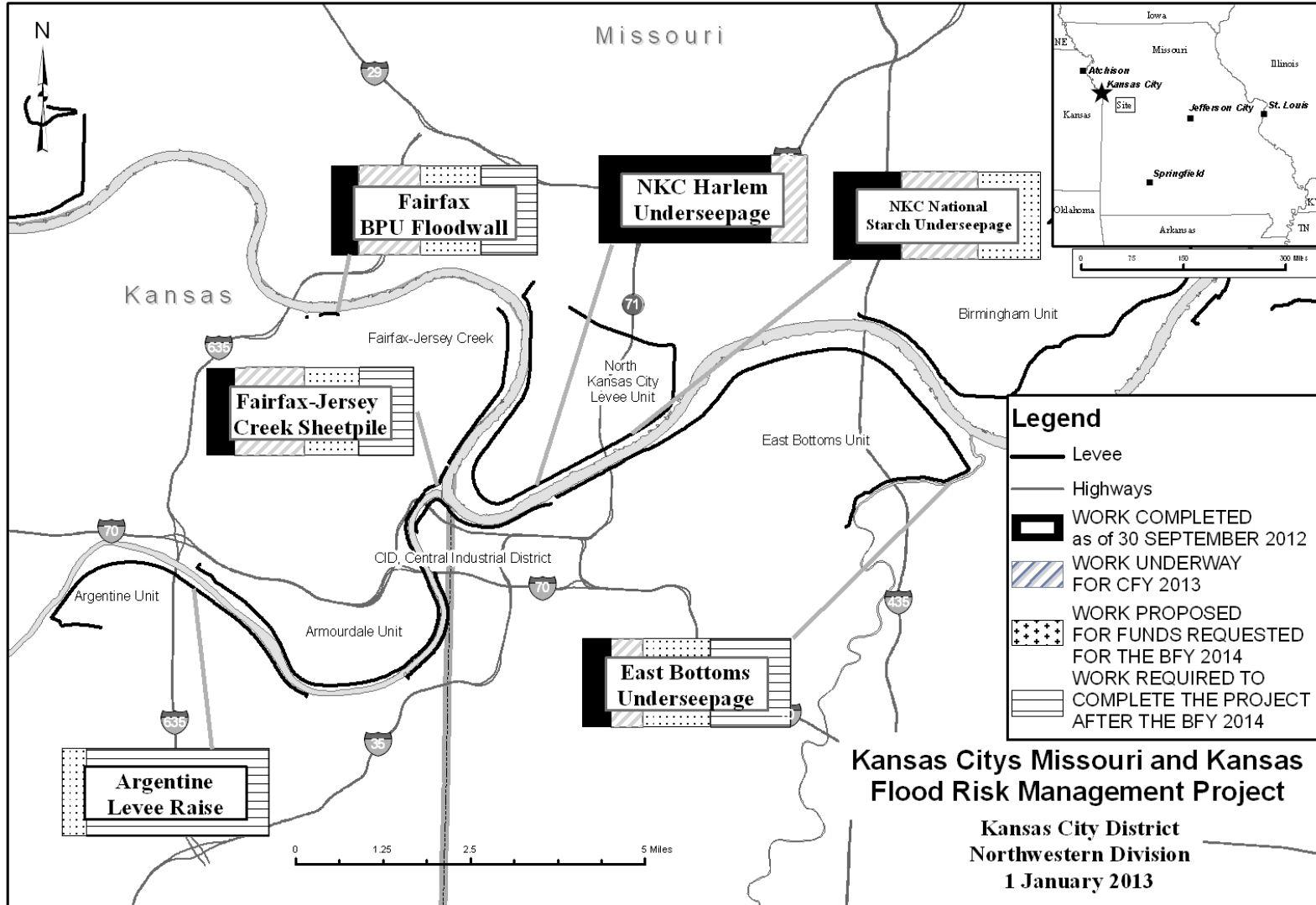
- (1) Jersey Creek Sheetpile: A Design Agreement (DA) was executed in January 2010 with the Kaw Valley Drainage District and the Project Partnership Agreement (PPA) is scheduled for execution in May 2013.
- (2) Fairfax- BPU Floodwall: A DA was executed in August 2008 with the Fairfax Drainage District and the PPA is scheduled for execution in May 2013.
- (3) East Bottoms: A DA was executed in February 2012 with the Water Service Department of Kansas City, Missouri and the PPA is scheduled for execution in May 2014.
- (4) Argentine: A DA is scheduled for execution in March 2014.
- (5) North Kansas City: The PPA was executed in June 2011 with the North Kansas City Levee District.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$68,120,000 is an increase of \$1,976,000 from the latest estimate (\$66,144,000) presented to Congress, (FY2013). This change includes the following:

Item	Amount
Design Changes	\$1,976,000
Total	\$1,976,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: The Interim Feasibility Report and Environmental Impact Statement (EIS), dated August 2006 with Addendum dated December 2006 addresses opportunities for flood risk reduction for the Argentine, East Bottoms, Fairfax-Jersey Creek, Birmingham and North Kansas City levee units of the Kansas Citys Local Flood Damage Reduction Project. The recommended plan has relatively minor impacts to the natural environment with overall positive benefits to the socio-economic environment. Impacts to the natural environment are minor because the project is located within a previously disturbed environment that is highly industrial and urbanized. All practicable means to avoid and/or minimize adverse environmental effects have been incorporated into the recommended plan. The Record of Decision was signed by the Assistant Secretary of the Army (CW) on 21 Nov 2007.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 2007 and funds to initiate construction were appropriated in FY 2010.



NORTH DAKOTA

APPROPRIATION TITLE: Construction, Hydropower (Major Rehabilitation), Fiscal Year 2014

PROJECT: Garrison Dam and Power Plant, North Dakota (Completion)

LOCATION: The Garrison Dam Project is located in McLean and Mercer Counties in North Dakota on the Missouri River approximately 77 river miles upstream of Bismarck near Riverdale, North Dakota.

DESCRIPTION: Garrison Dam and Reservoir is a multi-purpose project consisting of a rolled earth-filled dam with a sheet pile cutoff, a hydroelectric power plant, and a reservoir with storage capacity of 23,821,000 acre feet for flood control, navigation, power, recreation, irrigation, and municipal supply. Five hydraulic turbine-driven generating units with a total plant rated capacity of 518 megawatts (MW) and the operation and maintenance facilities are housed in the powerhouse. The present hydropower benefits directly associated with Garrison Power Plant include (1) clean, non-polluting power generation for the region, and (2) average power generation revenues of about \$33,600,000 per year to the U.S. Treasury. This major rehabilitation project will replace the existing turbine runners on all five units with new runners designed to improve reliability and maximize efficiency over a broad range of operating conditions. Phase II was added by an addendum to the major rehabilitation report approved on 15 September 2004. The Phase II work will address upgrades to electrical components that will allow the project to maximize the full reliability and efficiencies obtained in the powerhouse upgrades.

AUTHORIZATION: Flood Control Act of 1944, PL 78-534 (existing project)

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because project is substantially complete.

TOTAL BENEFIT-COST RATIO: 3.3 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 7 3/4 percent (FY 1997)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Garrison Dam & Power Plant Major Rehabilitation Evaluation Report approved 27 February 1995 at 1994 price levels. Phase II benefits are from the Garrison Dam & Power Plant Major Rehabilitation Evaluation Report Addendum approved 15 September 2004 at 2004 price levels.

SUMMARIZED FINANCIAL DATA:

		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement	\$144,033,000		Entire Project	97	2014
Estimated Non-Federal Reimbursement	144,033,000		Phase I	100	
Estimated Federal Cost (Ultimate)	0		Phase II	95	
Estimated Non-Federal Cost	144,033,000				
Cash Contributions	\$ 0				
Other Costs	0				
Reimbursement, Power	144,033,000				
Total Estimated Project Cost	144,033,000				

Division: Northwestern

District: Omaha

Garrison Dam and Power Plant, ND

SUMMARIZED FINANCIAL DATA (continued)

Allocations to 30 September 2010	\$108,857,000		
Allocation for FY 2011	14,869,000		
Allocation for FY 2012	16,307,000		
Conference Allowance for FY 2013	0	<u>5/</u>	
Allocations through FY 2013	140,033,000	<u>1/2/3/6/</u>	97
Estimated Unobligated Carry-In Funds	0	<u>4/</u>	
President's Budget for FY 2014	4,000,000		100
Programmed Balance to Complete after FY 2014	0		
Unprogrammed Balance to Complete after FY 2014	0		

1/ \$16,140,000 reprogrammed to the project.

2/ \$217,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

PHYSICAL DATA: Phase I Power Installation: Original Project: 5 Units at 98 MW; Completed Project 5 Units at 113 MW
Phase II Electrical Reliability Equipment

JUSTIFICATION: The original components in the power generating system were circa 1950, were past the design lives, were inefficient, and had very low reliability. Phase 1 of the major rehabilitation project is complete and performed upgrades in the powerhouse to include generator rewind, turbine upgrades, and replacing existing turbine runners on all five units with new runners designed to improve reliability and maximize efficiency over a broad range of operating conditions. Phase II work is 95% complete and addresses upgrades to electrical components that will allow the project to maximize the full reliability and efficiencies obtained in the powerhouse upgrades. FY 2014 funds are requested to complete the switchyard installation. The new switchyard will maximize efficiencies gained in the upgrades of the turbines and generators as well as substantially reduce maintenance costs associated with the existing switchyard. Without the requested funds, the project will not be able to physically complete in FY 2014 and will not be able to maximize the benefits and efficiencies planned for the project when the major rehabilitation project began in 1997. Average annual benefits are as follows:

Annual Benefits	Amount
Deferred Maintenance Benefits	\$ 3,144,100
Restored Efficiency Benefits	7,903,500
Efficiency Improved Benefits	<u>5,457,400</u>
Total Benefits	\$16,505,000

Division: Northwestern

District: Omaha

Garrison Dam and Power Plant, ND

1 May 2013

NWD-61

FISCAL YEAR 2013: NA

FISCAL YEAR 2014: The existing switchyard is outdated, lacking in capability and is unreliable. The new switchyard will maximize the efficiencies gained in the upgrades of the turbines and generators as well as reduce substantially the maintenance costs associated with the existing switchyard. The requested amount will be applied as follows:

Complete Switchyard Installation & financially closeout the project	<u>4,000,000</u>
Total	\$4,000,000

NON-FEDERAL COSTS: Garrison Dam is a multi-purpose project, and the cost for the turbine runner modifications will benefit hydropower generation only. The hydropower from the Garrison power plant is marketed by Western Area Power Administration (WAPA), through which project costs are ultimately repaid to the Treasury. WAPA has provided a letter stating that they "will be able to market any additional power gained through increased efficiency of the turbines."

STATUS OF LOCAL COOPERATION: N/A

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$144,033,000 is an increase of \$23,026,000 from the latest estimate (\$121,007,000) presented to Congress (FY 2011).

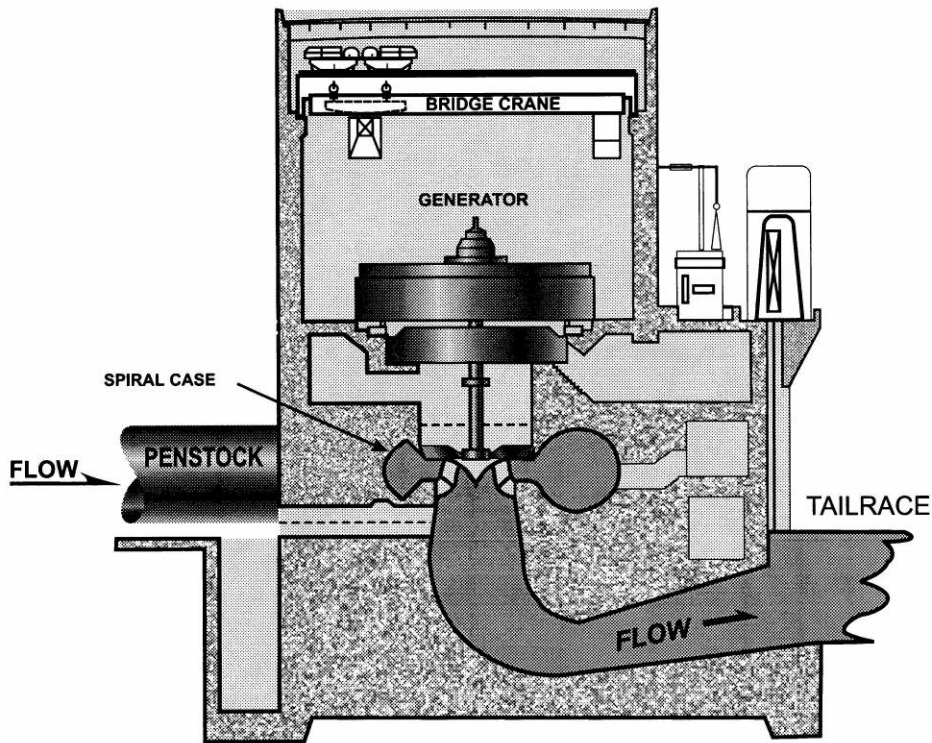
Item	Amount
Price escalation on construction features	\$ 4,026,000
Design changes & contract bid increases	<u>\$19,000,000</u>
Total	\$23,026,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The proposed rehabilitation is not a major Federal action that would significantly affect the quality of the human environment, and therefore did not require the preparation of an environmental impact statement. The U.S. Fish and Wildlife Service concurred with the "Finding of no Significant Impact."

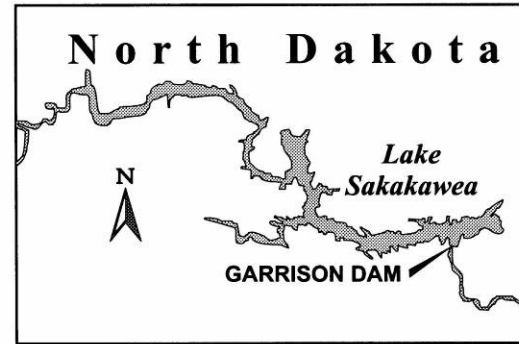
OTHER INFORMATION: Funds to initiate pre-construction engineering and design were first appropriated in 1997. There is no requirement to undertake fish and wildlife mitigation measures in conjunction with this rehabilitation project.

Although the capacity of the turbine generators is significantly increased, their capability was still limited to the existing equipment. Consequently an addendum to the Major Rehabilitation report was prepared and approved on 15 September 2004. The addendum report included replacement of the existing transformers, electrical power train, peripheral equipment, and switchyard equipment.

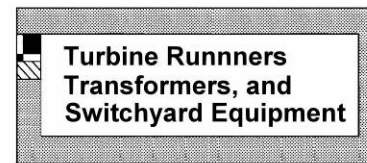
Initial construction of the powerhouse was completed in 1955.






**TRANSFER SECTION THRU
GARRISON DAM POWER PLANT**



VICINITY MAP



-  WORK COMPLETED
-  WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
-  WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR

**GARRISON DAM & POWER PLANT
NORTH DAKOTA
MAJOR REHABILITATION**
U.S. Army Engineer District, Omaha
Northwestern Division
1 January 2013

OREGON

APPROPRIATION TITLE: Construction, Navigation (Major Rehabilitation), Fiscal Year 2014

PROJECT: Columbia River at the Mouth, Oregon and Washington (New)

LOCATION: The project is located at the entrance of the Columbia River to the Pacific Ocean and is about 120 miles downstream of Portland, OR and Vancouver, WA.

DESCRIPTION: The project will rehabilitate the Mouth of Columbia River (MCR) jetty system which consists of three rubble-mound jetties, with a total originally authorized length of 10.2 miles, constructed from 1885-1939 on massive tidal shoals to secure consistent navigation through the coastal inlet. The North Jetty is about 2.5 miles long, the South Jetty is about 6.6 miles long and the Spur Jetty 'A' is about 1.1 miles long.

AUTHORIZATION: River & Harbors Act, 5 July 1884.

REMAINING BENEFIT - REMAINING COST RATIO: 1.1 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.1 to 1 at 7 percent

INITIAL BENEFIT - COST RATIO: N/A

BASIS OF BENEFIT COST RATIO: Benefits are from the major rehabilitation report approved in June 2012 at 2012 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
				Jetty 'A'	0%	TBD
				N. Jetty	0%	TBD
				South Jetty	0%	TBD
Estimated Federal Cost		\$257,201,000				
Programmed Construction	257,201,000					
Un-programmed Construction	0					
Estimated Non-Federal Cost		0				
Total Estimated Programmed Construction Cost		257,201,000				
Total Estimated Unprogrammed Construction Cost		0				
Total Estimated Project Cost		257,201,000				
Allocations to 30 September 2010		0				
Allocations for FY 2011		0				
Allocations for FY 2012		0				
Conference Allowance for FY 2013		0	<u>5/</u>			
Allocations through FY 2013		0	<u>1/</u> <u>2/</u> <u>3/</u> <u>6/</u>	0%		
Estimated Unobligated Carry-in Funds		0	<u>4/</u>			
President's Budget for FY 2014		1,000,000				
Programmed Balance to Complete after FY 2014		256,201,000	<u>7/</u>			
Un-programmed Balance to Complete After FY 2014		0				

1/ \$ 0 reprogrammed to (from) the project.

2/ \$ 0 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date the justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Rivers and Harbor Act of 5 July 1884 authorized construction of the South Jetty (first 4.5 miles) to attain a 30-foot deep navigation channel across the MCR bar. The Rivers and Harbor Act of 3 March 1905 authorized the extension of the South Jetty to 6.6 miles and construction of the North Jetty to 2.5 miles long to attain a 40-foot channel. Jetty A was authorized and constructed to 1.1 miles in length for channel stabilization in connection with the rehabilitation of the North Jetty. Its purpose was to assist in controlling the location and direction of the ebb tidal flow through the navigation entrance.

JUSTIFICATION: The MCR jetty system is in a state of structural decay. Continued deterioration, ongoing storm activity and the continued loss of sand shoal material at the foundation of each of the three MCR jetties, has positioned the jetty system for a series of frequent and costly emergency repairs. In the absence of specific and immediate repair actions, the jetties and sand shoals upon which they rest will further deteriorate, increasing the likelihood of a jetty breach which will cause significant and immediate impact to the navigation channel and commercial deep draft access to the Columbia River port facilities.

The benefit-to-cost ratio for this project does not accurately reflect the economic benefits attained from rehabilitation of the jetties. Rehabilitation of all three jetties is necessary to: (1) lessen wave heights and currents affecting the navigation channel thus improving safety; (2) decrease future O&M dredging; (3) improve structural reliability and (4) optimize the expenditure of Federal funds. The MCR jetty system is the most significant coastal navigation structure in the Pacific Northwest; one that provides economic benefits significantly beyond a system BCR of 1.1.

Functioning jetties at the MCR annually support the following:

- \$20,000,000,000 in international trade
- 42 million tons of cargo g/
- 4,000 vessel crossings g/
- 1,375 vessel crossings requiring 30-foot draft or greater g/
- More than 40,000 maritime-related jobs
- U.S. Coast Guard Search and Rescue activities

g/ Data from Waterborne Commerce of the United States, 2010

According to the Center for Economic Development and Research, the Columbia/Snake River navigation system is the number one export gateway for the Nation's wheat and barley exports. It is also the number one export gateway for west coast wood and mineral bulk exports and number one for automobile imports. Marine traffic passing the entrance of the Columbia River has increased by 34% from 32 million tons in 2003 to 42 million tons in 2010.

The Average Annual Benefits are: \$13,464,633

FISCAL YEAR 2013: N/A

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate and complete design of Jetty 'A'	\$1,000,000
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Division: Northwestern

District: Portland

Columbia River at the Mouth, OR & WA

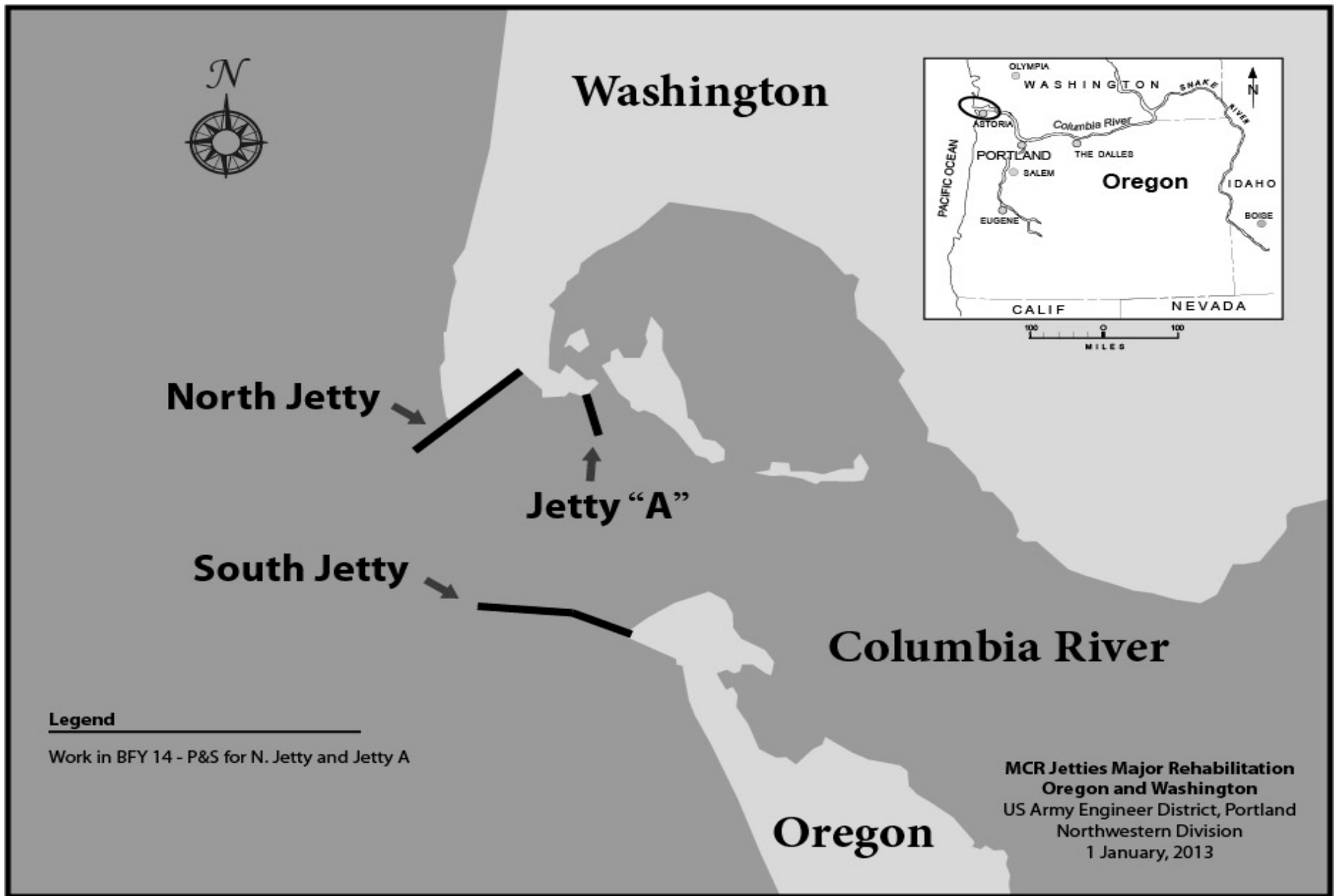
NON-FEDERAL COSTS: The MCR jetty system is a 100% U.S. Army Corps of Engineers (USACE) owned and maintained project. There are no non-Federal Sponsor costs.

STATUS OF LOCAL COOPERATION: The MCR jetty system is a 100% USACE owned and maintained project. There is no local cooperation required.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$257,201,000 is the initial estimate presented to Congress (FY 2014).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An EIS is not required. An Environmental Assessment was completed June 2012.

OTHER INFORMATION: The Major Rehabilitation Evaluation Report of the Columbia River at the Mouth, OR & WA, was approved June 2012.



APPROPRIATION TITLE: Construction, Navigation, Fiscal Year 2014

PROJECT: Columbia River Channel Improvements, Oregon and Washington (Continuing)

LOCATION: The project area begins at the mouth of the Columbia River (river mile 3) and extends upstream to the vicinity of the Port of Vancouver, Washington (river mile 106.5), and also includes the Lower Willamette River from its confluence with the Columbia River (river mile 101.5) upstream to the vicinity of downtown Portland (river mile 11.6).

DESCRIPTION: Lower Columbia River ports have been the primary shipping point for West Coast grain and feed grain exports for many years. More than 40 million tons of commerce annually is shipped to or from Lower Columbia River ports valued at \$16 billion in 2004. Increasing trade between the Pacific Northwest states and the Pacific Rim nations accentuated the need for a deepened navigation channel in the Lower Columbia River, to accommodate larger, deeper-draft vessels. When completed, the channel will be at a 43-foot depth and generally a 600-foot width. The purposes of the project are to improve the deep-draft transport of goods on the authorized navigation channel and to provide ecosystem restoration for fish and wildlife habitats.

AUTHORIZATION: P.L. 106-53 Water Resources Development Act of 1999, Section 101(b)(13), and P.L. 108-199 Consolidated Appropriations Act, 2004, Division H, Section 123.

REMAINING BENEFIT - REMAINING COST RATIO: To be determined. See Other Information.

TOTAL BENEFIT-COST RATIO: To be determined. See Other Information.

INITIAL BENEFIT - COST RATIO: 1.9 to 1 at 6-7/8% (FY 1999); Updated to 1.7 to 1 at 6-7/8% (FY 2003).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Report of the Chief of Engineers dated 23 December 1999; Updated in the Final Supplemental integrated Feasibility Report and Impact Statement dated 28 January 2003. See Other Information.

SUMMARIZED FINANCIAL DATA

		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
			Columbia River	99%	31 Dec 2011
			Willamette River	0%	TBD
Estimated Federal Cost		\$165,485,000			
Estimated Non-Federal Cost		62,580,000			
Cash Contributions	\$50,310,000				
Other Costs	12,270,000				
Total Estimated Project Cost		228,065,000			
Allocations through 30 September 2010		\$138,074,000			
Allocations for FY 2011		1,000			
Allocations for FY 2012		2,500,000			
Conference Allowance for FY 2013		0	<u>5/</u>		
Allocation for FY 2013		1,735,000	<u>8/</u>		
Allocations through FY 2013		142,310,000	<u>1/</u> <u>2/</u> <u>3/</u> <u>6/</u>	89%	
Estimated Unobligated Carry-In Funds		0	<u>4/</u>		
Presidents Budget for FY 2014		250,000			
Programmed Balance to Complete after FY 2014		3,300,000	<u>7/</u>		
Unprogrammed Balance to Complete after FY 2014		19,625,000			

1/ \$2,593,000 reprogrammed to the project.

2/ \$233,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED Costs of \$6,013,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features. See Other Information.

8/ ARRA funds reprogrammed to the project and obligated in first quarter FY 2013

PHYSICAL DATA: Deepen 103.5 miles of the Columbia River Channel from 40' to 43'. Deepen 11.6 miles of the Willamette River Channel from 40' to 43' Deepen three turning basins on the Columbia and three on the Willamette to 43'. Construct environmental mitigation and restoration features at selected locations.

JUSTIFICATION: The need for navigation improvements has been driven by the steady growth in waterborne commerce and the use of larger, more efficient vessels to transport bulk commodities. With the increased use of deep-draft vessels, limitations posed by the existing channel dimensions occur with greater frequency. By improving navigation, the opportunity to realize greater benefits would result from reducing transportation costs by allowing deep-draft vessels to carry more tonnage, and by reducing vessel delays. For these reasons, a coalition of the Lower Columbia River Ports (Port of Portland in Oregon and Vancouver, Kalama, Longview, and Woodland in Washington) committed to sponsor the project construction. Columbia and Willamette River ports are second in the world in grain exports. Each year, about 2,000 ocean-going ships transit the Columbia and Willamette Rivers, carrying approximately \$15 billion in imports and exports. Deepening the Columbia and Willamette Rivers from 40-43 feet is necessary to accommodate the larger, deeper-draft cargo ships that comprise a growing share of worldwide shipping fleets. Today, 20 percent of the wheat, 45 percent of the corn, 70 percent of the soybeans, and 90 percent of the containerized exports leaving lower Columbia River ports are carried on ships requiring some or all of the additional three feet in depth. The average tonnage for the period 2006-2010 in the Columbia River was 53,173,000 short tons. Average annual benefits are as follows:

Annual Benefits	Amount
Columbia River	\$23,545,000
Willamette River	TBD. See Other Information.

FISCAL YEAR 2013: N/A

FISCAL YEAR 2014: The requested amount will be applied as follows:

Prepare a PMP, execute a cost sharing agreement, and initiate preparation of a Limited Reevaluation Report (LRR) to refine remaining costs for the Willamette River Channel Improvement in advance of a recommended plan for the Willamette River portion of the project.	\$250,000
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NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements for Local Cooperation		
Provide lands, easements, rights of way	6,232,000	
Modify or relocate or remove utilities, roads bridges (except railroad bridges), Dredging of berthing areas, and other facilities, where necessary for construction of the project.	14,509,000	
Pay 25 percent of the joint costs allocated for Preconstruction Engineering and Design	1,558,000	

Division: Northwestern

District: Portland

Columbia River Channel Improvements, OR & WA

Pay 25 percent of the separable and joint costs allocated to the NED plan for navigation channel improvements offset by credit for authorized construction (\$12 million) by the sponsor from river mile 95 to the upstream end of the project, and have the amount credited against their total cost share.	45,276,000	
Pay \$1,587,000 for the incremental first costs of the locally preferred plan over the NED plan and pay an estimated \$450,000 in incremental annual operating and maintenance costs over the operating and maintenance costs of the NED navigation plan.	1,587,000	450,000
Pay 35 percent of the first costs allocated to ecosystem restoration and provide all costs for ecosystem restoration operation and maintenance	1,147,000	38,000
Pay 25 percent of the costs allocated for Willamette River navigation channel improvements.	5,795,000	
Total Non-Federal Costs	76,104,000	488,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsors for the Columbia River portion of the project are the Ports of Portland, Oregon and Vancouver, Kalama, Longview, and Woodland, Washington. The PCA was executed on 23 June 2004. The non-Federal sponsor for the Willamette River portion of the project is the Port of Portland.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$165,485,000 is an increase of \$55,461,000 from the latest estimate (\$110,024,000) presented to Congress (FY 2009). The latest estimate presented to Congress (FY 2009) only included the Columbia River portion of the project. See Other Information. This change includes the following:

Item	Amount
Post Contract Award and Other Estimating Adjustments	
Differing Site Conditions: Rock Removal at River Mile 88 (Columbia R)	\$32,286,000
Limited Reevaluation Report (LRR) for the Willamette River portion	3,550,000
Implement Willamette River Channel Improvements	<u>19,625,000</u>
Total	\$55,461,000

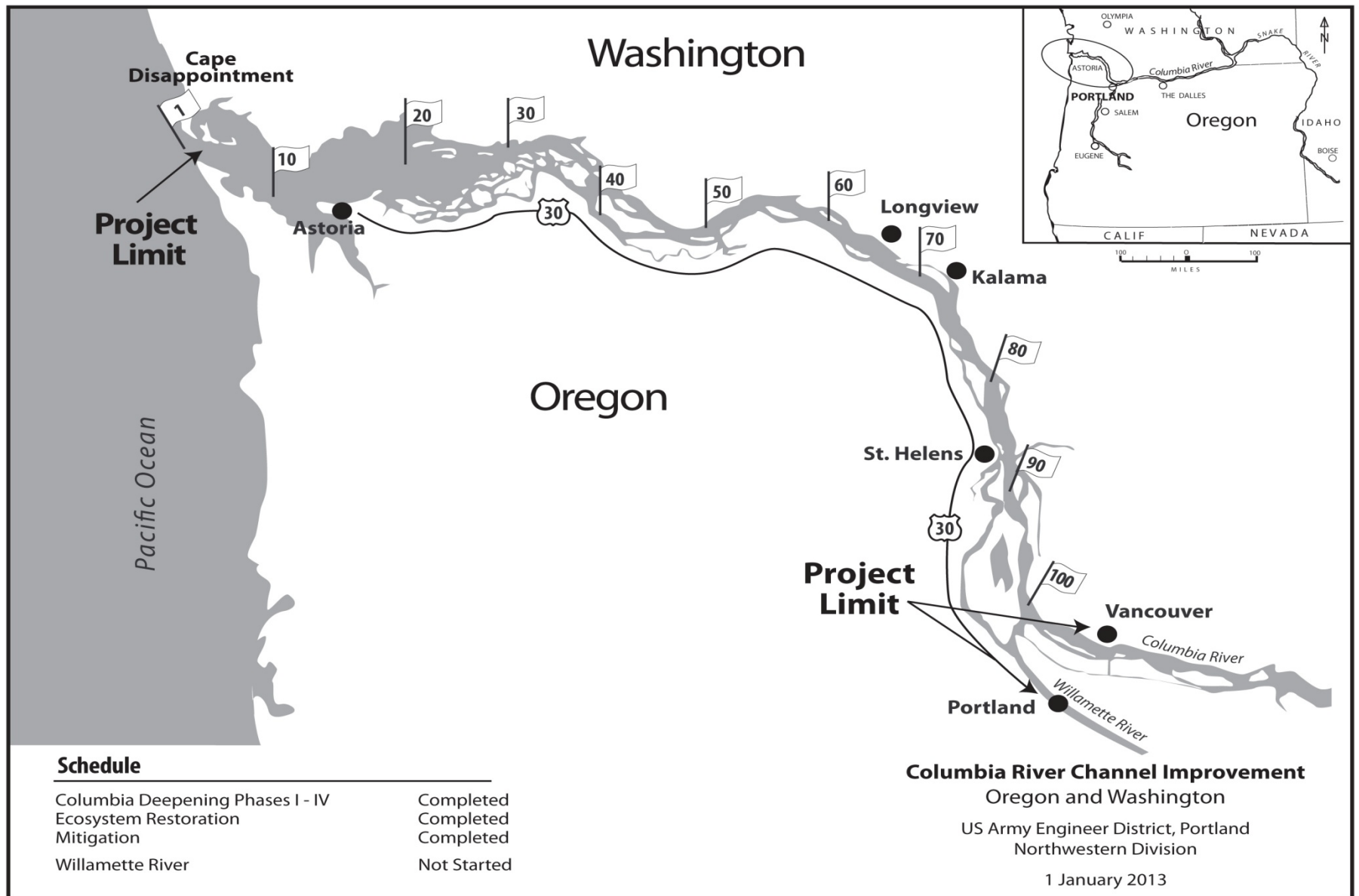
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Corps of Engineers completed a Biological Assessment for the project in December 2001. The National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USFWS) issued no-jeopardy Biological Opinions in May 2002. The Corps completed a Supplemental Integrated Feasibility Report and Environmental Impact Statement (EIS) in November 2002. The Record of Decision was signed on 9 January 2004. An update of the EIS will be completed as part of the LRR for the Willamette River portion of the project.

OTHER INFORMATION: The project was authorized for construction in WRDA 1999. Construction funding was first appropriated in FY 2001.

At the request of the non-Federal sponsors, the project was split into two elements, the Columbia River Channel Improvement and the Willamette River Channel Improvement. The Columbia River portion has been completed and the Willamette River portion was deferred to allow further coordination with the EPA and the State of Oregon. This deferral was to ensure the Willamette River portion incorporates the evaluation results and remediation plan for the Portland Harbor Superfund site which is planned for completion in late 2014.

The Programmed Balance to Complete includes preparation of an Limited Reevaluation Report (LRR) only. The budget amount being proposed is to initiate actions necessary for preparation of an LRR for the Willamette River portion in order to update project costs, benefits and environmental coordination necessary to support a decision to construct the Willamette River portion of the project. The LRR is expected to be completed in FY 2018.

The disposal sites consist of 29 upland sites, with a total of 1,681 acres, and three beach nourishment and two ocean disposal sites for the disposal of construction and subsequent channel maintenance dredged material. Fourteen of the upland disposal sites, totaling 1,025 acres, are currently in use. The non-Federal sponsors are in the process of acquiring the final three sites.



APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Elk Creek Lake, Oregon (Completion)

LOCATION: In Jackson County, on Elk Creek, a tributary of Rogue River, at river mile 1.7 about 26.5 miles north of Medford, Oregon.

DESCRIPTION: The Elk Creek Lake Project was authorized as one of three multiple-purpose dams in the Rogue River Basin. The three dams were designed to operate as a system to reduce flooding and to accomplish additional purposes of water supply, irrigation, fish and wildlife enhancement, hydropower, and recreation. Two of the three dams are complete and operating. Authorized features of the Elk Creek Lake project included a 249-foot high, roller-compacted concrete gravity dam, a gate controlled concrete chute spillway, regulating outlet conduits, a penstock for hydropower, and a multiple use intake tower attached to the upstream face of the dam.

Elk Creek Dam was partially completed prior to a court injunction which halted construction. The Corps' analysis determined that removing a section of the dam to provide a fish passage corridor through the project was the most cost effective and biologically sound method to provide fish passage through the partially completed project. Based on the selected alternative described in the final Environmental Impact Statement (EIS), Supplement Number 2, filed 1 May 1991, the project was redesigned for interim operation with no conservation pool and with fish passage. See the Other Information paragraph below.

AUTHORIZATION: Flood Control Act of 1962, PL 87-874

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the fiscal year for which Congress appropriated initial construction funds (FY 1971) was 1.01 to 1 at a 3 1/4 percent rate and was based on allocating a share of the system benefits to this project.

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
			Entire Project	99%	2014
Estimated Federal Cost		\$128,351,000			
Programmed Construction	128,351,000				
Un-programmed Construction	0				
Estimated Non-Federal Cost		0			
Total Estimated Project Cost		128,351,000			
Allocations to 30 September 2010		126,754,000			
Allocation for FY 2011		140,000			
Allocation for FY 2012		80,000			
Conference Allowance for FY 2013		194,000	<u>5/</u>		
Allocations through FY 2013		127,168,000	<u>1/ 2/ 3/ 6/ 99%</u>		
Estimated Unobligated Carry-in Funds		0	<u>4/</u>		
President's Budget for FY 2014		1,183,000		100%	
Programmed Balance to Complete after FY 2014		0	<u>7/</u>		
Un-programmed Balance to Complete after FY 2014		0			

1/ \$5,627,000 reprogrammed to the project.

2/ \$41,000 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$ 0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA (authorized); Dam: Type - Roller compacted concrete; Height - 249 feet; Length - 2,580; Concrete Volume - 1,100,000 cubic yards; Spillway: Type - Concrete gravity Gate; Ogee Section: Design discharge- 68,400 cfs; Gates - 3 (33 feet x 34 feet) tainter. Authorized Project was not completed, Fish Passage Corridor (Notch) completed September FY10, Upstream Channel Realignment completed September FY11.

Division: Northwestern

District: Portland

Elk Creek Lake, OR

1 May 2013

NWD-77

JUSTIFICATION: Passage through the existing diversion tunnel and continued operation of the existing temporary trap and haul facility was not a viable long-term solution to address the threatened species concerns in the watershed. The Corps biological assessment and National Marine Fisheries Service (NOAA Fisheries) biological opinion concluded that a fish passage corridor would be a better long-term solution. In 2007, US Army Corps of Engineers reviewed alternatives and concluded the fish passage corridor (notch) was the preferred alternative and a contract was awarded in March 2008 for this effort.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete Long Term Management Plan; implement noxious weed control and monitoring	\$249,000	8/
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8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Implement noxious weed control and monitoring	183,000
Complete construction and fiscal closeout	<u>1,000,000</u>
Total	\$1,183,000

NON-FEDERAL COST: N/A

STATUS OF LOCAL COOPERATION: N/A

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$128,351,000 is a decrease of \$937,000 from the latest estimate \$129,288,000 presented to Congress (FY 2013). This change includes the following item:

Item	Amount
Design Changes	(\$937,000)

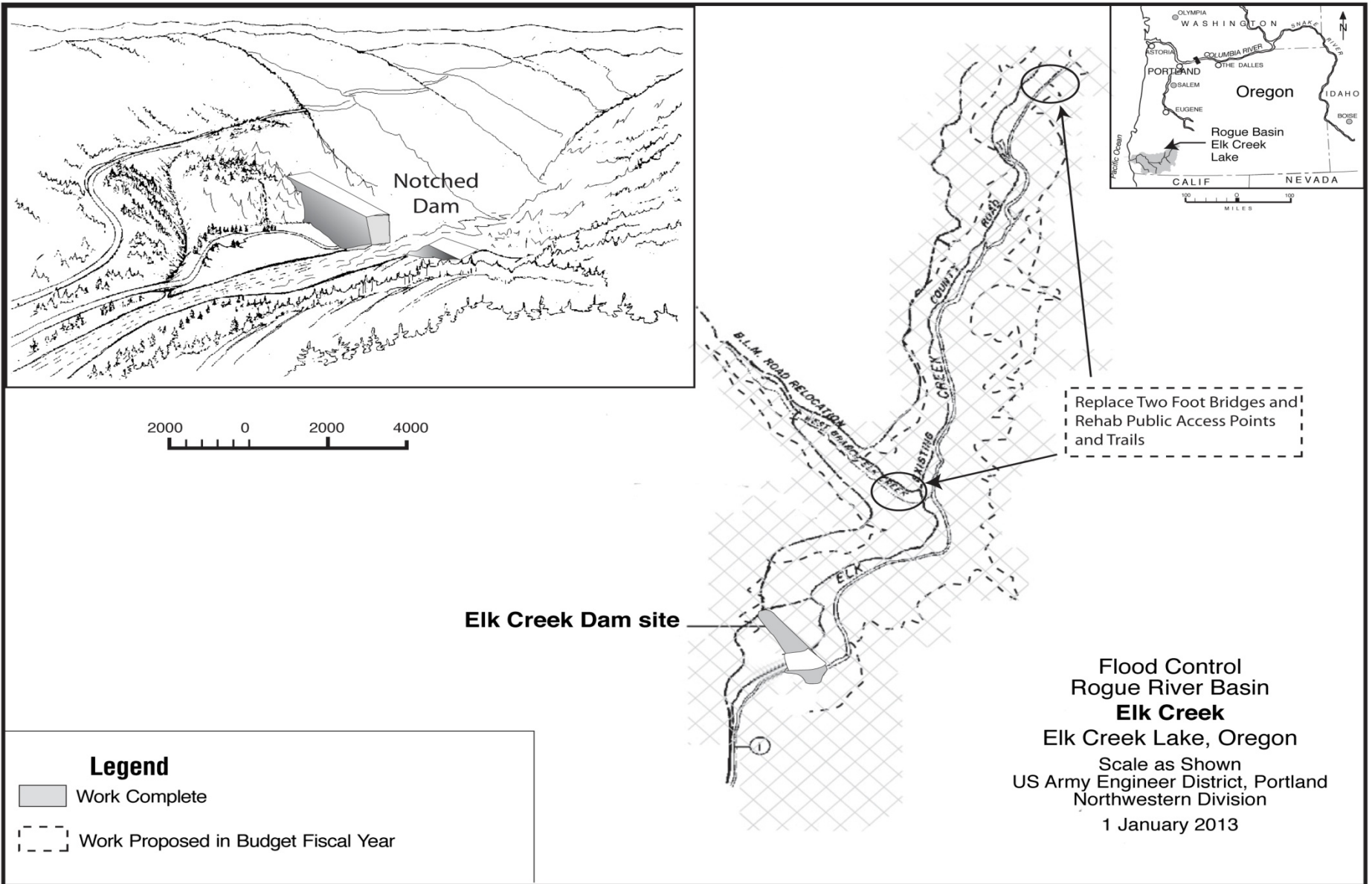
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final EIS was filed with the Department of Environmental Quality (DEQ) on September 17, 1971. Supplement No. 1, addressing water quality effects, was filed with the US Environmental Protection Agency (EPA) on December 24, 1980, and a Record of Decision was filed with EPA in February 1982. An environmental assessment addressing design changes (such as roller compacted concrete instead of embankment dam) was completed on October 11, 1983. Supplemental Information Reports dated September 23, 1985 and January 14, 1986 were provided to the public. These reports described the findings of the 1983 environmental assessment and other new information that had become available since the 1980 EIS Supplement. Another EIS supplement was prepared as a result of litigation. This Supplement was completed and filed with the EPA on May 1, 1991. A Record of Decision, selecting the no conservation pool as the interim operating alternative, was signed on January 24, 1992. After completion of the final EIS Supplement #2, the US Department of Justice filed a motion with the Court to remove the injunction. The Ninth Circuit Court of Appeals issued a ruling on April 21, 1995. In its decision, the Court also reversed the District Court decision that EIS Supplement #2 met the requirements of the earlier Ninth Circuit opinion and awarded attorneys fees to the plaintiffs. The case was remanded with instructions to prepare a third EIS supplement adequately addressing all issues raised under the National Environmental Policy Act (NEPA) process. Due to the Ninth Circuit Court of Appeals decision and status of local support, the Corps did not perform the environmental studies under NEPA necessary to remove the Federal court injunction against completion of the project.

Division: Northwestern

District: Portland

Elk Creek Lake, OR

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1965 and funds to initiate construction were appropriated in FY 1971. After initiation of construction, an injunction was placed against completion of the project. Construction of the project was terminated with the project at 83 feet, one-third its design height. Consultation began with NOAA Fisheries concerning alternatives for long-term fish passage at Elk Creek under the Endangered Species Act. Four potential upstream fish passage alternatives were evaluated in the Corps biological assessment. Based on this analysis, it was determined that removing a section of the dam would provide long-term passive fish passage and was the most cost-effective method to provide fish passage over the long term with the project in a partially completed state, even when including the cost to replace the removed section of the dam if it were to be completed in the future. In FY 2008, a contract was awarded for the fish passage corridor (notch). Upstream channel realignment was initiated in FY 2009 and the fish passage corridor was completed in FY 2010. FY 2014 funds will be used to replace two failing vehicle bridges with pedestrian (only) bridges and rehabilitation of walking trails that pose a danger to the public. This work will complete the project.



APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Lower Columbia River Ecosystem Restoration, Oregon and Washington (Continuing)

LOCATION: The Lower Columbia River extends from the mouth of the Columbia River to River Mile 145 at Bonneville Lock and Dam.

DESCRIPTION: The project area includes the estuary of the Columbia River and all tributaries of the Columbia River that are tidally influenced, which includes the Willamette River up to Willamette Falls. The project is based on non-monetary quantitative changes in fish and wildlife habitat units and other biological benefits (see Justification paragraph.) A comprehensive conservation and management plan was developed for the Lower Columbia River under Section 320 of the Federal Water Pollution Control Act (33 U.S.C. 1330).

AUTHORIZATION: Section 536 of the Water Resources Development Act (WRDA) of 2000 (P. L. 106-541, dated 11 December 2000).

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA:			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
				Entire Project	76%	TBD
Estimated Federal Cost		30,000,000				
Programmed Construction	30,000,000					
Unprogrammed Construction	0					
Estimated Non-Federal Cost		4,000,000				
Programmed Construction	TBD					
Cash Contributions	TBD					
Other Costs	TBD					
Total Estimated Programmed Construction		34,000,000				
Total Estimated Unprogrammed Construction		0				
Total Estimated Project Cost		34,000,000				
Allocations to 30 September 2010		13,092,000				
Allocation for FY 2011		1,946,000				
Allocation for FY 2012		4,200,000				
Conference Allowance for FY 2013		3,650,000	<u>5/</u>			
Allocations through FY 2013		22,888,000	<u>1/ 2/ 3/ 6/</u>	76%		
Estimated Unobligated Carry-in Funds		0	<u>4/</u>			
President's Budget for FY 2014		7,080,000		100%		
Programmed Balance to Complete after FY 2014		32,000	<u>7/ 8/</u>			
Un-programmed Balance to Complete after FY 2014		0				

1/ \$1,909,000 reprogrammed to the project.

2/ \$45,000 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funds: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$ 0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ See Other Information.

PHYSICAL DATA: Types of projects will include, but not be limited to: creation and restoration of shallow water habitat; restoration of wetlands; improvements to fish passage; restoration of floodplain functions and other actions to restore the estuary ecosystem.

Division: Northwestern

District: Portland

Lower Columbia River Ecosystem Restoration OR & WA

JUSTIFICATION: The Lower Columbia River basin has undergone considerable changes in water resource needs and uses and experienced significant environmental degradation. Human modifications have changed the hydrologic regime and caused increased water temperatures and losses of critical juvenile salmon habitat. Losses of in-stream, riparian and wetland habitats, and reduced genetic diversity of fish and wildlife resources have resulted from these modifications. Over the last century, the amount of forested and tidal swamp habitat (including tidal sloughs in the region) has decreased by about 78% over historical levels because of dike and levee building and associated development activities. Riparian plant communities and forest have declined about 86% from historical levels. The lower river and estuary are critical areas for migrating juveniles, especially anadromous salmonids federally listed as threatened or endangered, because these areas provide refuge from predators, feeding grounds, and areas to transition physiologically from freshwater to saltwater. Flood risk management, water quality, navigation, water-related infrastructure, and ecosystem restoration needs have all been evaluated on a case-by-case basis. Section 536 of WRDA 2000 provided the authority for the U.S. Army Corps of Engineers to construct ecosystem restoration projects in the Lower Columbia River estuary and Tillamook Bay. These two estuaries are designated as national estuaries of significance under the National Estuary Program (NEP). As a result, added emphasis was placed on the Lower Columbia River Estuary programs Comprehensive Conservation Management Plan. Also during that time period, the National Marine Fisheries Service (NOAA Fisheries) identified the Columbia River Estuary as important in rebuilding the productivity of Columbia River Basin salmon and steelhead listed under the Endangered Species Act (ESA). Thirteen stocks of anadromous salmonids that use the estuary and reproduce in the Columbia River Basin have been listed as threatened or endangered under the ESA. Such listings have broad implications to existing water resource uses and future developments. The 2010 Supplemental Biological Opinion (BiOp) to the 2008 Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp) includes Reasonable and Prudent Alternatives (RPAs) calling for planning and restoration efforts in the Columbia River estuary to help avoid jeopardy for these listed species, or actions resulting in the destruction or adverse modification of critical habitat. On August 2, 2011, the U.S. District Court ruled that the 2008/2010 BiOp, including the RPA's habitat mitigation measures, remain in place through 2013, but ordered NOAA Fisheries to either produce a new or supplemental BiOp by January 1, 2014, to correct the 2008/2010 BiOp's reliance on post-2013 measures that the court concluded were unidentified and not reasonably certain to occur. Historic losses of 52,000 acres of wetland/marsh habitats, 13,800 acres of riparian forest habitat and 27,000 acres of forested wetland habitat downstream of Portland have impacted this ecosystem's ability to produce and sustain fish and wildlife resources. Much of this wetland loss can be attributed to the 84,000 acres encompassed by diking districts and the 20,000-acre increase in urban development that has occurred along the Lower Columbia River.

The implementation of the Lower Columbia River element of the Section 536 legislation serves as a catalyst to bring together and implement current efforts by governmental and private organizations including, but not limited to, the National Estuary Program, six state agencies from Oregon and Washington, four Federal agencies, recreation, ports, industry, agriculture, labor, commercial fishing, environmental interests and citizens to identify and cost share restoration projects and provide ecosystem benefits to terrestrial, plant and 13 listed ESA aquatic species.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete feasibility phase at four sites	\$450,000	
Continue feasibility studies at four sites	210,000	
Complete design phase at two sites	876,000	
Complete construction at the Sandy R. Delta Site	1,000,000	
Initiate and complete construction at the Post Office Lake Site	<u>3,700,000</u>	
Total	\$6,236,000	<u>9/</u>

9/ Includes unobligated carry-in from FY 2012.

Division: Northwestern

District: Portland

Lower Columbia River Ecosystem Restoration OR & WA

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate construction on one major project site	\$7,000,000
Project closeout on the Sandy River Delta and Post Office Lake sites	<u>80,000</u>
Total	\$7,080,000

NON-FEDERAL COSTS: The authorization provides that studies shall be subject to cost sharing in accordance with Section 105 of WRDA 1986 and that restoration projects shall be cost shared at 35 percent by non-Federal interests, that non-federal interests shall provide all lands, easements, rights-of-way, dredged material disposal areas, and relocations necessary for the projects to be carried out and that in-kind contributions cannot exceed 50 percent of the non-Federal share. However, the Federal share of projects carried out on Federal lands shall be 100 percent.

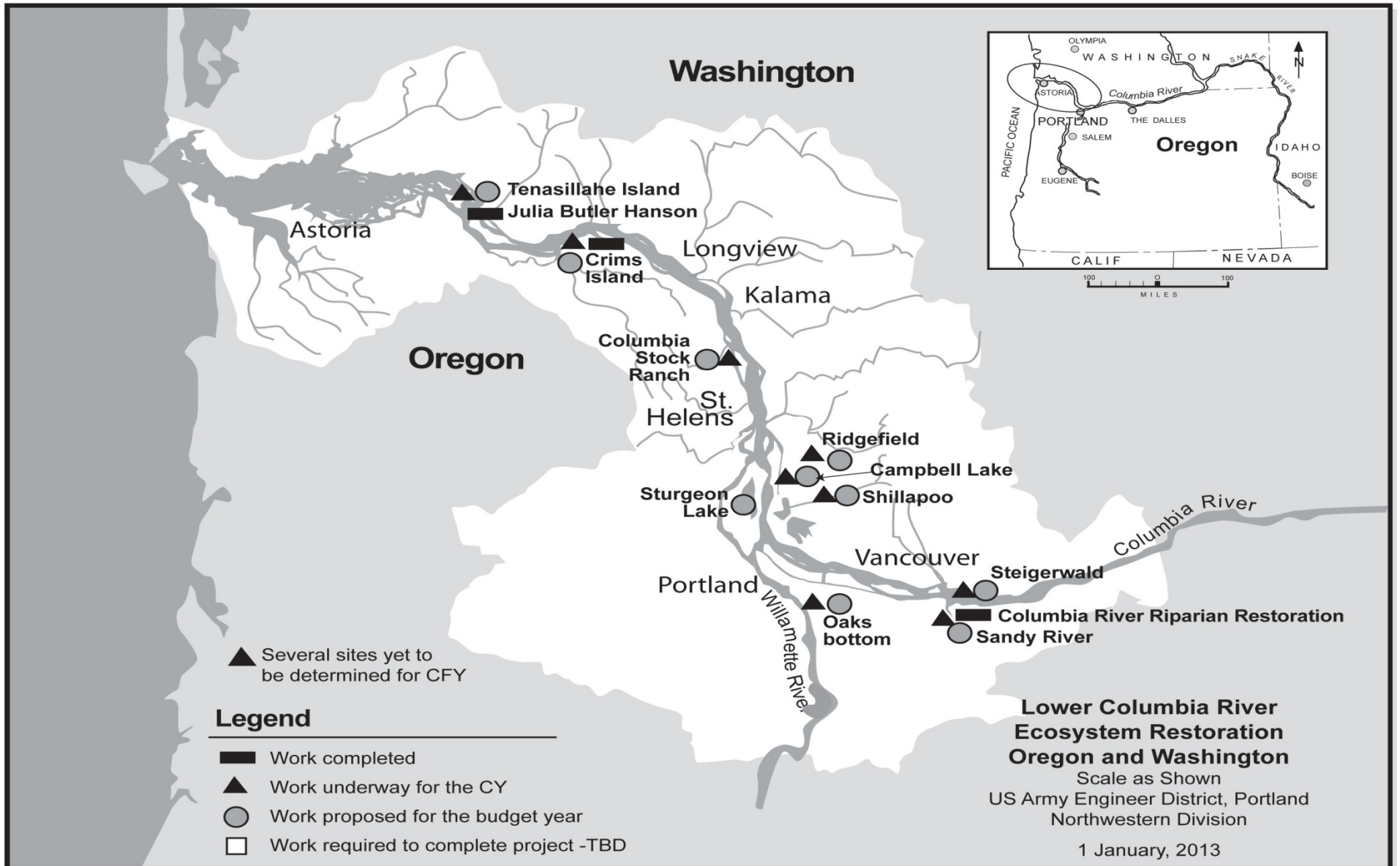
STATUS OF LOCAL COOPERATION: Project Agreements for individual restoration sites are prepared/executed as they are identified.

- (1) Crims Island Site: A Memorandum of Agreement (MOA) was executed in May 2004 with the U.S. Fish and Wildlife Service (USFWS).
- (2) Columbia River Riparian Site: A MOU was executed in February 2006 with the U.S. Department of Agriculture (Forest Service).
- (3) Julia Butler Hanson Site: A MOA was executed in August 2008 with the U.S. Fish and Wildlife Service.
- (4) Washington Estuary Sites: A MOA was executed in September 2009 with the Washington State Department of Fish and Wildlife (WDFW).
- (5) Shillapoo Lake Restoration Site: A Feasibility Cost Sharing Agreement (FCSA) was executed in July 2012 with the WDFW.
- (6) Oaks Bottom Site: A FCSA was executed in December 2010 with the City of Portland. A Project Partnership Agreement is scheduled to be executed during the 3rd quarter of FY 2013.
- (7) Sandy River Delta Site: A MOA was executed in December 2011 with the U.S. Department of Agriculture (Forest Service).
- (8) Post Office Lake, Ridgefield National Wildlife Refuge Site: A MOA is scheduled to be executed during the 3rd quarter of FY 2013.
- (9) Columbia Stock Ranch: A MOA was executed in November 2012 with the Bonneville Power Administration.
- (10) Campbell Lake: A MOA is scheduled to be executed in the 3rd quarter of FY 2013 with the U.S. Fish and Wildlife Service.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$30,000,000 is the same as last presented to Congress (FY 2013). See Other Information.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement has not been prepared. National Environmental Policy Act documentation for individual restoration sites is prepared as they are identified.

OTHER INFORMATION: Funds to initiate Engineering and Design and Construction were first appropriated in FY 2003. Additional costs have been identified to consider BiOp requirements in the Lower Columbia River estuary. However cost increases and the appropriate course(s) of action are being determined.



WASHINGTON

APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Columbia River Fish Mitigation, Washington, Oregon, & Idaho (Continuing)

LOCATION: Lower Columbia, Snake and Willamette Rivers.

DESCRIPTION: The mitigation consists of: (1) Adult and juvenile fish bypass improvements at the Lower Granite, Little Goose, Lower Monumental, and Ice Harbor projects on the Snake River and at the McNary, John Day, The Dalles, and Bonneville projects on the Columbia River, and avian predation controls and salmon survival research and development in the Lower Columbia River estuary and near-ocean environments; (2) A mitigation analysis, prepared in cooperation with regional interests, to evaluate additional measures to increase fish survival in the Columbia and Snake Rivers. The mitigation analysis provides the analytical process for consideration and implementation of Federal actions necessary to support regional initiatives and Federal salmon and steelhead Endangered Species Act (ESA) requirements; (3) Beginning in FY2008, evaluations, design and construction of measures to address the impacts on ESA-listed species of salmon and steelhead of construction and operation of 13 dams on the Willamette River; and (4) Increased efforts to improve juvenile and adult pacific lamprey passage to boost recovery and avoid additional ESA listings within the Federal Columbia River Power System (FCRPS) were initiated in FY 2009.

AUTHORIZATION: 1933 Federal Emergency Administration of Public Works; 1935, 1945 and 1950 River and Harbor Acts; 1937 Bonneville Project Act; 1938, 1948, 1950 and 1954 Flood Control Acts; Water Resources Development Act (WRDA) 1986, Section 906(b)(1); WRDA 1996, Section 511, as amended by WRDA 1999, Section 582 and WRDA 2007, Section 5025.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio is not applicable to this project because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT COMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (Corps of Engineers)	2,100,000,000		Entire Project	78%	TBD
Estimated Other Federal Costs (Bonneville Power Administration)	9,670,000				
Total Federal Cost	2,109,670,000				
Future Non-Federal Reimbursement	1,719,000,000	<u>8/</u>			
Estimated Federal Cost (Ultimate)	381,000,000				
Estimated Non Federal Cost	1,719,000,000				
Cash Contributions	0				
Other Costs	0				
Reimbursements, Power	1,719,000,000				
Total Estimated Project Cost	2,109,670,000				
Allocations to 30 September 2010	1,455,394,000				
Allocation for FY 2011	134,860,000				
Allocation for FY 2012	128,311,000				
Conference Allowance for FY 2013	83,000,000	<u>5/</u>			
Allocations through FY 2013	1,801,565,000	<u>1/ 2/ 3/ 6/</u>	86%		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	101,553,000		91%		
Programmed Balance to Complete after FY 2014	196,882,000	<u>7/ 9/</u>			
Unprogrammed Balance to Complete after FY 2014	0				

1/ (\$94,000) reprogrammed to (from) the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ Allocation for actual reimbursement by the Bonneville Power Administration is made as each element is placed in service.

9/ See Other Information.

PHYSICAL DATA

Lower Granite Lock & Dam

- Juvenile fish bypass system
- Juvenile fish transport facilities
- Barge moorage
- Fish transport barges
- Spillway flow deflectors
- Spillway weir
- Juvenile passage monitoring facilities
- Adult fish ladders
- Adult passage monitoring facilities
- Lamprey passage facilities

Little Goose Lock & Dam

- Juvenile fish bypass system
- Lamprey passage facilities
- Spillway flow deflectors
- Spillway weir
- Juvenile fish transport facilities
- Adult fish ladders

Lower Monumental Lock & Dam

- Juvenile fish bypass system
- Juvenile fish transport facilities
- Spillway flow deflectors
- Spillway weir
- Juvenile passage monitoring facilities
- Adult fish ladders
- Lamprey passage facilities

The Dalles Lock & Dam

- Tailrace spill wall
- Spillway improvements
- Sluiceway surface passage
- Adult fish ladders
- Lamprey passage facilities

McNary Lock & Dam

- Juvenile fish bypass system
- Juvenile fish transport facilities
- Juvenile passage monitoring facilities
- Spillway flow deflectors
- Spillway weirs
- Adult fish ladders
- Adult passage monitoring facilities
- Lamprey passage facilities

John Day Lock & Dam

- Juvenile fish bypass system
- Juvenile passage monitoring facilities
- Spillway flow deflectors
- Spillway weirs
- Adult fish ladders
- Mitigation hatcheries
- Lamprey passage facilities

Ice Harbor Lock & Dam

- Juvenile fish bypass system
- Spillway flow deflectors
- Spillway weir
- Juvenile passage monitoring facilities
- Adult fish ladders
- Lamprey passage facilities

Lower Columbia River estuary

- Avian Predation Reduction
- Estuary Studies

Bonneville Lock and Dam

- Juvenile fish bypass system
- Independent station service
- Juvenile fish monitoring facilities
- Corner collector surface passage
- Spillway flow deflectors
- Sea lion barriers
- Adult fish ladders
- Adult passage laboratory
- Adult passage monitoring facilities
- Lamprey passage facilities
- Sluiceway surface passage

Mitigation Analysis

- Gas abatement
- Adult passage
- Turbine Passage
- Project passage efficiency and survival studies
- Prototype facility studies
- Delayed & multiple bypass mortality studies
- Temperature impacts

Willamette Valley Projects

- Evaluations (Mitigation Analysis)
- Adult trap and haul facilities
- Temperature control facilities
- Juvenile passage facilities

Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID

JUSTIFICATION: Columbia River Fish Mitigation provides mitigation for the impacts of Corps' dams on migrating salmon. Completed and scheduled mitigation measures are based on completed analyses. Mitigation measures are being considered as a result of the Northwest Power and Conservation Council's regional rebuilding efforts for upriver salmon stocks; the National Oceanic and Atmospheric Association National Marine Fisheries Service (NOAA Fisheries) listing of salmon as threatened/ endangered; the NOAA Fisheries Biological Opinions [BiOp(s)] on operation of the FCRPS issued 1995, 1998, 2000, 2004, 2008 and the 2010 Supplemental BiOp which includes the Adaptive Management Implementation Plan and amendments; the 2008 Columbia Basin Fish Accords; and the 2008 United States Fish and Wildlife Service (USFWS) and NOAA Fisheries Willamette River Basin BiOp . The current scope of this project has been adjusted to be in accord with BiOps and specific dates for Reasonable and Prudent Alternatives (RPAs) identified in the BiOp(s). The Mitigation Analysis, begun in FY 1991, is contributing to a regionally collaborative process for analyzing potential new measures.

In response to Section 582 of WRDA 1999 and in recognition of hydropower system operations' effects on the Columbia River estuary and concomitant impacts on salmonids, efforts began in FY 2001 to address habitat and avian predation issues in the estuary. In FY2008, under the authority of Section 906b of WRDA 1986, the Corps initiated actions to relocate a portion of the Caspian Tern colony in the estuary to reduce predation on migrating juvenile salmonids. In response to ongoing ESA consultation, the Corps proposed to initiate a study to identify impacts, and identify and recommend appropriate structural modifications in the Willamette River Basin to address impacts on listed species resulting from the operation of the 13 dams in the basin beginning in FY2008. A BiOp was issued by NOAA Fisheries and USFWS in July 2008. As a result of the May 2008 Columbia Basin Fish Accords, increased efforts to investigate and improve juvenile and adult Pacific lamprey passage and survival was initiated in FY2009.

FISCAL YEAR 2013: The total unobligated dollars are being applied to address the highest priority actions to comply with the BiOp requirements for the FCRPS, the NOAA Fisheries and USFWS 2008 BiOp for the Willamette River Basin, and the 2008 Columbia Basin Fish Accords. Current execution plans are for funds to be applied on major measures as follows:

Lower Granite	\$9,520,000	John Day	\$2,275,000
Facility bypass improvements		Adult ladder improvements	
Barge moorage upgrade		Adult PIT monitoring	
Surface passage alternative			
Spillway PIT monitoring			
Little Goose	3,500,000	The Dalles	1,800,000
Spillway weir boat barrier		Emergency adult ladder aux water supply	
Spillway weir stop logs			
Lower Monumental	2,105,000	Bonneville	2,380,000
Spillway weir boat barrier		Gatewell orifice modifications	
		Fish unit trash rake	

Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID

Ice Harbor Unit 2 replacement	2,470,000	Lower Columbia River Estuary Estuary studies Avian predator relocation	5,110,000
McNary Spillway Weir Handling Equipment Intake Gate Closure	2,455,000	Mitigation Analysis, FCRPS Lamprey passage improvement development, Tagging studies, Fall Chinook studies, Adult passage and survival studies Delayed mortality, Turbine passage survival PIT tag recovery, post-FCRPS survival study FCRPS performance verification	23,164,000
Willamette Valley Projects Mitigation analysis Trap and haul facilities Fish release sites	29,750,000		
			=====
			Total \$84,529,000 <u>10/</u>

10/ Includes unobligated carry-in from FY 2012.

FISCAL YEAR 2014: The requested amount will be applied to address the highest priority actions to comply with the BiOp requirements for the FCRPS, the NOAA Fisheries and USFWS 2008 BiOp for the Willamette River Basin, and the 2008 Columbia Basin Fish Accords. Current execution plans are for funds to be applied on major measures as follows (Specific amounts are tentative. See "Other Information" below):

Lower Granite Juvenile facility bypass improvements Spillway PIT monitoring system Surface passage alternative Spillway weir boat barrier	\$21,550,000	John Day Adult ladder improvements	\$100,000
Little Goose Spillway weir boat barrier Spillway weir gate hoist	250,000	The Dalles Emergency adult ladder aux water supply Adult PIT monitoring system	5,200,000
Lower Monumental Spillway weir boat barrier Spillway weir access	520,000	Bonneville Gatewell orifice modifications Fish unit trash rake	8,500,000

Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID

1 May 2013

NWD-91

Ice Harbor Unit 2 replacement	5,280,000	Lower Columbia River Estuary Estuary studies Avian predator relocation	3,300,000
McNary Spillway Weir Handling Equipment Intake Gate Closure	2,550,000	Mitigation Analysis, FCRPS Lamprey passage improvement development, Tagging studies, Fall Chinook studies, Adult passage and survival studies Turbine passage survival, Inland avian predation PIT tag recovery, post-FCRPS survival study FCRPS performance verification	11,403,000
Willamette Valley Projects Mitigation analysis Trap and haul facilities Fish release sites	42,900,000		
			=====
			Total \$101,553,000

NON-FEDERAL COST: Costs eventually determined to be allocable to power are reimbursable. The dams being modified and analyzed are a part of the FCRPS. Bonneville Power Administration (BPA), the Federal Power Marketing Agency, establishes system rate levels adequate to recover all capital investment costs for generating projects (including Corps generating projects) within a 50-year period and to repay annual OM&R and interest expenses. BPA submits an annual financial statement to Congress, as required by law, on repayment and periodically recommends rate adjustments as required for meeting repayment obligations.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$2,109,670,000 is the same as last presented to Congress (FY 2013). See Other Information.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Mitigation construction may be covered by existing environmental impact statements. Additional environmental documentation pursuant to National Environmental Policy Act (NEPA) will be accomplished as necessary. Consultations with NOAA Fisheries and USFWS will be held and biological assessments prepared as necessary to conform to the requirements of NEPA and the ESA.

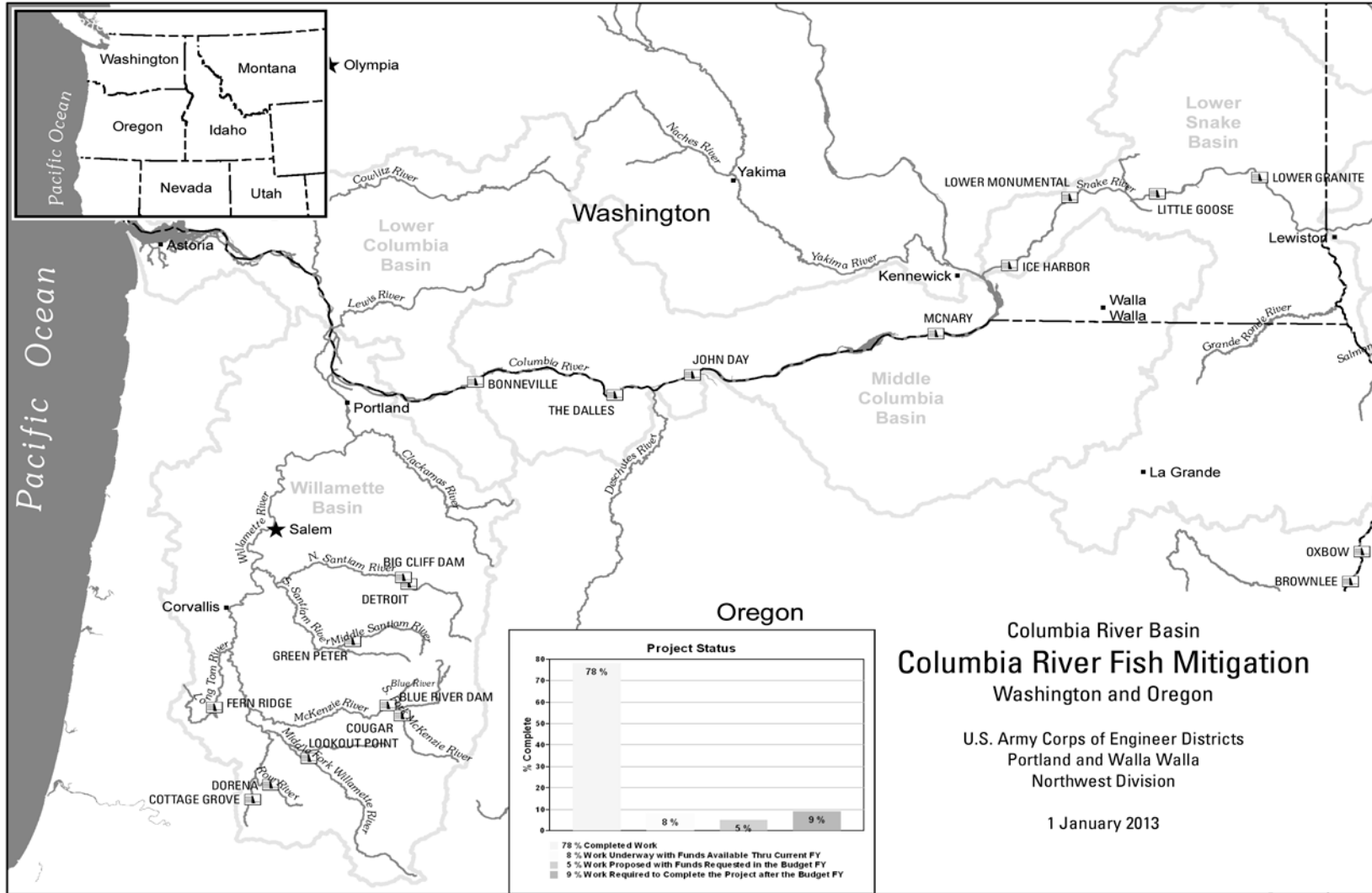
OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1988. Additional costs have been identified to consider remaining RPA actions to meet BiOps, cost and schedule risk, and escalation factors. However, cost increases and the appropriate course(s) of action are being determined.

Potential Changes: Salmon rebuilding initiatives for Corps implementation have been adopted by the Northwest Power Planning Council (Council) as part of the amended Columbia River Basin Fish and Wildlife Program and, when applicable, ESA consultation is completed and documented in the NOAA Fisheries and USFWS BiOps. In response to the biological opinions, the Corps has developed and continues to update implementation plans. The Council, NOAA Fisheries and USFWS emphasize adaptive management – incorporating changes based on new research, monitoring and regional prioritization decisions. This adaptive management approach is regionally recognized and accepted.

Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID



Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID

1 May 2013

NWD-93

APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Duwamish and Green River Basin, Washington (Continuing)

LOCATION: The project is located in the Duwamish/Green River Basin, in King County in the Puget Sound Basin in northwestern Washington State.

DESCRIPTION: The project will provide 45 ecosystem restoration sites throughout the 492 square mile Duwamish and Green River Basin. The project will create 1900 acres of new habitat and add significant habitat for three Endangered Species Act (ESA) listed species: Bull trout, Steelhead trout and Chinook salmon. Habitat improvements will occur over 200 miles of river and streams with features including stream restoration, levee removal to open up adjacent flood plains, reconnection of abandoned side channels, providing wood and gravel for fish habitat and other restoration actions. Post construction monitoring between 2 and 10 years was approved for individual sites to ensure project elements achieve desired environmental outputs.

AUTHORIZATION: Section 101 (b) (26) of the Water Resources Development Act of 2000, PL 106-541

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$130,017,000		Entire Project	14%	TBD
Estimated Non-Federal Cost	66,734,000				
Cash Contributions	4,000,000				
Other Costs	62,734,000				
Total Estimated Project Cost	\$196,751,000				
Allocations to 30 September 2010	\$12,289,000				
Allocation for FY 2011	1,796,000				
Allocation for FY 2012	1,800,000				
Conference Allowance for FY 2013	2,500,000	<u>5/</u>			
Allocations through FY 2013	18,385,000	<u>1/ 2/ 3/ 6/</u>	14%		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	8,500,000		21%		
Programmed Balance to Complete after FY 2014	103,132,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY 2014	0				

1/ \$0 reprogrammed to (from) the project.

2/ \$4,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Costal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Forty-six restoration sites will add 1,900 acres of new habitat to include culvert removal, side channel reconnection, levee setback, gravel nourishment, and large wood placement.

JUSTIFICATION: The Duwamish/Green ecosystem restoration project will restore habitat for the Chinook salmon, Steelhead, and Bull trout. Key elements of this project are included in the Duwamish/Green Salmon Habitat Restoration Plan prepared in response to listing of Chinook salmon under ESA in 1999. The proposed restoration focuses on improving the overall health of the Duwamish/Green River Basin over its 200 miles of river and streams through 1,900 acres of new habitat, enhancing and restoring fish and wildlife while maintaining existing flood protection within the basin. Of special interest are the habitat needs of the listed endangered species Chinook salmon, Steelhead, and Bull trout. Potential projects were proposed and screened by the Watershed Restoration Group, composed of the local sponsor, stakeholders, scientists, and Corps officials. Projects were scored according to an environmental

Division: Northwestern

District: Seattle

Duwamish and Green River Basin, WA

JUSTIFICATION Continued

evaluation criteria: 1) effectiveness of project in addressing one or more limiting factors, including barriers to fish passage, reduction in channel forming flows, loss of channel diversity in the lower river, loss of estuarine and floodplain habitat, reduction in large woody debris, loss of sediment sources, and increase in water temperature; 2) scale, size, and effect; 3) technical and political feasibility; and 4) potential for wildlife benefits. Forty five (45) sites were evaluated which incorporated varying levels and degrees of restoration in an incremental cost analysis. The Corps received input to incorporate local needs and direction in the development of site-specific restoration criteria supportive to local goals. Assessing and incorporating the desires of stakeholders into the restoration plan will continue throughout project development. The project is an integral part of a Water Resource Inventory Area (WRIA) 9 recovery plan and a Regional Recovery Plan. The Water Resource Inventory Area (WRIA) 9 recovery plan is the Puget Sound Chinook Recovery Plan for the Green-Duwamish Watershed. The Regional Recovery Plan is the Puget Sound Wide Chinook recovery Plan adopted by National Marine Fisheries Service (NMFS). The project is an integral part of Washington's ESA recovery plan as documented in the WRIA 9 recovery plan and NMFS Puget Sound Chinook Recovery Plan

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete design and execute Project Partnership Agreement (PPA) for Mill Creek Wetlands 5K site	\$ 250,000
Initiate construction for Mill Creek Wetlands 5K site	2,500,000
Complete construction for Big Spring Creek Phase 2	1,400,000
Complete design for Boeing Levee Setback site	600,000
S&A, EDC and monitoring for several sites	<u>150,000</u>
Total:	\$4,900,000 <u>8/</u>

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount would be applied as follows:

Continue construction for Mill Creek Wetlands 5K site	\$2,500,000
Initiate construction for Boeing Levee Setback site	5,000,000
Execute design agreement, complete design and execute PPA for Porter Levee Setback site	600,000
Execute design agreement and initiate design for Lower Russell Road	300,000
Conduct monitoring for completed project sites	<u>100,000</u>
Total	\$8,500,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and relocations	\$62,734,000	
Pay 35% of the costs allocated to fish and wildlife enhancement, and pay 100% of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	<u>4,000,000</u>	TBD
Total Non-Federal Costs	\$66,734,000	TBD

Division: Northwestern

District: Seattle

Duwamish and Green River Basin, WA

STATUS OF LOCAL COOPERATION: The primary local sponsor of this project has been King County with the full support of local cities; the Muckleshoot Tribe; the Suquamish Tribe; state and local agencies; 16 cities, federal resource agencies, Trout Unlimited and other interested stakeholders. These entities remain active in development of the project.

PPAs have been, or are scheduled to be executed, as follows:

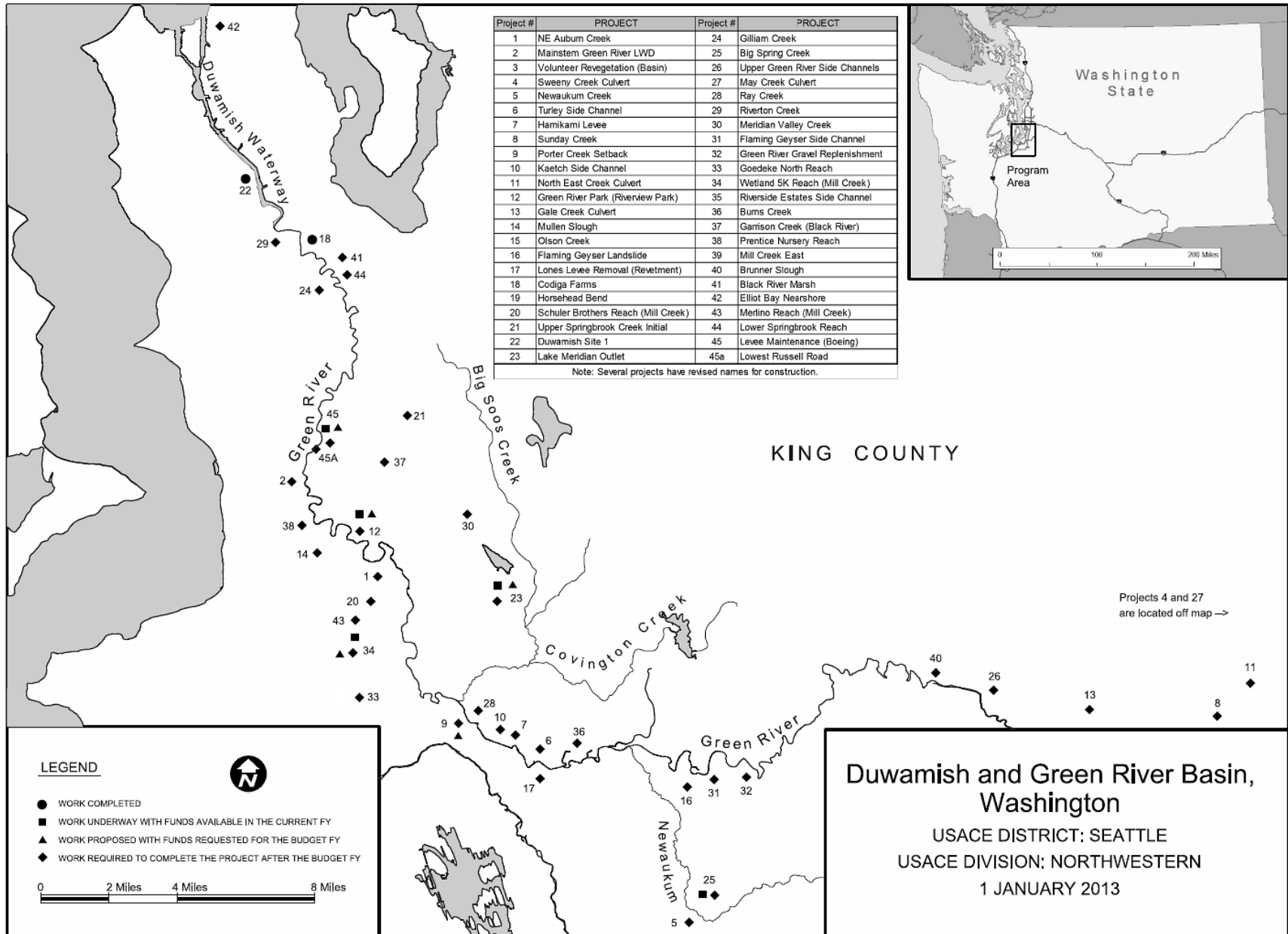
- (1) Meridian Valley site: A Project Cooperation Agreement (PCA) was executed in November 2004 with the City of Kent.
- (2) Lake Meridian Outlet site: A PCA was executed in August 2006 with the City of Kent.
- (3) Site 1: A PPA was executed in July 2009 with King County.
- (4) Upper Springbrook site: A PPA was executed in August 2010 with the City of Renton.
- (5) Riverview Park site: A PPA was executed in August 2011 with the City of Kent.
- (6) Big Spring Creek site: A PPA was executed in August 2012 with King County.
- (7) Mill Creek Wetland 5K site: A PPA is scheduled to be executed in April 2013 with the City of Auburn.
- (8) Main Stem Boeing Levee site: A PPA is scheduled to be executed in December 2013 with the City of Kent.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$130,017,000 is an increase of \$11,390,000 from the latest estimate of \$118,627,000 presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments	\$11,390,000
Total	\$11,390,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Programmatic Environmental Impact Statement was completed in December 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 2001 and funds to initiate construction were appropriated in FY 2004. The Chief of Engineer's report was signed 29 December 2000. The project will restore high quality ecosystem habitat that has been lost. Several Puget Sound salmon species are listed under the Endangered Species Act. The project will provide a major component for habitat restoration in the Duwamish/Green River Basin to stem declines and begin rebuilding salmon habitat. The project complements other local, state, and federal programs for salmon recovery in the Puget Sound Watershed.



Division: Northwestern

District: Seattle

Duwamish and Green River Basin, WA

1 May 2013

NWD-98

APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Lower Snake River Fish and Wildlife Compensation, Washington, Oregon, Idaho (Continuing)

LOCATION: Hatchery sites are located at McCall, Idaho, about 1,500 feet downstream from Payette Lake; Lyons Ferry, Washington, at River Mile 59 on the Snake River; Lookingglass, Oregon, about 10 miles northwest of Elgin, Oregon; Hagerman, Idaho, 10 miles west of Twin Falls, Idaho; Irrigon Hatchery, about 10 miles west of Umatilla, Oregon; Dworshak Expansion, Sawtooth Hatchery about 5 miles south of Stanley, Idaho; Magic Valley Hatchery about 4 miles north of Buhl, Idaho; and Clearwater Hatchery about 5 miles west of Orofino, Idaho. Fishing and hunting access and wildlife habitat lands will be located in Washington and Idaho. The riparian lands are located on the Snake and Columbia River drainages from the Washington/Oregon border upstream to the confluence with the Clearwater River. This reach includes significant tributaries and their watersheds, including (but not limited to) the Walla Walla, Tucannon, Asotin, Grande Ronde, and Imnaha River basins.

DESCRIPTION: The project purpose is fish and wildlife compensation for construction of the four mainstem dams on the Snake River. The project consists of Chinook and Steelhead hatcheries that will provide 27,000,000 juvenile salmon and steelhead annually. These fish will be released in streams for migration to the Pacific Ocean. Adult salmon and steelhead resulting from these releases will provide both sport and commercial fishing opportunities with over 4 million pounds of fish going to the commercial fisheries and providing approximately 689,000 additional angler days of sport fishing. An estimated 132,000 adult fish will return to the project area of the Snake River. In addition to the anadromous fish, 93,000 pounds of trout will be reared and released in Eastern Washington which will provide 45,000 additional angler days of sport fishing. There will be an aggregate of 24,150 acres in fee or easement for fisherman access, wildlife habitat and hunting access. Additionally, a program has been implemented with Washington State Department of Game to produce the equivalent of 20,000 game birds per year for 20 years. The 1989 Letter of Agreement entered into by the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers and the Washington Department of Fish and Wildlife states that Lower Snake River Fish and Wildlife Plan mitigation, as authorized by PL 94-587 and PL 99-662, will be measured on a habitat basis instead of using "animal number replacement" as a basis for measurement. The "Special Report – Lower Snake River Fish and Wildlife Compensation, Wildlife Habitat Compensation Evaluation for the Lower Snake River Project" submitted in June 1991, concluded that, "Current habitat conditions of project lands do not contribute significantly to meeting compensation goals..." This project will restore 1,916 acres of project habitat; 3,285 acres of project woody riparian land; and 24,271 acres of project grass/shrub steppe land to pre-project conditions. Additional project restoration effort would include creation of small forested islands and shallows which would provide the additional benefit of creating substantial natural salmon spawning and rearing habitat. Consequently, significant consideration and effort will be given to protecting, preserving and perpetuating natural salmon spawning and rearing habitat which is a significant beneficiary of woody riparian lands.

AUTHORIZATION: Water Resources Development Act (WRDA) 1976 as modified by WRDA 1986, Sec 856 and WRDA 2007, Sec 3165. The current Federal cost estimate may exceed the WRDA 1986 Section 902 project cost limit. See Other Information.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

Division: Northwestern

District: Walla Walla

Lower Snake River Fish and Wildlife Compensation, WA, OR, ID

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement	261,000,000		Entire Project	94	TBD
Future Non-Federal Reimbursement	237,771,000		Wildlife Compensation	100	Sep 2002
Estimated Federal Cost (Ultimate)	23,229,000		Fish Facility	100	2011
Estimated Non-Federal Cost	237,994,000		Lands	100	Sep 1994
Cash Contributions	223,000		Habitat Restoration	87	TBD
Reimbursements	237,771,000				
Power	237,771,000				
Total Estimated Project Cost	261,223,000				
Allocations to 30 September 2010	241,103,000				
Allocation for FY 2011	1,497,000				
Allocation for FY 2012	1,564,000	<u>1/</u>			
Conference Allowance for FY 2013	2,000,000	<u>5/</u>			
Allocations through FY 2013	246,164,000	<u>1/</u> <u>2/</u> <u>3/</u> <u>6/</u>	94%		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	2,000,000		95%		
Programmed Balance to Complete after FY 2014	12,836,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY 2014	0				

1/ \$94,000 reprogrammed to the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

Capacity of Hatcheries

9,160,000 Fall Chinook Smolts - 101,800 lbs.

6,750,000 Spring and Summer Chinook Smolts - 450,000 lbs.

11,020,000 Summer Steelhead - 1,377,500 lbs.

93,000 lbs. Of Resident Sport Fishery

Acquisition of 24,150 acres for fisherman access and wildlife compensation and improvement of land for wildlife compensation.

Restore 1,916 acres of project forland, 3,285 acres of project woody riparian land, and 24,271 acres of project grass/shrub steppe land to pre-project conditions.

JUSTIFICATION: The project will provide for losses to fish and wildlife resources caused by construction and operation of the four dams (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite) constituting the Lower Snake River Project, authorized by PL 79-14, as is required by the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) in accordance with the requirements of the Lower Snake River Fish and Wildlife Compensation Plan negotiated in accordance therewith and subsequently authorized by PL 94-587 and PL 99-662.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete vegetation mapping, initiate Habitat Evaluation Procedure (HEP) study, and analysis of costs to complete with streamlines restoration methods	\$662,000
Complete planting at the Willow Bar site	386,000
Complete planting at the Swift Bar site	373,000
Initiate planting at the Ayers site	377,000
Complete closeout actions at the Asotin, Hells Canyon, and Skookum restoration sites	<u>210,000</u>
Total	\$2,008,000 <u>8/</u>

8/ Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: The requested amount will be applied as follows:

Complete P&S at the Central Ferry site	\$150,000
Complete planting at the Ayers site	400,000
Complete planting at the Knoxway Canyon site	450,000
Initiate P&S for multiple Lower Monumental Pool sites	325,000
Complete HEP study, initiate PACR (if required) and closeout actions at the Willow and Swift Bar sites	<u>675,000</u>
Total	\$2,000,000

NON-FEDERAL COSTS: Costs allocable to power presently estimated at \$237,771,000 are reimbursable. This project is a part of the Federal Columbia River Power System. Bonneville Power Administration (BPA), the Federal marketing agency, establishes system rate levels adequate to recover all capital investment costs for generating projects (including Corps generating projects) within a 50-year period and to repay annual operation and maintenance and interest expenses. BPA submits an annual financial statement to Congress, as required by law, on repayment and periodically recommends rate adjustments as required for meeting repayment obligations. In addition, a cash contribution to expand the Lyons Ferry Hatchery (\$223,000) has been furnished.

Division: Northwestern

District: Walla Walla

Lower Snake River Fish and Wildlife Compensation, WA, OR, ID

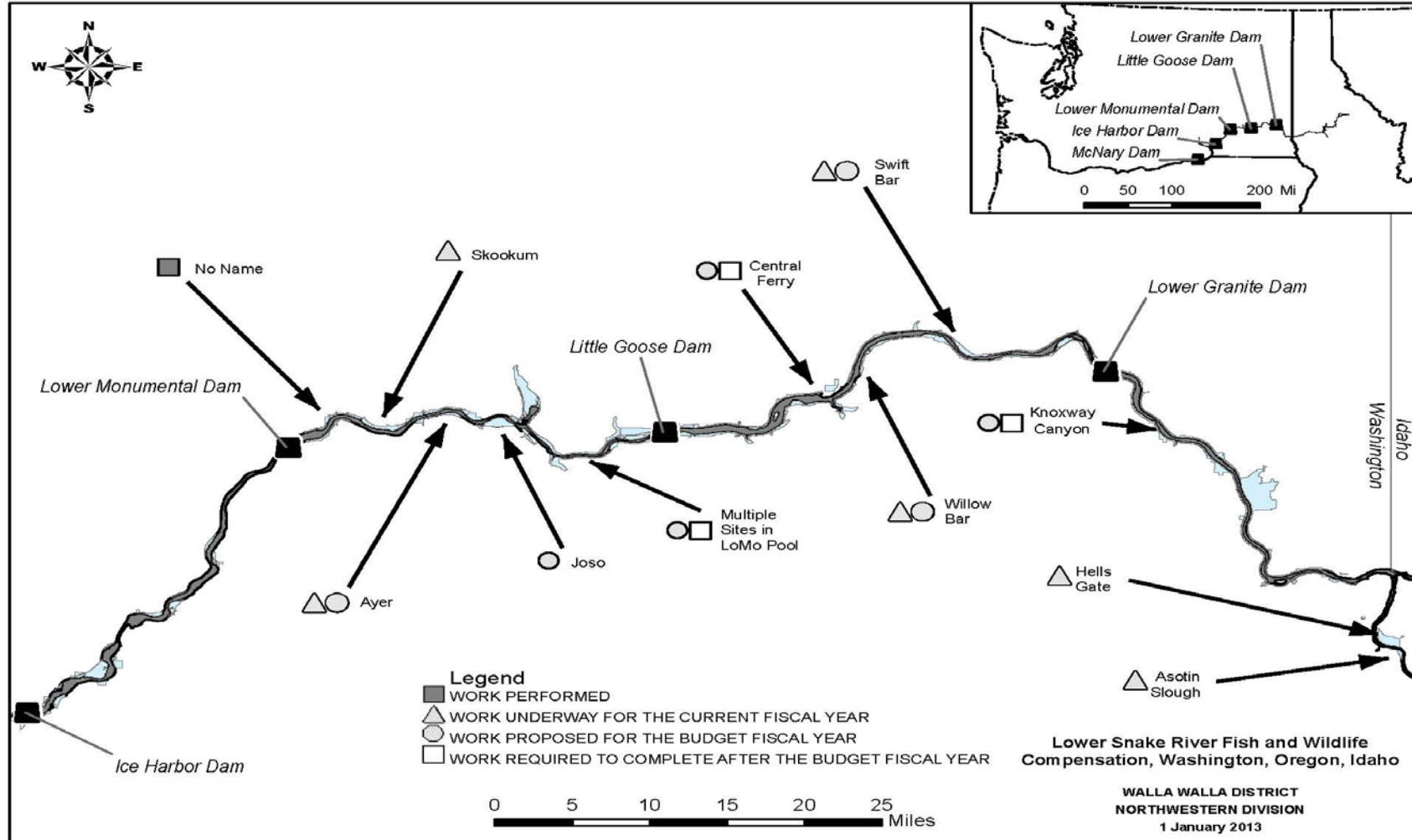
STATUS OF LOCAL COOPERATION: None required for construction.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$261,000,000 is the same as last presented to Congress (FY 2013). See Other Information.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 29 October 1977. Additional environmental documentation pursuant to the National Environmental Policy Act will be accomplished as necessary. Consultations with the National Marine Fisheries Service will be held and biological assessments prepared as necessary to conform to requirements of the Endangered Species Act.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1978 and funds to initiate construction were appropriated in FY 1979.

The current Federal cost estimate may exceed the WRDA 1986 Section 902 limit. The actions in the FY 2014 budget request are within the Section 902 limit and necessary to meet mitigation goals. Vegetation mapping will be completed in FY 2013 and a HEP study will be completed in FY 2014 to determine creditable habitat acres and identify remaining mitigation gaps, if any. If required by the findings of the HEP analysis, a Post Authorization Change Report would be prepared to address the updated cost estimate for the remaining work. As budgeted through FY 2014, there will be \$2,498,000 of remaining authorization within the current Section 902 limit.



APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Mount St. Helens Sediment Control, Washington (Continuing)

LOCATION: A sediment retention structure on the North Fork Toutle River, 3 miles upstream from its confluence with the Green River; a Fish Collection Facility located on the North Fork Toutle River, 8,500 feet downstream of the Sediment Retention Structure; levee improvements at Kelso, WA on the Cowlitz river; and dredging in the Cowlitz River from the mouth to river mile 20; all located in Cowlitz County, southwest WA. The river systems impacted by the project include the Toutle, Cowlitz and a portion of the Coweeman River. Most of the population affected by the problems reside in the WA communities of Longview, Kelso, Lexington and Castle Rock.

DESCRIPTION: The purpose of this project is to reduce the risk of flooding to the WA communities of Longview, Kelso, Lexington and Castle Rock. The project consists of an earth and rock fill sediment retention structure with a spillway (125 feet high and a length of 1,800 feet and a retention capacity of 258 million cubic yards of sediment); a 300 foot long barrier type fish trap facility, a 210 foot fish ladder and levee raises and improvements on the Cowlitz River at Kelso, WA; dredging in the Cowlitz River from the mouth to river mile 20 and system-wide flood protection throughout the fifty year project life (1985-2035) at congressionally authorized levels.

AUTHORIZATION: Supplemental Appropriations Act, 1985, PL 99-88.

REMAINING BENEFIT - REMAINING COST RATIO: 5.3 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 6.1 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 3.0 to 1 at 8 5/8 percent. The benefit to cost ratio is based on the project functioning independently.

BASIS OF BENEFIT-COST RATIO: Benefits are from a Level I Economic Update approved in June 2012 at 2012 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$304,566,000				
Programmed Construction	304,566,000			Sediment Retention		
Un-programmed Construction	0			Structure	100	Feb 1990
				Dredging	100	Mar 1990
Estimated Non-Federal Cost		\$25,311,000		Future Dredging	0	TBD
Programmed Construction	25,311,000			Entire Project	49	TBD
Cash Contribution	4,311,000					
Other Costs	21,000,000					
Total Estimated Programmed Construction Cost		\$329,877,000				
Total Estimated Unprogrammed Construction Cost		0				
Total Estimated Project Cost		\$329,877,000				
Allocations to 30 September 2010		137,320,000				
Allocation for FY 2011		1,182,000				
Allocation for FY 2012		6,370,000				
Conference Allowance for FY 2013		3,500,000	5/			
Allocations through FY 2013		148,372,000	1/ 2/ 3/ 6/	49%		
Estimated Unobligated Carry-in Funds		0	4/			
President's Budget for FY 2014		600,000		49%		
Programmed Balance to Complete after FY 2014		155,594,000	7/			
Un-programmed Balance to Complete after FY 2014		0				

1/ \$27,639,000 reprogrammed to the project.

2/ \$14,000 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED Costs of \$ 0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Dam: Type - Earth and Rock fill; Spillway Height - 125 feet; Length - 1,800 feet; Spillway Width - 400 feet; Fish Trap Facility: 300 feet long, concrete with stilling basin; Fish Ladder: 210 feet long by 6 feet wide, concrete; Lands and Damages: Acres - 5,374 (Sediment Retention Structure), 1,300 (Disposal Sites for Dredging), 25 (Levee Improvements); Ultimate Sediment Capacity: 258 million cubic yards.

Division: Northwestern

District: Portland

Mount St. Helens Sediment Control, WA

1 May 2013

NWD-105

JUSTIFICATION: The eruption of Mount St. Helens in May 1980 dramatically altered the hydraulic and hydrologic regimes of the Cowlitz and Toutle River watersheds. The Supplemental Appropriation Act, 1985 authorized the US Army Corps of Engineers to construct, operate and maintain a sediment retention structure (SRS) with such design features and associated actions necessary to provide flood protection to the WA communities of Longview, Kelso, Lexington and Castle Rock. About 50,000 people and their property are at risk if the flood protection is not maintained.

Changing hydraulic and hydrologic conditions impact the dynamic downstream deposition of sediment that is now infringing on the congressionally authorized levels of flood protection. Without dredging and other actions in the watershed the authorized level of flood protection cannot be maintained.

The ongoing data collection and sediment management analysis work is a critical step in determining what additional measures should be implemented to maintain long-term flood protection for these communities. Potential alternatives to regain/maintain the authorized levels of protection through 2035 include: dredging, improving levee integrity, increasing flood control storage, installation of a sediment storage sump, or establishment of a main channel above the SRS to reduce sediment delivery.

This project, in addition to preventing damage to property, is effective in reducing a high risk to life for the populations in the project area. That risk must be considered in evaluating the project justification in addition to economic analyses. Risk is created by both hydrologic factors (flood depth, velocity, and short warning time) and cultural factors (size of population and available routes of egress from the floodplain).

The Average annual benefits are \$54,432,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue annual monitoring	\$ 600,000	
Develop Limited Reevaluation Report (LRR) and EIS	2,182,000	
Construction Management	141,000	
Complete spillway raise construction	<u>1,021,000</u>	<u>8/</u>
Total	\$3,944,000	<u>9/</u>

FISCAL YEAR 2014: The requested amount will be applied as follows:

Continue annual monitoring	\$400,000	
Complete LRR	<u>\$200,000</u>	<u>10/</u>
Total	\$600,000	

8/ The work items have been adjusted due to construction claim for increased quantities.

9/ Includes unobligated carry-in from FY2012.

10/ The LRR is expected to complete in FY2015 with FY2014 funding.

NON-FEDERAL COST: In accordance with the agreement between the United States of America and the State of Washington for local cooperation at, along and near the Cowlitz and Toutle Rivers, Cowlitz County, State of Washington, the total estimated non-Federal cost for construction is \$25,311,000 including allowances for inflation. The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction	Annual Operation Maintenance and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$16,911,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	400,000	
Mitigation for dredging operations	4,400,000	\$846,000
Sales & Use Tax Offset from the State of Washington	3,600,000	
Total Non-Federal Payments During Construction	\$25,311,000	

STATUS OF LOCAL COOPERATION: A Local Cooperation Agreement for the Sediment Control project was signed on 26 April 1986. The State of Washington is the sponsor for the SRS and dredging portions of the project. Consolidated Diking Improvement District No. 3 and Drainage Improvement District No. 1 are sponsors for the Kelso levee improvement.

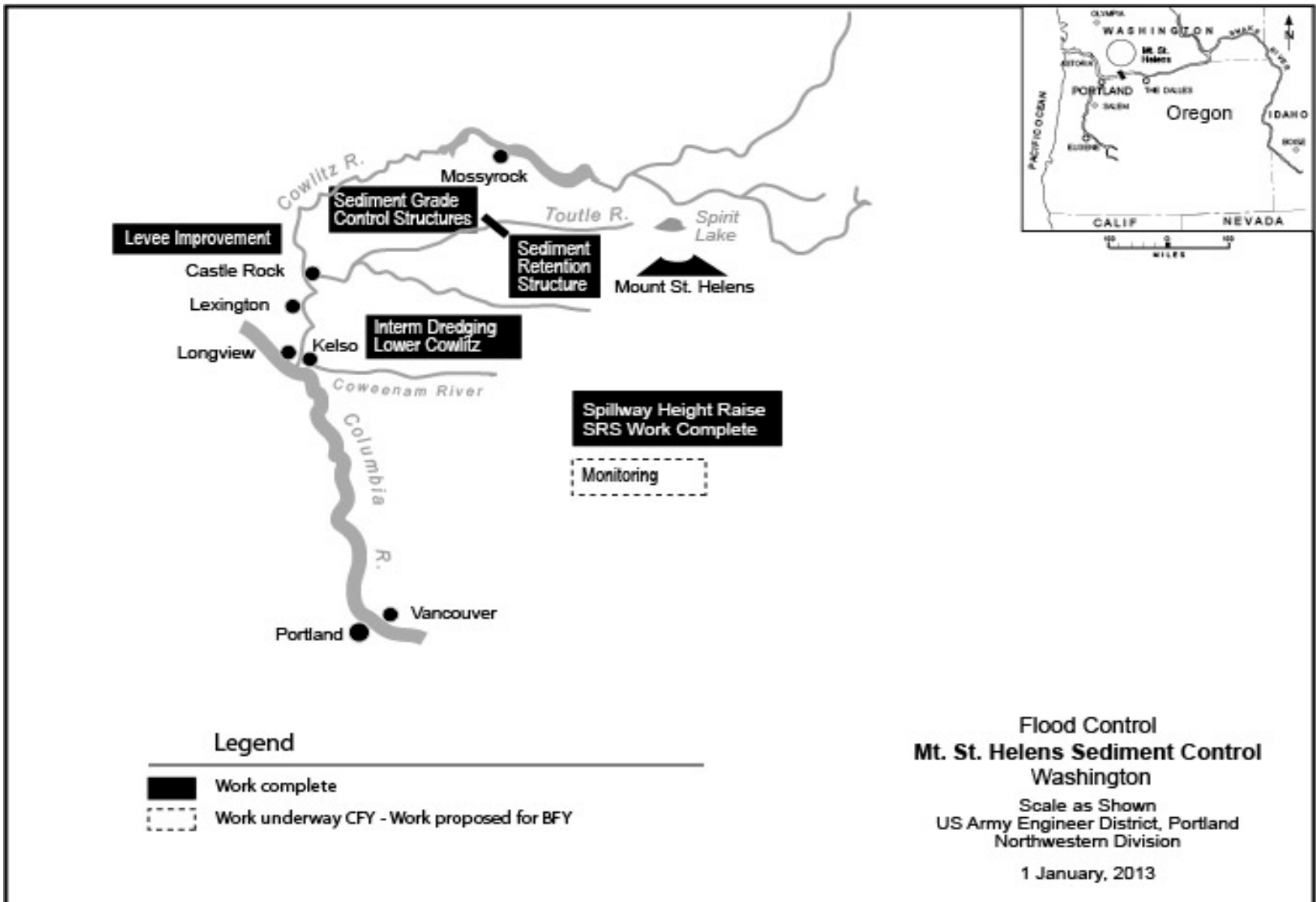
Land rights have been obtained by the State over the lands required for initial construction of the SRS. All persons residing within the SRS acquisition boundary have been relocated. The Diking and Drainage Districts have been furnished right-of-way requirements and are continuing their acquisition program. The State is continuing to acquire rights-of-way for additional dredge disposal areas should future dredging be required to preserve authorized flood protection levels.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$304,566,000 is an increase of \$4,166,000 from the latest estimate \$300,400,000 submitted to Congress (FY 2013). This change includes the following items.

Item	Amount
Price Escalation	\$3,497,000
Design Changes	<u>669,000</u>
Total	\$4,166,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency (EPA) in December, 1984.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1985 and funds to initiate construction were appropriated in FY 1986. The project remains open because of the unique circumstances created by the eruption of Mt. St. Helens. Since the small explosive eruption that occurred 1 October 2004, there have been several larger eruptions of steam and ash, with some additional growth of the lava dome within the mountain's existing crater. Significant sediment from the Mt.St. Helen's debris avalanche continues to deposit in the Lower Cowlitz River and is beginning to infringe on the authorized level of flood protection. An analysis of alternative approaches and actions to manage the sediment depositing in the Lower Cowlitz is needed in order to maintain flood damage reduction benefits to the WA communities of Longview, Kelso, Lexington and Castle Rock through 2035.



OPERATIONS & MAINTENANCE

KEY TO ABBREVIATIONS:

N = NAVIGATION
FRM = FLOOD RISK MANAGEMENT
RC = RECREATION
H = HYDROPOWER
EN = ENVIRONMENT
WS = WATER SUPPLY

COLORADO

O&M JUSTIFICATION SHEET

PROJECT NAME: Bear Creek Lake, CO

AUTHORIZATION: PL 90-483 (Recreation, Flood Control, Fish & Wildlife), PL 89-72 (Recreation)

LOCATION AND DESCRIPTION: Bear Creek Dam is located in the Denver metropolitan area on the southwest edge of Lakewood at the confluence of the Bear Creek and Turkey Creek. Construction was authorized in 1968 and was completed in 1982. The dam consists of two segments commonly referred to as the Main Embankment and the South Embankment. The main embankment measures 5,300 feet in length and has a maximum height of 179.5 feet; and the south embankment measures 2,100 feet in length with a maximum height of 65 feet. The reservoir impounded by the dam is 0.5 miles long with a maximum depth of 48 feet at the dam. The primary purpose of the dam is flood damage reduction. Fish and wildlife, and recreation are also authorized purposes.

CONFERENCE AMOUNT FOR FY 2013: \$ 840,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 467,000 O: \$ 455,000 T: \$ 912,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 884,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes rehabilitation of the earth cut spillway to repair active erosion on the downstream end.

RC: \$ 11,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 17,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$3,800,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Chatfield Lake, CO

AUTHORIZATION: PL 81-516, PL 99-662, PL 89-72, PL 93-251

LOCATION AND DESCRIPTION: Chatfield Dam is located in the Denver metropolitan area southwest of Denver on the South Platte River. Construction was authorized in 1967 and was completed in 1975. The dam measures 13,136 feet in length and has a maximum height of 147 feet. Chatfield Lake is 2.0 miles long with a maximum depth of 47 feet at the intake tower. The project provides benefits to flood damage reduction, fish and wildlife, water supply, and recreation.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,445,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 443,000 O: \$ 1,404,000 T: \$ 1,847,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 1,582,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project.

RC: \$ 177,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the following routine activities will include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 0 – NA

EN: \$ 88,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$10,500,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cherry Creek Lake, CO

AUTHORIZATION: PL 77-228, PL 78-534, PL 79-732

LOCATION AND DESCRIPTION: Cherry Creek Dam is located in the Denver metropolitan area in Aurora, Colorado. Construction of the dam was authorized in 1948 and was completed in 1950. The dam measures 14,300 feet in length and has a maximum height of 141 feet. Cherry Creek Reservoir is 3.25 miles long with a maximum depth of 46 feet at the intake tower under normal operation. The project provides benefits for flood damage reduction, fish and wildlife, and recreation.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,518,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 557,000 O: \$ 1,390,000 T: \$ 1,947,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 1,798,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes installation of additional relief wells to control embankment under seepage and corrosion repairs and repainting of flood tunnel emergency gates.

RC: \$ 123,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the following routine activities will include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans. Program includes funding for park improvements cost shared with the State of Colorado.

H: \$ 0 – NA

EN: \$ 26,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$1,150,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Cherry Creek Dam & Lake, CO

IDAHO

O&M JUSTIFICATION SHEET

PROJECT NAME: Albeni Falls Dam, ID

AUTHORIZATION: Construction of a multipurpose dam and powerhouse was authorized by the Flood Control Act of 1950 (Public Law 516, 81st Congress, Second Session with reference to Senate Doc 9, 81st Congress, 1st Session) Navigation, hydroelectric power and flood control are authorized under Public Law 81-516. Recreation was authorized in the Flood Control Act of 1944, Section 4 (PL 78-534).

LOCATION AND DESCRIPTION: Albeni Falls Dam is located 26 miles west of Sandpoint, Idaho and 4 miles east of Newport, WA, near the Washington/Idaho border on the Pend Oreille River in Bonner County, ID. The dam is a 90-foot-high concrete gravity, gate-controlled structure with a spillway 472 feet long. Overall length, including the non-overflow abutment section, is 755 feet. Ten spillway gates are the vertical lift roller-chain type. The powerhouse contains three Kaplan turbines and generators for a total installed rated capacity of 42,600 kilowatts. The project is multi-purpose, providing flood control, power generation, and regulation of stream flow for 15 downstream federal and non-federal hydroelectric projects. Lake Pend Oreille water storage seasonally augments flows on the Columbia and Pend Oreille Rivers for power production downstream. Other purposes include navigation, recreation, and fish and wildlife conservation.

CONFERENCE AMOUNT FOR FY 2013: \$1,260,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$434,000 O: \$810,000 T: \$1,244,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$29,000 - Albeni Falls Project provides flow augmentation for downstream navigation interests.

FRM: \$20,000 - Albeni Falls provides flood protection for upstream interests.

RC: \$1,143,000 - Albeni Falls has four major recreation areas and two day-use areas, with the largest campground program in Seattle District. The bulk of our budget is targeted for operating and maintaining recreation areas safely for public use. This includes hiring park attendants; recreation area garbage collection and grounds maintenance; utilities for all the facilities; maintaining the grounds, campsites, and beaches; water safety activities; and security for our visitors. A Class B Visitor Center with interpretive displays, restrooms, a theatre, and viewing areas is also operated and maintained.

H: \$0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is directly funded by Bonneville Power Administration.

EN: \$52,000 - Albeni Falls must assure compliance with environmental mandates and legal requirements in areas such as mitigation compliance, endangered species protection, cultural resources management, healthy & sustainable lands and waters, level one natural resources inventory completion, and master plan completion.

WS: \$0 - N/A

OTHER INFORMATION: Total visitation to this project for FY12 was 277,898 visitors.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Seattle

Albeni Falls Dam, ID

O&M JUSTIFICATION SHEET

PROJECT NAME: Dworshak Dam and Reservoir, ID

AUTHORIZATION: PL 87-874 (Flood Control Act of 1962)

LOCATION AND DESCRIPTION: A multi-purpose project located in Northern Idaho on the north fork of the Clearwater River; near Orofino, ID. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$2,730,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,157,000 O: \$3,645,000 T: \$4,802,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$449,000 – Funds for Emergency Action Plan revision, dam safety routine activities for instrumentation data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures Safety inspections. Provides the navigation component for the operations and maintenance of the joint features of the project.

FRM: \$2,424,000 – Funds routine operations and maintenance of the dam, routine bridge inspections, instrumentation maintenance and repair, Hydraulic Steel Structures inspections, update emergency notification plan, dam safety training, flood damages reports and inspection and data collection. Non-routine will include inspection of the spillway gates, redesign of the locking mechanism of the eccentric cylinder, evaluation of the crane and replacement of a deteriorated bridge crossing over railroad tracks with an at grade crossing. Provides the flood risk management component for the operations and maintenance of the joint features.

RC: \$849,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage outgranted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine O&M of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$1,080,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. In an effort to manage and conserve natural resources, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Funding also will be used for fish hatchery operations and biological opinions requirements and commitments to Native American tribes' ancestral remains affected by project operation.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a reservoir that has a gross storage capacity of 3,468,000 acre-feet of water, a powerhouse with an installed capacity of 400 Megawatts, 30,935 acres of land that provides recreation facilities and wildlife mitigation habitat, and the Dworshak National Fish Hatchery.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Dworshak Dam and Reservoir, ID

O&M JUSTIFICATION SHEET

PROJECT NAME: Lucky Peak Dam and Lake, ID

AUTHORIZATION: PL 79-526 (Flood Control Act of 1946)

LOCATION AND DESCRIPTION: Project is located in Southern Idaho on the Boise River, 15 minutes from Boise, Idaho.

CONFERENCE AMOUNT FOR FY 2013: \$2,350,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$641,000 O: \$1,742,000 T: \$2,383,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$1,493,000 – Funding will be used to meet the operations and maintenance requirements of the Flood Risk Management mission. Activities include performing routine operations of the dam, routine maintenance, routine bridge inspections, instrumentation maintenance and repair, to update emergency notification plan, dam safety training, security guards, flood damages reports and inspection and data collection.

RC: \$756,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – N/A

EN: \$134,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for water quality activities and section 106 funding required for cultural resources mandates, clearances and inspections.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a flood control and irrigation reservoir that has a gross storage capacity of 306,000 acre-feet of water. The reservoir and 4,288 acres of land provides recreation facilities to over a million visitors annually and valuable wildlife mitigation habitat.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

IOWA

O&M JUSTIFICATION SHEET

PROJECT NAME: Missouri River Fish and Wildlife Recovery, IA, KS, MO, MT, NE, ND & SD

AUTHORIZATION: Water Resource and Development Act (WRDA) 1986 & 1999 and WRDA 2007

LOCATION AND DESCRIPTION: The Missouri River Recovery Program (MRRP) is authorized to construct habitat features necessary to comply with the USFWS' 2003 Missouri River Biological Opinion and to mitigate for construction of the Missouri River Bank Stabilization and Navigation Project. The MRRP is located on the lower 800 miles of the Missouri River. Habitat features include numerous land tracts purchased in fee that have been restored with native vegetation and include aquatic features such as side channel chutes, 'notches' and other alterations of river training structures. Day-to-day site management of land tracts is provided by various State and Federal Agencies with funding by the Corps of Engineers. This project is split between Omaha District, Sioux City, IA, to Rulo, NE, and Kansas City District, Rulo, NE, to the mouth.

CONFERENCE AMOUNT FOR FY 2013: \$ 0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,100,000 O: \$ 1,100,000 T: \$ 2,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA.

FRM: \$ 0 – NA.

RC: \$ 0 – NA.

H: \$ 0 – NA.

EN: \$ 2,200,000 – Operation and maintenance of Missouri River Fish and Wildlife mitigation sites by the Corps of Engineers and its state and local partners. Work includes basic land and water management such as habitat plantings, maintenance of water control structures, control of noxious species, dredging of chutes and backwaters, protection of endangered species, and management of public use including signing and patrols to protect established habitats. This funding provides for overall stewardship of land tracts, physical management of land tracts to maintain desired conditions, periodic maintenance of chutes and modified river training structures, and monitoring of terrestrial and aquatic habitat to ensure habitats are performing as designed.

WS: \$ 0 – NA.

OTHER INFORMATION: NA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Missouri River, Sioux City to Mouth, IA,NE,KS & MO

AUTHORIZATION: Flood Control Acts of 1912 (P.L. 62-241), 1917 (P.L. 64-), 1925 (P.L. 68-585), 1927 (P.L. 70-560), 1930 (P.L. 73-67), 1935 (P.L. 73-409), 1945 (P.L. 79-14), 1970 (P.L. 91-611)

LOCATION AND DESCRIPTION: The Missouri River project was designed to be a self-scouring channel that uses 5,000 separate river structures and the erosive forces of flowing water to maintain channel widths and depths. Dike and revetment structures must be maintained in design condition to achieve the desired flow patterns and channel dimensions necessary for commercial navigation. This project is split between Omaha District, Sioux City, IA, to Rulo, NE, and Kansas City District, Rulo, NE, to the mouth.

CONFERENCE AMOUNT FOR FY 2013: \$ 7,767,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 5,630,000 O: \$ 2,754,000 T: \$ 8,384,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,381,000 – Critical operations and maintenance activities to support minimum channel requirements. Operations funding supports river field offices which includes some support staff; channel reconnaissance; hydro-surveys; mile board maintenance; and daily boat reports to include mileage, tonnage, and obstacles. Maintenance funding includes: structural improvements of low-flow navigation problem areas; repair of damaged dikes for bank stabilization and navigation; and emergency dredging in support of navigation activities. Significant costs include: floating plant labor costs; fleet maintenance costs; purchase of rock for repairs; plant replacement and improvement program costs; General Services Administration vehicles, fuel and travel.

FRM: \$0 – NA.

RC: \$0 – NA.

H: \$0 – NA.

EN: \$1,003,000 – Operation and maintenance of Missouri River Fish and Wildlife mitigation sites by the States of Missouri, Kansas, and the US Fish and Wildlife Service. Work includes maintenance of habitat plantings and mitigation water control structures, control of noxious species, installation of annual wildlife food plots, protection of endangered species, and management of public use including signing and patrols to protect mitigation site habitats, and Endangered Species Act compliance. Most activities in Omaha district are performed in-house, while most activities in Kansas City district are performed with contract actions with US Fish and Wildlife Service, and the states of Missouri and Kansas.

WS: \$0 – NA.

OTHER INFORMATION: Tonnage of commodities transported is approximately 4.3 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City Missouri River, Sioux City to Mouth, IA,
NE, KS, MO

O&M JUSTIFICATION SHEET

PROJECT NAME: Rathbun Lake, IA

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located on the Chariton River, near Centerville, IA, and is located in Wayne, Lucas, Monroe and Appanoose Counties. The project includes an earth-fill dam 10,600 feet long with a crest about 102 feet above the original streambed. The dam has gated outlet works and an uncontrolled chute-type spillway, and total reservoir storage capacity of 570,500 acre-feet. Regional Benefits include: Flood damage reduction on the Chariton, Missouri and Mississippi Rivers; recreation; fish and wildlife management; downstream water quality improvement; and water supply for one of the largest rural water systems in the country, the Rathbun Regional Water Association (RRWA).

CONFERENCE AMOUNT FOR FY 2013: \$ 2,359,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 963,000 O: \$ 2,229,000 T: \$ 3,192,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$2,073,000 - Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special item included in FY14 budget amount is Phase 2 to update the water control manual to prevent flood damages around lake from high water and repairs to Buck Creek sewage lagoon.

RC: \$979,000 - Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Typical operation and maintenance activities include interpretive services, water safety, mowing, sign program, fee collection, and law enforcement; and maintenance of miscellaneous facilities such as campgrounds, access roads, parking areas, trails, visitor center, kiosks, shower houses, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$133,000 - Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$7,000 - Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$159,000,000. FY12 public visitation was 675,000 which produced \$255,000 in associated recreation fees. The Project provides 2.5B gallons of water annually to approx 80,000 customers via the RRWA distribution of allocated storages. Also, the project utilizes volunteers and partnerships to assist with maintenance activities. Their work was valued at over \$68,000 in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Rathbun Lake, IA

KANSAS

O&M JUSTIFICATION SHEET

PROJECT NAME: Clinton Lake, KS

AUTHORIZATION: Flood Control Act of 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: The project is located on the Wakarusa River, 1 mile west of Lawrence, in Douglas County, Kansas. The project includes an earth-fill dam about 9,250 feet long with a crest about 114 feet above the original streambed, and reservoir total storage capacity of 411,200 acre-feet. This project provides flood protection, water supply, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,257,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 602,000 O: \$ 1,851,000 T: \$ 2,453,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,449,000 – Critical routine operations and maintenance including the dam, control tower, and outlet works. Funds cover hydrologic engineers in the reservoir control center, river gauging stations, and onsite personnel to operate the gates for flood and low flow releases. Also includes district support to address harmful algae blooms.

REC: \$860,000 - Operations and maintenance of facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing for approximately 1,700,000 visitors per year. Clinton Lake collects \$170,000 in associated recreation related fees. In FY12, \$105,000 was used to maintain recreation facilities including roads, water and wastewater treatment, and showers and restrooms. The project depends on service contracts in the amount of \$217,000, \$85,000 in utility cost, \$480,000 for labor, and \$22,000 in vehicles expenses to meet the mission. Clinton Lake also utilizes volunteer labor valued at \$85,000 to assist with maintenance activities, helping to reduce some expenses.

H: \$0 – NA.

EN: \$137,000 – Basic stewardship and curation of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Investigations include project review, field investigations, and coordination with various state historical societies for 144 sites. Other activities include maintaining and improving prairie grass stands, improve wildlife carrying potential, control erosion through maintenance of residues and the maintenance of terraces, and enhance wildlife carrying potential by providing wildlife food plots on approximately 14,400 acres. Conservation efforts also focus on the control and reduction of noxious weeds on approximately 10,000 acres and invasive species 5,000 acres.

WS: \$7,000 – Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: Visitation last year was approximately 8,766,000 visitor hours. Damages prevented in 2011 equaled \$2,300 and cumulative damages prevented from project implementation has totaled \$1,209,540,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Clinton Lake, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Hillsdale Lake, KS

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located approximately 12 miles above the mouth of Big Bull Creek, a tributary of the Marais des Cygnes River and about 2 ½ miles west of Hillsdale, in Miami County, Kansas. The project includes an earth-fill embankment about 11,600 feet long (including approximately 3,300 feet of dike section) with a crest about 100 feet above the original streambed, and reservoir storage capacity of 163,900 acre-feet. This project provides flood protection, water supply, water quality, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 835,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 416,000 O: \$ 713,000 T: \$ 1,129,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,019,000 – Critical routine operations and maintenance flood risk management including the dam, control tower, and outlet works. Funds cover hydrologic engineers in the reservoir control center, river gauging stations, and onsite personnel to operate the gates for flood and low flow releases. Also includes, rehabilitation of dam and north access roads which serve as a major commuter route for local residents, R30 insulation for project facilities, and district support to address harmful algae blooms.

RC: \$64,000 – The recreation funding at Hillsdale Lake provides for the operation and maintenance of facilities and oversight of Kansas Department of Wildlife, Parks, and Tourism, leased lands for activities for the general public such as camping, fishing, boating, trails, hunting and site seeing for approximately 350,000 visitors per year. In FY-12, \$16,000 was used to maintain recreation facilities including roads, visitor center, and wastewater treatment. Hillsdale Project has a staff of 2 permanent employees with a recreation related labor cost of \$70,000 for FY-12. Hillsdale Lake also utilizes volunteer labor valued at \$30,000 to assist in the visitor's center and to perform maintenance activities to reduce expenses.

H: \$0 – NA.

EN: \$41,000 – Provides for oversight of basic stewardship, and curation, of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Investigations include project review, field investigations, and coordination with various state historical societies for 142 sites. Other activities include maintaining and improving prairie grass stands, improve wildlife carrying potential, and enhance wildlife carrying potential by providing wildlife food plots on approximately 8,000 acres. Conservation efforts also focus on the control and reduction of noxious weeds on approximately 6,000 acres and invasive species 4,000 acres.

WS: \$5,000 – Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: NA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Hillsdale Lake, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Kanopolis Lake, KS

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: The project is located on the Smoky Hill River, about 184 river miles above the mouth of the stream, and about 11 miles northwest of Marquette, Kansas. The project includes an earth-fill dam with a crest of about 121 feet above the original streambed, having a total length of 15,360 feet, including dike sections on the left and right abutments; and reservoir storage capacity of 413,500 acre-feet. This project provides flood protection and recreation for central Kansas.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,513,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 330,000 O: \$ 1,101,000 T: \$ 1,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$769,000 – Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special item included in FY14 budget amount is service bridge pier repair and District support to address harmful algae blooms.

RC: \$473,000 – Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Typical operation and maintenance activities include interpretive services, water safety, mowing, sign program, fee collection, and law enforcement; and maintenance of miscellaneous facilities such as campgrounds, access roads, parking areas, trails, visitor center, kiosks, shower houses, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$181,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$8,000 – Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$1,650,000. FY12 public visitation was 250,000 which produced \$75,000 in associated recreation fees. The Project provides 225,000,000 gallons of water annually to customers via the Ellsworth County Rural Water District #5. Also, the project utilizes volunteers and partnerships to assist with maintenance activities, work valued at over \$21,000 in FY12, helping to reduce some of the operation and maintenance expenses.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Melvern Lake, KS

AUTHORIZATION: Flood Control Acts of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located in Osage County, Kansas, 8 miles south of Lyndon. The project includes an earth-fill dam about 9,700 feet long with a crest about 119 feet above the original streambed, and reservoir storage capacity of 358,600 acre-feet. This project provides flood protection, water supply, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,092,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$440,000 O: \$1,733,000 T: \$2,173,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,271,000 – Provide critical routine operations and maintenance functions on a 9,700 foot earthen dam structure with a volume of 9,100,000 cubic yards. The embankment also includes an intake/double gated outlet structure with an 822 foot conduit, and a 200 foot uncontrolled spillway. During the drought period of FY 2012, flood damages prevented by project operations were \$196,000. Cumulative flood damages prevented from 1973 through FY 2012 total \$221,000,000. In addition to flood control, Melvern Lake also provides critical support to downstream area water supply and water quality valued at over \$4,800,000 each FY.

RC: \$766,000 - Funding is used for operation and maintenance of recreation facilities on Melvern Lake including campgrounds, beaches, day use parks, fishing docks, and boat ramp. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities to support the 6,495,400 visitor hours per year. The 6,930 acre Melvern Lake provides the various Recreational Activities at 5 Public Use Areas. Maintenance of Recreation facilities - \$51,000; service contracts such as law enforcement and gate attendants - \$260,000; Labor to support mission - \$433,000; General Services Administration vehicles - \$24,000; and other items. Fees collected are approximately \$280,000. FY12 Volunteer savings per year – 56 volunteers provided 3,508 hours for \$76,000.

H: \$0 – NA.

EN: \$130,000 – Provides for basic stewardship of cultural resources and compliance with Sections 106 and 110 of the National Historic Preservation Act, to include project review, field investigations, and coordination with various state historical societies. Funding at this level will provide minimal boundary surveillance, prescribed burning and lake sampling.

WS: \$6,000 – Critical routine operations performed under the Water Supply Agreement. Supplemental support to downstream area water supply and quality valued at over \$4,800,000 occurred in FY12.

OTHER INFORMATION: Visitation last year was approximately 5,503,000 visitor hours.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Milford Lake, KS

AUTHORIZATION: Flood Control Act of 1954 (P.L. 81-780)

LOCATION AND DESCRIPTION: The project is located in Geary, Clay, and Riley Counties, on the Republican River near the village of Alida, about 10 miles above the confluence of the Republican and Smokey Hill Rivers, which form the Kansas River; near Fort Riley, Kansas and about 4 miles northwest of Junction City, Kansas. The project includes an earth-fill dam about 6,300 feet long with a crest about 143 feet above the original streambed, and reservoir storage capacity of 1,131,000 acre-feet. This project provides flood protection, water supply, water quality control, fish and wildlife management, navigation supplementation, and recreation for northeast Kansas.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,113,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 649,000 O: \$ 1,726,000 T: \$ 2,375,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,360,000 - Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special items included in FY14 budget amount are installation of potable water at project office, dam relief well rejuvenation and District support to address harmful algae blooms.

RC: \$929,000 – Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Typical operation and maintenance activities include interpretive services, water safety, mowing, sign program, fee collection, and law enforcement; and maintenance of miscellaneous facilities such as campgrounds, access roads, parking areas, trails, visitor center, kiosks, shower houses, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$81,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$5,000 – Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented in FY12 limited to \$25,000 due to widespread drought across Midwest. Cumulative flood damages prevented from project implementation has totaled \$1,316,000,000. FY12 public visitation was 850,000 which produced \$160,000 in associated recreation fees. Also, the project utilizes volunteers and partnerships to assist with maintenance activities, work valued at over \$64,000 in FY12, helping to reduce some of the operations and maintenance expenses.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Milford Lake, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Perry Lake, KS

AUTHORIZATION: Flood Control Act of 1954 (P.L. 81-780)

LOCATION AND DESCRIPTION: The project is located on the Delaware River, 2 miles north of Perry, in Jefferson County, Kansas. The project includes an earth-fill dam about 7,750 feet long with a crest about 121 feet above the original streambed, and reservoir storage capacity of 715,500 acre-feet. This project provides flood protection, water supply, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,259,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 696,000 O: \$ 1,627,000 T: \$ 2,323,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,118,000 - Perry reservoir provides critical support to the Missouri River during times of flooding and during periods of drought. Funds will also be used to purchase a work barge, provide rejuvenation of the relief well system and the required District support of harmful algae bloom program.

RC: \$1,037,000 - The recreation funding at Perry Lake provides activities for the general public such as camping, fishing, boating, trail activities, hunting and site seeing adventures for approximately 5,000,000 visitor hours per year that generates \$243,000 in collected fees. Perry Lake uses volunteers to assist with maintenance activities with a value of \$263,000 in savings to the Government. The Maintenance of Recreations Facilities for FY12 was \$223,000. With a staff of only ten permanent employees and one summer hire, and a labor cost of \$410,000 per year, the project depends on service contracts in the amount of \$418,000, and \$26,000 in vehicles expenses to meet the mission.

H: \$0 – NA

EN: \$163,000 - Provides for basic stewardship of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Investigations include project review, field investigations, and coordination with various state historical societies. Also, maintain and improve prairie grass stands, improve wildlife carrying potential, control erosion through maintenance of residues and the maintenance of terraces, and enhance wildlife carrying potential by providing wildlife food plots..

WS: \$5,000 - Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: Visitation last year was approximately 5,316,000 visitor hours. Damages prevented in 2011 equaled \$12,665,000 and cumulative damages prevented from project implementation has totaled \$5,438,812,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pomona Lake, KS

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located in Osage County, Kansas, approximately 8 miles northwest of Pomona and 34 miles upstream from Ottawa. The project includes an earth-fill dam about 7,750 feet long with a crest about 119 feet above the original streambed, and reservoir storage capacity of 239,500 acre-feet. This project provides flood protection, water quality, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,053,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 655,000 O: \$ 1,349,000 T: \$ 2,004,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,132,000 – Critical routine operations and maintenance functions on a 7,750 foot earthen dam structure with a volume of 5,200,000 cubic yards. The embankment also includes an intake/double gated outlet structure with a 720 foot conduit, and a 200 foot uncontrolled spillway. During the drought period of FY12, flood damages prevented by project operations were \$0. Cumulative flood damages prevented from 1963 through FY12 total \$210,026,000.

RC: \$729,000 - Funding is used for operation and maintenance of recreation facilities on Pomona Lake including campgrounds, beaches, day use parks, fishing docks, boat ramp, etc. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities to support the 2,929,377 visitor hours per year. The 3,865 acre Pomona Lake provides the various recreational activities at 7 public use areas including maintaining recreation facilities - \$58,900; service contracts such as law enforcement and gate attendants - \$190,000; Labor to support mission - \$459,000; General Services Administration vehicles - \$25,000; and other items. Fees collected are approximately \$139,000. FY12 volunteer savings per year – 7 full time plus groups provided 2,979 hours for \$65,000.

H: \$0 – NA.

EN: \$139,000 - This provides for basic stewardship of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Also included is tree cutting/pruning, seeding, erosion control projects, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and bald eagle monitoring of eagle nests.

WS: \$4,000 - Critical routine operations performed under the Water Supply Agreement. 6,691 acre feet of water was supplied for supplemental water quality and supply in FY12, in addition to the 55,000,000 gallons of routine water supply.

OTHER INFORMATION: Visitation last year was approximately 2,929,377 visitor hours.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Pomona Lake, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Tuttle Creek Lake, KS

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-645), WRDA 1986 (P.L. 99-662)

LOCATION AND DESCRIPTION: The project is located at mile 10 on the Big Blue River, 6 miles north of Manhattan in Riley County, Kansas. An earth and rock-fill dam 7,500 feet long with a crest about 166 feet above the original streambed, gated outlet works, and gated concrete spillway. The reservoir storage capacity is 2,141,300 acre-feet. The project provides flood protection, low-flow supplementation to the Kansas and Big Blue Rivers, navigation supplementation on the Missouri River, water quality, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,245,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 927,000 O: \$ 1,166,000 T: \$ 2,093,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,342,000 - Critical operation and maintenance for: 1.5 miles embankment; 4 hydraulic service gates, an emergency gate, several hundred instruments (dam safety): Spillway; 18 tainter gates and bridge deck (State Highway K-13): Blue Rapids Levee; one mile long with instrumentation (dam safety), two gravity sluice gates, and Pumping plant. Planned expenditures include relief well rejuvenation (critical to the dam safety) and District support to address harmful algae bloom and zebra mussel monitoring.

RC: \$509,000 – Operate two Class A campgrounds and four day-use park areas, includes \$390,000 labor, \$26,000 service contracts, \$42,000 in miscellaneous contractual services and supplies, and \$32,000 in General Services Administration vehicles. Project has no law enforcement supplemental contracts. One Class A campground and three day-use areas are monitored by volunteer labor (camp hosts and custodians). Annual average visitation is 1,993,000 visitor hours.

H: \$0 – NA.

EN: \$235,000 – Basic stewardship of cultural resources and compliance with Sections 106 and 110 of National Historic Preservation Act. Also included is erosion control projects, gate installation and maintenance, controlled burns, detection and control of invasive species, water sampling, and bald eagle nest monitoring. The Missouri River Biological Opinion recognizes that regulation of the Kansas River for flood control and navigation has adverse impacts on least tern and piping plover nesting on the Kansas River. Work includes monitoring and evaluation of nesting activities and fulfills requirements of the current Biological Opinion.

WS: \$7,000 - Critical routine operations for Water Supply Agreement flows for water supply and water quality are met, and also at times navigation support flows for the Missouri River are met.

OTHER INFORMATION: Damages prevented in 2011 equaled \$133,886,000 and cumulative damages prevented from project implementation has totaled \$6,553,330,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Tuttle Creek, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Wilson Lake, KS

AUTHORIZATION: Flood Control Act of 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: Wilson Lake is located near Russell, in Russell County, Kansas. A small arm of the lake extends into Lincoln County. The project includes an earth-fill dam about 5,600 feet long with a crest about 172 feet above the original streambed, and reservoir storage capacity of 766,300 acre-feet. The Corps of Engineers lake project purposes include flood protection, recreation, navigation (until irrigation is developed), irrigation (when developed), fish and wildlife, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,515,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 922,000 O: \$ 1,421,000 T: \$ 2,343,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,746,000 - Critical routine operations and maintenance for flood risk management. Also, repair elevator controls in tower, Zebra Mussel protection phase I, design/build wind turbine, periodic bridge inspection, flume and piezometers at Station 70, spillway stage frequency study, embankment cracking study and District support to address harmful algae bloom.

RC: \$512,000 - Activities required to open parks to accommodate visitation. 13 contracts consisting of park attendant, custodian, janitor, refuse collection, herbicide, and mowing will account for \$191,000. Electric and water utilities are anticipated to account for \$110,000.

H: \$0 – NA.

EN: \$77,000 – Provides for basic stewardship, and curation of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act for 84 sites. Investigations include project review, field investigations, and coordination with various state historical societies. Other activities include maintaining and improving prairie grass stands, improve wildlife carrying potential, control erosion through maintenance of residues and the maintenance of terraces, and enhance wildlife carrying potential by providing wildlife food plots on approximately 75 acres. Base effort for the prevention of the direct, immediate degradation of loss of natural resources. Increased effort to return project prairie lands to a sustainable condition through the implementation of prescribed fire and invasive species management. Conservation efforts also focus on the control and reduction of noxious weeds and invasive species on approximately 4,500 acres and invasive species.

WS: \$8,000 - Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: FY 2012 visitation was 200,928 with 2,127,723 visitor hours. Volunteer hours were 759 hours valued at \$17,000. FY 2012 Recreation revenue collected was \$215,000. Damages prevented in 2012 equaled \$11,000 and cumulative damages prevented from project implementation has totaled \$1,650,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District Kansas City

Wilson Lake, KS

MISSOURI

O&M JUSTIFICATION SHEET

PROJECT NAME: Harry S. Truman Dam and Reservoir, MO

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761), 1941(P.L. 77-228), 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: Harry S Truman Dam is located 1 mile west of Warsaw, Missouri. This project has an earth-fill dam about 5,000 feet long with a crest about 126 feet above the original streambed; a gate-controlled overfall spillway; and powerhouse with six inclined pump-generating units with a combined nameplate capacity of 160,000 kilowatts; and 5,187,000 acre-feet reservoir storage capacity. This project provides flood protection, hydropower, water supply, fish and wildlife, and recreation to central Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 7,834,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 4,440,000 O: \$ 4,725,000 T: \$ 9,165,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$596,000 – Critical joint routine operations (i.e. water control/management), maintenance, and repairs necessary to avoid forced facility closures, dam/life safety concerns, lessee/outgrant non-compliance issues, non-compliance with environmental laws and regulations. Funds also used to perform critical dam safety activities (i.e. dam safety inspections, instrumentation, engineering analysis, etc.).

RC: \$2,446,000 – Critical routine operations and maintenance to include labor, service contracts, utilities, General Services Administration fleet expenses, materials and supplies to accomplish the recreation mission. Recreation facilities under Corps of Engineers management include: 9 Campgrounds with over 1100 campsites, 6 swim beaches, 13 boat ramps and the associated facilities to support these areas. The program supports over 16M visitor hours and generates recreation revenues of \$533,000. Volunteers contributed labor valued at \$199,000.

H: \$5,299,000 – Funds critical routine operations, maintenance, and repairs necessary to prevent forced unit outages and lost power production and revenue for the U.S. Treasury. Average annual capacity and energy benefits of the plant is \$20,700,000. Funds also used to ensure compliance with North American Electric Reliability Corporation standards avoiding notice of violations and costly penalties and repair of Unit 6 main shaft coupling stud failure.

EN: \$817,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$ 7,000 – Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$1,870,000,000 and average annual capacity and energy benefit for the power plant is \$20,700,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Little Blue River Lakes, MO

AUTHORIZATION: Flood Control Acts of 1968 (P.L. 90-483)

LOCATION AND DESCRIPTION: This project consists of two lakes in Jackson County, Missouri, located in Kansas City, Missouri and suburban communities. The Blue Springs Lake site is on the East Fork of the Little Blue River about ½ mile south of U.S. Highway 40, and the Longview Lake site is on the main stem at approximately 109th Street. The Blue Springs Dam is an earth-fill embankment about 2,500 feet long with a crest about 80 feet above the original streambed, and total reservoir storage capacity of 26,600 acre-feet. The Longview Dam is an earth-fill embankment about 1,900 feet long with a crest about 117 feet above the original streambed, and total reservoir storage capacity of 46,900 acre-feet. The project provides flood protection, water quality, and recreation to the surrounding area, and greater metropolitan Kansas City, Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,154,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 344,000 O: \$ 583,000 T: \$ 927,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$835,000 – Funding used to provide critical routine operations and maintenance for flood risk management on both lake projects plus special item work for FY14 to include remove and replace Blue Springs and Longview Control Tower electrical conduit and fixtures, Longview bridge inspection and periodic inspection and dewatering.

RC: \$19,000 – Funding used to support approximately 900K visitor hours per year and for operation and maintenance of 1600 sf Administrative and Information Center and picnic pavilion, Coordination with Cost Share Partner; janitorial contract; labor to support mission; and General Services Administration vehicle cost.

H: \$0 – NA.

EN: \$67,000 – To provide basic cultural resources stewardship and compliance with Sec. 106 & 110 of the National Historic Preservation Act, to include investigations, project review, field investigations, and coordination with state historic preservation officers and Native American Tribes. Other activities include oversight of historic properties and updating historical property management plans. Also, provide basic resource management program oversight and protection programs, and real estate program guidance and oversight. Plant trees, mow early succession fields, spray herbicide to control invasive species.

WS: \$6,000 – Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: Cumulative damages prevented since project implementation has totaled \$50,813,000. Volunteers provided 1460 volunteer labor hours valued at \$32,000.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Long Branch Lake, MO

AUTHORIZATION: Flood Control Acts of 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: The project is located on the East Fork Little Chariton River in north central Missouri, about 2 miles west of Macon, in Macon County. An earth-fill dam about 3,800 feet long with a crest about 76 feet above the original streambed, and total reservoir storage capacity of 64,500 acre-feet. This project provides flood protection, water supply, water quality, and recreation for north central Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,093,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 181,000 O: \$ 826,000 T: \$ 1,007,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$815,000 – Critical Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special item included in FY14 budget amount is 5-yr periodic dam safety inspection.

RC: \$118,000 – Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Parks at this project are operated by the State of Missouri which keeps operation and maintenance costs for recreation at a minimum. Typical operation and maintenance activities include interpretive services, water safety, sign program, and law enforcement; and maintenance of misc. facilities such as access roads, parking areas, visitor center, kiosks, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$69,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$5,000 – Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$50,200,000. FY12 public visitation was 157,000. The Project collected approximately \$95,000 from water supply revenues in FY12 from the City of Macon, MO. Also, the project utilizes volunteers and partnerships to assist with maintenance activities, work valued at over \$2,000 in FY12, helping to reduce some of the operation and maintenance expenses.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pomme de Terre Lake, MO

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761), 1944 (P.L. 78-534), 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located in Hickory and Polk counties, 4 miles south of Hermitage and 20 miles north of Bolivar, Missouri. The project includes an earth and rock-fill dam about 4,630 feet long plus a dike section about 2,790 long on the left abutment with a crest about 156 feet above the original streambed, and total reservoir storage capacity of 644,200 acre-feet. This project provides flood protection, water quality, and recreation to southwest Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,170,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 608,000 O: \$ 1,689,000 T: \$ 2,297,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,044,000 - Funding supports critical routine operations and maintenance of dam and appurtenant structures. Funds are utilized for labor, service contracts, utilities, General Services Administration fleet expenses, materials and supplies. The dam provides direct flood protection for 21 river miles below the dam. The reservoir and dam provide flood reduction benefits for the Osage and Missouri Rivers.

RC: \$894,000 – This funding supports critical routine operations and maintenance of the projects recreation program. It includes service contracts, utilities, General Services Administration fleet expenses, materials and supplies. Recreation facilities under Corps of Engineers management include: 6 Day Use Areas, 6 Campgrounds with over 400 campsites, 2 swim beaches, 6 boat ramps and the associated facilities to support these areas. The recreation program supports almost 12 million visitor hours and generates recreation revenues of \$286,000. Volunteers contribute 5,400 hours of labor worth \$119,000 to enhance the recreation program.

H: \$0 – NA.

EN: \$359,000 – Funding will be used to operate the Shoreline Management Program. It is the largest shoreline management program in Northwestern Division with 645 private boat docks, 346 vegetation modification permits and 68 private real estate licenses. This also funds the fisheries and wildlife management program with 7,800 acres of water and 8,100 acres of wildlife lands. The funding provides for basic stewardship of cultural resources and compliance with Sections 106 and 110 of the National Historic Preservation Act, to include project review, field investigations, and coordination with various state historical societies.

WS: \$0 – NA.

OTHER INFORMATION: The economic impact of 1.5 million annual visits to Pomme de Terre Lake result in an estimated \$31,300,000 in total sales and creates 600 jobs. During its life the project has provided \$69,169,600 in flood reduction benefits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Pomme de Terre Lake, MO

O&M JUSTIFICATION SHEET

PROJECT NAME: Smithville Lake, MO

AUTHORIZATION: Flood Control Act of 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: Smithville Lake is about 1 mile northeast of Smithville, and about 5 miles north of Kansas City, in Clay and Clinton counties, Missouri. The project includes an earth-fill dam about 4,200 feet long with a crest about 96 feet above the original streambed; and a dike about 2,400 feet long. The dam has gated outlet works and an uncontrolled service spillway, and a total reservoir storage capacity of 241,500 acre-feet. The project provides flood protection, water supply, water quality, and recreation to the surrounding area, and greater metropolitan Kansas City, Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,312,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 616,000 O: \$ 971,000 T: \$ 1,587,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,299,000 - Critical routine functions on an earthen dam structure, including an intake and outlet structures to include periodic inspection and dewatering, underground fuel storage tank, periodic bridge inspection, periodic failure mode assessment and installation of additional piezometers.

RC: \$123,000 - Operation and maintenance of a 10,000 square foot Class A Visitor Center and Admin facility with trail and group pavilion plus patrol of 31 public access points - \$130,000; Coordination with Cost Share Partners; service contracts such as lawn mowing, janitorial and refuse pickup - \$26,000; Labor to support mission - \$130,000; other items such as General Services Administration vehicles and fuel - \$30,000.

H: \$0 – NA.

EN: \$161,000 – Provides for basic stewardship of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Investigations include project review, field investigations, and coordination with various state historical societies. Provide basic stewardship of soil, water, vegetative and wildlife resources on project lands. Monitor soil erosion on lake shore and implement improvements as necessary by placing rip rap on disturbed areas and planting native grass strips in erosion reduction zones. Also includes admin of 40 agriculture leases and numerous public hunting areas. Removal of invasive species including zebra mussels, lespechea, multi-flora rose, honey locust, and Russian olives.

WS: \$4,000 - Critical routine operations performed under the Water Supply Agreement, and support to Cities of Smithville and Plattsburg, Missouri, for water supply operations.

OTHER INFORMATION: Cumulative flood damages prevented from 1982 through FY 2012 total \$970,247,100. Project visitation is approximately 1.3 million visitor hours per year. Annual volunteer labor averages 3,281 volunteer hours valued at \$72,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Smithville Lake, MO

O&M JUSTIFICATION SHEET

PROJECT NAME: Stockton Lake, MO

AUTHORIZATION: Flood Control Act of 1954 (Public Law 83-780)

LOCATION AND DESCRIPTION: Stockton Lake is located in Cedar, Dade, and Polk counties, approximately 1 mile east of Stockton, Missouri. The project is a rock-shell dam with impervious core about 5,100 feet long with a crest about 156 feet above the original streambed; a gate-controlled overfall spillway; and a powerhouse with a single generating unit with a nameplate capacity of 45,200 kilowatts. The reservoir storage capacity is 1,651,000 acre-feet. This project provides flood protection, hydropower, water supply, fish and wildlife, and recreation to southwest Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 4,664,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,678,000 O: \$ 2,931,000 T: \$ 4,609,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,198,000 – Critical routine program joint maintenance and repair costs (i.e. vegetation removal, dam safety inspections, instrumentation, etc.) necessary for the safe operation of the dam, and joint operating costs necessary for water management (water control & quality) activities.

RC: \$1,696,000 – Supports critical routine operations and maintenance of the Stockton Recreation Program. Funds labor, service contracts, utilities, General Services Administration fleet expenses, materials/supplies to accomplish the recreation mission. Recreation facilities under Corps of Engineers management include: 9 campgrounds with over 500 campsites, 5 swim beaches, 10 boat ramps and the associated facilities to support these areas. The program supports over 8 million visitor hours and generates recreation revenues of \$374,000. Volunteers contribute over 2300 hours of labor worth \$52,000.

H: \$1,540,000 - Essential operating costs necessary to meet minimum operating requirements of the power plant, and funds critical routine operations of generation and transmission equipment. The power plant plays a critical part in producing power for customers within the Southwestern Power Administration region. These funds are used to protect from lost power production, lost revenue for the US Treasury, and customers having to purchase replacement power at higher rates.

EN: \$168,000 – This provides for basic stewardship of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Includes tree cutting/pruning, seeding, erosion control projects, gate installation and maintenance, controlled burns, detection and control of invasive species, water sampling, and bald eagle monitoring of eagle nests.

WS: \$7,000 - Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: Visitation last year was approximately 7,809,000 visitor hours. Damages prevented in 2011 equaled \$144,000 and cumulative damages prevented from project implementation has totaled \$206,831,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Stockton Lake, MO

MONTANA

O&M JUSTIFICATION SHEET

PROJECT NAME: Fort Peck Dam & Lake, MT

AUTHORIZATION: PL 74-409, PL 75-259, PL 75-529, PL 74-409, PL 92-500, PL 93-205, PL 99-662

LOCATION AND DESCRIPTION: The project is located 20 miles southeast of Glasgow, Montana on Montana Highway 24. Construction began in 1933 and was completed in 1940. The dam is 21,026 feet long and has a maximum height of 250.5 feet. The lake behind the dam measures 134 miles long and a maximum depth of 220 feet. The water at Fort Peck provides benefits of the flood damage reduction, power generation, navigation, fish and wildlife, recreation, irrigation, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 5,235,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 391,000 **O:** \$ 5,149,000 **T:** \$ 5,540,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$ 799,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,091,000 - Funding will provide portion of activities serving multiple project purposes allocated to flood risk management.

RC: \$ 1,172,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 1,642,000 – Funding will provide portion of activities serving multiple project purposes allocated to hydropower. Funding for routine O&M activities and management expenses of hydropower facilities are provided by the Fort Peck continuing fund, which is managed by Western Area Power Administration and funded through customer receipts.

EN: \$ 586,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 250,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, from the beginning to FY11, \$12,061,000,000. Plant installed generation capacity of 185 Megawatts, produced \$35,000,000 in power production in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

O&M JUSTIFICATION SHEET

PROJECT NAME: Libby Dam (Lake Kocanusa), MT

AUTHORIZATION: Flood Control Act of 1950 (PL81-516)

LOCATION AND DESCRIPTION: Libby Dam is located on the Kootenai River in Lincoln County, MT, 17 road miles northeast of the town of Libby on State Highway 37. The Libby Dam is a multi-purpose concrete gravity dam. Its operations primarily benefit flood control, power generation and regulation of stream flow for 16 downstream hydroelectric projects. The powerhouse came on line in 1975 has five turbines with a total installed rated capacity of 605 megawatts. Libby Dam is a high head dam and holds back 90 miles of water in Lake Kocanusa. Forty-eight miles of the reservoir lie within U.S. borders, the other 42 miles are in Canada.

CONFERENCE AMOUNT FOR FY 2013: \$1,718,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$442,000 O: \$1,370,000 T: \$1,812,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A.

FRM: \$882,000 - Libby Dam provides storage for downstream flood protection in the Kootenai River and lower Columbia River. Funding will be utilized for operating and maintaining the dam structure, supporting facilities and equipment. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific.

RC: \$416,000 - Recreation is one of the congressionally authorized purposes as part of the enabling legislation that authorized Libby Dam. Included in this mission is a Class A Visitor Center, campgrounds, boats ramps, swimming facilities and day use areas. The bulk of this budget is utilized for operating and maintaining public use areas. This funding also pays for hiring seasonal park rangers to accommodate increased visitation in summer months.

H: \$0 - Routine operation and maintenance of Hydropower plant is direct funded by the Power Marketing Agency.

EN: \$416,000 - Libby Dam carries out the full range of responsibilities in public lands stewardship, including US Fish and Wildlife, Endangered Species Act requirements, Cultural Resources Management, water quality and monitoring, Environmental Compliance Coordination, and forestry. This funding also assures compliance with legal mandates and regulations regarding biological opinions.

WS: \$0 - N/A

OTHER INFORMATION: The visitation for FY12 was 191,379 and the estimated benefit to the local economy was \$4,501,505.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

NEBRASKA

O&M JUSTIFICATION SHEET

PROJECT NAME: Gavins Point Dam & Lewis and Clark Lake, NE & SD

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: Gavins Point Dam is located 4 miles west of Yankton, SD on Highway 52, south across the dam or 13 miles north of Crofton, NE on Highway 121. Gavins Point Dam construction began in 1952 and was completed in 1956. The dam measures 8,700 feet in length and has a maximum height of 74 feet. Lewis and Clark Lake is 25 miles long, creates 90 miles of shoreline, and has a maximum depth of 45 feet at the dam.

CONFERENCE AMOUNT FOR FY 2013: \$ 8,018,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,080,000 O: \$ 7,272,000 T: \$ 9,352,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$ 882,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,210,000 - Funding will provide portion of activities serving multiple project purposes allocated to flood risk management. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

RC: \$ 787,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 5,858,000 – Funding will provide for critical routine O&M activities and management of hydropower facilities, which includes operation and maintenance of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, and allocated portion of multi-purpose activities. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

EN: \$ 540,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 75,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, through FY11, \$645,000,000. Plant installed generation capacity of 132 Megawatts, produced \$23,000,000 in power production in FY12.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Gavins Point Dam & Lewis and
Clark Lake, NE & SD

O&M JUSTIFICATION SHEET

PROJECT NAME: Harlan County Lake, NE

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: Harlan County Lake is located in south central Nebraska on the Republican River, 7 miles east of Alma and 60 miles south of Kearney, Nebraska. The project includes an earth-fill dam with a crest about 107 feet above original streambed; total length of 11,827 feet including a gate-controlled, concrete, gravity-type spillway; and reservoir storage capacity of 163,900 acre-feet. Project purposes include flood protection, irrigation, recreation, fish and wildlife, and water quality benefits to the south central Nebraska, north central Kansas regions.

CONFERENCE AMOUNT FOR FY 2013: \$ 6,256,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 11,088,000 O: \$ 1,521,000 T: \$ 12,609,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$11,672,000 – Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special items included in FY14 budget amount are tainter gate and spillway rehab phases 4A and 4B, repair of stilling basin wall drains, replace case loader, replace dam gallery electric wiring, repair and replace dam guardrail, construct irrigation stoplogs, and replace corrugated metal pipe drains on downstream toe.

RC: \$780,000 – Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Typical operation and maintenance activities include interpretive services, water safety, mowing, sign program, fee collection, and law enforcement; and maintenance of miscellaneous facilities such as campgrounds, access roads, parking areas, trails, visitor center, kiosks, shower houses, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$157,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$0 – NA.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$228,600,000. FY12 public visitation was 600,000 which produced \$200,000 in associated recreation fees. The Project provides irrigation supply to 23,000 acres of land in Nebraska and 42,000 acres in Kansas. Also the project utilizes volunteers and partnerships to assist with maintenance activities, work valued at over \$65,000 in FY12, helping to reduce some of the operations and maintenance expenses.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Harlan County Lake, NE

O&M JUSTIFICATION SHEET

PROJECT NAME: Missouri River - Kenslers Bend, NE to Sioux City, IA

AUTHORIZATION: PL 79-14.

LOCATION AND DESCRIPTION: Missouri River Kenslers Bend Project provides operation and maintenance of 15 miles of the Missouri River channel stabilization from Big Sioux Bend near Sioux City IA to Ponca Bend near Ponca, Nebraska. Program responsibilities include maintenance of dikes revetments, environmental notches, chevron dikes, L-dikes, sills, kicker dikes, chute closures, water control and water quality studies.

CONFERENCE AMOUNT FOR FY 2013: \$81,000 2/

BUDGET FOR FY 2014: M: \$ 18,000 O: \$ 74,000 T: \$ 92,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 92,000 – The funding will be used to meet the minimum O&M requirements of the Flood Risk Management mission. Program responsibilities include maintenance of stabilization structures; dikes, revetments, environmental notches, chevron dikes, L-dikes, sills, kicker dikes and chute closures. Funding will provide maintenance to critically damaged or degraded structures, structure surveys, dredging, water control and water quality studies necessary to maintain a stable river channel.

RC: \$ 0 – N/A

H: \$ 0 – NA

EN: \$ 0 – N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$198,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Papillion Creek and Tributaries Lakes, NE

AUTHORIZATION: PL 90-483, PL 89-72.

LOCATION AND DESCRIPTION: The Papillion (Papio) Creek Projects consist of Glenn Cunningham, Standing Bear, Zorinsky and Wehrspann Lakes and Dams, all of which are located within the Greater Omaha area. The Corps of Engineers built the dams and developed the initial recreation plan as part of the Papio Creek and Tributaries lakes project. Extensive flooding in 1964 and 1965 resulted in the loss of 7 lives and \$5.5M in property damage, prompting Congress to authorize construction of the Papio dams. The dams and reservoirs were built primarily to reduce flood damage in the Papio Creek watershed. Recreational opportunities, wildlife habitat and improved water quality are additional benefits derived from the Papios. The Corps cooperates with other agencies to manage and protect the natural resources of these lakes and surrounding lands.

CONFERENCE AMOUNT FOR FY 2013: \$ 778,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 131,000 **O:** \$ 807,000 **T:** \$ 938,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 833,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project.

RC: \$ 27,000 - Funding will allow the Corps to meet minimum Recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 78,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$66,400,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Papillion Creek and
Tributaries Lakes, NE

O&M JUSTIFICATION SHEET

PROJECT NAME: Salt Creek and Tributaries, NE

AUTHORIZATION: PL 78-534, PL 85-500.

LOCATION AND DESCRIPTION: The Salt Creek and Tributaries Flood Control Project in Nebraska was authorized by the Federal Flood Control Act of 1958 to provide flood damage reduction, water quality, recreation, and fish and wildlife enhancement. The basin drains a 1645 square mile area of southeastern Nebraska, encompassing the City of Lincoln. The ten Salt Creek Lakes furnish much needed recreation for local residents as well as providing vital habitat for wildlife. These projects cover 11,239 acres, of which 4,289 are surface acres of water. The Corps of Engineers leases all but one of its Salt Creek Reservoirs to the State of Nebraska Game and Parks Commission (NGPC). The NGPC refers to these projects as the Salt Valley Lakes. Holmes Lake is leased to the City of Lincoln, Nebraska

CONFERENCE AMOUNT FOR FY 2013: \$ 1,025,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 112,000 O: \$ 963,000 T: \$ 1,075,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 970,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project.

RC: \$ 24,000 - Funding will allow the Corps to meet minimum Recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 81,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$250,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

NORTH DAKOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Bowman Haley Lake, ND

AUTHORIZATION: PL 87-874.

LOCATION AND DESCRIPTION: Located 11 miles south of Bowman, North Dakota on highway 85 then 5 miles east, Bowman-Haley Dam was constructed for flood damage reduction, fish and wildlife enhancement, recreation, as well as municipal and industrial water supply. Construction of the dam began in June 1964 and was completed in 1966. The dam measures approximately 5,730 feet in length, with a maximum height of 79 feet from the stream bed to the top of the dam. Bowman-Haley Lake formed at the confluence of Spring Creek, Alkali Creek, and North Fork Grand River; has 17 miles of shoreline and an average depth of 39 feet.

CONFERENCE AMOUNT FOR FY 2013: \$ 214,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 224,000 T: \$ 224,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 193,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes project survey to support periodic dam safety assessment and inspection.

RC: \$ 5,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 26,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$22,600,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Garrison Dam & Lake Sakakawea, ND

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: The Garrison Project is located 75 miles upstream from Bismarck, North Dakota. Garrison Dam construction began in 1947 and was completed in 1953. The dam measures 13,200 feet long and has a maximum height of 210 feet. Lake Sakakawea is 178 miles long with approximately 1,300 miles of shoreline and a maximum depth of 180 feet. The water at Garrison Dam provides benefits of flood damage reduction, power generation, navigation, fish and wildlife, recreation, irrigation, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 12,050,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,209,000 O: \$ 10,118,000 T: \$ 12,327,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,063,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,764,000 - Funding will provide for critical routine operation and maintenance, engineering, oversight to safely meet flood control mission, as well as allocated portion of multipurpose activities.

RC: \$ 682,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 6,699,000 – Funding will provide for critical routine O&M activities and management of hydropower facilities, which includes operation and maintenance of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, and allocated portion of multi-purpose activities.

EN: \$ 1,869,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 250,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, from the beginning to FY11, \$15,978,000,000. Plant installed generation capacity of 583 Megawatts, produced \$79,800,000 in power production in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pipestem Lake, ND

AUTHORIZATION: PL 89-298, PL 89-72.

LOCATION AND DESCRIPTION: Located 4 miles north of Jamestown, North Dakota, off highway 52/281. Pipestem Dam was constructed for flood damage reduction, fish and wildlife enhancement, and recreation. Construction of the dam began in June 1971, and was completed in 1973. The dam measures approximately 4,000 feet in length, with a maximum height of 107.5 feet from the stream bed to the top of the dam. Pipestem Lake is 5.5 miles long and has a maximum depth of 30 feet under normal operation. The lake drains an approximate 594 square mile area, and has a multipurpose storage capacity of 8,944 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: \$ 835,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 4,000 O: \$ 1,182,000 T: \$ 1,186,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 1,069,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes investigation of the erosion potential of the uncontrolled unlined earth cut spillway to verify dam safety.

RC: \$ 27,000 - Funding will allow the Corps to meet minimum Recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 90,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$123,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

OREGON

O&M JUSTIFICATION SHEET

PROJECT NAME: Applegate Lake, OR

AUTHORIZATION: PL 87-874, 1962 Flood Control Act

LOCATION AND DESCRIPTION: Near River Mile 46.5 on the Applegate River, 23.5 miles south of Medford, Oregon. Flood reduction project with rock-fill embankment dam, 1300-ft long & 242-ft high, gate controlled concrete spillway on left abutment, regulating outlet conduit & intake tower with multi-level intakes and reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 937,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 336,000 O: \$ 914,000 T: \$ 1,250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 1,061,000 – Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment. Also includes funds to replace regulating outlet gates hydraulic operation cylinders and a qualified energy audit to provide the tools necessary to reduce green house gas emission.

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 189,000 – Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides 75,000 acre-feet of usable storage for flood control and water conservation utilization. Project controls runoff from a drainage area of 223 square miles. In addition to flood control, the reservoir is operated to provide irrigation, fish and wildlife enhancement, water quality control, and recreation benefits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Blue River Lake, OR

AUTHORIZATION: P.L. 81-51, 1950 Flood Control Act

LOCATION AND DESCRIPTION: On Blue River, 38 miles east of Eugene, Oregon. Rock-fill embankment dam 1420-ft long, 319-ft high, spillway 70-ft long, outlet works in left abutment, earth & gravel-fill dike 1535-ft long between Blue & McKenzie Rivers & Reservoir, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 579,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 65,000 O: \$ 506,000 T: \$ 571,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 494,000 – Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 22,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 55,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Project controls runoff from drainage area of 88 square miles. Reservoir provides 85,000 acre-feet of usable flood control storage and is operated as a unit of the coordinated reservoir system to protect the Willamette River Valley and provide increased low water flows for navigation and other purposes.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

O&M JUSTIFICATION SHEET

PROJECT NAME: Bonneville Lock and Dam, OR & WA

AUTHORIZATION: 1933 WPA project, 1935 PL. 409 and 1950 Flood Control Act PL. 81-516

LOCATION AND DESCRIPTION: On Columbia River, 42 miles east of Portland, Oregon; Multi-purpose w/power; 1 Dam, spillways and fish passage; 1 Navigation Lock, 2 Powerhouses w/ 20 generation units; regional visitor center and recreation areas.

CONFERENCE AMOUNT FOR FY 2013: \$ 7,039,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,726,000 O: \$ 4,751,000 T: \$ 7,477,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 4,398,000 – Funding will provide for routine navigation lock operations & maintenance including periodic navlock inspections. Also includes cost associated with support of navigation to ensure project performs to meet authorized purposes. Additionally includes cost for Remediation of Contaminated Sites Record of Decision for Bradford Island.

FRM: \$ 0 - N/A

RC: \$ 1,636,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which include recreation management, interpretive services, visitor assistance program implementation, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,443,000 – Funding will provide for routine operation & maintenance activities and management for the Environmental Stewardship. Activities include mitigation requirements for fish passage facilities & natural resource management and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides a spillway dam with overflow crest at 24 ft. above mean sea level. Two powerhouses consisting of 18 units and two fish attraction units for a total power generation capacity of 1,145.7 megawatts. Fish ladders to serve main channel, Bradford Slough Channel, and Powerhouse II channel. Recreation visitation exceeds 600,000 a year at the dam site and 2,700,000 project wide. Project also provides for navigation with a lock chamber 86 feet wide with a 19' depth of water over the sill.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Chetco River, OR

AUTHORIZATION: Rivers and Harbors Acts of 1950 and 1945, P.L. 79-14

LOCATION AND DESCRIPTION: On the Oregon Coast about 290 miles south of the mouth of the Columbia River; two stone jetties; 14 foot deep, 120 feet wide channel entrance; barge turning basin; and small boat access channel.

CONFERENCE AMOUNT FOR FY 2013: \$ 0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 21,000 T: \$ 21,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 21,000 – Annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides \$8.6 million annually in commerce including 2,000 tons of fish and shellfish landings and 4,000 tons of other commodities (2005). Economic effect of the port is \$25 million. There are over 47,000 recreational bar crossings and over 5,500 commercial bar crossings annually. Project is also a critical Harbor of Refuge and priority location for United States Coast Guard.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Columbia and Lower Willamette Rivers below Vancouver, WA and Portland OR

AUTHORIZATION: Rivers and Harbors Acts 1912 (30' channel), 1930 (deepen to 35'), 1962 (deepen to 40'), 1999 (deepen to 43')

LOCATION AND DESCRIPTION: Columbia River Mouth to Vancouver, WA (106.5 miles) and Willamette River Mouth to Broadway Bridge (11.6 miles). The deep-draft federal navigation channel in the Columbia River from RM 3 to 106.5, and in the Willamette River from RM 0 to 11.6.

CONFERENCE AMOUNT FOR FY 2013: \$ 28,066,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 31,990,000 O: \$ 2,527,000 T: \$ 34,517,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 34,517,000 - Funding will allow annual dredging needed for safe transit of commercial and recreational vessels. Also funded is Dredge Material Management Plan for material disposal capacity for the recently deepened 43' channel.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Channel provides environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation. The maintenance of the channel has experienced significant cost increases due to the increased cost of fuel; increased dredge mobilization and operating costs; and recent high flows resulting in depth restrictions in the channel in 2012. The project is an important part of the Columbia – Snake River inland navigation system that provides water access as far inland as Lewiston, ID.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Columbia River at the Mouth, OR and WA

AUTHORIZATION: River and Harbor Act of 1884, as amended and River and Harbor Acts of 1905, (build Jetties & dredge) 1954 (deepen to 48'), 1983 (deepen to 55')

LOCATION AND DESCRIPTION: Entrance to the Columbia River between the states of Oregon and Washington. Deep Draft Navigation entrance channel 6 miles long, 2640 ft wide, 55/48 feet deep, north and south entrance jetties and interior jetty north side at river mile 3.

CONFERENCE AMOUNT FOR FY 2013: \$ 19,277,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 17,831,000 O: \$ 386,000 T: \$ 18,217,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 18,217,000 - Funding includes annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project is considered one of the world's most dangerous coastal inlets due to large waves and strong currents. The project provides efficient movement of 48 million tons of cargo worth over \$16 billion from the Rockies to the Pacific Ocean each year. It is the world's 2nd largest grain export system and provides for the passage of 12,000 commercial and 100,000 recreation vessels each year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Columbia River between Vancouver, WA to The Dalles, OR

AUTHORIZATION: Rivers and Harbors Acts, 1937 (27' channel), 1946 P.L. 79-525

LOCATION AND DESCRIPTION: Columbia River between Vancouver, Washington and The Dalles, Oregon. The deep-draft Federal navigation channel in the Columbia River from RM 106.5 at Vancouver, WA, to RM 192 at The Dalles Dam.

CONFERENCE AMOUNT FOR FY 2013: \$ 931,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 716,000 O: \$ 162,000 T: \$ 878,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 878,000 - Funding will allow routine dredging needed for safe transit of deep draft commercial vessels and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides for more than 40% of United States wheat exports being shipped via ports on the Columbia and Willamette Rivers. Also provides for all transit cargo between Portland and Lewiston, ID.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

Division: Northwestern

District: Portland

Columbia River between
Vancouver, WA to The Dalles, OR

O&M JUSTIFICATION SHEET

PROJECT NAME: Coos Bay, OR

AUTHORIZATION: Rivers and Harbor Acts of 1910 (dredging), 1919 (22' channel), 1930 (deepen to 24'), 1970 (deepen to 45'), 1995 (deepen to 47')

LOCATION AND DESCRIPTION: Coos Bay is located on the central Oregon coast at Coos Bay, Coos County, Oregon about 200 miles south of the Columbia River. The existing project includes: two rubble-mound, high tide jetties at the entrance; a channel across the outer bar 47-feet deep and 700-feet wide, dimensions reducing gradually to 37-feet deep and 300-feet wide at River Mile 1, an inner channel 37-feet deep and 300-feet wide to River Mile 9, thence a channel 37- feet deep and 400-feet wide to River Mile 15; two turning basins; and a boat basin access channel located in Charleston.

CONFERENCE AMOUNT FOR FY 2013: \$ 5,843,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 5,456,000 O: \$ 613,000 T: \$6,069,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 6,069,000 - Funding will be used for annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides 2.3 million tons of cargo annually, mainly wood products, valued at approximately \$25.1 million. Economic benefits include 26 million pounds of fish and shellfish landings. Project is a Critical Harbor of Refuge and United States Coast Guard Headquarters and Air Station.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cottage Grove Lake, OR

AUTHORIZATION: 1938 Flood Control Act. P.L. 75-761

LOCATION AND DESCRIPTION: On Coast Fork of Willamette River, Oregon River Mile 29, about 25 miles S.E. of Eugene, Oregon. Flood reduction and earth fill dam 1750-ft long, and concrete gravity spillway 264-ft long, outlet works consisting of 3 gate-controlled conduits, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,266,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 317,000 O: \$ 1,153,000 T: \$ 1,470,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 960,000 – Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 296,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 214,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Reservoir provides 30,060 acre-feet of usable flood control storage and controls runoff of drainage area of 104 square miles. Project is operated as a unit of the coordinated reservoir system that protects the Willamette River Valley and provides increased low water flow for navigation and for other purposes. Recreational development consists of day use and overnight facilities at five sites operated by the Corps of Engineers.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cougar Lake, OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On the South Fork McKenzie River, 42 miles east of Eugene, Oregon. Multi-purpose project with power; dam, spillway and powerhouse with 2 generating units.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,934,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 87,000 O: \$ 1,915,000 T: \$ 2,002,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 7,000 – Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions.

FRM: \$ 646,000 – Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 41,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,255,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 53,000 - Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes.

OTHER INFORMATION: Reservoir is 6 miles long with storage capacity at full pool of 219,000 acre-feet and controls runoff of tributary streams. Power plant consists of two 12,500-kilowatt units with minimum provisions for installing a third unit of 35,000 kilowatts for future peaking capacity.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Detroit Lake, OR

AUTHORIZATION: 1938 Flood Control Act, P.L. 75-761

LOCATION AND DESCRIPTION: On North Santiam River 45 miles S.E. of Salem, Oregon. Multi-purpose w/power; main dams and spillways include; powerhouse w/2 generating units and a re-regulating dam (Big Cliff) powerhouse w/1 generating unit, and recreation.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,008,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 63,000 O: \$ 1,020,000 T: \$ 1,083,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 6,000 – Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions.

FRM: \$ 549,000 - Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 61,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 361,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 106,000 - Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes.

OTHER INFORMATION: Main dam and a re-regulating dam, both with power-generating facilities. Spillway is a gate-controlled overflow section, and outlet works are gate-controlled conduits through the dam. Powerhouses combined have three units with a total capacity of 118 megawatts. Reservoir has a storage capacity at full pool of 454,900 acre-feet and controls runoff of a tributary drainage area of 438 square miles.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Dorena Lake, OR

AUTHORIZATION: 1938 Flood Control Act, P.L. 75-761

LOCATION AND DESCRIPTION: On Row River, Oregon, River Mile 7 about 20 miles S.E. of Eugene, Oregon. Flood reduction, earth fill dam 3352-ft long, 131-ft high, spillway 200-ft long, outlet works include 5 conduits controlled by hydraulic operated slide gates & reservoir, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,040,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 111,000 O: \$ 959,000 T: \$ 1,070,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 625,000 - Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 246,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 199,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Reservoir provides 70,500 acre-feet of usable flood control storage and controls runoff from a basin of 265 square miles. The Project is operated as a unit of the coordinated reservoir system to protect the Willamette River Valley and provides increased low water flows for navigational and other purposes.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fall Creek Lake, OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On Fall Creek 19 miles S.E. of Eugene, Oregon; flood reduction, dam 5100-ft long, 180-ft high, gate controlled spillway, stilling basin & reservoir, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 3,602,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,197,000 O: \$ 1,062,000 T: \$ 2,259,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 1,804,000 - Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment. Also includes repair of structural deformities on spillway gates and development of a communication plan.

RC: \$ 50,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 405,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Reservoir provides 115,000 acre-feet of usable flood control storage and is operated as a unit of the coordinated reservoir system to protect the Willamette River Valley and provide increased low water flows for navigation and other purposes.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fern Ridge Lake, OR

AUTHORIZATION: 1938 Flood Control Act, P.L. 75-761

LOCATION AND DESCRIPTION: On Long Tom River Oregon, River Mile 24 about 10 miles west of Eugene, Oregon; flood reduction, earth fill dam 6330-ft long, 2 auxiliary dikes, spillway with 6 automatic radial gates, outlet works in spillway structure & reservoir, and recreation sites. Project also includes the Long Tom River Channel downstream of dam.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,791,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 175,000 O: \$ 1,824,000 T: \$ 1,999,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 1,275,000 – Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 164,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 560,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Reservoir provides 110,000 acre-feet of usable flood control storage and controls runoff of tributary drainage area of 275 square miles. Reservoir protects Long Tom River Valley and is operated as a unit of the coordinated reservoir system to protect the Willamette River Valley generally and to increase low water-flows for navigation and other purposes.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Green Peter – Foster Lake, OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: Foster Lake is on the South Santiam River 7 miles downstream from Green Peter Lake which is on the middle fork of the Santiam River about 35 miles N.E. of Eugene, Oregon. Multi-purpose w/power; main dams and spillways including powerhouse with 2 generating units and a re-regulating dam (Foster) and powerhouse with 2 generating units, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 4,321,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 609,000 O: \$ 1,783,000 T: \$ 2,392,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 12,000 - Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions. Also includes funding for contract administration of repair to structurally deficient spillway gate.

FRM: \$ 1,255,000 - Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions. Also includes funding for contract administration of repair to structurally deficient spillway gate.

RC: \$ 263,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 692,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 170,000 – Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes. Also includes funding for contract administration of repair to structurally deficient spillway gate.

OTHER INFORMATION: Main dam and a re-regulating dam, both with power-generating facilities. Power plants consist of four units with an installed capacity of 100,000 kilowatts. Reservoirs provide storage capacity at full pool of 491,000 acre-feet and control runoff of tributary drainage area of 277 square miles.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Hills Creek Lake, OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On Middle Fork Willamette River, 45 miles S.E. of Eugene, Oregon; Multi-purpose w/power; Dam, spillway and powerhouse w/ 2 generating units, and recreation facilities.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,257,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 50,000 O: \$ 1,277,000 T: \$ 1,327,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 17,000 - Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions.

FRM: \$ 745,000 - Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 27,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 410,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 128,000 – Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes.

OTHER INFORMATION: Powerhouse with two 15,000-kilowatt generators. Hills Creek Lake is about 8.5 miles long and provides storage capacity at full pool of 356,000 acre-feet. Project controls runoff of a drainage area of 389 square miles and is an integral unit of the comprehensive plan for development of the water resources of Willamette River Basin.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: John Day Lock and Dam, OR and WA

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On Columbia River, 112 miles East of Portland, Oregon. The project is multi-purpose w/power consisting of one dam, spillways, fish passage, one navigation lock, one powerhouse w/16 generation units, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 4,329,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 996,000 O: \$ 3,506,000 T: \$ 4,502,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,643,000 – Funding will provide for routine navigation lock operations & maintenance including periodic navlock inspections. Also includes cost associated with support of navigation to ensure project performs to meet authorized purposes.

FRM: \$ 212,000 – Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 857,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which include recreation management, interpretive services, visitor assistance program implementation, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,790,000 - Funding will provide for routine operation & maintenance activities and management for the Environmental Stewardship. Activities include mitigation requirements for fish passage facilities & natural resource management and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: The project provides 500,000 acre-feet of flood control storage between elevations 257 and 268. The powerhouse has space for 20 generating units of 135,000 kilowatts each; 16 units have been installed for a present capacity of 2.2 megawatts.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lookout Point Lake, OR

AUTHORIZATION: Flood Control Acts, 1944, P.L. 75-761, 1950, PL. 81-516

LOCATION AND DESCRIPTION: On Middle Fork Willamette River, 22 miles S.E. of Eugene, Oregon. Multi-purpose w/power; main dams, spillways, powerhouse w/3 generating units and a re-regulating dam (Dexter) powerhouse w/1 generating unit, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,168,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 6,991,000 O: \$ 2,354,000 T: \$ 9,345,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 125,000 – Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions. Also includes critical spillway gate strengthening.

FRM: \$ 7,701,000 – Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions. Also includes critical spillway gate strengthening.

RC: \$ 221,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,047,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 251,000 – Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes. Also includes critical spillway gate strengthening.

OTHER INFORMATION: Main dam reservoir provides storage of 456,000 acre-feet at full-pool level. Re-regulating dam forms a full pool of 27,500 acre-feet. Reservoirs control runoff of a tributary drainage area of 991 square miles. Powerhouses combined have four main generating units with a capacity of 135,000 kilowatts.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lost Creek Lake, OR

AUTHORIZATION: 1962 Flood Control Act, P.L. 87-874

LOCATION AND DESCRIPTION: On upper Rogue River, 27 miles N.E. of Medford, Oregon. Multi-purpose project with power; dam, spillway, powerhouse with 2 generating units, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 3,866,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 354,000 O: \$ 2,802,000 T: \$ 3,156,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 654,000 - Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 717,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols. Also includes cost associated with support of recreation to ensure project performs to meet authorized purposes.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,676,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates. Also includes cost associated with support of environmental stewardship to ensure project performs to meet authorized purposes.

WS: \$ 109,000 - Routine operation cost associated with planning, coordinating, and monitoring local water supply agreements for authorized storage. Also includes cost associated with support of water supply to ensure project performs to meet authorized purposes.

OTHER INFORMATION: Powerhouse has two main generating units with installed capacity of 24,500 kilowatts each. Regulating outlet facility with provisions for temperature regulation for releases in interest of fishery enhancement is provided. Reservoir 10 miles long provides 315,000 acre-feet of usable storage. Project provides control of runoff of drainage area of 674 square miles.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: McNary Lock and Dam, OR & WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Central Oregon on the Columbia River near Umatilla Oregon. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$5,872,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,105,000 O: \$2,804,000 T: \$6,909,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,360,000 – Funding will be used to meet the operations and maintenance requirements of critical lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including Emergency Action Plan revision, dam safety routine activities for data collection, evaluation, and surveys to monitor dam performance, water management coordination/quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital project costs for actions to improve plant performance, preclude forced facility closure/outages and life safety concerns, rehabilitation of nine of the fifteen levee pumping plants installed in 1953 and an upgrade of the potable water system.

FRM: \$0 – N/A

RC: \$1,600,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services, visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine O&M of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$949,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation and biological opinions for listed endangered species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 980 Megawatts, a navigation lock with a vertical lift of 75 feet, two fish ladders, a system of levees and pumping plants, a reservoir that has a water surface area of 38,800 acres; 16,908 acres of land that provides recreation facilities and wildlife mitigation habitat; and a juvenile fish holding, loading, and bypass facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

McNary Lock and Dam, OR & WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Siuslaw River, OR

AUTHORIZATION: The Rivers and Harbors Act of 1890, as amended, and Section 107 Continuing Authority, 1890 (build jetties), 1925 (12' channel), 1958 (deepen to 16')

LOCATION AND DESCRIPTION: The project is located at the Siuslaw River, Oregon, approximately 130 miles south of the Columbia River. The project provides for navigation access to the Siuslaw River and consists of two high-tides, rubble-mound jetties 750-feet apart at the outer end: the north jetty 8,390-foot long, and the south jetty 4,200-foot long. The project also includes: an entrance channel 18-foot deep and 300-foot wide from the deep water in the ocean to a point 1,500-feet inside the outer end of the existing north jetty; a channel 16-foot deep, 200-foot wide with additional widening at bends, and about 5 miles long, to a turning basin which is 16-foot deep, 400-foot wide, and 600-foot long, opposite the Siuslaw dock at Florence; a channel 12-foot deep, 150-foot wide from Florence to mile 16.5; a turning basin 12-foot deep, 300-foot wide, and 500-foot long at RM 15.5.

CONFERENCE AMOUNT FOR FY 2013: \$ 0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 32,000 T: \$ 32,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 32,000 – Funding will be used for annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides approximately 38,000 pounds of fish plus lumber, and other commodities. The economic effect of the port is \$12.5 million. There are 1,354 commercial bar crossings annually. The project is also a critical Harbor of Refuge and priority location for United States Coast Guard. There were 56 search and rescue cases in 2011.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Willamette River at Willamette Falls, OR

AUTHORIZATION: Rivers and Harbors Act of 1910 (P.L. 61-264)

LOCATION AND DESCRIPTION: Willamette Falls Locks is a multiple-lift navigation lock located on the Willamette River in West Linn, Oregon.

CONFERENCE AMOUNT FOR FY 2013: \$ 110,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 60,000 T: \$ 60,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 60,000 - Funding will be used to provide critical operation for caretaker status activities.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: The project includes four locks, a canal basin, and an extra guard lock used to prevent flooding when river levels are high. The system acts as a fluid staircase between the upper and lower reaches of the Willamette River. Due to structural/safety concerns, the project is maintained in a caretaker status.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Willamette River Bank Protection, OR

AUTHORIZATION: Flood Control Acts; 1936 (bank protection and channel clearing), 1938 PL. 75-685 (added flood protection), 1950 PL. 81-519 (add'l 77 locations)

LOCATION AND DESCRIPTION: Approximately 90 miles of bank protection, drift embankments, drift barriers and channel improvements at 223 locations along the Willamette River and its tributaries from about River Mile 25 to River Mile 225 on the Willamette River Basin.

CONFERENCE AMOUNT FOR FY 2013: \$ 0

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 81,000 T: \$ 81,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 81,000 – Funding will be provided to identify potential restoration sites associated with existing Corps revetments in Willamette Basin. The information collected from this effort will be used to assess overall strategies to meet the intent of the Biological Opinion in a cost-effective manner.

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: The program consists of 223 federally constructed projects that were authorized to clear, slope andrevet river banks, construct pile and timber bulkheads and drift barriers, minor channel improvements and maintenance of existing works constructed under the 1936 and 1938 Flood Control Acts for control of floods and preventing erosion at various locations along the Willamette River and tributaries.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Willow Creek Lake, OR

AUTHORIZATION: 1965 Flood Control Act, P.L. 89-298

LOCATION AND DESCRIPTION: On Willow Creek at Heppner, Oregon; flood reduction, roller compacted concrete dam, ancillary features include center uncontrolled spillway, minor flow works and diversion works, outlet works & reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 677,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 108,000 O: \$ 573,000 T: \$ 681,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 673,000 - Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 8,000 - Funding will provide for routine operation & maintenance for stewardship management and oversight for the protection of project natural resources and to meet minimum requirements for State and Federal regulations.

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides flood protection to the city of Heppner and downstream area by controlling runoff from a drainage area of 96 square miles. Gross storage capacity of the project is 13,250 acre-feet, consisting of 7,750 acre-feet for exclusive flood control, 1,750 acre-feet for joint flood control and irrigation, 1,750 acre-feet exclusive irrigation, and 2,000 acre-feet for fish, wildlife, recreation, sediment accumulation, and aesthetics.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Yaquina Bay and Harbor, OR

AUTHORIZATION: Rivers and Harbors Act of: 14 Jun 1880, 2 Mar 1919 (construct jetties), 1945 (26' channel), 1946 (construct boat basin), 1958 (deepen 40 entrance, 30' river channel) 1960 (boat basin S. shore) P.L. 86-645.

LOCATION AND DESCRIPTION: On the Oregon Coast about 110 miles south of the Columbia River. Deep draft project with two stone jetties; small boat access channel and South Beach Marina.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,780,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$ 2,000,000 O: \$ 0 T: \$ 2,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 2,000,000 - Funding will be used for annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Critical harbor of refuge, large commercial fishing fleet and distant water fleets, OSU Marine Science Facility center, NOAA Marine Operations Center, and USCG Search and Rescue base located in bay; hazardous waters with high commercial and recreational use; 39.5K tons of fish & shellfish landings valued at \$43,800,000 in 2011 (NMFS). Newport is ranked as 19th major port in the US for fish landings in 2011. Growing interest from lumber industry to start exporting from Yaquina Bay in 2013.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

SOUTH DAKOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Big Bend Dam & Lake Sharpe, SD

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: The Big Bend Project is located northwest of Chamberlain, South Dakota, on South Dakota Highway 47, near Ft. Thompson, South Dakota. Construction on the dam began in 1959 and closure of the embankment occurred in 1963. The dam measures 10,570 feet in length and has a maximum height of 95 feet. Lake Sharpe extends 80 miles upstream, creates 200 miles of shoreline, and has a maximum depth of 78 feet at the dam.

CONFERENCE AMOUNT FY 2013: \$ 9,567,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,153,000 O: \$ 8,012,000 T: \$ 10,165,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$ 0 – N/A

FRM: \$ 0 - N/A

RC: \$ 729,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 8,379,000 – Funding will provide for critical routine O&M activities and management of hydropower facilities, which includes operation and maintenance of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, and reservoir scheduling.

EN: \$ 957,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 100,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, beginning to FY11, \$631,000,000. Plant installed generation capacity of 497 Megawatts, produced \$35,600,000 in power production in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cold Brook Lake, SD

AUTHORIZATION: PL 77-228, PL 78-534

LOCATION AND DESCRIPTION: Cold Brook Dam is located 1 mile north of Hot Springs South Dakota. The dam is 925 feet in length and has a height of 127 feet. Cold Brook Lake is 1.2 miles in length and its multipurpose pool contains 520 acre-feet of water. Cold Brook Dam was constructed to reduce flood damage in the Fall River basin. In years past, the Fall River was subject to flash flooding, causing damage to Hot Springs, South Dakota and nearby rural areas. The Flood Control Act of 1941 authorized the construction of these two dams and the channel improvements within the community of Hot Springs.

CONFERENCE AMOUNT FOR FY 2013: \$ 453,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 19,000 O: \$ 358,000 T: \$ 377,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 270,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes project surveys to support periodic dam safety assessment and inspection.

RC: \$ 59,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 48,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$2,100,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cottonwood Springs Dam & Lake, SD

AUTHORIZATION: PL 77-228, PL 78-534

LOCATION AND DESCRIPTION: Cottonwood Springs Dam is located 4.5 miles west of Hot Springs South Dakota. The dam and channel improvements were constructed under the authorization of Flood Control Act of 1941 to reduce flood damage in the Fall River basin. In years past, the Fall River was subject to flash flooding, causing damage to Hot Springs, South Dakota and nearby rural areas. The dam is 1,190 feet in length and stands 123 feet high.

CONFERENCE AMOUNT FOR FY 2013: \$ 394,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 14,000 **O:** \$ 1,102,000 **T:** \$ 1,116,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$ 0 – NA

FRM: \$ 1,022,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes rehabilitation of the outlet tunnels to repair cracks at the conduit joints to ensure project safety and reliability.

RC: \$ 50,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality public outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 44,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fort Randall Dam & Lake Francis Case, SD

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: Fort Randall Dam is located 12 miles west of Wagner, South Dakota. Construction on Fort Randall Dam began in 1946 and was completed in 1956. The dam measures 10,700 feet in length and has a maximum height of 140 feet. Lake Francis Case extends 107 miles upstream, creates 540 miles of shoreline, and has a maximum depth of 140 feet at the dam. The water in Lake Francis Case is stored for flood damage reduction, power generation, navigation support, fish and wildlife, recreation, irrigation, water supply, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 8,848,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,429,000 O: \$ 7,976,000 T: \$ 10,405,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 758,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,036,000 - Funding will provide portion of activities serving multiple project purposes allocated to flood risk management.

RC: \$ 165,000 - Funding will provide for routine O&M of recreation facilities, including interpretive services, public outreach, visitor assistance program, Title 36 enforcement, reservation services support, recreation fee management, and completion of updates to required management plans.

H: \$ 6,943,000 – Funding will provide for critical routine O&M of hydropower facilities, which includes O&M of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, and allocated portion of multi-purpose activities. Non-routine work includes repacking of penstock articulation joints on Units 1, 4 and 6.

EN: \$ 1,428,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 75,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, through FY11, \$10,588,000,000. Plant installed generation capacity of 320 Megawatts, produced \$57,900,000 in power production in FY12.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Fort Randall Dam & Lake
Francis Case, SD

O&M JUSTIFICATION SHEET

PROJECT NAME: Oahe Dam & Lake Oahe, SD

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: The Oahe project is located 7 miles north of Pierre, South Dakota. Construction on Oahe Dam began in 1948 and the project began generating electricity in 1962. The dam measures 9,300 feet in length and has a maximum height of 245 feet. The project provides benefits of flood damage reduction, power generation, navigation, fish and wildlife, recreation, irrigation, water supply, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 11,215,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,033,000 O: \$ 10,763,000 T: \$ 12,796,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014

N: \$ 1,230,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,682,000 - Funding will provide portion of activities serving multiple project purposes allocated to flood risk management.

RC: \$ 474,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 7,731,000 – Funding will provide for critical routine O&M activities and management of hydropower facilities, which includes operation and maintenance of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, and allocated portion of multi-purpose activities. Non-routine multi-purpose work includes surveys and borings to determine the stability and erosion potential of the unlined earth cut spillway.

EN: \$ 1,429,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 250,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, through FY11, \$11,584,000,000. Plant installed generation capacity of 786 Megawatts, produced \$93,600,000 in power production in FY12

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Oahe Dam & Lake, SD

WASHINGTON

O&M JUSTIFICATION SHEET

PROJECT NAME: Chief Joseph Dam, WA

AUTHORIZATION: Rivers and Harbor Act of 1946 as modified by 1958 Fish and Wildlife Coordinator Act.

LOCATION AND DESCRIPTION: Chief Joseph Dam is located in Bridgeport, WA, 545 river miles above the mouth of the Columbia River, 51 river miles downstream from Grand Coulee Dam. The dam consists of a 19-bay gated concrete gravity spillway that abuts the right bank and connects to a curved non-overflow concrete section founded on a rock outcropping. The 2,047-foot-long powerhouse encloses 27 Francis turbines with a total installed rated capacity of 2,614 megawatts, 2 station service generators, maintenance shops and control room, and the visitor center. Routine hydropower and joint O&M costs, and capital investment costs, are direct funded by Bonneville Power Administration (BPA). Appropriation funds are used to continue normal O&M activities for the recreation program.

CONFERENCE AMOUNT FOR FY 2013: \$653,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$180,000 O: \$457,000 T: \$637,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$0 - N/A

RC: \$637,000 - Funding provides for routine operations and maintenance for recreation program at the Corps' largest hydropower project. Routine program includes operation of project Visitor Center, supports 10 public day-use areas.

H: \$0 – Routine hydropower O&M costs are 100% direct funded by BPA..

EN: \$0 – Routine joint O&M costs, including environmental stewardship, are 100% direct funded by BPA.

WS: \$0 - N/A

OTHER INFORMATION: The project produced a total of 12,517 megawatts with an approximate value of \$376,000,000. FY12 public visitation was approximately 267,407 with an estimated benefit to the local economy of \$6,700,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Columbia River Fish Mitigation, WA, OR & ID

AUTHORIZATION: 1933 Federal Emergency Administration of Public Works; 1935, 1945 and 1950 River and Harbor Acts; 1937 Bonneville Project Act; 1938, 1948, 1950 and 1954 Flood Control Acts; WRDA 1986, Section 906(b)(1); WRDA 1996, Section 511, as amended by WRDA 1999, Sec.582 and WRDA 2007, Sec. 5025.

LOCATION AND DESCRIPTION: Maintain the infrastructure installed by the Columbia River Fish Mitigation improvements on eight hydro-system dams and the navigation locks on the Lower Columbia and Snake Rivers. To include Juvenile fish bypass systems, fish transport and passage monitoring facilities. Also fish transport barges and moorage, spillway flow deflectors and weirs, adult fish ladders and passage monitoring facilities and lamprey passage facilities.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,350,000 O: \$0 T: \$3,350,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$0 – N/A

RC: \$0 – N/A

H: \$0 – N/A

EN: \$3,350,000 – Funding will be used to meet the maintenance requirements of the Columbia River Fish Mitigation funded infrastructure that has been installed to benefit fish passage within the Federal Columbia River Power System. Maintenance funds are for maintenance of newly constructed spillway weirs, bypass systems, and avian arrays. Routine preventative maintenance will be performed on these new capital assets in order to maintain their performance into the future.

WS: \$0 – N/A

OTHER INFORMATION: Columbia River Fish Mitigation provided mitigation for the impact of Corps' dams on migrating salmon. Mitigation measures considered were a result of the Northwest Power Planning Council's regional rebuilding efforts for upriver salmon stocks, the National Marine Fisheries Service listing of salmon as threatened/ endangered, the National Marine Fisheries Service Biological Opinions on operation of the Federal Columbia River Power System issued 1995, 1998, 2000, 2004, 2008 and the 2010 Supplemental BiOp which includes the Adaptive Management Implementation Plan and amendments, the 2008 Columbia Basin Fish Accords.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Everett Harbor and Snohomish River, WA

AUTHORIZATION: River and Harbor Act of June 25, 1910 and modified by subsequent acts.

LOCATION AND DESCRIPTION: Located in central Puget Sound on the eastern shore of Possession Sound. The project channel runs approximately six miles upstream from its mouth at Port Gardner Bay. The project accommodates deep draft shipping in its outer harbor and also barge traffic on the Snohomish River. The project provides for the East Waterway, a 30 feet-deep, 900 feet-wide and 2,400 feet-long channel leading to the facilities on the west side of the Everett Navy Home Port. There is also an 8 to 15 feet-deep by 150 feet-wide channel up the Snohomish River. The project includes two settling basins to concentrate shoaling and promote maintenance dredging efficiency. The lower river channel is flanked by a system of training and spur dikes.

CONFERENCE AMOUNT FOR FY 2013: \$851,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,749,000 O: \$0 T: \$1,749,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,749,000 - Funding provides for hydraulic pipeline dredging of upstream and downstream settling basins w/upland disposal for navigation purposes on the Snohomish River. Channel project condition survey will be conducted to report conditions to users and ongoing coordination on sediment characterization regarding ongoing maintenance coordination.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A.

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: FY13 removal of dredged material for beneficial reuse by the Port of Everett is expected to reach 120,000 cubic yards. The annual shipping averages 1.4 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Grays Harbor and Chehalis River, WA

AUTHORIZATION: The Rivers and Harbors Act of 30 August 1935 and Section 202 of WRDA 1986.

LOCATION AND DESCRIPTION: Grays Harbor is located on the southwest coast of Washington state. The project's 24-mile long channel and entrance structures serve deep-draft commerce to the Port of Grays Harbor and facilities at the cities of Aberdeen, Hoquiam and Cosmopolis. The deep-draft channel is secured by a complex system of coastal structures including the north and south jetties, groin, revetments and timber breakwaters. The North Jetty is at the south end of Ocean Shores and the South Jetty is at Westport, near Half Moon Bay. The Point Chehalis Revetment and Groins are located along the north and west edge of Westport. The breakwaters A, B, and C provide protection for the Westport Marina. This complex navigation project is large with ongoing Federal O&M activities including required dredging, structure repair, and mitigation on an annual basis.

CONFERENCE AMOUNT FOR FY 2013: \$9,778,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$9,728,000 O: \$237,000 T: \$9,965,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$9,965,000 - Funding provides for routine operations and maintenance for navigation, including extensive export activity, US Coast Guard (USCG) Search & Rescue, Tribal fishing activities and critical fleet maintenance support service. Annual contract clamshell dredging of the inner harbor channels will be continued with open water disposal. Government hopper dredges YAQUINA and ESSAYONS will be used to provide a safe bar and entrance channel conditions with annual dredging. Project condition surveys will be conducted to apprise navigation users and the USCG of channel conditions with sediment characterization continued for open water and beneficial use disposal of the dredged resources. State required survey to meet multi-agency mitigation agreement. Funds will be used to finalize environmental impact statement for the Long Term Maintenance System at Half Moon Bay.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A.

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Annual shipping averages approximately 2 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Howard A. Hanson Dam, WA

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: The project is located on the upper reach of the Green-Duwamish River in King County, 63.76 river miles above the mouth. It is in the city of Tacoma's municipal watershed 35 road miles east of Tacoma, 6 miles upstream from Palmer, and 24 miles from Mud Mountain Dam. This project is protected from public access.

CONFERENCE AMOUNT FOR FY 2013: \$3,187,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$729,000 O: \$2,567,000 T: \$3,296,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$2,718,000 - Operations and Maintenance activities. Continue to support the fish passage project delivery team, plan and prepare for removing and rehabilitating the 45-ton stop log, and clean the intake trash rack.

RC: \$0 - N/A

H: \$0 - N/A.

EN: \$565,000 - Continue in river deposition of woody debris and gravel for mitigation. Continue efforts with implementation of the Reasonable and Prudent Measures in the Biological Opinion.

WS: \$13,000 - Continue to support the water supply mission and to interface with the City of Tacoma water system.

OTHER INFORMATION: The facility provides flood protection within the Green-Duwamish watershed with an accumulative flood prevention benefit of over \$752 million since 1962 (\$3,400,000 prevented in FY05 alone). The Biological Opinion and the Endangered Species Act mandate the construction and annual maintenance of mitigation sites consisting of gravel and woody debris below the dam – approximately \$545,000 annually. The Construction General program constructed the mitigation sites. FY 2007 was the first year in which O&M became responsible for maintenance of the mitigation sites.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ice Harbor Lock and Dam, WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on the Snake River about 12 miles east of Pasco Washington. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$4,237,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,425,000 O: \$2,149,000 T: \$4,574,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,618,000 – Funds routine operations and maintenance requirements of critical Lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including Emergency Action Plan revision, dam safety routine activities for instrumentation data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital projects to improve plant performance, preclude forced facility closure/outages and life safety concerns also to rehabilitate the skin plate on the spillway gates and non-overflow elevators.

FRM: \$0 – N/A

RC: \$1,189,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine operation and maintenance of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$767,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation, passage research, water quality activities and biological opinions for listed endangered or threatened species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 603 Megawatts, a navigation lock with a vertical lift of 100 feet, two fish ladders, reservoir that has a water surface area of 9,200 acres, 3,576 acres of land that provides recreation facilities and wildlife mitigation habitat, and a juvenile fish bypass facility.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Ice Harbor Lock and Dam, WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Washington Ship Canal, WA

AUTHORIZATION: River and Harbor Act of 1910, House Document 953, 60th Congress.

LOCATION AND DESCRIPTION: Located in the City of Seattle, the 30-foot deep canal connects Puget Sound on the west with Lake Washington eight miles to the east. A dam, gated spillway, fish ladder and two navigational locks are located 1½ miles east of the west entrance. The canal and locks provide a navigation link from freshwater Lake Washington and Lake Union to the saltwater Puget Sound. The project has materially contributed to the industrial, commercial and recreational development of the area.

CONFERENCE AMOUNT FOR FY 2013: \$8,646,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,077,000 O: \$7,339,000 T: \$9,416,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,940,000 - Funding provides for routine operations and maintenance for navigation, including 24/7 year-round staffing for lock operations to transit 69,000 commercial and recreational boats. Of these funds, \$1,000,000 will fund critical repairs to structures (spillway tainter gate lifting machinery and trunnions

FRM: \$0 - N/A.

RC: \$756,000 - Funding provides routine operations and maintenance for recreation program including uniformed rangers and grounds maintenance staff. Funds provide support for the contract to operate the Regional Class A Visitor Center, tour program, and environmental education programs.

H: \$0 - N/A.

EN: \$720,000 - Funding provides routine operations and maintenance for fish passage facilities, regional coordination of fish and wildlife activities, and district support for listed endangered species. Funding is necessary to carry out Endangered Species Act requirements for listed species to meet US Fish & Wildlife Service/National Oceanographic Atmospheric Administration biological opinions for bull trout, Chinook salmon, and steelhead.

WS: \$0 - N/A

OTHER INFORMATION: This is the busiest navigation lock in the United States. The recreation area of the Lake Washington Ship Canal project receives over one million visitors per year. Since 1995, an average of 16,180 lockage's, 69,000 boats and over 1.5 million tons of cargo have passed through the locks annually.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Little Goose Lock and Dam, WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on the Snake River about 50 miles west of Lewiston Idaho. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$2,341,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,752,000 **O:** \$958,000 **T:** \$2,710,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,069,000 – Funding will be used to meet the operations and maintenance requirements of critical Lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including dam safety routine activities for instrumentation data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital projects to improve plant performance, preclude forced facility closure/outages and life safety concerns.

FRM: \$0 – N/A

RC: \$407,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine operation and maintenance of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$234,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation, passage research, water quality activities and biological opinions for listed endangered or threatened species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 810 Megawatts, a navigation lock with a vertical lift of 98 feet, one fish ladder, a reservoir that has a water surface area of 10,025 acres; 5,398 acres of land that provides recreation facilities and wildlife mitigation habitat; and juvenile fish holding, loading, and bypass facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Little Goose Lock and Dam, WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Granite Lock and Dam, WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on the Snake River about 33 miles west of Lewiston, Idaho. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$3,062,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$8,226,000 **O:** \$1,395,000 **T:** \$9,621,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$8,083,000 – Funding will be used to meet the operations and maintenance requirements of critical Lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including Emergency Action Plan revision, dam safety routine activities, data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital projects to improve plant performance, preclude forced facility closure/outages and life safety concerns and rehabilitate the skin plate on the spillway gates.

FRM: \$0 – N/A

RC: \$1,499,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage outgranted recreation areas, and support to leased activities not managed by the District.

H: \$0 - Routine operation and maintenance of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$39,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation and biological opinions for listed endangered species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 810 Megawatts, a navigation lock with a vertical lift of 100 feet, one fish ladder, a system of levees and pumping plants, a reservoir that has a water surface area of 8,900 acres; 5,778 acres of land that provides recreation facilities and wildlife mitigation habitat; juvenile fish holding, loading, and bypass facilities, and adult-fish trapping facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Lower Granite Lock and Dam, WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Monumental Lock and Dam, WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on the Snake River about 45 miles northeast of Pasco Washington. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$2,603,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,480,000 **O:** \$1,000,000 **T:** \$2,480,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,801,000 – Funding will be used to meet the operations and maintenance requirements of critical Lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including Emergency Action Plan revision, dam safety routine activities for instrumentation data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital projects to improve plant performance, preclude forced facility closure/outages and life safety concerns.

FRM: \$0 – N/A

RC: \$478,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine operation and maintenance of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$201,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation and biological opinions for listed endangered species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 810 Megawatts, a navigation lock with a vertical lift of 98 feet, two fish ladders, a reservoir that has a water surface area of 6,590 acres; 8,336 acres of land that provides recreation facilities and wildlife mitigation habitat; and a juvenile fish holding, loading, and bypass facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Lower Monumental Dam, WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Mill Creek Lake, WA

AUTHORIZATION: PL 75-761 (Flood Control Act of 1938)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on Mill Creek near Walla Walla Washington.

CONFERENCE AMOUNT FOR FY 2013: \$2,243,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$942,000 O: \$1,481,000 T: \$2,423,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$1,529,000 – Funding will be used to meet the operations and maintenance requirements of the Flood Risk Management mission. Activities include performing routine operations of the dam, routine maintenance, routine bridge inspections, instrumentation maintenance and repair, to update emergency notification plan, dam safety training, flood damages reports and inspection and data collection. Non-routine funding will be used to replace a 12 yr old gas powered electric utility vehicle with an electric utility vehicle and solar charging station.

RC: \$409,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – N/A

EN: \$485,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Funding also will be used to coordinate and implement National Marine Fisheries Service Biological Opinion for listed threatened Mid-Columbia River steelhead and U.S. Fish and Wildlife Service biological opinion for listed threatened bull trout. Also includes Section 106 funding required for cultural resources mandates, clearances and inspections.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a reservoir that has a gross storage capacity of 8,300 acre-feet of water, a flood control channel, 612 acres of land that provides recreation facilities and wildlife mitigation habitat, and a diversion dam and levee with two fish ladders.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mount St Helens Sediment Control, WA

AUTHORIZATION: Supplemental Appropriation Act 1985, P.L. 99-88

LOCATION AND DESCRIPTION: On the North Fork Toutle River and on the Cowlitz River in Cowlitz County, Washington; flood reduction, sediment retention structure on the North Fork Toutle River.

CONFERENCE AMOUNT FOR FY 2013: \$ 266,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 40,000 O: \$ 220,000 T: \$ 260,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 260,000 - Funding will provide for routine operation & maintenance of sediment retention structure, project service facilities, and permanent operating equipment.

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: As authorized, the project will provide a permanent solution to potential flooding on the Cowlitz River from sedimentation problems created by the eruption of Mt. St. Helens.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mud Mountain Dam, WA

AUTHORIZATION: Section 5 of the Flood Control Act of 1936, dated 22 June 1936 for flood control and fish collection

LOCATION AND DESCRIPTION: The project is located on the White River, six miles upriver and southeast of Enumclaw and 38 miles east of Tacoma. Facility provides flood protection within the White River watershed. When the original flood control project was built in 1948, a fish passage trap facility was constructed six miles downstream of the dam to facilitate migration. The facility is still used yearly to capture salmonids for trucking above the dam where they are released.

CONFERENCE AMOUNT FOR FY 2013: \$3,698,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$687,000 O: \$2,856,000 T: \$3,543,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A.

FRM: \$2,734,000 - Operations and Maintenance activities. Continue to monitor and support the construction general projects.

RC: \$265,000 - Continue to operate and maintain the public park, trails and over look areas in a safe manner.

H: \$0 - N/A

EN: \$544,000 - Continue trap and haul fish mitigation and efforts with implementation of the Reasonable and Prudent Measures in the Biological Opinion. Perform cultural resources survey and complete the projects Section 106 consultation. Complete the wildlife management and historical property Management Plans.

WS: \$0 - N/A

OTHER INFORMATION: The dam provides flood protection within the White River watershed with an accumulative flood prevention benefit of over \$665,000,000 since 1960. The FY12 visitation was 115,071 with an estimated benefit to the local economy of \$2,500,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Olympia Harbor, WA

AUTHORIZATION: The Rivers and Harbor Act of 1927

LOCATION AND DESCRIPTION: Olympia Harbor is a deep draft port at the south end of Puget Sound. This project provides a channel, 30 feet deep and 500 feet wide, extending from deep water in Budd Inlet to the Port Terminal. The project also includes East Bay (Swantown) Marina, with a 13-foot-deep 150-foot-wide entrance channel and two access channels 12 to 13 feet deep.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$603,000 T: \$603,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 603,000 – This appropriation will allow funding for environmental document preparations and dredging activities of Olympia Harbor which has not been dredged since the minor dredge in 2008. As this waterway is still an active aquatic State of Washington - Model Toxics Control Act Site, full sediment characterization is required. Sediment is known to contain polynuclear aromatic hydrocarbons, pentachlorophenol and dioxins. In addition, side scan sonar and multibeam hydrosurvey techniques will be used to locate numerous debris fields of wood and other debris remaining from earlier industrial uses of the waterway.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Olympia Harbor is a moderate use waterway (over 1,000,000 tons) with increasing amounts of non-containerized bulk cargo; such as timber products, steel pipe, and scrap metals.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Puget Sound and Tributary Waters, WA

AUTHORIZATION: The Rivers and Harbor Act of 1892

LOCATION AND DESCRIPTION: The Puget Sound and its Tributary Waters in Washington State. Removal of all hazards to navigation in the Federal Navigation Channel waters.

CONFERENCE AMOUNT FOR FY 2013: \$1,057,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$995,000 O: \$80,000 T: \$1,075,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,075,000 - Funding provides for routine operations and maintenance for the debris vessel M/V PUGET and support vessel, within Puget Sound Waters. Funded activities include the removal of hazards to navigation composed of man-made and large woody debris in the Federal Navigation Channel waters of Puget Sound, thus reducing collision hazards for the shipping industry and public users. Funding also allows appropriate disposal of the collected debris not used for environmental restoration projects and allows stockpiling of large debris to be used for restoration projects for local Government agencies. Funding provides for the upkeep of 3 large flat-deck barges used to collect and transport debris.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: 9,000 to 11,000 tons of debris is removed annually.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Seattle Harbor, WA

AUTHORIZATION: The Rivers and Harbors Act of March 2, 1919.

LOCATION AND DESCRIPTION: Seattle Harbor is located on the east side of central Puget Sound in Washington State. The project is located on the lower Duwamish River from Elliott Bay upstream approximately five miles along the river to the head of the federal navigation channel. The project consists of the East Waterway, 34 to 51 feet deep; the West Waterway, 34 feet deep; Duwamish Waterway, 30 feet deep for 2.6 miles, 20 feet deep for 0.8 miles, and 15 feet deep for 1.8 miles to the head of navigation.

CONFERENCE AMOUNT FOR FY 2013: \$957,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$110,000 T: \$110,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$110,000 - Funding provides multibeam and sidescan sonar channel project condition survey to report conditions to extensive and diverse waterway users. Area surveyed is the entire project from tip to tail performed twice yearly to determine shoaling patterns in this rapidly changing waterway. Also included in the surveys are East and West Waterways evaluations as deep draft vessels are regularly calling on these waterways. These funds allow documentation of navigation changes through multiple seasons.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Annual shipping handled by Seattle Harbor is 27 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Stillaguamish River, WA

AUTHORIZATION: Sec 5 of the Flood Control Act of 1936 (Public No. 738) dated 22 June 1936

LOCATION AND DESCRIPTION: The project is located downstream of Arlington in Snohomish County, in northwestern Washington state. The project provides for works to reduce bank erosion and channel changes on the Stillaguamish River between Arlington and the head of Hat Slough, a distance of 15 miles, and on Cook Slough, 3 miles long, as follows: Revetments at 26 places on the river and Cook Slough; a concrete control weir 275 feet long between steel-sheet pile piers at the head of Cook Slough to limit flow through the slough; and two cut-off channels, each about 900 feet long, to eliminate sharp bends of Cook Slough.

CONFERENCE AMOUNT FOR FY 2013: \$273,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$280,000 T: \$280,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A

FRM: \$280,000 - Budgeted funds will be used to continue brush removal from bank revetments, and normal maintenance and repair of bank erosion from winter flows. Further work entails design and coordination work for the Cook Slough weir rehabilitation. Brush removal will occur in the March/April timeframe.

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from 1939 through FY 2012 total \$12,600,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Tacoma Harbor, WA

AUTHORIZATION: Rivers and Harbors Act, March 3, 1905

LOCATION AND DESCRIPTION: The project is located in Tacoma, Washington. Provides for ,(a) channel in City Waterway 500 feet wide and 29 feet deep from deep water in Commencement Bay to 11th Street Bridge, 500 feet wide and 22 feet deep to 14th Street Bridge, and varying from 500 to 250 feet wide and 19 feet deep from 14th Street Bridge to end of this waterway, a total length of 8,500 feet; (b) channel in Hylebos Waterway 30 feet deep, 3.1 miles long, and 200 feet wide except where width is increased to 250 feet at the bend below East 11th Street, to 300 feet at Lincoln Avenue bend, and to 510 feet and 770 feet, respectively, at the channel widening above Lincoln Avenue and the turning basin at the head of the waterway; (c) construction of two training walls, each about 700 feet long at mouth of Puyallup River; (d) channel in Blair Waterway 2.6 miles long, including a portion seaward of East 11th Street 650 feet wide and 51 feet deep over southerly 350 feet, and 51 feet deep over northerly 300 feet; and remaining portion 51 feet deep and 150 feet wide at East 11th Street, 600 feet wide between East 11th Street and Lincoln Avenue, and 300 feet wide between Lincoln Avenue and a 1,200-foot wide turning basin at head of waterway. All depths refer to the plane of mean lower low water.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,033,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,369,000 O: \$ 525,000 T: \$ 1,894,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014 :

N: \$ 1,894,000 – This appropriation will allow funding for environmental document preparations and dredging activities of Blair Waterway which has not been dredged since the extensive deepening (through Section 107 with Port of Tacoma) 10 years ago. As this waterway is still an active aquatic Superfund Site, full sediment characterization including high resolution dioxin and PCB congeners is required. In addition side scan sonar and multibeam hydrosurvey techniques will be used to locate numerous debris fields of wood and scrap metal remaining from former industrial users of the Waterway.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: The Blair Waterway is the primary waterway for the Port of Tacoma which has recently expanded its container business by over 30% (5-7 million additional tons high value containers shipped) with the addition of the Grand Alliance shipping groups.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0 . This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Seattle

Tacoma Harbor, WA

1 May 2013

NWD-203

O&M JUSTIFICATION SHEET

PROJECT NAME: Tacoma-Puyallup River, WA

AUTHORIZATION: Sec 5 of the Flood Control Act of 1936 (Public No. 738) dated 22 June 1936

LOCATION AND DESCRIPTION: The project is located on the Puyallup River near Tacoma, WA. It provides for a channel with a capacity of 50,000 cubic feet per second between the East 11th Street bridge and the lower end of the inner-county improvement, a distance of about 2.2 miles, by straightening the channel, building levees, (revetted the channel and levees), and making all necessary bridge changes. The Flood Control Act of 28 June 1938 provides for Federal maintenance of the project. The improvement was planned in conjunction with Mud Mountain Dam, and affords protection against floods approximately 50 percent greater than the maximum discharge of record.

CONFERENCE AMOUNT FOR FY 2013: \$144,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$148,000 T: \$148,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A

FRM: \$148,000 - The funds will be used to brush excessive vegetation from levee tops and side slopes, grading of levee top, pickup garbage, and control noxious weeds and to manage and coordinate project modifications and real estate actions.

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from 1950 through FY 2012 total \$102,067,202.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: The Dalles Lock and Dam, WA & OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On the Columbia River, 90 miles east of Portland, Oregon. Multi-purpose with power; 1 Dam, spillways and fish passage; 1 Navlock, 1 Powerhouse with 24 generating units and Recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 3,196,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 910,000 O: \$ 2,240,000 T: 3,150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,888,000 – Funding will provide for routine navigation lock operations & maintenance including periodic navlock inspections. Also includes cost associated with support of navigation to ensure project performs to meet authorized purposes.

FRM: \$ 0 - N/A

RC: \$ 574,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which include recreation management, interpretive services, visitor assistance program implementation, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 688,000 - Funding will provide for routine operation & maintenance activities and management for the Environmental Stewardship. Activities include mitigation requirements for fish passage facilities & natural resource management and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides for navigation and hydroelectric power generation. Powerhouse has 26 main generating units with a capacity of 1,800 megawatts. Also provides Fish-passage facilities including two ladders and a fish lock. Dispersed recreation occurs at 4 minimally developed sites and on over 4000 acres of lands and natural resource areas surrounding Lake Celilo.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

WYOMING

O&M JUSTIFICATION SHEET

PROJECT NAME: Jackson Hole Levees, WY

AUTHORIZATION: PL 81-516 (Flood Control Act of 1950)

LOCATION AND DESCRIPTION: Project is located in Western Wyoming on the Snake River near Jackson Hole Wyoming. The project includes 22 miles of levees located on both sides of the Snake River and 2.5 miles on the Gros Ventre River. The levees provide flood control protection.

CONFERENCE AMOUNT FOR FY 2013: \$2,356,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,179,000 O: \$195,000 T: \$2,374,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$2,374,000 – Funding will be used to meet the operations and maintenance requirements of the Flood Risk Management mission. Activities include performing routine annual maintenance and levee patrol, periodic inspection with local sponsor and environmental compliance for flood damages. Also included is the annual cleaning and inspection of project culverts, riprap replacement, vegetation removal and the establishment of the Levee Safety Action Classification ratings for the Jackson Project levees.

RC: \$0 – N/A

H: \$0 – N/A

EN: \$0 – N/A

WS: \$0 – N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

NORTHWESTERN DIVISION

**NORTHWESTERN DIVISION
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JUSTIFICATION OF ESTIMATE

INVESTIGATIONS

COLORADO

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Cache La Poudre River, Greeley, Colorado (Completion)	1,449,000	1,029,000	55,000	65,000	0 2/	300,000 1/	0

Omaha District

The Cache La Poudre River is a left bank tributary to the South Platte River with headwaters in Rocky Mountain National Park. The Cache La Poudre River basin, which drains 1,890 square miles and includes the City of Greeley, is subject to severe flooding caused by intense rainfall from localized thunderstorms in May through September. The potential for floods is also increased from May through July due to rapid snowmelt from the Rocky Mountains. The City of Greeley has experienced fifteen major floods over the past 100 years, most recently in 1999 and 1983. The 100-year discharge is 10,800 cfs at Greeley. The 1983 discharge was recorded at 8,200 cfs, however, the 1904 flood event discharge was estimated to be 18,000 cfs. The City has incurred considerable expense over the last 20 years in replacing six bridges, with improved bridges designed to pass the 100 year flood event, however, there are no existing flood control structures in the Greeley reach, leaving the City vulnerable to continued flooding. There are approximately 630 residential and 234 non-residential structures in the 500-year floodplain with an estimated total value of \$272,400 (x1000). The estimated annual damages are \$2,379 (x1000). In addition to the threat of flooding and loss of life, another major concern in the Cache La Poudre basin is the degradation of habitat in the riparian corridor. The Colorado Department of Natural Resources characterizes the Cache La Poudre River through Greeley as a low elevation cottonwood-willow riparian habitat community. This type of ecological system provides the most important wildlife habitat in Colorado in terms of species diversity and abundance. The reach of the Cache La Poudre River through Greeley has been designated as critical wildlife habitat by the Colorado Division of Wildlife. Channelization, gravel mining, wetland destruction, water quality issues, and many other human influences have had a major impact on the quality of riparian habitat along the Cache La Poudre River and the wildlife dependent on this waterway. The major goals of the study and subsequent project(s) is to reduce the potential for damage to existing properties in the flood plain, reduce the threat for loss of life, restore riparian habitat in the river corridor, and improve opportunities for recreation along the channel. The cost share sponsor is the City of Greeley, Colorado. The Feasibility Cost Sharing Agreement (FCSA) was signed on December 27, 2005.

This study is not included in the Fiscal Year 2013 President's Budget; however non-Federal cost-sharing funds will be used to continue the feasibility study during Fiscal Year 2013 and conduct an Alternatives Formulation Briefing. The funds budgeted for Fiscal Year 2014 will be used to complete the feasibility phase of the study. The feasibility phase is estimated to cost \$2,430 (x1000), which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,664,000
Reconnaissance Phase (Federal)	234,000
Feasibility Phase (Federal)	1,215,000
Feasibility Phase (Non-Federal)	1,215,000

The study authority is a resolution adopted by the Committee on Public Works, U.S. Senate on March 22, 1971.

Division: Northwestern

District: Omaha

Cache La Poudre River, Greeley, CO

The reconnaissance phase was completed September 2005 and the FCSA was executed on December 27, 2005. The study has strong support from the City of Greeley, the state of Colorado, and many others (including the town of Eaton, Colorado Department of Transportation, Colorado Division of Wildlife, City of Evans, Greeley Urban Renewal Authority, and the Poudre River Trail Corridor). The feasibility study schedule for completion is Fiscal Year 2015.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

KANSAS

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Brush Creek Basin, Kansas and Missouri (Completion)	1,362,000	1,023,000	50,000	60,000	0 2/	229,000 1/	0

Kansas City District

The Brush Creek Basin study area includes 20 square miles of urban Kansas City, Missouri and Johnson County, Kansas. The basin has experienced considerable flooding in many locations over the years since construction in the Plaza was complete. Flooding in 1998 damaged private residences and public structures in many parts of the basin not protected by the completed Federal project. Lives were lost in a reach downstream of the Federal project in the flood of October 1998, and also upstream on the Kansas side of the state line. Tributaries such as Town Fork Creek in Missouri and Rock Creek in Kansas are two of the larger areas in the basin that still experience damages. The project has significant water resources challenges and opportunities that require a watershed perspective, including flood risk management, ecosystem restoration, water quality and environmental justice. The Basin is subjected to frequent severe and life threatening flooding, including significant loss of life in the 1998 flood. Very high risk areas remain to be formulated into a comprehensive flood risk management plan for the watershed, especially in the city of Kansas City, Missouri. The local sponsors, City of Kansas City, Missouri, and Johnson County, Kansas, strongly support this study and are providing the full local financial share, and will do so throughout all phases of the project. The Feasibility Cost Share Agreement (FCSA) was signed August 2005.

This study is not included in the Fiscal Year 2013 President's budget. The funds requested for Fiscal Year 2014 plus any carry-in funds will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$2,338 (x1000), which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Funds requested will also be used for Independent External Peer Review (IEPR). The estimated cost for IEPR is \$150,000. The IEPR cost an exception to the 50-50 cost share and is completely federally funded. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	2,456,000
Reconnaissance Phase (Federal)	118,000
Feasibility Phase (Federal)	1,244,000
Feasibility Phase (Non-Federal)	1,094,000

The study authority is the Resolution of the Committee on Transportation and Infrastructure, U.S. House of Representatives, adopted July 24, 2002, Docket 2698.

The reconnaissance phase was completed with the signing of the FCSA in August 2005. The feasibility study is scheduled for completion in Fiscal Year 2015.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

Division: Northwestern

District: Kansas City

Brush Creek Basin KS & MO

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Manhattan, Kansas (Completion)	1,329,000	729,000	100,000	200,000	0 2/	300,000 1/	0

Kansas City District

The city of Manhattan and adjacent areas of Riley County, and Pottawatomie County, Kansas, are located around the confluence of the Big Blue River (which flows generally south) and the Kansas River (which flows generally east). This Section 216 study examines an existing 50-year old levee originally constructed by the Corps of Engineers which now actively serves to reduce risk of river flooding within the City of Manhattan, Kansas. The terrain inside the Manhattan levee is relatively flat resulting in widespread flood damages from even small amounts of flooding. Flooding in 1993 damaged several hundred residences outside the levee even though the existing levee did not overtop. The City received an estimated \$1,380 (x1000) in flood damages and nearby areas of Pottawatomie County received an estimated \$144,000 in flood damages. The 1993 flood elevation came close to the top of the existing levee with a peak discharge that should have had significantly more freeboard margin. Subsequent analysis has revealed that the levee provides significantly less than the authorized level of protection. Given the large population and over \$800,000 (x1000) in investment behind the levee, the risk and consequences of an overtopping, and potentially an associated catastrophic failure are much higher than is acceptable. Local protection at Manhattan, Kansas, was authorized in the 1954 Flood Control Act as part of the Missouri River Basin comprehensive plan. Construction began May 4, 1961, and the project was turned over to the City of Manhattan for operation and maintenance in July 1963. The Federal construction cost was \$2,488 (x1000). Nearly 29,000 feet of levee and 4,100 feet of channel modification reduce the risk of floods from the Kansas and the Big Blue Rivers. The preliminary results of the feasibility study indicate that a modest levee raise and other reliability improvements will result in significant flood damage reduction benefits and lowered risk. The non-Federal sponsor, City of Manhattan, Kansas, requested a review of the completed works in a May 4, 2000 letter based on the 1993 flood event. The City of Manhattan strongly supports this study and is providing the full local financial share, and will do so throughout all phases of the project. The Feasibility Cost Share Agreement (FCSA) was signed November 2005.

This study is not included in the Fiscal Year 2013 President's budget. The funds requested for Fiscal Year 2014 plus any carry-in funds will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$2,117 (x1000), which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Funds requested will also be used for Independent External Peer Review (IEPR). The estimated cost for IEPR is \$201,000. The IEPR cost is an exception to the 50-50 cost share and is completely federally funded. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,287,000
Reconnaissance Phase (Federal)	170,000
Feasibility Phase (Federal)	1,159,000
Feasibility Phase (Non-Federal)	958,000

The study authority is Section 216 of the 1970 Flood Control Act (PL 91-611).

Division: Northwestern

District: Kansas City

Manhattan, KS

The reconnaissance phase was completed with the signing of the FCSA in November 2005. The feasibility study is scheduled for completion Fiscal Year 2015.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

MISSOURI

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Missouri River Degradation, Missouri and Kansas	2,907,000	935,000	200,000	529,000	200,000 2/	450,0001/	593,000

Kansas City District

The Missouri River between miles 340 and 400 in the Kansas City reach has exhibited significant degradation or down cutting of the riverbed. This phenomenon has been observed by evaluation of Missouri River gage data collected over a long period of time. In other reaches of the Missouri River from Rulo, Nebraska to St. Louis, Missouri, data indicates that the river bed is relatively stable. Degradation within the Kansas City reach has affected water supply intakes and outfall structures and has potential to destabilize the navigation structures, flood control structures, and other public infrastructure along the river. Continued degradation could impact Federal interest in maintaining the Bank Stabilization and Navigation Project (BSNP) and the existing Kansas City's Metropolitan Flood Protection System by causing bank instability that could lead to levee overtopping and levee failures during flood events. Degradation of the river has occurred during past flood events. The riverbed did not fully recover to pre-flood elevations following the 2007 flood event, indicating flood events are a contributing factor to the continued down cutting. Information gathered during the 2011 flood indicates that this flood has broadened the area of impact. Emergency repairs (rock placement at the toe to stabilize banks at critical levee/floodwall units) were implemented during the flood event due to significant scour resulting from the flood. The degradation is a serious and systemic issue, such that localized emergency repairs to avoid bank failures during flood events may become necessary on a more frequent basis. The sponsor is Mid-America Regional Council, a regional planning agency located in Kansas City Missouri. Mid-America Regional Council is supported with funding from 17 stakeholder entities that represent a wide cross section of interests, including water supply, transportation, local municipalities, levee districts, rail, etc. The reconnaissance study establishing a Federal interest in the project was completed August 2009. The Feasibility Cost Share Agreement (FCSA) was signed November 1, 2010.

Fiscal Year 2013 funds are being used to conduct a re-scoping charette at which a path forward was developed using risk-based assumptions, lowered estimated costs, and a shorter schedule. The Decision Management Plan (DMP) concerning a Viable Array and the associated Risk Register will guide study efforts, culminating in a decision on an array of alternatives at an In-Progress Review (IPR) meeting with the Vertical Team (VT) to be held in August of 2013. At the IPR meeting the criteria and steps necessary for completion of the screening and arriving at a Tentatively Selected Plan (TSP) will be established. Fiscal Year 2014 funds, plus any carry-in funds, will be used to develop the necessary information to screen the array of alternatives. Evaluation criteria, public involvement and project coordination activities will be continued, economic, engineering, technical, and environmental analysis of the selected array of alternatives will be conducted leading to an additional IPR in FY14, and the TSP will be identified. In accordance with the Corps Planning Modernization this study was re-scoped and the study cost has been revised. The preliminary estimated cost of the re-scoped feasibility phase is \$4,456 (x1000) which is cost shared on a 50-50 percent basis by Federal and non-Federal interests. Funds requested will also be used for Independent External Peer Review (IEPR). The estimated cost for IEPR is \$300,000. The IEPR cost is an exception to the 50-50 cost share and is completely federally funded. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,986,000
Reconnaissance Phase (Federal)	529,000
Feasibility Phase (Federal)	2,378,000
Feasibility Phase (Non-Federal)	2,078,000

The study authority is Section 216 of the Flood Control Act of 1970 "Review of Completed Projects".

The reconnaissance phase was completed with the signing of the FCSA on November 1, 2010. The feasibility study schedule for completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

MONTANA

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to in FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Yellowstone River Corridor, Montana	6,102,000	3,991,000	625,000	241,000	200,000 2/	750,000 1/	295,000

Omaha District

The Yellowstone River Corridor Study is to determine the cumulative hydrologic, biological and socioeconomic impacts along the corridor from Gardiner, Montana, to the confluence of the Missouri River, as authorized by Section 431 of Water Resources Development Act of 1999. The Yellowstone River corridor, defined linearly as approximately 600 river miles in Montana and North Dakota and laterally from the channel as the upper riverine terrace formed from historic fluvial processes, has been subject to natural and human factors affecting sustainable use and conservation of resources. Flooding in 1996 and 1997 caused damage to private property and public facilities with a subsequent increase in requests for regulatory approvals under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act as well as for Corps of Engineers emergency technical assistance. Given the natural and cultural heritage of this river corridor, public and private sector and environmental interests have raised issues regarding the long-term effects of bank stabilization and the potential for adverse cumulative impacts.

The primary goal of this study is to develop a set of publicly-supported river corridor management recommendations that address effects of channel modifications on the human community and riparian ecosystem along the Yellowstone River corridor. The corridor study will be used to formulate management and protection objectives based on a cumulative effects analysis and stakeholder input, evaluate trade-offs among objectives, and assess impacts of the management objectives to help determine their acceptability as contrasted with potential long-term riparian deterioration. For this study, the corridor has been divided into sub-reaches based on hydrogeomorphic characteristics for comparative analyses of altered vs. unaltered reaches; these comparison studies will form the foundation for the cumulative effects analysis of past, present, and potential future land use changes. In accordance with Section 431 of P.L. 106-53, this study is to be performed in consultation with the United States Fish and Wildlife Service (USFWS), United States Geological Survey, Natural Resources Conservation Services (NRCS) and with full participation of the State of Montana, tribal, and local entities; the study should also provide for public participation. Funding for the consultation efforts of the USFWS and NRCS during the study should be obtained by each respective agency. . The cost share sponsor is the Custer County Conservation District, the fiscal agent for the Yellowstone River Conservation District Council. The sponsor has provided approximately \$2,000,000 in in-kind services through Fiscal Year 2012. The Feasibility Cost Sharing Agreement (FCSA) was signed on January 22, 2004.

Fiscal Year 2013 funds will be used to continue the cumulative effects study, specifically completion of the fisheries study, hydrology and hydraulic analysis and floodplain mapping. The funds budgeted for Fiscal Year 2014 would be used to conduct a comprehensive socio-economic study of economic activities and trends along the Yellowstone River corridor. The socio-economic study is the final technical study element needed before initiating the cumulative effects analysis of how human activities have historically affected (and are anticipated to affect in the future) the physical characteristics and natural habitats along the river. Completion of the cumulative effects analysis will include formulation of a series of best management practices that promote restoration and conservation of habitats in balance with future activities, so that informed economic investment decisions can be made in a sustainable manner. The preliminary estimated cost of the feasibility phase is \$7,591,000, which is to be shared on a 75/25 percent basis by Federal and non-Federal interests. All or part of the non-Federal share may be

Division: Northwestern

District: Omaha

Yellowstone River Corridor, MT

in-kind services. This preliminary estimated cost does not include an amount for Independent External Peer Review (IEPR). This watershed study will not result in a decision document therefore an IEPR is not required under EC 1165-2-209. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 8,000,000
Reconnaissance Phase (Federal)	409,000
Feasibility Phase (Federal)	5,693,000
Feasibility Phase (Non-Federal)	1,898,000

The study authority is Section 431 of the Water Resources Development Act of 1999 (P.L. 106-53).

The reconnaissance phase was completed with the signing of the FCSA on January 22, 2004. The feasibility study schedule for completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

OREGON

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Lower Columbia River Ecosystem Restoration, Oregon and Washington	3,811,000	1,508,000	738,000	362,000	300,000 2/	450,000 1/	453,000

Portland District

The Lower Columbia River Ecosystem Restoration comprehensive watershed study extends from the mouth of the Columbia River—where there is a 43-foot deep-draft Federal navigation channel that runs to the Portland metropolitan area—to a shallow draft channel upstream to river mile 145 at Bonneville Lock and Dam. The Columbia River’s estuary is classified as nationally significant under the National Estuary Program (NEP). The river divides the states of Oregon and Washington throughout this area. The lower Columbia River basin system includes flood damage reduction, navigation, fish and wildlife, environmental restoration, hydropower, bank protection, recreation and water supply improvement purposes. Competing water resource requirements and significant environmental degradation has occurred within the lower Columbia River basin system. Human modifications to the system have changed the hydrologic regime. Storm water run-off pollution from agricultural and forest practices and increased development, and substantial losses of instream, riparian and wetland habitats have caused a reduction in the abundance of fish and wildlife resources, such as resting and rearing areas, and a diminished food web. Thirteen different populations of anadromous salmonids—that use the estuary and reproduce in the Columbia River basin—have been listed as threatened or endangered under the Endangered Species Act (ESA). Such listings have broad implications to existing water resource uses, and future developments. The updated proposed action for the Columbia River Federal Power System includes planning and restoration efforts in the Columbia River estuary to help avoid jeopardy rulings under the ESA for these listed species. Historic losses of 52,000 acres of wetland/marsh habitats, 13,800 acres of riparian forest habitat and 27,000 acres of forested wetland habitat downstream of Portland have significantly impacted this ecosystem’s ability to produce and sustain fish and wildlife resources. Much of this wetland loss can be attributed to the 84,000 acres encompassed by diking districts and the 20,000-acre increase in urban development that has occurred along the lower Columbia River. The purpose of this ongoing study is to investigate and recommend appropriate solutions to accomplish a comprehensive watershed approach for addressing restoration and water resource opportunities in the lower Columbia River basin. The study is not limited to the tidally influenced areas but is ecosystem-wide in scope. A comprehensive, long-range approach to address water resource problems and opportunities for the lower Columbia River is needed. Some of the key areas to be addressed in this comprehensive study include wetland/riparian habitat restoration and stream and fisheries habitat improvement. It is imperative that reversals of these impactful trends occur now before further urban growth causes irreparable impairment of current water uses and ecosystem functions, and while regional interest and financial support is high. The comprehensive watershed study would serve as the catalyst to bring together and implement current efforts by a number of governmental and private organizations including the NEP, six state agencies from Oregon and Washington, four Federal agencies, recreation, ports, industry, agriculture, labor, commercial fishing, environmental interests and citizens. The project has the potential to add up to 10,000 acres of Estuarine / Riverine emergent and forested wetland, consistent with the Lower Columbia River Estuary Partnerships Comprehensive Conservation Management Plan and Washington State recovery plans. The states of Oregon and Washington are joint sponsors for the study and understand the cost sharing provisions as evidenced by the 16 December 2003 signed Feasibility Cost Share Agreement (FCSA).

Fiscal Year 2013 funds are being used to host a re-scoping meeting and continue the feasibility phase of the study including continued screening and refining of potential actions and alternatives for the identified sites; developing costs and benefits for potential actions, providing more detailed planning, analysis and evaluation, including initial design, for long-range larger projects, developing National Environmental Policy Act documentation for habitat restoration, working closely with cost-share partners to define specific study requirements, initiating and continuing conceptual alternatives and feasibility design development to include large scale ecosystem restoration, habitat creation, and potential habitat conservation.

The funds requested for Fiscal Year 2014 plus any carry-in funds would be used to continue the feasibility study. In accordance with the Corps Planning Program Modernization, this study is being re-scoped and the study cost has increased. The preliminary estimated revised cost of the feasibility phase is \$7,040,000, of which \$6,840,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests and an additional \$200,000 will be 100% Federally funded for the required Independent External Peer Review. The feasibility phase cost has increased from \$6,200,000, in the Fiscal Year 2013 budget submission, by an estimated \$840,000 to \$7,040,000. The cost increase is due to the study scope, initially envisioned as a comprehensive watershed study framework document to inform and guide a holistic approach to restoration, changed to now focus on developing alternatives and choosing specific sites for specific authorization to implement restoration of the Lower Columbia River. Discussions are underway with the project sponsors to further refine this estimate and revise the FSCA as necessary. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$7,231,000
Reconnaissance Phase (Federal)	191,000
Feasibility Phase (Federal)	3,620,000
Feasibility Phase (Non-Federal)	3,420,000

The original authorization for this study is Resolution of the Senate Committee on Environment and Public Works dated 28 June 2000.

The reconnaissance phase was completed in Aug 2001. The FCSA was signed 16 December 2003. The feasibility study completion date is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Willamette River Basin Review, Oregon	TBD	1,881,000	5,000 3/	32,000 4/	200,000 2/	200,000 1/	TBD

Portland District

The Willamette River Basin located in northwestern Oregon is approximately 12,000 square miles and houses 70% of Oregon's population. During the last 70 years, this basin has been highly developed including 13 Corps reservoirs to control floods, generate power, and provide water for navigation, irrigation, low flow augmentation and fish and wildlife conservation. Many miles of levees and channel improvements have also been constructed within the basin. The estimated number of people living throughout the basin in the 100-year floodplain is 125,000, with 500,000 people living in the 500-year floodplain. Present concerns in the basin include flood damages, fish and wildlife conservation, Municipal and Industrial (M&I) water supply, irrigation, and development of additional recreation opportunities. Projected irrigation development in the basin has not materialized at the rate previously envisioned and urban development has increased dramatically, putting a higher demand on water supply for M&I purposes. The feasibility study will determine if modifying the operation and storage allocations of the existing Corps system of 13 reservoir projects would better serve current and anticipated water resource needs. Strong local interests seek a re-examination of Corps reservoirs with a view toward utilizing additional project purposes and modifying reservoir operation. The State of Oregon has expressed strong support for the study because of its desire to implement a new Comprehensive Management Plan for the basin. Demand for M&I water supply in the Willamette River basin is growing rapidly. Several municipalities in the upper Willamette River basin need to make significant investment decisions regarding future water supply. The State of Oregon listed existing Willamette River basin reservoirs as the most likely alternative sources if storage allocation and other related issues can be resolved by the study. Additional impacts to water reallocation opportunities were introduced when the National Marine Fisheries Services (NOAA Fisheries) listed three species of anadromous fish in March 1999. The Corps completed a Biological Assessment in April 2000, which was then supplemented in 2007. On July 11, 2008, NOAA Fisheries and U.S. Fish and Wildlife Service issued Biological Opinions (BiOps), concluding that the continued operation of the Willamette River reservoirs jeopardize the survival of Federally listed species in the basin. The BiOps included "reasonable and prudent alternatives" (RPAs) the Corps (and the other two Action Agencies) should undertake to avoid jeopardy to the listed species and support their recovery. These actions may significantly modify structures and operation of the existing Corps Willamette River basin projects in multiple functional areas, including improvement of fish passage, temperature control facilities, upstream and downstream habitat restoration, and flow augmentation. The Columbia River Fish Mitigation (CRFM) project is being used to respond to the BiOps and RPAs. The Willamette River Basin Review continues to be a water reallocation study but will have to consider all influences within the basin including the BiOps actions required under the CRFM project. The CRFM project has preliminarily determined that approximately one third of the 1.6M acre-feet of irrigation allocation may be reserved for ESA listed species. With this determination, the Willamette River Basin Review water reallocation study can proceed with the understanding that the study scope will address the remaining two thirds allocation or 1.1M acre-feet. The first increment of work will include a small-scale study to create a report for reallocating existing conservation storage for a single use for the cities of Cottage Grove and Creswell. The results of the small-scale study will provide information regarding standardized costing, the needed processes and an understanding of the appropriate players to be engaged for the next increment of work, the basin wide reallocation study. The State of Oregon is the sponsor for the study and understands the cost share provisions as evidenced by the 31 May 1996 signed Feasibility Cost Share Agreement (FCSA).

Fiscal Year 2013 funds are being used to re-scope the study utilizing Planning Modernization directives, initiate the small-scale reallocation study, initiate environmental clearance documentation, and conduct public meetings. The funds requested for Fiscal Year 2014 plus any carry-in funds would be used to complete the small-scale re-allocation study. Funding for the next increment of the study, for the basin wide reallocation study, will be considered as a new budget decision. The estimated cost of the feasibility phase will be determined during the re-scoping meeting in FY13. Following the re-scoping of the study, the FCSA will be modified as necessary. A summary of study cost sharing is as follows:

Total Estimated Study Cost:	\$ TBD
Reconnaissance Phase (Federal):	834,000
Feasibility Phase (Federal):	TBD
Feasibility Phase (Non-Federal):	TBD

The authority for this study is Resolution of the House Committee on Public Works & Transportation, 8 September 1988.

The reconnaissance phase of the study was completed in May 1996. The FCSA was signed 31 May 1996. The feasibility study schedule for completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Reprogrammed funds in Fiscal Year 2011.

4/ Reprogrammed funds in Fiscal Year 2012.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

WASHINGTON

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Grays Harbor, Washington (Completion)	1,642,000	367,000	75,000	800,000	0 2/	400,000 1/	0

Seattle District

The Grays Harbor, Washington, navigation project is an existing 24.3-mile deep draft navigation channel that begins on Washington State's Pacific coast, 45 miles north of the mouth of the Columbia River and 110 miles south of the Strait of Juan de Fuca. Deepening of the channel to -38 feet mean lower low water (MLLW), and other improvements, were authorized by Section 202 of the Water Resources Development Act of 1986, Public Law 99-662. A General Design Memorandum was completed in February 1989, recommending deepening of the project to -36 feet MLLW, and widening the turning basins to serve vessels exporting timber. The deepening to -36 feet MLLW and widening was completed in 1999. The Port of Grays Harbor has experienced dramatic growth in cargo volume over the last several years, increasing from 280,000 metric tons in 2006 to 1,400 (x1000) metric tons in 2010 and expected to double to 2,800 (x1000) metric tons by 2016. Diversity of goods has also expanded and the Port now exports logs, lumber, aluminum, bio diesel, crude oil, other bulk cargos, and vehicles. The increase in exports from the Port has created jobs in one of the State's most economically depressed regions, where unemployment approaches 13%. As the Port has grown, the number of vessels and their size has grown as well, exacerbating the economic impacts of light loading and tidal delays caused by insufficient channel depth. The sponsor, the Port of Grays Harbor, has requested a re-evaluation of the project to allow deepening the channel to the -38 foot MLLW depth authorized by Congress. Deepening the channel would increase efficiency of, and reduce costs to, ships calling on the Port, allowing for the continued growth that provides and economic boost to the region and the State. The study would culminate in a document similar to a limited re-evaluation report and would not require any additional Congressional authorization. The Feasibility Cost Share Agreement (FCSA) was executed in May 2011, between the Department of the Army and the Port of Grays Harbor.

This study is not included in the Fiscal Year 2013 President's budget. The funds requested for Fiscal Year 2014 would be used to complete the final report and the Environmental Impact Statement. In accordance with the Corps Planning Program Modernization, this study has revised its study costs. The estimated cost of the feasibility phase is \$2,738 (x1000), to be shared on a 50-50 percent basis by Federal and non-Federal interests. All or part of the non-Federal share may be in-kind services. Federal cost includes an Independent External Peer Review, estimated at approximately \$200,000. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,911,000
Reconnaissance Phase (Federal)	173,000
Feasibility Phase (Federal)	1,469,000
Feasibility Phase (Non-Federal)	1,269,000

The study authority is Section 202 of the Water Resource Development Act 1986 (PL 99-662).

The reconnaissance phase completion was September 2010 and the FCSA was executed May 2011. The feasibility study is scheduled for completion in Fiscal Year 2014.

Division: Northwestern

District: Seattle

Grays Harbor, WA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Puget Sound Nearshore Marine Habitat Restoration, Washington (Completion)	11,307,000	8,162,000	1,458,000	637,000	850,000 2/	200,000 1/	0

Seattle District

The Puget Sound Nearshore study area is located along 2,500 marine shorelines of the 15,000 square mile basin of Puget Sound, Washington. The study team concluded that the shoreline has been shortened by 690 miles with the loss of 305 coastal embayments, 115 miles of delta, 120 miles of beaches and 93% of freshwater-oligohaline wetland areas throughout Puget Sound. A multi-agency team of Federal, State and local planners, scientists, and engineers have evaluated over 700 potential restoration sites and have now proposed a list of 19 sites for inclusion in the Tentatively Selected Plan. When completed, these sites will total nearly 5,000 acres of restored habitat, including critical habitat to support 13 species listed as endangered or threatened under the Endangered Species Act, as well as numerous Treaty protected Tribal fisheries. The Puget Sound Action Agenda, which is the over-arching State and Federal document that prioritizes actions for Puget Sound recovery, specifically lists the Puget Sound Nearshore study as a key near-term action. The proposed restoration projects recommended in the draft Feasibility Report would support key salmon recovery goals as outlined in the National Oceanic and Atmospheric Administration's Salmon Recovery Plan, under the Endangered Species Act. The project has broad based support from Tribes, the State of Washington, and other key stakeholders. The Feasibility Cost Share Agreement (FCSA) was executed September 2001, between the Department of the Army and the State of Washington Department of Fish and Wildlife. FCSA Amendment No. 1 was executed March 2009, and FCSA Amendment No. 2 was executed April 2012.

FY 2013 funds are being used to complete the draft Feasibility Report, an Environmental Impact Statement, and reviews for the Agency Decision Milestone. The funds requested in FY 2014 would be used to complete the National Environmental Policy Act documentation and Civil Works Policy Reviews of the final Feasibility Report. In accordance with the Corps Planning Program Modernization, this study has reduced its study costs. The preliminary estimated cost of the feasibility phase is \$21,976,000, to be shared on a 50-50 percent basis by Federal and non-Federal interests, except for an estimated \$388,000 for Independent External Peer Review that is 100% Federal. All or part of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$22,101,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	11,182,000
Feasibility Phase (Non-Federal)	10,794,000

The study authority is Section 209 of the Flood Control Act of 1962 (P.L.84-874).

The reconnaissance phase was completed in December 2000. The FCSA was executed September 2001, Amendment No. 1 was executed March 2009, and Amendment No. 2 was executed April 2012. The feasibility study is scheduled for completion in Fiscal Year 2014.

Division: Northwestern

District: Seattle

Puget Sound Nearshore Marine Habitat Restor, WA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014
 SURVEYS - NEW

	Total Estimated Federal Cost \$	Allocations Prior to FY 2013 \$	Allocation in FY 2013 \$	Budgeted Amount for FY 2014 \$	Additional to Complete After FY 2014 \$
Seattle Harbor, Washington (Completion)	100,000	0	0 2/	100,000 1/	0

Seattle District

Seattle Harbor study area is located between the East, West, and Duwamish Waterways navigation channel, which is located in Puget Sound's Elliott Bay in Seattle, WA. The harbor provides access to existing container terminals and other marine industrial users. A reconnaissance study would review existing major study documents related to the modification of the East and West Waterways, and investigate depths between -34 and -55 feet Mean Lower Low Water (MLLW). This study would determine potential deepening of the East and West Waterways of Seattle Harbor, to allow existing post panamax and potentially larger vessels to access existing container terminals. The results of the reconnaissance study would be used to assist in the determination of Federal interest. The current authorization does not provide current users adequate depth for unrestricted access to existing container terminals. The 34 foot authorized depth on the West Waterway and the stage 1 area of the East Waterway to 51 feet MLLW and stage 2 area of the East Waterway to 39 feet MLLW result in tidal delays at existing container terminals. A substantial competitive threat for the Port is coming from Prince Rupert in Canada. Some cargo and associated job loss has already occurred as a result of this international competition and Prince Rupert is aggressively pursuing increased market share of cargo destined for American markets. An initial appraisal under Section 216 completed March 2012 recommended preparation of a reconnaissance report. Fiscal Year 2014 work would include initiation and completion of the reconnaissance study report (905b). Port of Seattle is the potential non-Federal sponsor for the feasibility portion of the study.

The study authority is Section 216 of the Flood Control Act of 1970.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Skokomish River Basin, Washington	3,720,000	2,033,000	37,000	150,000	0 2/	650,000 1/	850,000

Seattle District

The Skokomish River, located in Mason County, Washington is the primary drainage basin for the southeast region of the Olympic Peninsula, carrying flow from its headwaters in the Olympic Mountains to its outlet in Hood Canal. The basin consists of 80 mainstream river miles and 260 miles of tributaries. The purpose of the study is to investigate opportunities for ecosystem restoration in a highly degraded system. Human activities have altered the Skokomish River's hydrologic and sediment processes and reduced the fisheries resource, resulting in the listing of four salmonid species under the Endangered Species Act (ESA) including Puget Sound Chinook Salmon, Hood Canal Summer Chum Salmon, Steelhead, and Bull Trout. The clearing of log jams, removal of riparian trees, disturbance of the streambanks, bank protection, side-channel closures, and flow alterations from Cushman Dam have contributed to an altered deposition pattern and limited habitat connectivity throughout the basin. Aggradations in the system limits channel capacity in the mainstream and causes the river flow to run subsurface during the summer low flow period. As a result, passage and migration corridors are blocked for endangered fish species during spawning season and fish are stranded out of the channel during high flow events. The ESA-listed salmon species would benefit from spawning, rearing, and migration habitat improvements to nationally recognized critical habitat, as well as nesting and rearing habitat for bald eagles. The primary improvements will likely be to the channel capacity and restoration of a continuous low flow channel to maintain fish passage for listed species as well as reconnections of isolated off channel habitats on Forest Service, private, and tribal lands. This study is also included in the Puget Sound Action Agenda and the State and Federal plan for Puget Sound recovery. The Feasibility Cost Share Agreement (FCSA) was executed July 2006 between the Department of the Army, Mason County, and the Skokomish Indian Tribe.

This study is not included in the Fiscal Year 2013 President's budget. Fiscal Year 2014 funds, plus any carry-in funds, will be used to continue Feasibility in accordance with the scope and schedule as aligned with the vertical team. In accordance with the Corps Planning Program Modernization, this study has been re-scoped and the study costs have increased. The estimated cost of the feasibility phase is \$6,472 (x1000), to be cost-shared on a 50-50 percent basis by the Corps of Engineers and the non-Federal sponsors. All or part of the non-Federal share may be in-kind services. Federal cost includes an Independent External Peer Review, estimated at approximately \$500,000. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 6,706,000
Reconnaissance Phase (Federal)	234,000
Feasibility Phase (Federal)	3,486,000
Feasibility Phase (Non-Federal)	2,986,000

The study authority is Section 209 of the Flood Control Act of 1962 (PL 87-874).

The reconnaissance phase was completed March 2000 and the FCSA was executed July 2006. The feasibility study completion date is TBD.

Division: Northwestern

District: Seattle

Skokomish River, WA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 (x1000). This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

CONSTRUCTION

IOWA

APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Missouri River Fish and Wildlife Recovery, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Tributaries (Continuing)

LOCATION: The Missouri River mainstem and its tributaries.

DESCRIPTION: Within the Missouri River basin, planned activities will recover and provide protection to species listed under the Endangered Species Act (ESA), and the ecosystems on which they depend, to address the effects of the operation of the Missouri River Mainstem Reservoir System, the Missouri River Bank Stabilization and Navigation Project (BSNP), and the Kansas River Project. Between Sioux City, Iowa and the mouth of the Missouri River, planned activities will also provide for mitigation of fish and wildlife habitat losses specifically resulting from the construction and operation of the Missouri River BSNP.

AUTHORIZATION: All existing authorized Corps of Engineers projects along the Missouri River and tributaries - including the Water Resources Development Acts (WRDA) of 1986, 1988, 1999, & 2007; National Industrial Recovery Act of 1933; Flood Control Acts of 1938, 1944, 1954; River and Harbor Act of 1945; as amended.

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	Status (1 Jan 2013) Entire Project	PERCENT COMPLETE 16%	PHYSICAL COMPLETION SCHEDULE TBD
Estimated Federal Cost	\$3,739,687,000				
Estimated Non-Federal Other Costs	0				
Total Estimated Project Cost	3,739,687,000				
Allocations to 30 September 2010	418,945,000				
Allocation for FY 2011	84,524,000				
Allocation for FY 2012	72,888,000				
Conference Allowance for FY 2013	72,000,000	<u>5/</u>			
Allocations through FY 2013	648,357,000	<u>1/2/3/6/</u>	18%		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	70,000,000		19%		
Programmed Balance to Complete after FY2014	3,021,330,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY2014	0				

1/ \$16,852,000 reprogrammed from the project.

2/ \$1,071,000 rescinded from the project.

3/ \$350,000 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$700,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

JUSTIFICATION: The U.S. Fish & Wildlife Service (USFWS) 2003 Amended Biological Opinion (BiOp) concluded that the Corps' operation of the Missouri River Mainstem Reservoir System, Bank Stabilization and Navigation Project (BSNP) and Kansas River Project jeopardizes the continued existence of the endangered pallid sturgeon. Funding will be used to implement elements of the Reasonable and Prudent Alternative to Jeopardy for the pallid sturgeon, and actions necessary to preclude jeopardizing two other species listed under the ESA: the endangered interior least tern and threatened piping plover. These measures to avoid jeopardy to the listed species include enhanced and accelerated shallow water habitat construction and floodplain connection for the pallid sturgeon, enhanced emergent sandbar habitat construction for nesting tern and plover, additional pallid sturgeon propagation support, more comprehensive population assessment for the three species, an intensive research, monitoring and evaluation program for the species, and an adaptive management strategy that includes USFWS participation in a Missouri River Recovery Implementation Committee (MRRIC) that includes diverse stakeholder participation.

Division: Northwestern

District: Omaha/Kansas City

Missouri River Fish and Wildlife Recovery,
IA, KS, MO, MT, NE, ND, SD, and Tributaries

1 May 2013

NWD-37

Below Sioux City, the project will restore and/or preserve natural ecosystem functions of the Missouri River floodplain. Terrestrial habitats will include wetlands, prairie grass and bottomland hardwood plantings. Some existing levees will be relocated away from the river or breached to reconnect the floodplain. Chutes and backwater areas will be excavated or dredged and river banklines modified to increase aquatic habitats and riverine diversity. As originally conceived, the program would establish approximately 120 individual mitigation sites, creating a riparian corridor over time. Lands required for implementation will be acquired from willing sellers to the maximum extent possible.

FISCAL YEAR 2013: The total unobligated dollars are being used to first address the highest priority efforts to comply with the USFWS BiOp requirements followed by critical mitigation efforts below Sioux City. Selected mitigation sites will also be prioritized to also best respond to overlapping requirements of the BiOp. Design work on the fish passage phase of the Lower Yellowstone Intake project will continue in FY 2013. Current estimated execution plan includes effort as follows:

Item	Amount	
Program Management Activities	\$ 5,900,000	
Lower Yellowstone Intake	2,000,000	
Endangered Species Research and Evaluation	17,500,000	
MRRIC Coordination	1,800,000	
NEPA Activities	2,100,000	
Shallow Water Habitat Construction	26,589,000	
Emergent Sandbar Habitat (terns and plovers)	6,300,000	
Real Estate Acquisition	<u>15,000,000</u>	
Total	\$77,189,000	<u>8/</u>

FISCAL YEAR 2014: The requested amount will be used to first address the highest priority efforts to comply with the USFWS BiOp requirements followed by critical mitigation efforts below Sioux City. Selected mitigation sites will also be prioritized to also best respond to overlapping requirements of the BiOp. Construction on the fish passage phase of the Lower Yellowstone Intake project will begin in FY 2014. Current estimated execution plan includes effort as follows:

Item	Amount
Program Management Activities	\$ 5,500,000
Lower Yellowstone Intake	20,000,000
Endangered Species Research and Evaluation	14,700,000
MRRIC Coordination	1,800,000
NEPA Activities	3,000,000
Shallow Water Habitat Construction	10,000,000
Emergent Sandbar Habitat (terns and plovers)	3,000,000
Real Estate Acquisition	<u>12,000,000</u>
Total	\$70,000,000

8/ Includes unobligated carry-in from FY 2012.

Division: Northwestern

District: Omaha/Kansas City

Missouri River Fish and Wildlife Recovery,
IA, KS, MO, MT, NE, ND, SD, and Tributaries

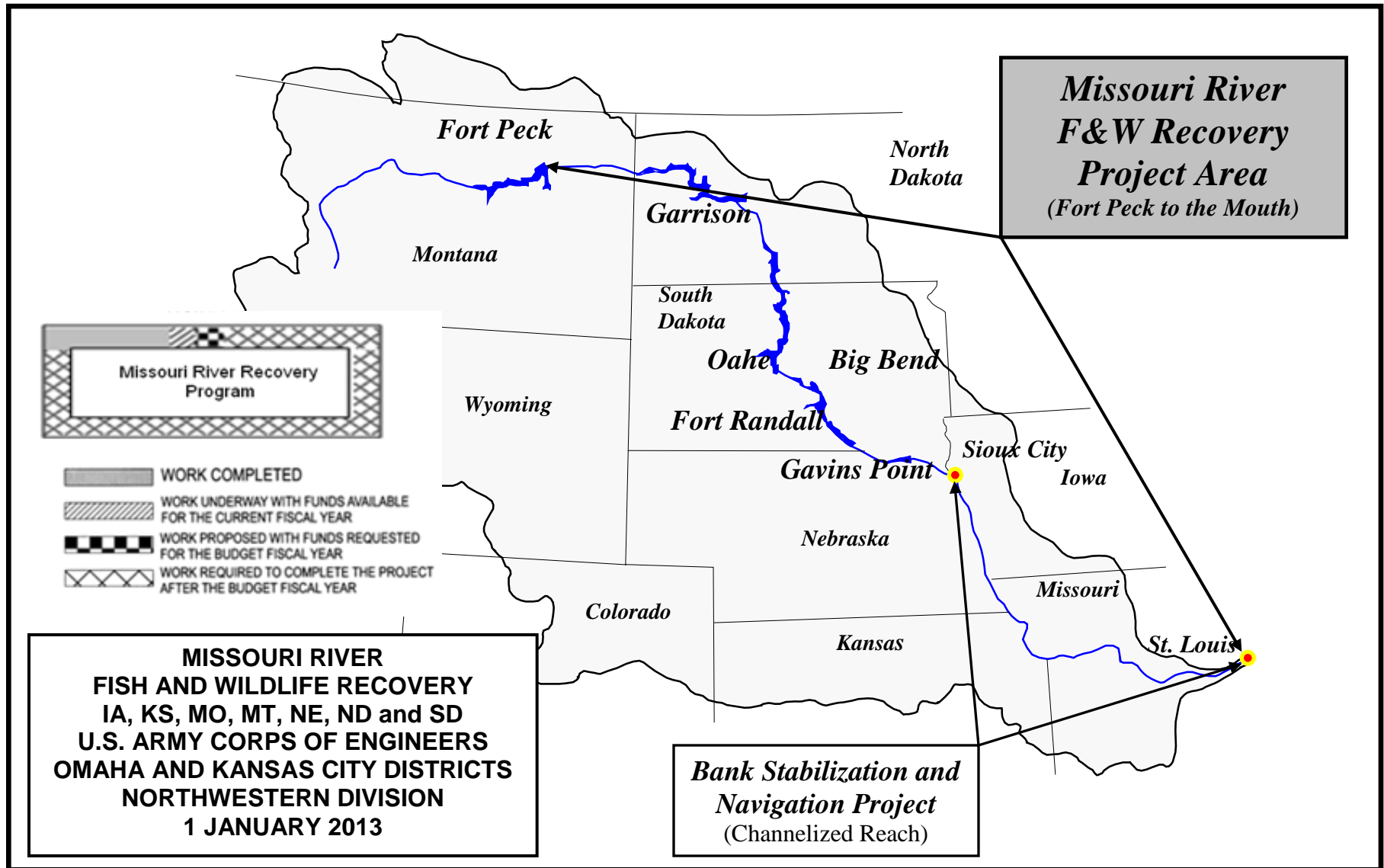
NON-FEDERAL COSTS: Not applicable

STATUS OF LOCAL COOPERATION: Endangered Species Act (ESA) recovery is a Federal responsibility. The 1986 and 1999 authorizing acts for the mitigation below Sioux City provides that the entire cost of the project, including all lands, easements, rights-of-way, and relocations, and all operation and maintenance costs be borne by the Federal Government with no costs to either local or state governments. Therefore, there is no non-Federal sponsor for the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal estimate of \$3,739,687,000 is the same as last presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The 2003 Amended Biological Opinion was prepared in response to the Corps' proposed revision of the Missouri River Master Water Control Manual as discussed in the supporting National Environmental Policy Act (NEPA) documents. However, the scope of the Amended Biological Opinion is broader than dam operations. Both programmatic and site-specific NEPA documents are being prepared to fulfill NEPA responsibilities for compliance with the 2003 Amended Biological Opinion. The Missouri River Mitigation Project Final Environmental Impact Statement (EIS) was filed with the U.S. Environmental Protection Agency on 23 December 1982. A supplement to the EIS was completed to allow acquisition and habitat development on the 118,650 acres authorized in WRDA 1999. The Record of Decision was signed 12 June 2003.

OTHER INFORMATION: Funds to initiate pre-construction engineering and design of the BSNP mitigation project were appropriated in FY 1990. Initial construction funds for the BSNP mitigation project were appropriated in FY 1992. Funding for the combined ESA and mitigation efforts, now known as Missouri River Fish and Wildlife Recovery, were first appropriated in FY 2005.



KANSAS

APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Turkey Creek Basin, Kansas City, Kansas and Missouri (Continuing)

LOCATION: The 23 square mile urban Turkey Creek basin drains Johnson and Wyandotte Counties in Kansas, and a portion of Kansas City, Missouri. Turkey Creek parallels Interstate Highway 35 for much of its length and flows through a tunnel into the Kansas River approximately three miles upstream of its confluence with the Missouri River.

DESCRIPTION: The plan of improvement consists of approximately ten thousand feet of urban channel modification, a levee section, the raising of two railroad bridges, 12.7 acres of riparian planting and four large drainage interceptor pipelines. A dual flood threat exists in the affected area, which consists of Turkey Creek over-bank flow and localized hillside runoff. Either flood source can cause considerable damage. The channel modification addresses the channel flooding threat, and the interceptors address the hillside component.

AUTHORIZATION: Section 101 of the Water Resources Development Act of 1999 (PL 106-53) and Section 123 of the Consolidated Appropriations Act of 2003.

REMAINING BENEFIT – REMAINING COST RATIO: 2.5 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 5.625 (FY 2004)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest economic update approved in August 2011 at 2011 price levels.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$75,961,000	Entire Project	69	TBD
Estimated Non-Federal Cost		45,539,000			
Cash Contribution	24,684,000				
Other Costs	20,855,000				
Total Estimated Project Cost		121,500,000			
Allocations to 30 September 2010		44,336,000			
Allocation for FY 2011		11,975,000			
Allocation for FY 2012		6,000,000			
Conference Allowance for FY 2013		4,000,000	<u>5/</u>		
Allocations through FY 2013		66,311,000	<u>1/2/3/6/</u> 87%		
Estimated Unobligated Carry-In Funds		0	<u>4/</u>		
Presidents Budget for FY 2014		6,000,000	95%		
Programmed Balance to Complete after FY 2014		3,650,000	<u>7/</u>		
Unprogrammed Balance to Complete after FY 2014		0			

1/ \$0 reprogrammed to (from) the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$1,960,206 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Channel Modification: 10,000 feet, Levee: 2,800 feet, Tunnel: 1,300 feet, Railroad Bridge Raises: 2 each, Interceptors: 16,000 feet, and Riparian Planting: 12.7 Acres.

JUSTIFICATION: The Turkey Creek basin is a 23-square-mile area within Kansas City, Kansas and suburbs in Johnson and Wyandotte Counties. The basin is nearly 100 percent urbanized, and a significant amount of development exists within the flood plain. Commercial and industrial investment, valued at over \$139,000,000, along with residential and other property valued at approximately \$9,000,000, are subject to flood damage. There are almost 500 businesses within the project area accounting for more than 6,000 jobs. Phasing of channel construction to coincide with widening of Interstate Highway 35 by the Kansas Department of Transportation (KDOT) resulted in significant project cost savings. KDOT's work on the channel is complete. A dual flood threat exists in the project area that consists of Turkey Creek over-bank flows and localized hillside runoff. Either flood source can cause considerable damage. Average annual damages without the project are estimated at \$11,700,000, and with the project at \$3,200,000. Six damaging floods have occurred since 1977. The flood of

Division: Northwestern

District: Kansas City

Turkey Creek Basin, KS & MO

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JUSTIFICATION (Continued)

record occurred in July 1993 causing one fatality and damages estimated at \$20,000,000 in 1993. Another flood of similar magnitude to the 1993 event occurred in October of 1998. The recent severe floods have occurred at night and on weekends when the commercial industrial corridor was inactive. A flood of similar magnitude occurring during normal business hours has the potential to result in multiple fatalities. The authorized project includes construction of channel modifications with a one-percent level of protection and tributary floodwater diversion. The average annual benefits are \$8,487,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue Kansas Interceptors Construction	\$4,100,000	
Continue Channel Construction	200,000	
Engineering, Design and Construction Mgmt	<u>1,000,000</u>	
Total	\$5,300,000	<u>8/</u>

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Complete Kansas Interceptors Construction	\$500,000
Complete Channel Construction	4,500,000
Initiate Missouri Interceptor Design	700,000
Construction Mgmt	<u>300,000</u>
Total	\$6,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated material disposal areas.	4,300,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	6,918,000	

Division: Northwestern

District: Kansas City

Turkey Creek Basin, KS & MO

	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation (continued)		
Pay 100% of the cost allocated to the Mission Road Interceptor and increasing the level of protection of the Missouri Interceptor from 10 years to 15 years (Locally Preferred Plan).	4,637,000	
Credit allowed based on prior work.	5,000,000	
Pay costs allocated to flood control to bring the non-Federal share of flood control costs to 35 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	24,684,000	112,000
Total Non-Federal Costs	45,539,000	112,000

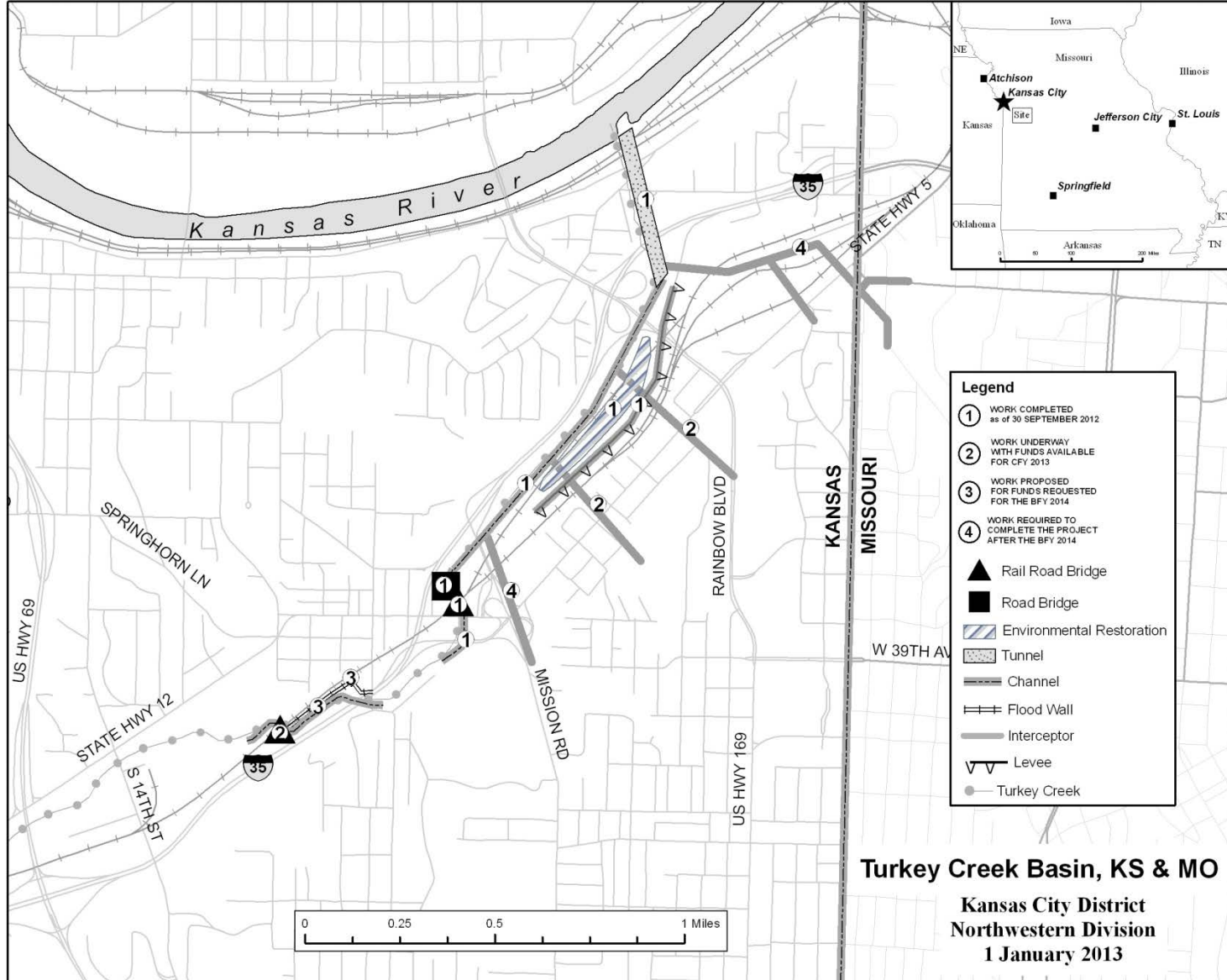
STATUS OF LOCAL COOPERATION: The City of Kansas City, Missouri and the Unified Government of Wyandotte County and Kansas City, Kansas expressed their intent to sponsor the project and a statement of financial capabilities in letters provided in January 2003 and November 2002 respectively. The Project Cooperation Agreement was signed 17 July 2006, following completion of tunnel work initiated by the Sponsor.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$75,961,000 is an increase of \$788,000 from the latest estimate (\$75,173,000) presented to Congress (FY 2013). This change includes the following items.

Post Contract Award and Other Estimating Adjustments	\$788,000
Total	\$788,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Revised Environmental Assessment, dated January 2003, concluded that no significant impacts, which would adversely affect the quality of the environment, were identified for the plan for flood protection measures for the lower Turkey Creek Basin. The District Commander signed a Finding of No Significant Impact February 4, 2003.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1998 and funds to initiate construction were appropriated in FY 2004.



MISSOURI

APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Blue River Channel, Kansas City, Missouri (Completion)

LOCATION: The project is located along the Blue River and tributaries in Kansas City, Jackson County, Missouri, and extends from near its mouth (located at Missouri river mile 358.0) to 63rd Street, channel mile 12.5.

DESCRIPTION: The project plan consists of a channel modification along 12.5 miles of the Blue River channel providing flood protection for a once in 30-year flood and reducing flooding for less frequent events.

AUTHORIZATION: Section 201 of the 1970 Flood Control Act (PL 91-611)

REMAINING BENEFIT - REMAINING COST RATIO: N/A - Project construction is substantially complete.

TOTAL BENEFIT-COST RATIO: 2.7 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 6 5/8 percent (FY 1979).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest economic update approved in July 2007 at 2007 price levels.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$248,133,000	Entire Project	98	2015
Estimated Non-Federal Costs		38,292,000			
Cash Contribution	0				
Other Costs	38,292,000				
Total Estimated Project Cost		\$286,425,000			
Allocations to 30 September 2010		237,189,000			
Allocation for FY 2011		3,992,000			
Allocation for FY 2012		2,940,000			
Conference Allowance for FY 2013		1,000,000	5/		
Allocations through FY 2013		245,121,000	1/2/3/6/ 98%		
Estimated Unobligated Carry-In Funds		0	4/		
Presidents Budget for FY 2014		3,012,000	100%		
Programmed Balance to Complete after FY 2014		0	7/		
Unprogrammed Balance to Complete after FY 2014		0			

Division: Northwestern

District: Kansas City

Blue River Channel, Kansas City, MO

1/ \$0 reprogrammed to (from) the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Bridge Alterations at Federal Cost: Railroad Bridges - Modify – 15, \$23,868,000; Bridge Alterations at Non-Federal Cost: Highway Bridges - Modify – 4, \$7,502,000; and Channel Improvement: Length Main Stem, Blue River Channel, 12.5 miles.

JUSTIFICATION: The Blue River basin lies completely in the Kansas City Metropolitan Region, with a 2000 population of 1,776,000 persons. The basin drains an area of 272 square miles and is subject to cloudbursts, prolonged rainstorms, floods, and extended drought periods. The maximum flood of record in the basin occurred in September 1961 and caused an estimated \$8,000,000 in damages. An August 1982 flood caused an estimated \$3,300,000 in damages, and an October 1986 flood along the Brush Creek tributary of the river caused an estimated \$209,000 in damages in the lower flood plain. A major flood occurred on the lower portion of the river in May 1990 and caused damages estimated at \$100,800,000. The July 1993 flood was not severe in this basin, causing damages estimated at \$60,000. The authorized project would have prevented all but minor damages caused by the 1961 event, and all damages caused by the later events. The channel project provides for about a 30-year level of protection to 3,400 acres in the lower basin, including the Blue River Valley Industrial District. The average annual benefits are \$55,581,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Item	Amount	
Continue Construction Habitat Mitigation	\$400,000	
Continue Channel Construction	1,900,000	
Planning, Engineering, and Design	300,000	
Construction Management	<u>200,000</u>	
Total	\$2,800,000	<u>8/</u>

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Item	Amount
Complete Construction	\$2,412,000
Planning, Engineering, and Design	300,000
Construction Management	<u>300,000</u>
Total	\$3,012,000

NON-FEDERAL COSTS: Local interests are required to furnish without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project; hold and save the United States free from damages due to construction; perform without cost to the United States necessary highway, highway bridge, and utility alterations required in connection with this project; maintain and operate the project after completion in accordance with regulations prescribed by the Secretary of the Army; and adequately inform all affected persons, at least annually, that the project will not provide complete flood protection. The investment is broken down as follows:

Requirements of Local Cooperation:	Payments During Construction Costs	Annual Operation, Maintenance and Replacement
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$19,171,000	\$67,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities.	\$19,121,000	\$43,000
Total Non-Federal Costs	\$38,292,000	\$111,000

STATUS OF LOCAL COOPERATION: The Section 221 Local Cooperation Agreement was signed by the Kansas City District Engineer on 8 September 1983. The City of Kansas City, Missouri provided all the rights-of-way for Stages 1 and 2 constructions that have been completed. Acquisitions for Stage 3 construction are substantially complete.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$248,133,000 is a decrease of \$2,426,000 from the latest estimate (\$250,559,000) presented to Congress (FY 2013). This change includes the following items.

Post Contract Award and Other Estimating Adjustments	(\$2,426,000)
Total	(\$2,426,000)

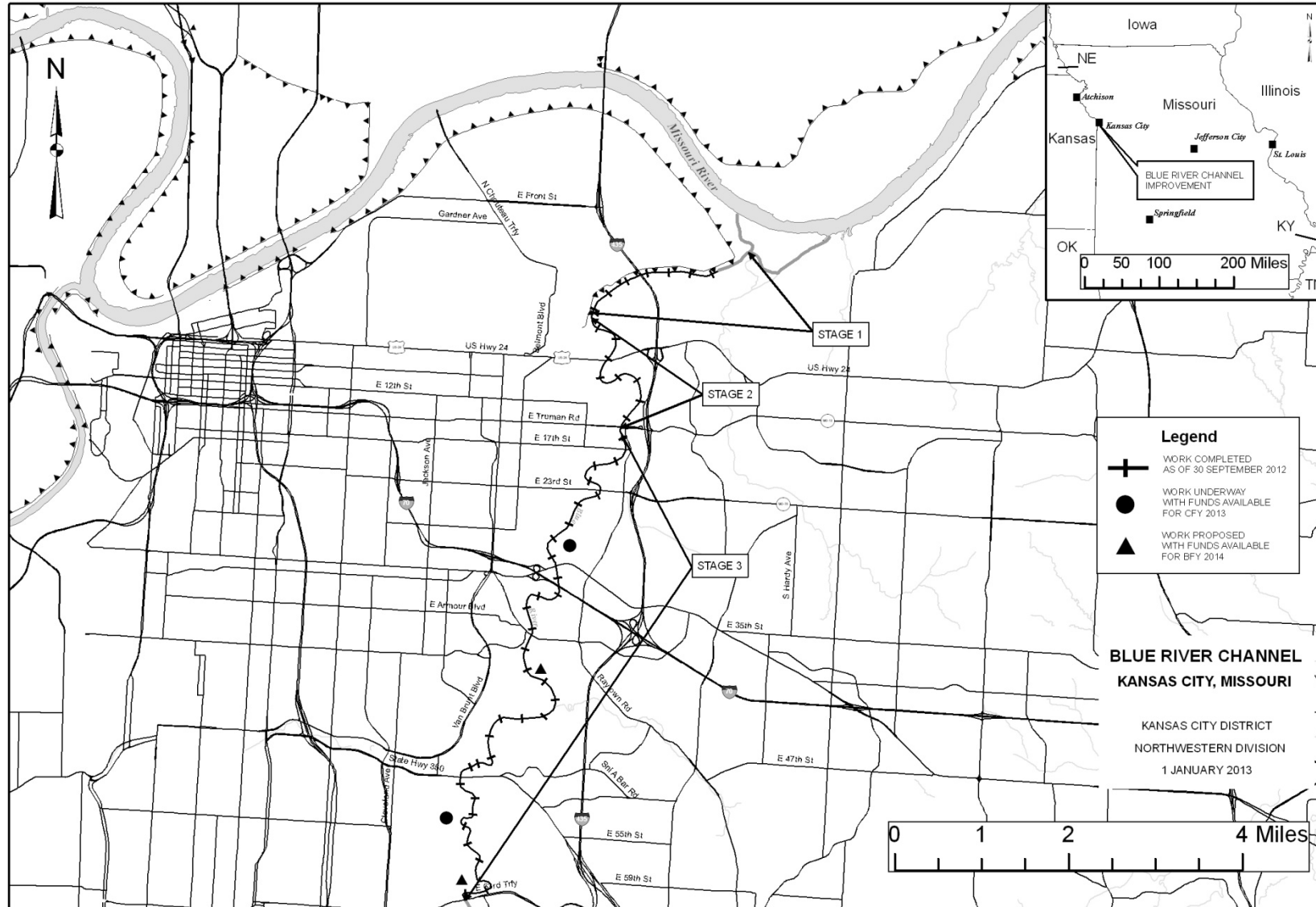
Division: Northwestern

District: Kansas City

Blue River Channel, Kansas City, MO

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Final statement on Blue River Basin plan made in connection with preauthorization studies was filed with the Council on Environmental Quality (CEQ) on 13 November 1970. A more complete draft statement on the Blue River Basin plan, including specific information on the impacts of the Blue River Channel, was filed with the CEQ on 11 April 1974. The final statement was forwarded to HQUSACE on 24 October 1974, and was filed with the CEQ on 8 September 1975.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1973 and funds to initiate construction were appropriated in FY 1979.



APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Kansas Citys, Missouri and Kansas (Continuing)

LOCATION: The existing Kansas Citys, Missouri and Kansas Local Protection Project consists of a system of seven levee units along both banks of the Missouri and Kansas Rivers in the Kansas City Metropolitan area.

DESCRIPTION: The North Kansas City (NKC) Levee Unit is located along the left bank of the Missouri River in North Kansas City, MO. Design deficiency corrections to address underseepage concerns are required at two locations, the Harlem area and the National Starch area. Modifications include the construction of relief wells and collector piping.

The Fairfax-Jersey Creek Unit is located on the left bank of the Kansas River and the right bank of the Missouri River in Kansas City, KS. Design deficiency modifications are proposed at the Board of Public Utilities (BPU) floodwall to provide stability reinforcements and underseepage control needed to provide the originally authorized level of performance. Reconstruction modifications are required at the 1,400-foot long Jersey Creek Sheet-pile Wall. Portions of this wall require replacement and 590 feet of new wall is needed.

The Argentine Unit is located on the right bank of the Kansas River in Kansas City, KS. Proposed reconstruction modifications include raising the unit height and replacing or modifying three pump stations and several closure and drainage structures.

The East Bottoms Unit is located on the right bank of the Missouri River in Kansas City, Missouri. Reconstruction modifications for underseepage improvements are needed including relief wells and buried collector pipeline.

AUTHORIZATION: 1936 and 1944 Flood Control Acts; Sec 1001 (28) Water Resources Development Act 2007.

REMAINING BENEFIT – REMAINING COST RATIO: 5.9 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 5.4 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 8.0 to 1 at 5.125 percent (FY 2010)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Level I Economic Update approved in June 2012 at 2012 price levels.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	68,120,000		Entire Project	5%	TBD
Estimated Non-Federal Cost	36,680,000				
Cash Contribution	33,212,000				
Other Costs	3,468,000				
Total Estimated Project Cost	104,800,000				
Allocations to 30 September FY 2010	2,075,000				
Allocation for FY 2011	2,994,000				
Allocation for FY 2012	490,000				
Conference Allowance for FY 2013	7,734,000	<u>5/</u>			
Allocations through FY 2013	13,293,000	<u>1/2/3/6/</u>	19%		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
Presidents Budget for FY 2014	11,000,000		32%		
Programmed Balance to Complete after FY 2014	43,827,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY2014	0				

1/ \$0 reprogrammed to (from) the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$2,025,177 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: NKC Levee: underseepage control improvements in 2 areas (Harlem and National Starch sites) Deficiency Correction; Fairfax-Jersey Creek levee unit includes: (1) BPU 1,446 linear feet (lf) of floodwall strengthening – Deficiency Correction and (2) Jersey Creek Sheet-pile Wall 1,400 lf Reconstruction; East Bottoms Levee – underseepage improvements; and Argentine Levee – levee raise to provide original authorized protection.

JUSTIFICATION: NKC levee under-seepage control design deficiency (NKC Levee Unit): Failure will result in major life safety threats and property damage. Design deficiencies pose a risk of under-seepage failure for the NKC levee unit under major flood events. The project modification will provide added under-seepage control keeping pressures within appropriate design criteria. NKC levee unit provides protection to a wide range of businesses plus railroad yards, Kansas City Missouri drinking water supply facilities, and the entire downtown Kansas City airport. The unit protects approx \$3,000,000,000 total investment and over 25,000 employees and 5,000 residents. Almost all of the North Kansas City community is located within the unit.

Division: Northwestern

District: Kansas City

Kansas Citys, MO & KS

1 May 2013

NWD-54

Fairfax Board of Public Utilities (BPU) floodwall foundation design deficiency (Fairfax-Jersey Creek Levee Unit): Failure will result in major life safety threats and property damage. There is a significant risk of floodwall failure which will affect entire Fairfax-Jersey Creek protected area under the extreme flood conditions. The BPU power plant which serves much of Kansas City, Kansas is adjacent to the floodwall. Overall, the Fairfax Industrial District is a major manufacturing hub including large a General Motors plant and several other Fortune 500 corporations, along with many smaller businesses. Approximately \$3,000,000,000 total investment and 11,000 employees are protected by this unit.

Jersey Creek Sheet-pile Wall – Reconstruction – Failure will result in major life safety threats and property damage. This site poses a risk of sheetpile failure which would affect the entire Fairfax-Jersey Creek protected area under extreme flood conditions. Reconstruction includes replacing the wall located along the Missouri and Kansas Rivers confluence adjacent to the Fairfax Industrial District. Overall, the Fairfax Industrial District is a major manufacturing hub including a large General Motors plant and several other Fortune 500 corporations along with many smaller businesses. Approximately \$3,000,000,000 total investment and 11,000 employees are protected by this unit.

Argentine Unit – Reconstruction – Failure will result in major life safety threats and property damage. The unit poses a high risk of levee overtopping and failure which will affect a large residential and business area of Kansas City, KS. Reconstruction includes raising the unit located along the Kansas River and modifying or replacing three pump stations and several closure and drainage structures. Approximately \$2,500,000,000 total investment, 10,700 employees, and over 3,400 residents are protected by this unit.

East Bottoms Unit – Reconstruction – Failure will result in major life safety threats and property damage. The unit poses a risk of underseepage failure which will affect a large industrial, business, and residential area of Kansas City, MO. Reconstruction includes the installation of relief wells and buried collector piping. Approximately \$4,500,000,000 total investment, 20,100 employees, and over 3,200 residents are protected by this unit.

The average annual benefits are \$41,336,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Initiate Fairfax-Jersey Creek Sheetpile Construction	2,100,000	
Initiate Fairfax-BPU Floodwall Construction	4,100,000	
Continue East Bottoms Design	200,000	
Complete Fairfax-Jersey Creek Sheetpile Design	534,000	
Complete Fairfax-BPU Floodwall Design	379,000	
Construction Management	<u>455,000</u>	
Total	\$7,768,000	<u>8 / 9/</u>

8/ Includes unobligated carry-in from FY2012.

9/ The work items have been adjusted between the four non-Federal Sponsors to maintain progress on the overall project completion.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate Argentine Unit Design	100,000
Initiate East Bottoms Construction	775,000
Continue Fairfax-BPU Floodwall Construction	6,130,000
Complete East Bottoms Design	95,000
Complete Fairfax-Jersey Creek Sheetpile Construction	3,420,000
Construction Management	<u>480,000</u>
Total	\$11,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation: Provide lands, easements, rights of way, and borrow and excavated material disposal areas which may be reduced for credit allowed based on prior work after reductions for such credit have been made in the required cash payments.	\$2,215,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	1,253,000	
Pay for Plans and Specifications for Relocations of utilities and roads	0	
Pay the costs allocated to flood control to bring the non-Federal share of flood control costs to 35 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	33,212,000	\$93,000
Total Non-Federal Costs	\$36,680,000	\$93,000

Division: Northwestern

District: Kansas City

Kansas Citys, MO & KS

STATUS OF LOCAL COOPERATION: The following is the status of cost sharing agreements:

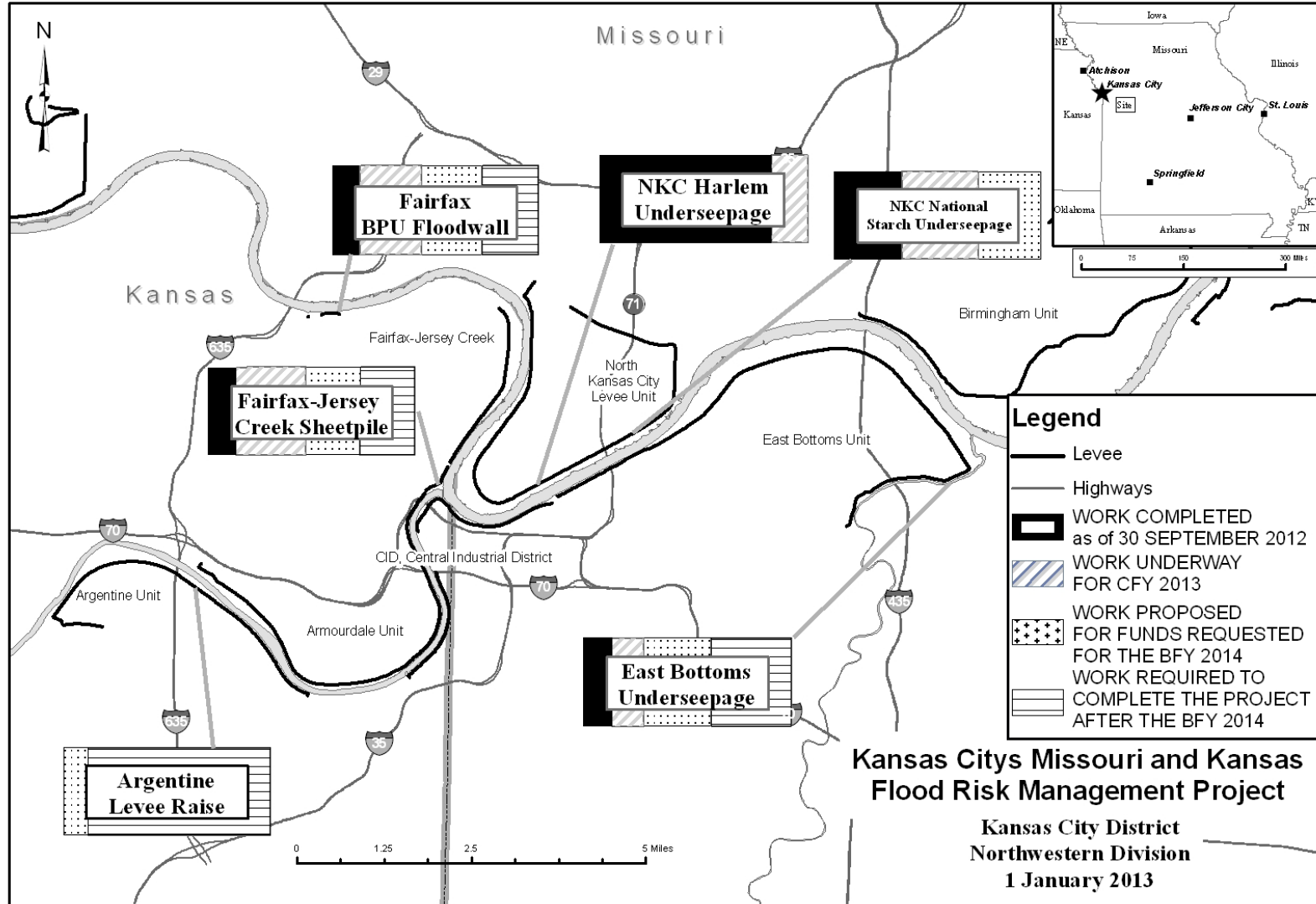
- (1) Jersey Creek Sheetpile: A Design Agreement (DA) was executed in January 2010 with the Kaw Valley Drainage District and the Project Partnership Agreement (PPA) is scheduled for execution in May 2013.
- (2) Fairfax- BPU Floodwall: A DA was executed in August 2008 with the Fairfax Drainage District and the PPA is scheduled for execution in May 2013.
- (3) East Bottoms: A DA was executed in February 2012 with the Water Service Department of Kansas City, Missouri and the PPA is scheduled for execution in May 2014.
- (4) Argentine: A DA is scheduled for execution in March 2014.
- (5) North Kansas City: The PPA was executed in June 2011 with the North Kansas City Levee District.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$68,120,000 is an increase of \$1,976,000 from the latest estimate (\$66,144,000) presented to Congress, (FY2013). This change includes the following:

Item	Amount
Design Changes	\$1,976,000
Total	\$1,976,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: The Interim Feasibility Report and Environmental Impact Statement (EIS), dated August 2006 with Addendum dated December 2006 addresses opportunities for flood risk reduction for the Argentine, East Bottoms, Fairfax-Jersey Creek, Birmingham and North Kansas City levee units of the Kansas Citys Local Flood Damage Reduction Project. The recommended plan has relatively minor impacts to the natural environment with overall positive benefits to the socio-economic environment. Impacts to the natural environment are minor because the project is located within a previously disturbed environment that is highly industrial and urbanized. All practicable means to avoid and/or minimize adverse environmental effects have been incorporated into the recommended plan. The Record of Decision was signed by the Assistant Secretary of the Army (CW) on 21 Nov 2007.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 2007 and funds to initiate construction were appropriated in FY 2010.



NORTH DAKOTA

APPROPRIATION TITLE: Construction, Hydropower (Major Rehabilitation), Fiscal Year 2014

PROJECT: Garrison Dam and Power Plant, North Dakota (Completion)

LOCATION: The Garrison Dam Project is located in McLean and Mercer Counties in North Dakota on the Missouri River approximately 77 river miles upstream of Bismarck near Riverdale, North Dakota.

DESCRIPTION: Garrison Dam and Reservoir is a multi-purpose project consisting of a rolled earth-filled dam with a sheet pile cutoff, a hydroelectric power plant, and a reservoir with storage capacity of 23,821,000 acre feet for flood control, navigation, power, recreation, irrigation, and municipal supply. Five hydraulic turbine-driven generating units with a total plant rated capacity of 518 megawatts (MW) and the operation and maintenance facilities are housed in the powerhouse. The present hydropower benefits directly associated with Garrison Power Plant include (1) clean, non-polluting power generation for the region, and (2) average power generation revenues of about \$33,600,000 per year to the U.S. Treasury. This major rehabilitation project will replace the existing turbine runners on all five units with new runners designed to improve reliability and maximize efficiency over a broad range of operating conditions. Phase II was added by an addendum to the major rehabilitation report approved on 15 September 2004. The Phase II work will address upgrades to electrical components that will allow the project to maximize the full reliability and efficiencies obtained in the powerhouse upgrades.

AUTHORIZATION: Flood Control Act of 1944, PL 78-534 (existing project)

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because project is substantially complete.

TOTAL BENEFIT-COST RATIO: 3.3 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 7 3/4 percent (FY 1997)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Garrison Dam & Power Plant Major Rehabilitation Evaluation Report approved 27 February 1995 at 1994 price levels. Phase II benefits are from the Garrison Dam & Power Plant Major Rehabilitation Evaluation Report Addendum approved 15 September 2004 at 2004 price levels.

SUMMARIZED FINANCIAL DATA:

		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement	\$144,033,000		Entire Project	97	2014
Estimated Non-Federal Reimbursement	144,033,000		Phase I	100	
Estimated Federal Cost (Ultimate)	0		Phase II	95	
Estimated Non-Federal Cost	144,033,000				
Cash Contributions	\$ 0				
Other Costs	0				
Reimbursement, Power	144,033,000				
Total Estimated Project Cost	144,033,000				

Division: Northwestern

District: Omaha

Garrison Dam and Power Plant, ND

SUMMARIZED FINANCIAL DATA (continued)

Allocations to 30 September 2010	\$108,857,000		
Allocation for FY 2011	14,869,000		
Allocation for FY 2012	16,307,000		
Conference Allowance for FY 2013	0	<u>5/</u>	
Allocations through FY 2013	140,033,000	<u>1/2/3/6/</u>	97
Estimated Unobligated Carry-In Funds	0	<u>4/</u>	
President's Budget for FY 2014	4,000,000		100
Programmed Balance to Complete after FY 2014	0		
Unprogrammed Balance to Complete after FY 2014	0		

1/ \$16,140,000 reprogrammed to the project.

2/ \$217,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

PHYSICAL DATA: Phase I Power Installation: Original Project: 5 Units at 98 MW; Completed Project 5 Units at 113 MW
Phase II Electrical Reliability Equipment

JUSTIFICATION: The original components in the power generating system were circa 1950, were past the design lives, were inefficient, and had very low reliability. Phase 1 of the major rehabilitation project is complete and performed upgrades in the powerhouse to include generator rewind, turbine upgrades, and replacing existing turbine runners on all five units with new runners designed to improve reliability and maximize efficiency over a broad range of operating conditions. Phase II work is 95% complete and addresses upgrades to electrical components that will allow the project to maximize the full reliability and efficiencies obtained in the powerhouse upgrades. FY 2014 funds are requested to complete the switchyard installation. The new switchyard will maximize efficiencies gained in the upgrades of the turbines and generators as well as substantially reduce maintenance costs associated with the existing switchyard. Without the requested funds, the project will not be able to physically complete in FY 2014 and will not be able to maximize the benefits and efficiencies planned for the project when the major rehabilitation project began in 1997. Average annual benefits are as follows:

Annual Benefits	Amount
Deferred Maintenance Benefits	\$ 3,144,100
Restored Efficiency Benefits	7,903,500
Efficiency Improved Benefits	<u>5,457,400</u>
Total Benefits	\$16,505,000

Division: Northwestern

District: Omaha

Garrison Dam and Power Plant, ND

1 May 2013

NWD-61

FISCAL YEAR 2013: NA

FISCAL YEAR 2014: The existing switchyard is outdated, lacking in capability and is unreliable. The new switchyard will maximize the efficiencies gained in the upgrades of the turbines and generators as well as reduce substantially the maintenance costs associated with the existing switchyard. The requested amount will be applied as follows:

Complete Switchyard Installation & financially closeout the project	<u>4,000,000</u>
Total	\$4,000,000

NON-FEDERAL COSTS: Garrison Dam is a multi-purpose project, and the cost for the turbine runner modifications will benefit hydropower generation only. The hydropower from the Garrison power plant is marketed by Western Area Power Administration (WAPA), through which project costs are ultimately repaid to the Treasury. WAPA has provided a letter stating that they "will be able to market any additional power gained through increased efficiency of the turbines."

STATUS OF LOCAL COOPERATION: N/A

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$144,033,000 is an increase of \$23,026,000 from the latest estimate (\$121,007,000) presented to Congress (FY 2011).

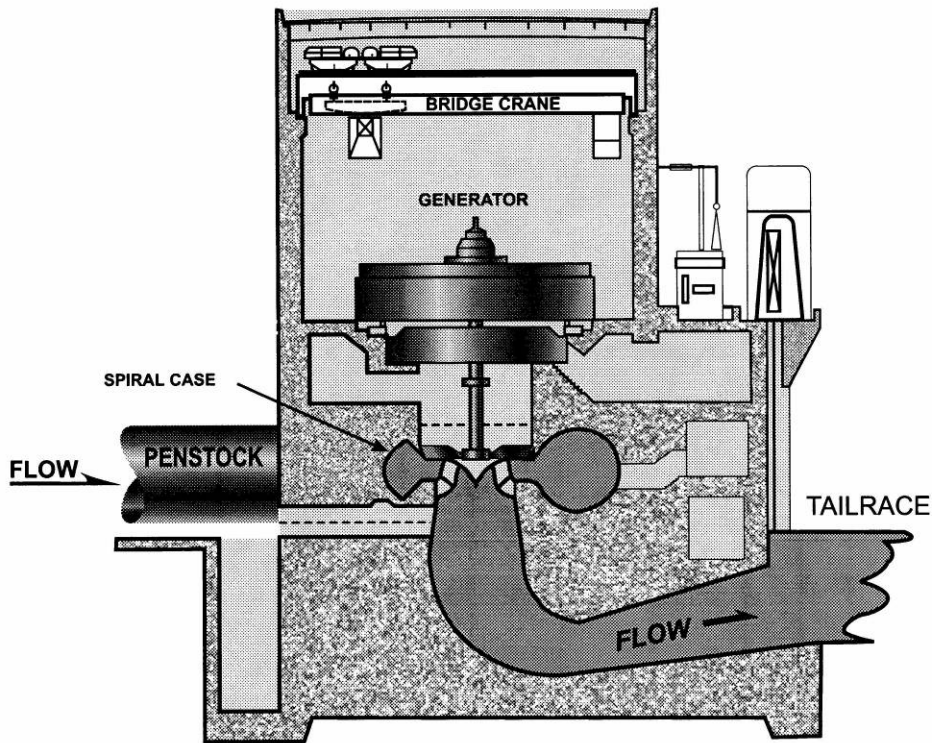
Item	Amount
Price escalation on construction features	\$ 4,026,000
Design changes & contract bid increases	<u>\$19,000,000</u>
Total	\$23,026,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The proposed rehabilitation is not a major Federal action that would significantly affect the quality of the human environment, and therefore did not require the preparation of an environmental impact statement. The U.S. Fish and Wildlife Service concurred with the "Finding of no Significant Impact."

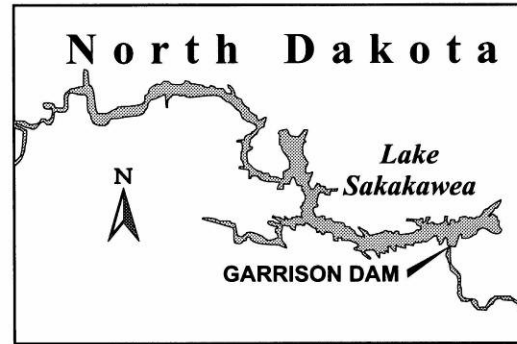
OTHER INFORMATION: Funds to initiate pre-construction engineering and design were first appropriated in 1997. There is no requirement to undertake fish and wildlife mitigation measures in conjunction with this rehabilitation project.

Although the capacity of the turbine generators is significantly increased, their capability was still limited to the existing equipment. Consequently an addendum to the Major Rehabilitation report was prepared and approved on 15 September 2004. The addendum report included replacement of the existing transformers, electrical power train, peripheral equipment, and switchyard equipment.

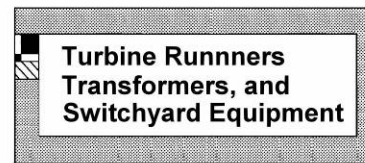
Initial construction of the powerhouse was completed in 1955.






**TRANSFER SECTION THRU
GARRISON DAM POWER PLANT**



VICINITY MAP



-  WORK COMPLETED
-  WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
-  WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR

**GARRISON DAM & POWER PLANT
NORTH DAKOTA
MAJOR REHABILITATION**

U.S. Army Engineer District, Omaha
Northwestern Division

1 January 2013

OREGON

APPROPRIATION TITLE: Construction, Navigation (Major Rehabilitation), Fiscal Year 2014

PROJECT: Columbia River at the Mouth, Oregon and Washington (New)

LOCATION: The project is located at the entrance of the Columbia River to the Pacific Ocean and is about 120 miles downstream of Portland, OR and Vancouver, WA.

DESCRIPTION: The project will rehabilitate the Mouth of Columbia River (MCR) jetty system which consists of three rubble-mound jetties, with a total originally authorized length of 10.2 miles, constructed from 1885-1939 on massive tidal shoals to secure consistent navigation through the coastal inlet. The North Jetty is about 2.5 miles long, the South Jetty is about 6.6 miles long and the Spur Jetty 'A' is about 1.1 miles long.

AUTHORIZATION: River & Harbors Act, 5 July 1884.

REMAINING BENEFIT - REMAINING COST RATIO: 1.1 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.1 to 1 at 7 percent

INITIAL BENEFIT - COST RATIO: N/A

BASIS OF BENEFIT COST RATIO: Benefits are from the major rehabilitation report approved in June 2012 at 2012 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
				Jetty 'A'	0%	TBD
				N. Jetty	0%	TBD
				South Jetty	0%	TBD
Estimated Federal Cost		\$257,201,000				
Programmed Construction	257,201,000					
Un-programmed Construction	0					
Estimated Non-Federal Cost		0				
Total Estimated Programmed Construction Cost		257,201,000				
Total Estimated Unprogrammed Construction Cost		0				
Total Estimated Project Cost		257,201,000				
Allocations to 30 September 2010		0				
Allocations for FY 2011		0				
Allocations for FY 2012		0				
Conference Allowance for FY 2013		0	<u>5/</u>			
Allocations through FY 2013		0	<u>1/</u> <u>2/</u> <u>3/</u> <u>6/</u>	0%		
Estimated Unobligated Carry-in Funds		0	<u>4/</u>			
President's Budget for FY 2014		1,000,000				
Programmed Balance to Complete after FY 2014		256,201,000	<u>7/</u>			
Un-programmed Balance to Complete After FY 2014		0				

1/ \$ 0 reprogrammed to (from) the project.

2/ \$ 0 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date the justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Rivers and Harbor Act of 5 July 1884 authorized construction of the South Jetty (first 4.5 miles) to attain a 30-foot deep navigation channel across the MCR bar. The Rivers and Harbor Act of 3 March 1905 authorized the extension of the South Jetty to 6.6 miles and construction of the North Jetty to 2.5 miles long to attain a 40-foot channel. Jetty A was authorized and constructed to 1.1 miles in length for channel stabilization in connection with the rehabilitation of the North Jetty. Its purpose was to assist in controlling the location and direction of the ebb tidal flow through the navigation entrance.

JUSTIFICATION: The MCR jetty system is in a state of structural decay. Continued deterioration, ongoing storm activity and the continued loss of sand shoal material at the foundation of each of the three MCR jetties, has positioned the jetty system for a series of frequent and costly emergency repairs. In the absence of specific and immediate repair actions, the jetties and sand shoals upon which they rest will further deteriorate, increasing the likelihood of a jetty breach which will cause significant and immediate impact to the navigation channel and commercial deep draft access to the Columbia River port facilities.

The benefit-to-cost ratio for this project does not accurately reflect the economic benefits attained from rehabilitation of the jetties. Rehabilitation of all three jetties is necessary to: (1) lessen wave heights and currents affecting the navigation channel thus improving safety; (2) decrease future O&M dredging; (3) improve structural reliability and (4) optimize the expenditure of Federal funds. The MCR jetty system is the most significant coastal navigation structure in the Pacific Northwest; one that provides economic benefits significantly beyond a system BCR of 1.1.

Functioning jetties at the MCR annually support the following:

- \$20,000,000,000 in international trade
- 42 million tons of cargo g/
- 4,000 vessel crossings g/
- 1,375 vessel crossings requiring 30-foot draft or greater g/
- More than 40,000 maritime-related jobs
- U.S. Coast Guard Search and Rescue activities

g/ Data from Waterborne Commerce of the United States, 2010

According to the Center for Economic Development and Research, the Columbia/Snake River navigation system is the number one export gateway for the Nation's wheat and barley exports. It is also the number one export gateway for west coast wood and mineral bulk exports and number one for automobile imports. Marine traffic passing the entrance of the Columbia River has increased by 34% from 32 million tons in 2003 to 42 million tons in 2010.

The Average Annual Benefits are: \$13,464,633

FISCAL YEAR 2013: N/A

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate and complete design of Jetty 'A'	\$1,000,000
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Division: Northwestern

District: Portland

Columbia River at the Mouth, OR & WA

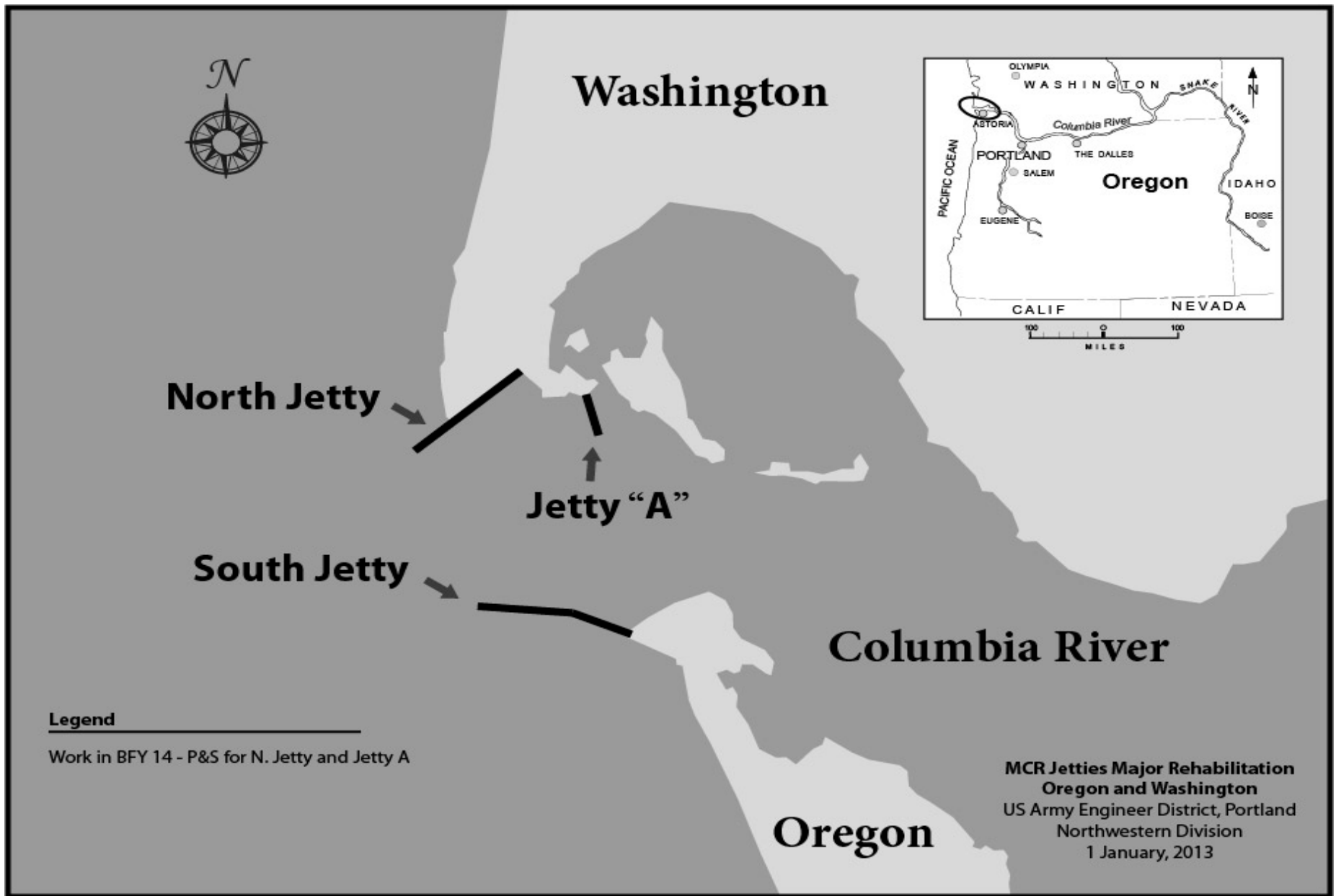
NON-FEDERAL COSTS: The MCR jetty system is a 100% U.S. Army Corps of Engineers (USACE) owned and maintained project. There are no non-Federal Sponsor costs.

STATUS OF LOCAL COOPERATION: The MCR jetty system is a 100% USACE owned and maintained project. There is no local cooperation required.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$257,201,000 is the initial estimate presented to Congress (FY 2014).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An EIS is not required. An Environmental Assessment was completed June 2012.

OTHER INFORMATION: The Major Rehabilitation Evaluation Report of the Columbia River at the Mouth, OR & WA, was approved June 2012.



APPROPRIATION TITLE: Construction, Navigation, Fiscal Year 2014

PROJECT: Columbia River Channel Improvements, Oregon and Washington (Continuing)

LOCATION: The project area begins at the mouth of the Columbia River (river mile 3) and extends upstream to the vicinity of the Port of Vancouver, Washington (river mile 106.5), and also includes the Lower Willamette River from its confluence with the Columbia River (river mile 101.5) upstream to the vicinity of downtown Portland (river mile 11.6).

DESCRIPTION: Lower Columbia River ports have been the primary shipping point for West Coast grain and feed grain exports for many years. More than 40 million tons of commerce annually is shipped to or from Lower Columbia River ports valued at \$16 billion in 2004. Increasing trade between the Pacific Northwest states and the Pacific Rim nations accentuated the need for a deepened navigation channel in the Lower Columbia River, to accommodate larger, deeper-draft vessels. When completed, the channel will be at a 43-foot depth and generally a 600-foot width. The purposes of the project are to improve the deep-draft transport of goods on the authorized navigation channel and to provide ecosystem restoration for fish and wildlife habitats.

AUTHORIZATION: P.L. 106-53 Water Resources Development Act of 1999, Section 101(b)(13), and P.L. 108-199 Consolidated Appropriations Act, 2004, Division H, Section 123.

REMAINING BENEFIT - REMAINING COST RATIO: To be determined. See Other Information.

TOTAL BENEFIT-COST RATIO: To be determined. See Other Information.

INITIAL BENEFIT - COST RATIO: 1.9 to 1 at 6-7/8% (FY 1999); Updated to 1.7 to 1 at 6-7/8% (FY 2003).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Report of the Chief of Engineers dated 23 December 1999; Updated in the Final Supplemental integrated Feasibility Report and Impact Statement dated 28 January 2003. See Other Information.

SUMMARIZED FINANCIAL DATA

		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
			Columbia River	99%	31 Dec 2011
			Willamette River	0%	TBD
Estimated Federal Cost		\$165,485,000			
Estimated Non-Federal Cost		62,580,000			
Cash Contributions	\$50,310,000				
Other Costs	12,270,000				
Total Estimated Project Cost		228,065,000			
Allocations through 30 September 2010		\$138,074,000			
Allocations for FY 2011		1,000			
Allocations for FY 2012		2,500,000			
Conference Allowance for FY 2013		0	<u>5/</u>		
Allocation for FY 2013		1,735,000	<u>8/</u>		
Allocations through FY 2013		142,310,000	<u>1/ 2/ 3/ 6/</u>	89%	
Estimated Unobligated Carry-In Funds		0	<u>4/</u>		
Presidents Budget for FY 2014		250,000			
Programmed Balance to Complete after FY 2014		3,300,000	<u>7/</u>		
Unprogrammed Balance to Complete after FY 2014		19,625,000			

1/ \$2,593,000 reprogrammed to the project.

2/ \$233,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED Costs of \$6,013,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features. See Other Information.

8/ ARRA funds reprogrammed to the project and obligated in first quarter FY 2013

PHYSICAL DATA: Deepen 103.5 miles of the Columbia River Channel from 40' to 43'. Deepen 11.6 miles of the Willamette River Channel from 40' to 43' Deepen three turning basins on the Columbia and three on the Willamette to 43'. Construct environmental mitigation and restoration features at selected locations.

JUSTIFICATION: The need for navigation improvements has been driven by the steady growth in waterborne commerce and the use of larger, more efficient vessels to transport bulk commodities. With the increased use of deep-draft vessels, limitations posed by the existing channel dimensions occur with greater frequency. By improving navigation, the opportunity to realize greater benefits would result from reducing transportation costs by allowing deep-draft vessels to carry more tonnage, and by reducing vessel delays. For these reasons, a coalition of the Lower Columbia River Ports (Port of Portland in Oregon and Vancouver, Kalama, Longview, and Woodland in Washington) committed to sponsor the project construction. Columbia and Willamette River ports are second in the world in grain exports. Each year, about 2,000 ocean-going ships transit the Columbia and Willamette Rivers, carrying approximately \$15 billion in imports and exports. Deepening the Columbia and Willamette Rivers from 40-43 feet is necessary to accommodate the larger, deeper-draft cargo ships that comprise a growing share of worldwide shipping fleets. Today, 20 percent of the wheat, 45 percent of the corn, 70 percent of the soybeans, and 90 percent of the containerized exports leaving lower Columbia River ports are carried on ships requiring some or all of the additional three feet in depth. The average tonnage for the period 2006-2010 in the Columbia River was 53,173,000 short tons. Average annual benefits are as follows:

Annual Benefits	Amount
Columbia River	\$23,545,000
Willamette River	TBD. See Other Information.

FISCAL YEAR 2013: N/A

FISCAL YEAR 2014: The requested amount will be applied as follows:

Prepare a PMP, execute a cost sharing agreement, and initiate preparation of a Limited Reevaluation Report (LRR) to refine remaining costs for the Willamette River Channel Improvement in advance of a recommended plan for the Willamette River portion of the project.	\$250,000
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NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements for Local Cooperation		
Provide lands, easements, rights of way	6,232,000	
Modify or relocate or remove utilities, roads bridges (except railroad bridges), Dredging of berthing areas, and other facilities, where necessary for construction of the project.	14,509,000	
Pay 25 percent of the joint costs allocated for Preconstruction Engineering and Design	1,558,000	

Division: Northwestern

District: Portland

Columbia River Channel Improvements, OR & WA

Pay 25 percent of the separable and joint costs allocated to the NED plan for navigation channel improvements offset by credit for authorized construction (\$12 million) by the sponsor from river mile 95 to the upstream end of the project, and have the amount credited against their total cost share.	45,276,000	
Pay \$1,587,000 for the incremental first costs of the locally preferred plan over the NED plan and pay an estimated \$450,000 in incremental annual operating and maintenance costs over the operating and maintenance costs of the NED navigation plan.	1,587,000	450,000
Pay 35 percent of the first costs allocated to ecosystem restoration and provide all costs for ecosystem restoration operation and maintenance	1,147,000	38,000
Pay 25 percent of the costs allocated for Willamette River navigation channel improvements.	5,795,000	
Total Non-Federal Costs	76,104,000	488,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsors for the Columbia River portion of the project are the Ports of Portland, Oregon and Vancouver, Kalama, Longview, and Woodland, Washington. The PCA was executed on 23 June 2004. The non-Federal sponsor for the Willamette River portion of the project is the Port of Portland.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$165,485,000 is an increase of \$55,461,000 from the latest estimate (\$110,024,000) presented to Congress (FY 2009). The latest estimate presented to Congress (FY 2009) only included the Columbia River portion of the project. See Other Information. This change includes the following:

Item	Amount
Post Contract Award and Other Estimating Adjustments	
Differing Site Conditions: Rock Removal at River Mile 88 (Columbia R)	\$32,286,000
Limited Reevaluation Report (LRR) for the Willamette River portion	3,550,000
Implement Willamette River Channel Improvements	<u>19,625,000</u>
Total	\$55,461,000

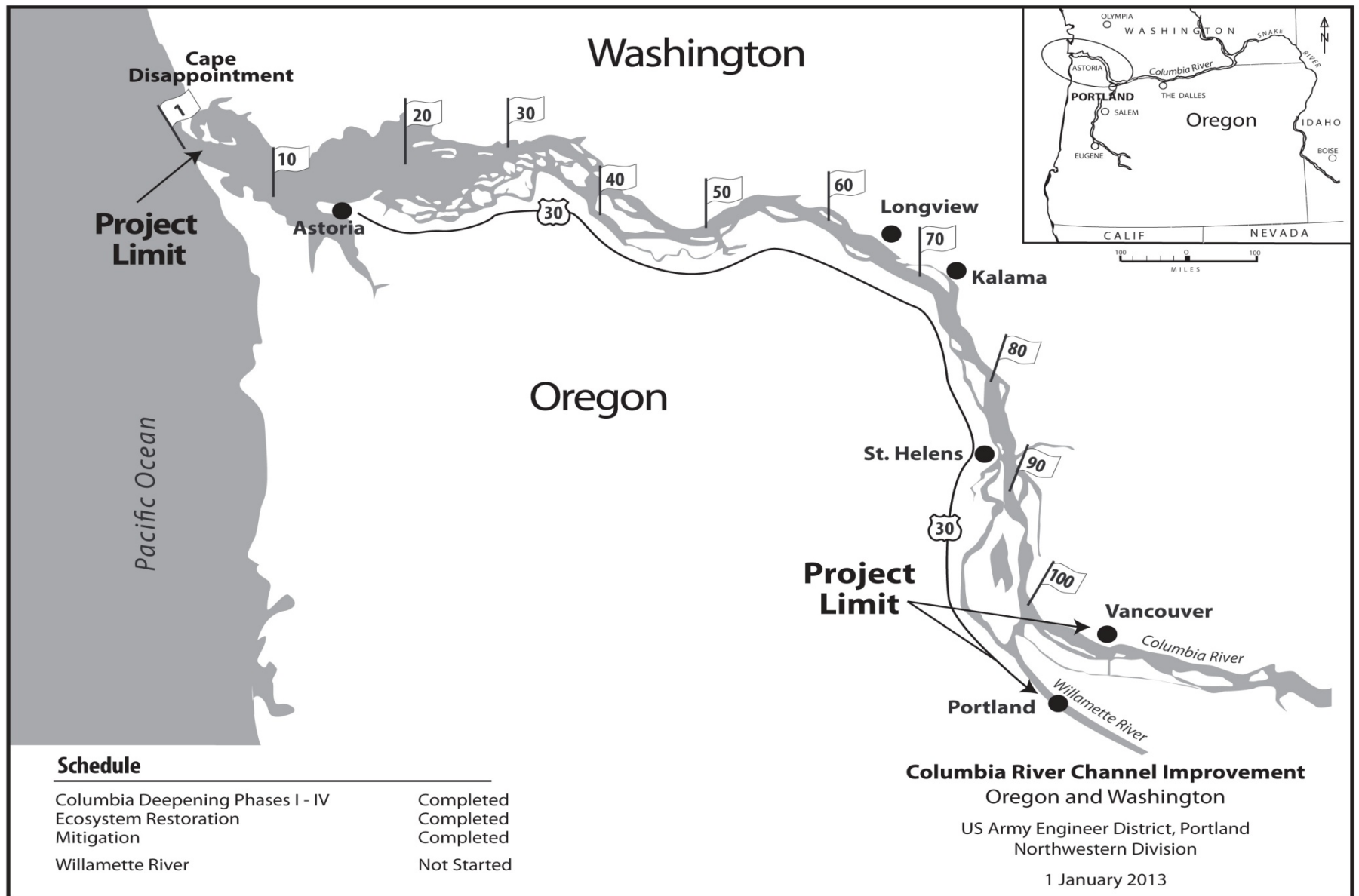
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Corps of Engineers completed a Biological Assessment for the project in December 2001. The National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USFWS) issued no-jeopardy Biological Opinions in May 2002. The Corps completed a Supplemental Integrated Feasibility Report and Environmental Impact Statement (EIS) in November 2002. The Record of Decision was signed on 9 January 2004. An update of the EIS will be completed as part of the LRR for the Willamette River portion of the project.

OTHER INFORMATION: The project was authorized for construction in WRDA 1999. Construction funding was first appropriated in FY 2001.

At the request of the non-Federal sponsors, the project was split into two elements, the Columbia River Channel Improvement and the Willamette River Channel Improvement. The Columbia River portion has been completed and the Willamette River portion was deferred to allow further coordination with the EPA and the State of Oregon. This deferral was to ensure the Willamette River portion incorporates the evaluation results and remediation plan for the Portland Harbor Superfund site which is planned for completion in late 2014.

The Programmed Balance to Complete includes preparation of an Limited Reevaluation Report (LRR) only. The budget amount being proposed is to initiate actions necessary for preparation of an LRR for the Willamette River portion in order to update project costs, benefits and environmental coordination necessary to support a decision to construct the Willamette River portion of the project. The LRR is expected to be completed in FY 2018.

The disposal sites consist of 29 upland sites, with a total of 1,681 acres, and three beach nourishment and two ocean disposal sites for the disposal of construction and subsequent channel maintenance dredged material. Fourteen of the upland disposal sites, totaling 1,025 acres, are currently in use. The non-Federal sponsors are in the process of acquiring the final three sites.



APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Elk Creek Lake, Oregon (Completion)

LOCATION: In Jackson County, on Elk Creek, a tributary of Rogue River, at river mile 1.7 about 26.5 miles north of Medford, Oregon.

DESCRIPTION: The Elk Creek Lake Project was authorized as one of three multiple-purpose dams in the Rogue River Basin. The three dams were designed to operate as a system to reduce flooding and to accomplish additional purposes of water supply, irrigation, fish and wildlife enhancement, hydropower, and recreation. Two of the three dams are complete and operating. Authorized features of the Elk Creek Lake project included a 249-foot high, roller-compacted concrete gravity dam, a gate controlled concrete chute spillway, regulating outlet conduits, a penstock for hydropower, and a multiple use intake tower attached to the upstream face of the dam.

Elk Creek Dam was partially completed prior to a court injunction which halted construction. The Corps' analysis determined that removing a section of the dam to provide a fish passage corridor through the project was the most cost effective and biologically sound method to provide fish passage through the partially completed project. Based on the selected alternative described in the final Environmental Impact Statement (EIS), Supplement Number 2, filed 1 May 1991, the project was redesigned for interim operation with no conservation pool and with fish passage. See the Other Information paragraph below.

AUTHORIZATION: Flood Control Act of 1962, PL 87-874

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the fiscal year for which Congress appropriated initial construction funds (FY 1971) was 1.01 to 1 at a 3 1/4 percent rate and was based on allocating a share of the system benefits to this project.

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
			Entire Project	99%	2014
Estimated Federal Cost		\$128,351,000			
Programmed Construction	128,351,000				
Un-programmed Construction	0				
Estimated Non-Federal Cost		0			
Total Estimated Project Cost		128,351,000			
Allocations to 30 September 2010		126,754,000			
Allocation for FY 2011		140,000			
Allocation for FY 2012		80,000			
Conference Allowance for FY 2013		194,000	<u>5/</u>		
Allocations through FY 2013		127,168,000	<u>1/ 2/ 3/ 6/ 99%</u>		
Estimated Unobligated Carry-in Funds		0	<u>4/</u>		
President's Budget for FY 2014		1,183,000		100%	
Programmed Balance to Complete after FY 2014		0	<u>7/</u>		
Un-programmed Balance to Complete after FY 2014		0			

1/ \$5,627,000 reprogrammed to the project.

2/ \$41,000 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$ 0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA (authorized); Dam: Type - Roller compacted concrete; Height - 249 feet; Length - 2,580; Concrete Volume - 1,100,000 cubic yards; Spillway: Type - Concrete gravity Gate; Ogee Section: Design discharge- 68,400 cfs; Gates - 3 (33 feet x 34 feet) tainter. Authorized Project was not completed, Fish Passage Corridor (Notch) completed September FY10, Upstream Channel Realignment completed September FY11.

Division: Northwestern

District: Portland

Elk Creek Lake, OR

1 May 2013

NWD-77

JUSTIFICATION: Passage through the existing diversion tunnel and continued operation of the existing temporary trap and haul facility was not a viable long-term solution to address the threatened species concerns in the watershed. The Corps biological assessment and National Marine Fisheries Service (NOAA Fisheries) biological opinion concluded that a fish passage corridor would be a better long-term solution. In 2007, US Army Corps of Engineers reviewed alternatives and concluded the fish passage corridor (notch) was the preferred alternative and a contract was awarded in March 2008 for this effort.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete Long Term Management Plan; implement noxious weed control and monitoring	\$249,000	8/
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8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount will be applied as follows:

Implement noxious weed control and monitoring	183,000
Complete construction and fiscal closeout	<u>1,000,000</u>
Total	\$1,183,000

NON-FEDERAL COST: N/A

STATUS OF LOCAL COOPERATION: N/A

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$128,351,000 is a decrease of \$937,000 from the latest estimate \$129,288,000 presented to Congress (FY 2013). This change includes the following item:

Item	Amount
Design Changes	(\$937,000)

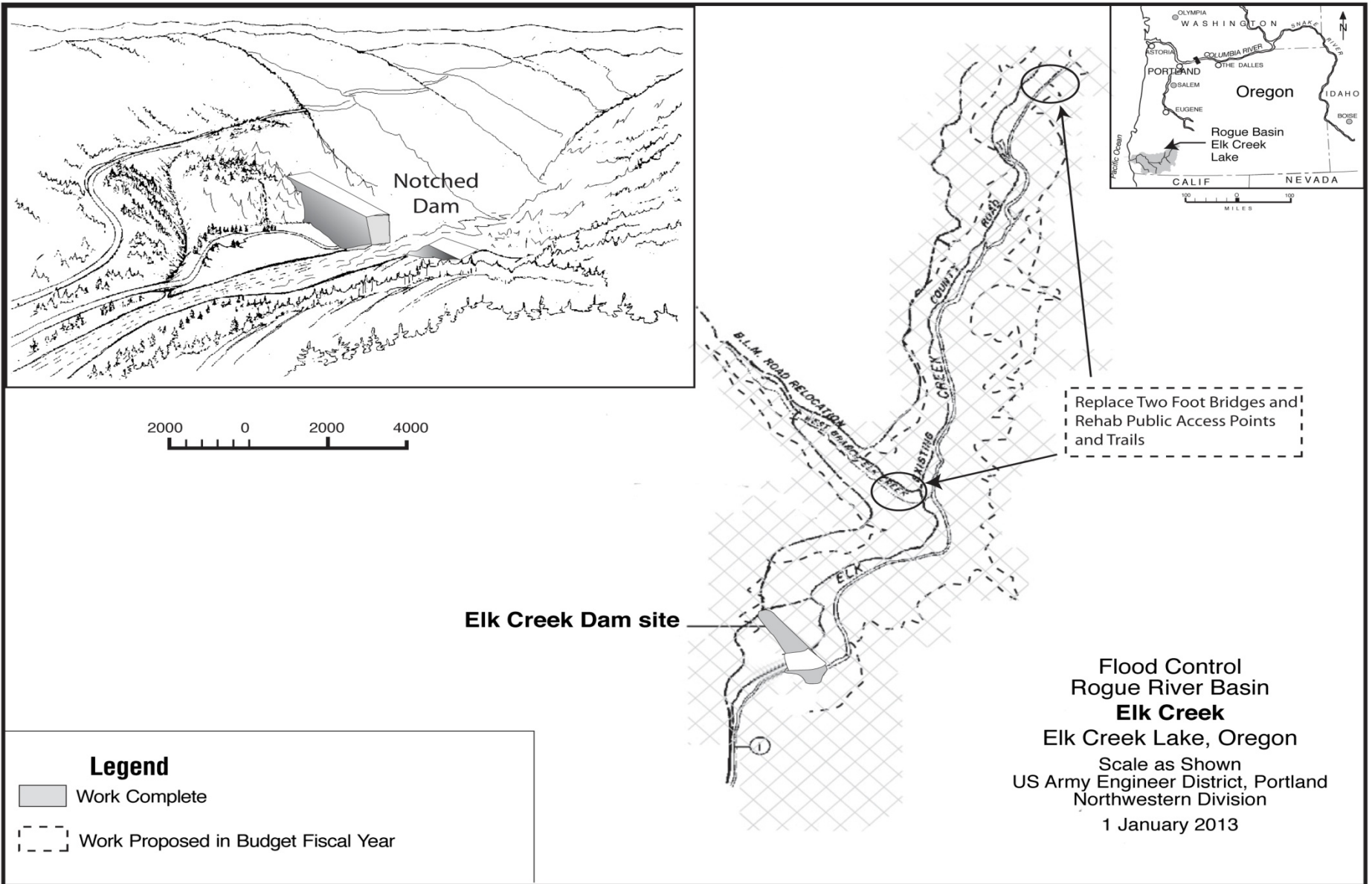
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final EIS was filed with the Department of Environmental Quality (DEQ) on September 17, 1971. Supplement No. 1, addressing water quality effects, was filed with the US Environmental Protection Agency (EPA) on December 24, 1980, and a Record of Decision was filed with EPA in February 1982. An environmental assessment addressing design changes (such as roller compacted concrete instead of embankment dam) was completed on October 11, 1983. Supplemental Information Reports dated September 23, 1985 and January 14, 1986 were provided to the public. These reports described the findings of the 1983 environmental assessment and other new information that had become available since the 1980 EIS Supplement. Another EIS supplement was prepared as a result of litigation. This Supplement was completed and filed with the EPA on May 1, 1991. A Record of Decision, selecting the no conservation pool as the interim operating alternative, was signed on January 24, 1992. After completion of the final EIS Supplement #2, the US Department of Justice filed a motion with the Court to remove the injunction. The Ninth Circuit Court of Appeals issued a ruling on April 21, 1995. In its decision, the Court also reversed the District Court decision that EIS Supplement #2 met the requirements of the earlier Ninth Circuit opinion and awarded attorneys fees to the plaintiffs. The case was remanded with instructions to prepare a third EIS supplement adequately addressing all issues raised under the National Environmental Policy Act (NEPA) process. Due to the Ninth Circuit Court of Appeals decision and status of local support, the Corps did not perform the environmental studies under NEPA necessary to remove the Federal court injunction against completion of the project.

Division: Northwestern

District: Portland

Elk Creek Lake, OR

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1965 and funds to initiate construction were appropriated in FY 1971. After initiation of construction, an injunction was placed against completion of the project. Construction of the project was terminated with the project at 83 feet, one-third its design height. Consultation began with NOAA Fisheries concerning alternatives for long-term fish passage at Elk Creek under the Endangered Species Act. Four potential upstream fish passage alternatives were evaluated in the Corps biological assessment. Based on this analysis, it was determined that removing a section of the dam would provide long-term passive fish passage and was the most cost-effective method to provide fish passage over the long term with the project in a partially completed state, even when including the cost to replace the removed section of the dam if it were to be completed in the future. In FY 2008, a contract was awarded for the fish passage corridor (notch). Upstream channel realignment was initiated in FY 2009 and the fish passage corridor was completed in FY 2010. FY 2014 funds will be used to replace two failing vehicle bridges with pedestrian (only) bridges and rehabilitation of walking trails that pose a danger to the public. This work will complete the project.



APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Lower Columbia River Ecosystem Restoration, Oregon and Washington (Continuing)

LOCATION: The Lower Columbia River extends from the mouth of the Columbia River to River Mile 145 at Bonneville Lock and Dam.

DESCRIPTION: The project area includes the estuary of the Columbia River and all tributaries of the Columbia River that are tidally influenced, which includes the Willamette River up to Willamette Falls. The project is based on non-monetary quantitative changes in fish and wildlife habitat units and other biological benefits (see Justification paragraph.) A comprehensive conservation and management plan was developed for the Lower Columbia River under Section 320 of the Federal Water Pollution Control Act (33 U.S.C. 1330).

AUTHORIZATION: Section 536 of the Water Resources Development Act (WRDA) of 2000 (P. L. 106-541, dated 11 December 2000).

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA:		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
			Entire Project	76%	TBD
Estimated Federal Cost		30,000,000			
Programmed Construction	30,000,000				
Unprogrammed Construction	0				
Estimated Non-Federal Cost		4,000,000			
Programmed Construction	TBD				
Cash Contributions	TBD				
Other Costs	TBD				
Total Estimated Programmed Construction		34,000,000			
Total Estimated Unprogrammed Construction		0			
Total Estimated Project Cost		34,000,000			
Allocations to 30 September 2010		13,092,000			
Allocation for FY 2011		1,946,000			
Allocation for FY 2012		4,200,000			
Conference Allowance for FY 2013		3,650,000	<u>5/</u>		
Allocations through FY 2013		22,888,000	<u>1/ 2/ 3/ 6/</u>	76%	
Estimated Unobligated Carry-in Funds		0	<u>4/</u>		
President's Budget for FY 2014		7,080,000		100%	
Programmed Balance to Complete after FY 2014		32,000	<u>7/ 8/</u>		
Un-programmed Balance to Complete after FY 2014		0			

1/ \$1,909,000 reprogrammed to the project.

2/ \$45,000 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funds: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$ 0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ See Other Information.

PHYSICAL DATA: Types of projects will include, but not be limited to: creation and restoration of shallow water habitat; restoration of wetlands; improvements to fish passage; restoration of floodplain functions and other actions to restore the estuary ecosystem.

Division: Northwestern

District: Portland

Lower Columbia River Ecosystem Restoration OR & WA

JUSTIFICATION: The Lower Columbia River basin has undergone considerable changes in water resource needs and uses and experienced significant environmental degradation. Human modifications have changed the hydrologic regime and caused increased water temperatures and losses of critical juvenile salmon habitat. Losses of in-stream, riparian and wetland habitats, and reduced genetic diversity of fish and wildlife resources have resulted from these modifications. Over the last century, the amount of forested and tidal swamp habitat (including tidal sloughs in the region) has decreased by about 78% over historical levels because of dike and levee building and associated development activities. Riparian plant communities and forest have declined about 86% from historical levels. The lower river and estuary are critical areas for migrating juveniles, especially anadromous salmonids federally listed as threatened or endangered, because these areas provide refuge from predators, feeding grounds, and areas to transition physiologically from freshwater to saltwater. Flood risk management, water quality, navigation, water-related infrastructure, and ecosystem restoration needs have all been evaluated on a case-by-case basis. Section 536 of WRDA 2000 provided the authority for the U.S. Army Corps of Engineers to construct ecosystem restoration projects in the Lower Columbia River estuary and Tillamook Bay. These two estuaries are designated as national estuaries of significance under the National Estuary Program (NEP). As a result, added emphasis was placed on the Lower Columbia River Estuary programs Comprehensive Conservation Management Plan. Also during that time period, the National Marine Fisheries Service (NOAA Fisheries) identified the Columbia River Estuary as important in rebuilding the productivity of Columbia River Basin salmon and steelhead listed under the Endangered Species Act (ESA). Thirteen stocks of anadromous salmonids that use the estuary and reproduce in the Columbia River Basin have been listed as threatened or endangered under the ESA. Such listings have broad implications to existing water resource uses and future developments. The 2010 Supplemental Biological Opinion (BiOp) to the 2008 Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp) includes Reasonable and Prudent Alternatives (RPAs) calling for planning and restoration efforts in the Columbia River estuary to help avoid jeopardy for these listed species, or actions resulting in the destruction or adverse modification of critical habitat. On August 2, 2011, the U.S. District Court ruled that the 2008/2010 BiOp, including the RPA's habitat mitigation measures, remain in place through 2013, but ordered NOAA Fisheries to either produce a new or supplemental BiOp by January 1, 2014, to correct the 2008/2010 BiOp's reliance on post-2013 measures that the court concluded were unidentified and not reasonably certain to occur. Historic losses of 52,000 acres of wetland/marsh habitats, 13,800 acres of riparian forest habitat and 27,000 acres of forested wetland habitat downstream of Portland have impacted this ecosystem's ability to produce and sustain fish and wildlife resources. Much of this wetland loss can be attributed to the 84,000 acres encompassed by diking districts and the 20,000-acre increase in urban development that has occurred along the Lower Columbia River.

The implementation of the Lower Columbia River element of the Section 536 legislation serves as a catalyst to bring together and implement current efforts by governmental and private organizations including, but not limited to, the National Estuary Program, six state agencies from Oregon and Washington, four Federal agencies, recreation, ports, industry, agriculture, labor, commercial fishing, environmental interests and citizens to identify and cost share restoration projects and provide ecosystem benefits to terrestrial, plant and 13 listed ESA aquatic species.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete feasibility phase at four sites	\$450,000	
Continue feasibility studies at four sites	210,000	
Complete design phase at two sites	876,000	
Complete construction at the Sandy R. Delta Site	1,000,000	
Initiate and complete construction at the Post Office Lake Site	<u>3,700,000</u>	
Total	\$6,236,000	<u>9/</u>

9/ Includes unobligated carry-in from FY 2012.

Division: Northwestern

District: Portland

Lower Columbia River Ecosystem Restoration OR & WA

FISCAL YEAR 2014: The requested amount will be applied as follows:

Initiate construction on one major project site	\$7,000,000
Project closeout on the Sandy River Delta and Post Office Lake sites	<u>80,000</u>
Total	\$7,080,000

NON-FEDERAL COSTS: The authorization provides that studies shall be subject to cost sharing in accordance with Section 105 of WRDA 1986 and that restoration projects shall be cost shared at 35 percent by non-Federal interests, that non-federal interests shall provide all lands, easements, rights-of-way, dredged material disposal areas, and relocations necessary for the projects to be carried out and that in-kind contributions cannot exceed 50 percent of the non-Federal share. However, the Federal share of projects carried out on Federal lands shall be 100 percent.

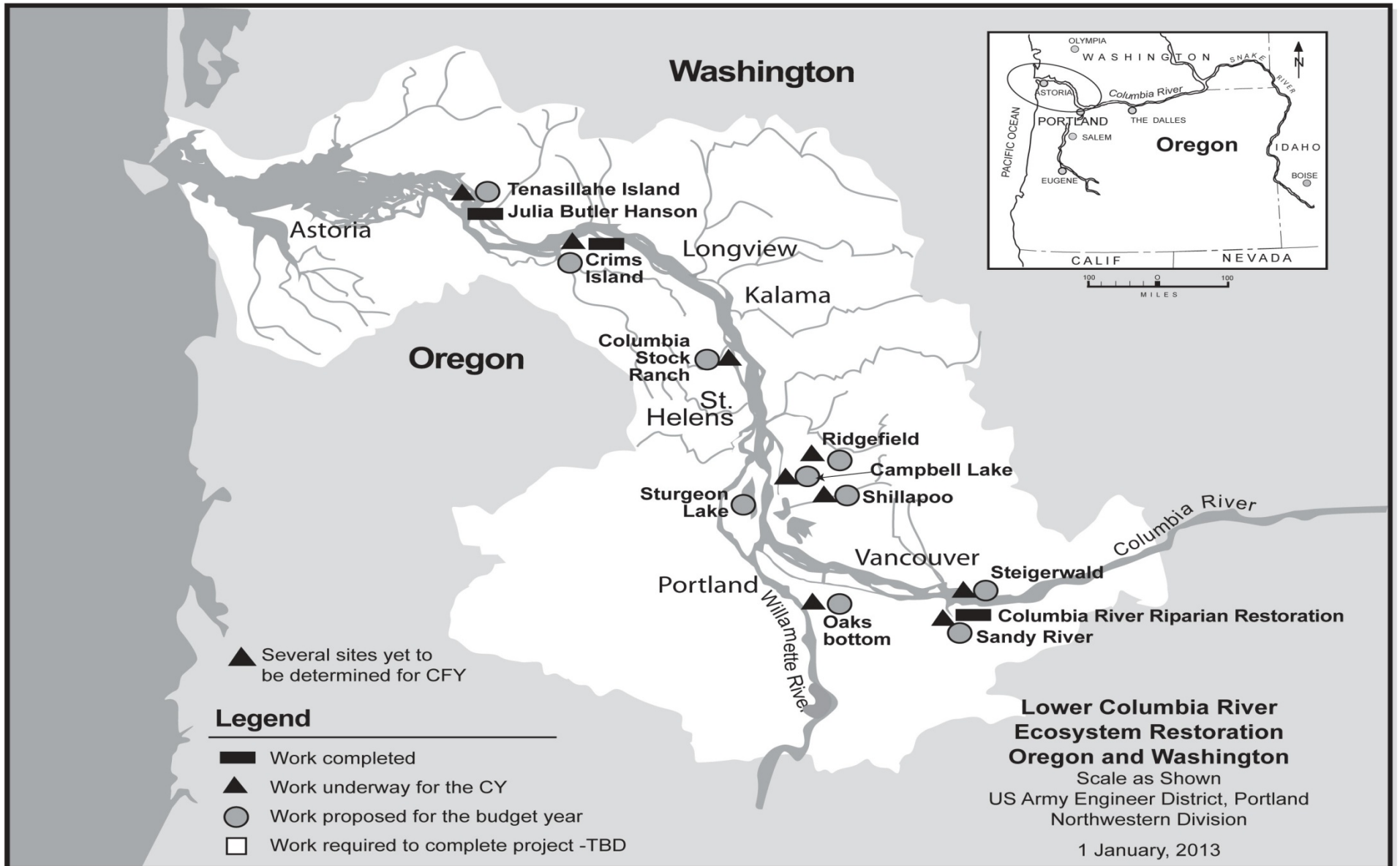
STATUS OF LOCAL COOPERATION: Project Agreements for individual restoration sites are prepared/executed as they are identified.

- (1) Crims Island Site: A Memorandum of Agreement (MOA) was executed in May 2004 with the U.S. Fish and Wildlife Service (USFWS).
- (2) Columbia River Riparian Site: A MOU was executed in February 2006 with the U.S. Department of Agriculture (Forest Service).
- (3) Julia Butler Hanson Site: A MOA was executed in August 2008 with the U.S. Fish and Wildlife Service.
- (4) Washington Estuary Sites: A MOA was executed in September 2009 with the Washington State Department of Fish and Wildlife (WDFW).
- (5) Shillapoo Lake Restoration Site: A Feasibility Cost Sharing Agreement (FCSA) was executed in July 2012 with the WDFW.
- (6) Oaks Bottom Site: A FCSA was executed in December 2010 with the City of Portland. A Project Partnership Agreement is scheduled to be executed during the 3rd quarter of FY 2013.
- (7) Sandy River Delta Site: A MOA was executed in December 2011 with the U.S. Department of Agriculture (Forest Service).
- (8) Post Office Lake, Ridgefield National Wildlife Refuge Site: A MOA is scheduled to be executed during the 3rd quarter of FY 2013.
- (9) Columbia Stock Ranch: A MOA was executed in November 2012 with the Bonneville Power Administration.
- (10) Campbell Lake: A MOA is scheduled to be executed in the 3rd quarter of FY 2013 with the U.S. Fish and Wildlife Service.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$30,000,000 is the same as last presented to Congress (FY 2013). See Other Information.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement has not been prepared. National Environmental Policy Act documentation for individual restoration sites is prepared as they are identified.

OTHER INFORMATION: Funds to initiate Engineering and Design and Construction were first appropriated in FY 2003. Additional costs have been identified to consider BiOp requirements in the Lower Columbia River estuary. However cost increases and the appropriate course(s) of action are being determined.



WASHINGTON

APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Columbia River Fish Mitigation, Washington, Oregon, & Idaho (Continuing)

LOCATION: Lower Columbia, Snake and Willamette Rivers.

DESCRIPTION: The mitigation consists of: (1) Adult and juvenile fish bypass improvements at the Lower Granite, Little Goose, Lower Monumental, and Ice Harbor projects on the Snake River and at the McNary, John Day, The Dalles, and Bonneville projects on the Columbia River, and avian predation controls and salmon survival research and development in the Lower Columbia River estuary and near-ocean environments; (2) A mitigation analysis, prepared in cooperation with regional interests, to evaluate additional measures to increase fish survival in the Columbia and Snake Rivers. The mitigation analysis provides the analytical process for consideration and implementation of Federal actions necessary to support regional initiatives and Federal salmon and steelhead Endangered Species Act (ESA) requirements; (3) Beginning in FY2008, evaluations, design and construction of measures to address the impacts on ESA-listed species of salmon and steelhead of construction and operation of 13 dams on the Willamette River; and (4) Increased efforts to improve juvenile and adult pacific lamprey passage to boost recovery and avoid additional ESA listings within the Federal Columbia River Power System (FCRPS) were initiated in FY 2009.

AUTHORIZATION: 1933 Federal Emergency Administration of Public Works; 1935, 1945 and 1950 River and Harbor Acts; 1937 Bonneville Project Act; 1938, 1948, 1950 and 1954 Flood Control Acts; Water Resources Development Act (WRDA) 1986, Section 906(b)(1); WRDA 1996, Section 511, as amended by WRDA 1999, Section 582 and WRDA 2007, Section 5025.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for this project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio is not applicable to this project because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT COMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (Corps of Engineers)	2,100,000,000		Entire Project	78%	TBD
Estimated Other Federal Costs (Bonneville Power Administration)	9,670,000				
Total Federal Cost	2,109,670,000				
Future Non-Federal Reimbursement	1,719,000,000	<u>8/</u>			
Estimated Federal Cost (Ultimate)	381,000,000				
Estimated Non Federal Cost	1,719,000,000				
Cash Contributions	0				
Other Costs	0				
Reimbursements, Power	1,719,000,000				
Total Estimated Project Cost	2,109,670,000				
Allocations to 30 September 2010	1,455,394,000				
Allocation for FY 2011	134,860,000				
Allocation for FY 2012	128,311,000				
Conference Allowance for FY 2013	83,000,000	<u>5/</u>			
Allocations through FY 2013	1,801,565,000	<u>1/ 2/ 3/ 6/</u>	86%		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	101,553,000		91%		
Programmed Balance to Complete after FY 2014	196,882,000	<u>7/ 9/</u>			
Unprogrammed Balance to Complete after FY 2014	0				

1/ (\$94,000) reprogrammed to (from) the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ Allocation for actual reimbursement by the Bonneville Power Administration is made as each element is placed in service.

9/ See Other Information.

PHYSICAL DATA

Lower Granite Lock & Dam

- Juvenile fish bypass system
- Juvenile fish transport facilities
- Barge moorage
- Fish transport barges
- Spillway flow deflectors
- Spillway weir
- Juvenile passage monitoring facilities
- Adult fish ladders
- Adult passage monitoring facilities
- Lamprey passage facilities

Little Goose Lock & Dam

- Juvenile fish bypass system
- Lamprey passage facilities
- Spillway flow deflectors
- Spillway weir
- Juvenile fish transport facilities
- Adult fish ladders

Lower Monumental Lock & Dam

- Juvenile fish bypass system
- Juvenile fish transport facilities
- Spillway flow deflectors
- Spillway weir
- Juvenile passage monitoring facilities
- Adult fish ladders
- Lamprey passage facilities

The Dalles Lock & Dam

- Tailrace spill wall
- Spillway improvements
- Sluiceway surface passage
- Adult fish ladders
- Lamprey passage facilities

McNary Lock & Dam

- Juvenile fish bypass system
- Juvenile fish transport facilities
- Juvenile passage monitoring facilities
- Spillway flow deflectors
- Spillway weirs
- Adult fish ladders
- Adult passage monitoring facilities
- Lamprey passage facilities

John Day Lock & Dam

- Juvenile fish bypass system
- Juvenile passage monitoring facilities
- Spillway flow deflectors
- Spillway weirs
- Adult fish ladders
- Mitigation hatcheries
- Lamprey passage facilities

Ice Harbor Lock & Dam

- Juvenile fish bypass system
- Spillway flow deflectors
- Spillway weir
- Juvenile passage monitoring facilities
- Adult fish ladders
- Lamprey passage facilities

Lower Columbia River estuary

- Avian Predation Reduction
- Estuary Studies

Bonneville Lock and Dam

- Juvenile fish bypass system
- Independent station service
- Juvenile fish monitoring facilities
- Corner collector surface passage
- Spillway flow deflectors
- Sea lion barriers
- Adult fish ladders
- Adult passage laboratory
- Adult passage monitoring facilities
- Lamprey passage facilities
- Sluiceway surface passage

Mitigation Analysis

- Gas abatement
- Adult passage
- Turbine Passage
- Project passage efficiency and survival studies
- Prototype facility studies
- Delayed & multiple bypass mortality studies
- Temperature impacts

Willamette Valley Projects

- Evaluations (Mitigation Analysis)
- Adult trap and haul facilities
- Temperature control facilities
- Juvenile passage facilities

Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID

JUSTIFICATION: Columbia River Fish Mitigation provides mitigation for the impacts of Corps' dams on migrating salmon. Completed and scheduled mitigation measures are based on completed analyses. Mitigation measures are being considered as a result of the Northwest Power and Conservation Council's regional rebuilding efforts for upriver salmon stocks; the National Oceanic and Atmospheric Association National Marine Fisheries Service (NOAA Fisheries) listing of salmon as threatened/ endangered; the NOAA Fisheries Biological Opinions [BiOp(s)] on operation of the FCRPS issued 1995, 1998, 2000, 2004, 2008 and the 2010 Supplemental BiOp which includes the Adaptive Management Implementation Plan and amendments; the 2008 Columbia Basin Fish Accords; and the 2008 United States Fish and Wildlife Service (USFWS) and NOAA Fisheries Willamette River Basin BiOp . The current scope of this project has been adjusted to be in accord with BiOps and specific dates for Reasonable and Prudent Alternatives (RPAs) identified in the BiOp(s). The Mitigation Analysis, begun in FY 1991, is contributing to a regionally collaborative process for analyzing potential new measures.

In response to Section 582 of WRDA 1999 and in recognition of hydropower system operations' effects on the Columbia River estuary and concomitant impacts on salmonids, efforts began in FY 2001 to address habitat and avian predation issues in the estuary. In FY2008, under the authority of Section 906b of WRDA 1986, the Corps initiated actions to relocate a portion of the Caspian Tern colony in the estuary to reduce predation on migrating juvenile salmonids. In response to ongoing ESA consultation, the Corps proposed to initiate a study to identify impacts, and identify and recommend appropriate structural modifications in the Willamette River Basin to address impacts on listed species resulting from the operation of the 13 dams in the basin beginning in FY2008. A BiOp was issued by NOAA Fisheries and USFWS in July 2008. As a result of the May 2008 Columbia Basin Fish Accords, increased efforts to investigate and improve juvenile and adult Pacific lamprey passage and survival was initiated in FY2009.

FISCAL YEAR 2013: The total unobligated dollars are being applied to address the highest priority actions to comply with the BiOp requirements for the FCRPS, the NOAA Fisheries and USFWS 2008 BiOp for the Willamette River Basin, and the 2008 Columbia Basin Fish Accords. Current execution plans are for funds to be applied on major measures as follows:

Lower Granite	\$9,520,000	John Day	\$2,275,000
Facility bypass improvements		Adult ladder improvements	
Barge moorage upgrade		Adult PIT monitoring	
Surface passage alternative			
Spillway PIT monitoring			
Little Goose	3,500,000	The Dalles	1,800,000
Spillway weir boat barrier		Emergency adult ladder aux water supply	
Spillway weir stop logs			
Lower Monumental	2,105,000	Bonneville	2,380,000
Spillway weir boat barrier		Gatewell orifice modifications	
		Fish unit trash rake	

Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID

Ice Harbor Unit 2 replacement	2,470,000	Lower Columbia River Estuary Estuary studies Avian predator relocation	5,110,000
McNary Spillway Weir Handling Equipment Intake Gate Closure	2,455,000	Mitigation Analysis, FCRPS Lamprey passage improvement development, Tagging studies, Fall Chinook studies, Adult passage and survival studies Delayed mortality, Turbine passage survival PIT tag recovery, post-FCRPS survival study FCRPS performance verification	23,164,000
Willamette Valley Projects Mitigation analysis Trap and haul facilities Fish release sites	29,750,000		
			=====
			Total \$84,529,000 <u>10/</u>

10/ Includes unobligated carry-in from FY 2012.

FISCAL YEAR 2014: The requested amount will be applied to address the highest priority actions to comply with the BiOp requirements for the FCRPS, the NOAA Fisheries and USFWS 2008 BiOp for the Willamette River Basin, and the 2008 Columbia Basin Fish Accords. Current execution plans are for funds to be applied on major measures as follows (Specific amounts are tentative. See "Other Information" below):

Lower Granite Juvenile facility bypass improvements Spillway PIT monitoring system Surface passage alternative Spillway weir boat barrier	\$21,550,000	John Day Adult ladder improvements	\$100,000
Little Goose Spillway weir boat barrier Spillway weir gate hoist	250,000	The Dalles Emergency adult ladder aux water supply Adult PIT monitoring system	5,200,000
Lower Monumental Spillway weir boat barrier Spillway weir access	520,000	Bonneville Gatewell orifice modifications Fish unit trash rake	8,500,000

Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID

Ice Harbor Unit 2 replacement	5,280,000	Lower Columbia River Estuary Estuary studies Avian predator relocation	3,300,000
McNary Spillway Weir Handling Equipment Intake Gate Closure	2,550,000	Mitigation Analysis, FCRPS Lamprey passage improvement development, Tagging studies, Fall Chinook studies, Adult passage and survival studies Turbine passage survival, Inland avian predation PIT tag recovery, post-FCRPS survival study FCRPS performance verification	11,403,000
Willamette Valley Projects Mitigation analysis Trap and haul facilities Fish release sites	42,900,000		
			=====
			Total \$101,553,000

NON-FEDERAL COST: Costs eventually determined to be allocable to power are reimbursable. The dams being modified and analyzed are a part of the FCRPS. Bonneville Power Administration (BPA), the Federal Power Marketing Agency, establishes system rate levels adequate to recover all capital investment costs for generating projects (including Corps generating projects) within a 50-year period and to repay annual OM&R and interest expenses. BPA submits an annual financial statement to Congress, as required by law, on repayment and periodically recommends rate adjustments as required for meeting repayment obligations.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$2,109,670,000 is the same as last presented to Congress (FY 2013). See Other Information.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Mitigation construction may be covered by existing environmental impact statements. Additional environmental documentation pursuant to National Environmental Policy Act (NEPA) will be accomplished as necessary. Consultations with NOAA Fisheries and USFWS will be held and biological assessments prepared as necessary to conform to the requirements of NEPA and the ESA.

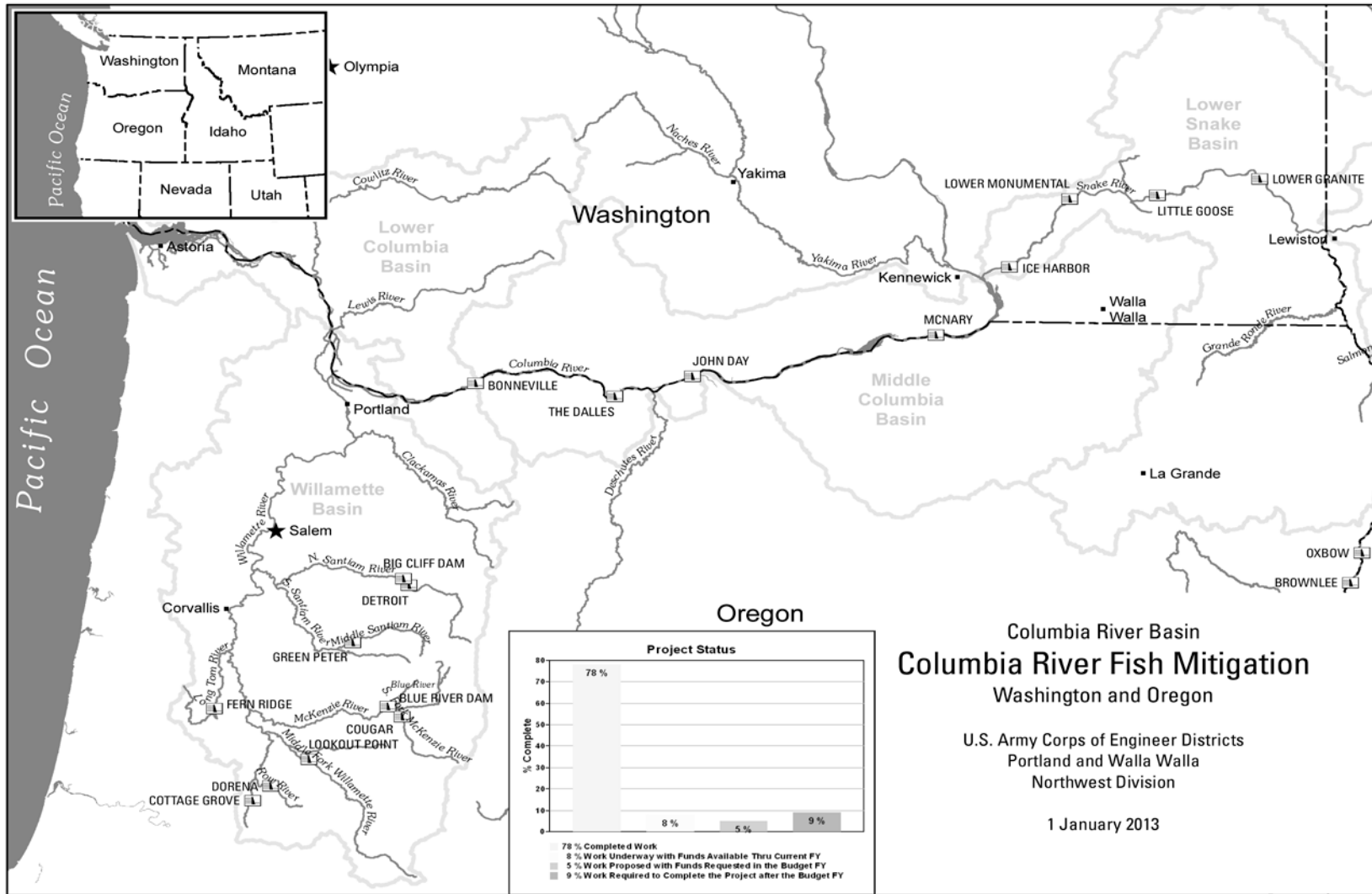
OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1988. Additional costs have been identified to consider remaining RPA actions to meet BiOps, cost and schedule risk, and escalation factors. However, cost increases and the appropriate course(s) of action are being determined.

Potential Changes: Salmon rebuilding initiatives for Corps implementation have been adopted by the Northwest Power Planning Council (Council) as part of the amended Columbia River Basin Fish and Wildlife Program and, when applicable, ESA consultation is completed and documented in the NOAA Fisheries and USFWS BiOps. In response to the biological opinions, the Corps has developed and continues to update implementation plans. The Council, NOAA Fisheries and USFWS emphasize adaptive management – incorporating changes based on new research, monitoring and regional prioritization decisions. This adaptive management approach is regionally recognized and accepted.

Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID



Division: Northwestern

District(s): Portland/Walla Walla

Columbia River Fish Mitigation, WA, OR, & ID

1 May 2013

NWD-93

APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Duwamish and Green River Basin, Washington (Continuing)

LOCATION: The project is located in the Duwamish/Green River Basin, in King County in the Puget Sound Basin in northwestern Washington State.

DESCRIPTION: The project will provide 45 ecosystem restoration sites throughout the 492 square mile Duwamish and Green River Basin. The project will create 1900 acres of new habitat and add significant habitat for three Endangered Species Act (ESA) listed species: Bull trout, Steelhead trout and Chinook salmon. Habitat improvements will occur over 200 miles of river and streams with features including stream restoration, levee removal to open up adjacent flood plains, reconnection of abandoned side channels, providing wood and gravel for fish habitat and other restoration actions. Post construction monitoring between 2 and 10 years was approved for individual sites to ensure project elements achieve desired environmental outputs.

AUTHORIZATION: Section 101 (b) (26) of the Water Resources Development Act of 2000, PL 106-541

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA:			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$130,017,000		Entire Project	14%	TBD
Estimated Non-Federal Cost		66,734,000				
Cash Contributions	4,000,000					
Other Costs	62,734,000					
Total Estimated Project Cost		\$196,751,000				
Allocations to 30 September 2010		\$12,289,000				
Allocation for FY 2011		1,796,000				
Allocation for FY 2012		1,800,000				
Conference Allowance for FY 2013		2,500,000	<u>5/</u>			
Allocations through FY 2013		18,385,000	<u>1/ 2/ 3/ 6/</u>	14%		
Estimated Unobligated Carry-In Funds		0	<u>4/</u>			
President's Budget for FY 2014		8,500,000		21%		
Programmed Balance to Complete after FY 2014		103,132,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY 2014		0				

1/ \$0 reprogrammed to (from) the project.

2/ \$4,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Costal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Forty-six restoration sites will add 1,900 acres of new habitat to include culvert removal, side channel reconnection, levee setback, gravel nourishment, and large wood placement.

JUSTIFICATION: The Duwamish/Green ecosystem restoration project will restore habitat for the Chinook salmon, Steelhead, and Bull trout. Key elements of this project are included in the Duwamish/Green Salmon Habitat Restoration Plan prepared in response to listing of Chinook salmon under ESA in 1999. The proposed restoration focuses on improving the overall health of the Duwamish/Green River Basin over its 200 miles of river and streams through 1,900 acres of new habitat, enhancing and restoring fish and wildlife while maintaining existing flood protection within the basin. Of special interest are the habitat needs of the listed endangered species Chinook salmon, Steelhead, and Bull trout. Potential projects were proposed and screened by the Watershed Restoration Group, composed of the local sponsor, stakeholders, scientists, and Corps officials. Projects were scored according to an environmental

Division: Northwestern

District: Seattle

Duwamish and Green River Basin, WA

JUSTIFICATION Continued

evaluation criteria: 1) effectiveness of project in addressing one or more limiting factors, including barriers to fish passage, reduction in channel forming flows, loss of channel diversity in the lower river, loss of estuarine and floodplain habitat, reduction in large woody debris, loss of sediment sources, and increase in water temperature; 2) scale, size, and effect; 3) technical and political feasibility; and 4) potential for wildlife benefits. Forty five (45) sites were evaluated which incorporated varying levels and degrees of restoration in an incremental cost analysis. The Corps received input to incorporate local needs and direction in the development of site-specific restoration criteria supportive to local goals. Assessing and incorporating the desires of stakeholders into the restoration plan will continue throughout project development. The project is an integral part of a Water Resource Inventory Area (WRIA) 9 recovery plan and a Regional Recovery Plan. The Water Resource Inventory Area (WRIA) 9 recovery plan is the Puget Sound Chinook Recovery Plan for the Green-Duwamish Watershed. The Regional Recovery Plan is the Puget Sound Wide Chinook recovery Plan adopted by National Marine Fisheries Service (NMFS). The project is an integral part of Washington's ESA recovery plan as documented in the WRIA 9 recovery plan and NMFS Puget Sound Chinook Recovery Plan

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete design and execute Project Partnership Agreement (PPA) for Mill Creek Wetlands 5K site	\$ 250,000
Initiate construction for Mill Creek Wetlands 5K site	2,500,000
Complete construction for Big Spring Creek Phase 2	1,400,000
Complete design for Boeing Levee Setback site	600,000
S&A, EDC and monitoring for several sites	<u>150,000</u>
Total:	\$4,900,000 <u>8/</u>

8/ Includes unobligated carry-in from FY2012.

FISCAL YEAR 2014: The requested amount would be applied as follows:

Continue construction for Mill Creek Wetlands 5K site	\$2,500,000
Initiate construction for Boeing Levee Setback site	5,000,000
Execute design agreement, complete design and execute PPA for Porter Levee Setback site	600,000
Execute design agreement and initiate design for Lower Russell Road	300,000
Conduct monitoring for completed project sites	<u>100,000</u>
Total	\$8,500,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and relocations	\$62,734,000	
Pay 35% of the costs allocated to fish and wildlife enhancement, and pay 100% of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	<u>4,000,000</u>	TBD
Total Non-Federal Costs	\$66,734,000	TBD

Division: Northwestern

District: Seattle

Duwamish and Green River Basin, WA

STATUS OF LOCAL COOPERATION: The primary local sponsor of this project has been King County with the full support of local cities; the Muckleshoot Tribe; the Suquamish Tribe; state and local agencies; 16 cities, federal resource agencies, Trout Unlimited and other interested stakeholders. These entities remain active in development of the project.

PPAs have been, or are scheduled to be executed, as follows:

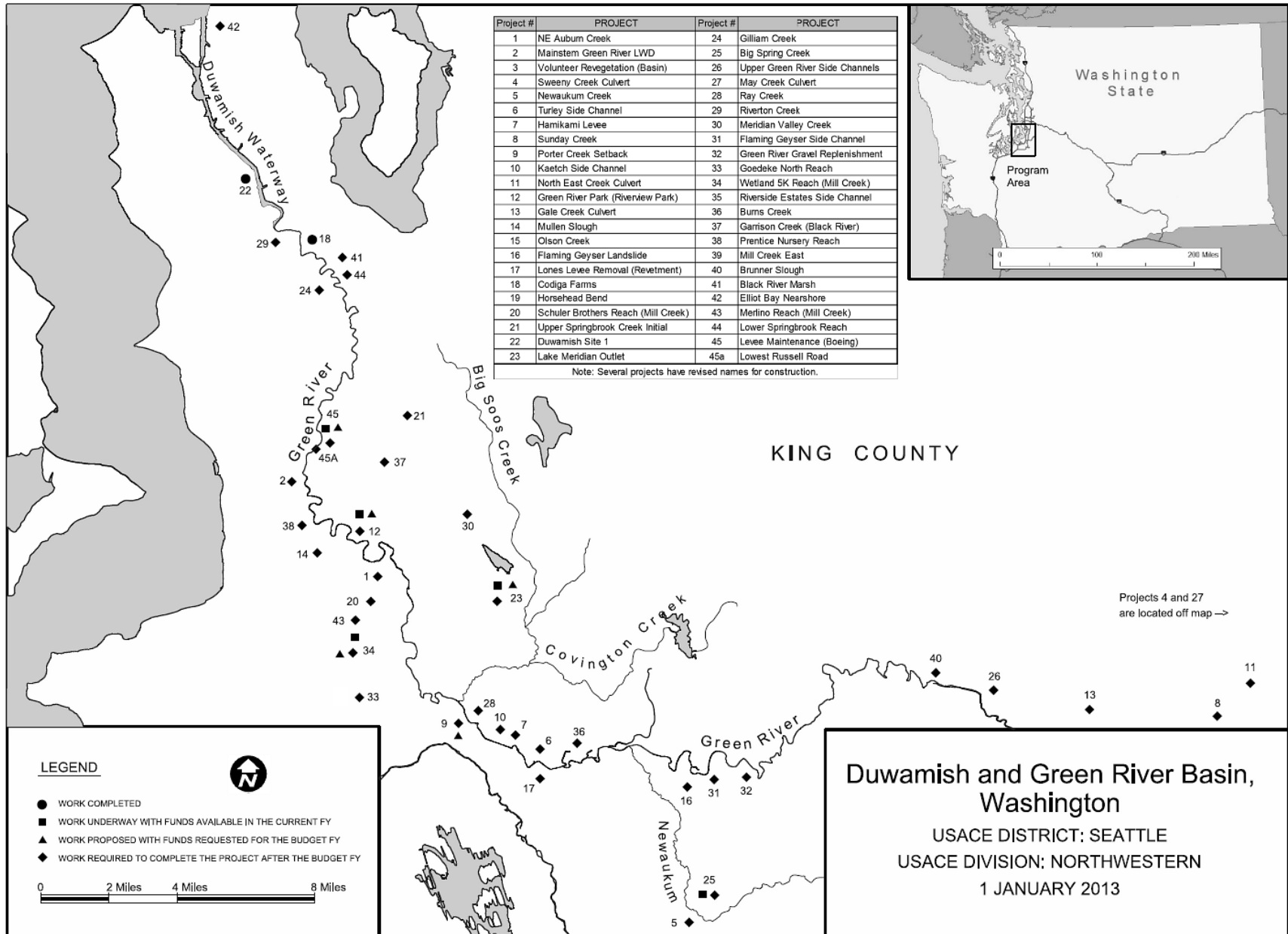
- (1) Meridian Valley site: A Project Cooperation Agreement (PCA) was executed in November 2004 with the City of Kent.
- (2) Lake Meridian Outlet site: A PCA was executed in August 2006 with the City of Kent.
- (3) Site 1: A PPA was executed in July 2009 with King County.
- (4) Upper Springbrook site: A PPA was executed in August 2010 with the City of Renton.
- (5) Riverview Park site: A PPA was executed in August 2011 with the City of Kent.
- (6) Big Spring Creek site: A PPA was executed in August 2012 with King County.
- (7) Mill Creek Wetland 5K site: A PPA is scheduled to be executed in April 2013 with the City of Auburn.
- (8) Main Stem Boeing Levee site: A PPA is scheduled to be executed in December 2013 with the City of Kent.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$130,017,000 is an increase of \$11,390,000 from the latest estimate of \$118,627,000 presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments	\$11,390,000
Total	\$11,390,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Programmatic Environmental Impact Statement was completed in December 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 2001 and funds to initiate construction were appropriated in FY 2004. The Chief of Engineer's report was signed 29 December 2000. The project will restore high quality ecosystem habitat that has been lost. Several Puget Sound salmon species are listed under the Endangered Species Act. The project will provide a major component for habitat restoration in the Duwamish/Green River Basin to stem declines and begin rebuilding salmon habitat. The project complements other local, state, and federal programs for salmon recovery in the Puget Sound Watershed.



Division: Northwestern

District: Seattle

Duwamish and Green River Basin, WA

1 May 2013

NWD-98

APPROPRIATION TITLE: Construction, Environment, Fiscal Year 2014

PROJECT: Lower Snake River Fish and Wildlife Compensation, Washington, Oregon, Idaho (Continuing)

LOCATION: Hatchery sites are located at McCall, Idaho, about 1,500 feet downstream from Payette Lake; Lyons Ferry, Washington, at River Mile 59 on the Snake River; Lookingglass, Oregon, about 10 miles northwest of Elgin, Oregon; Hagerman, Idaho, 10 miles west of Twin Falls, Idaho; Irrigon Hatchery, about 10 miles west of Umatilla, Oregon; Dworshak Expansion, Sawtooth Hatchery about 5 miles south of Stanley, Idaho; Magic Valley Hatchery about 4 miles north of Buhl, Idaho; and Clearwater Hatchery about 5 miles west of Orofino, Idaho. Fishing and hunting access and wildlife habitat lands will be located in Washington and Idaho. The riparian lands are located on the Snake and Columbia River drainages from the Washington/Oregon border upstream to the confluence with the Clearwater River. This reach includes significant tributaries and their watersheds, including (but not limited to) the Walla Walla, Tucannon, Asotin, Grande Ronde, and Imnaha River basins.

DESCRIPTION: The project purpose is fish and wildlife compensation for construction of the four mainstem dams on the Snake River. The project consists of Chinook and Steelhead hatcheries that will provide 27,000,000 juvenile salmon and steelhead annually. These fish will be released in streams for migration to the Pacific Ocean. Adult salmon and steelhead resulting from these releases will provide both sport and commercial fishing opportunities with over 4 million pounds of fish going to the commercial fisheries and providing approximately 689,000 additional angler days of sport fishing. An estimated 132,000 adult fish will return to the project area of the Snake River. In addition to the anadromous fish, 93,000 pounds of trout will be reared and released in Eastern Washington which will provide 45,000 additional angler days of sport fishing. There will be an aggregate of 24,150 acres in fee or easement for fisherman access, wildlife habitat and hunting access. Additionally, a program has been implemented with Washington State Department of Game to produce the equivalent of 20,000 game birds per year for 20 years. The 1989 Letter of Agreement entered into by the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers and the Washington Department of Fish and Wildlife states that Lower Snake River Fish and Wildlife Plan mitigation, as authorized by PL 94-587 and PL 99-662, will be measured on a habitat basis instead of using "animal number replacement" as a basis for measurement. The "Special Report – Lower Snake River Fish and Wildlife Compensation, Wildlife Habitat Compensation Evaluation for the Lower Snake River Project" submitted in June 1991, concluded that, "Current habitat conditions of project lands do not contribute significantly to meeting compensation goals..." This project will restore 1,916 acres of project habitat; 3,285 acres of project woody riparian land; and 24,271 acres of project grass/shrub steppe land to pre-project conditions. Additional project restoration effort would include creation of small forested islands and shallows which would provide the additional benefit of creating substantial natural salmon spawning and rearing habitat. Consequently, significant consideration and effort will be given to protecting, preserving and perpetuating natural salmon spawning and rearing habitat which is a significant beneficiary of woody riparian lands.

AUTHORIZATION: Water Resources Development Act (WRDA) 1976 as modified by WRDA 1986, Sec 856 and WRDA 2007, Sec 3165. The current Federal cost estimate may exceed the WRDA 1986 Section 902 project cost limit. See Other Information.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

Division: Northwestern

District: Walla Walla

Lower Snake River Fish and Wildlife Compensation, WA, OR, ID

BASIS OF BENEFIT-COST RATIO: The basis of benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement	261,000,000		Entire Project	94	TBD
Future Non-Federal Reimbursement	237,771,000		Wildlife Compensation	100	Sep 2002
Estimated Federal Cost (Ultimate)	23,229,000		Fish Facility	100	2011
Estimated Non-Federal Cost	237,994,000		Lands	100	Sep 1994
Cash Contributions	223,000		Habitat Restoration	87	TBD
Reimbursements	237,771,000				
Power	237,771,000				
Total Estimated Project Cost	261,223,000				
Allocations to 30 September 2010	241,103,000				
Allocation for FY 2011	1,497,000				
Allocation for FY 2012	1,564,000	<u>1/</u>			
Conference Allowance for FY 2013	2,000,000	<u>5/</u>			
Allocations through FY 2013	246,164,000	<u>1/</u> <u>2/</u> <u>3/</u> <u>6/</u>	94%		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	2,000,000		95%		
Programmed Balance to Complete after FY 2014	12,836,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY 2014	0				

1/ \$94,000 reprogrammed to the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

Capacity of Hatcheries

9,160,000 Fall Chinook Smolts - 101,800 lbs.

6,750,000 Spring and Summer Chinook Smolts - 450,000 lbs.

11,020,000 Summer Steelhead - 1,377,500 lbs.

93,000 lbs. Of Resident Sport Fishery

Acquisition of 24,150 acres for fisherman access and wildlife compensation and improvement of land for wildlife compensation.

Restore 1,916 acres of project forland, 3,285 acres of project woody riparian land, and 24,271 acres of project grass/shrub steppe land to pre-project conditions.

JUSTIFICATION: The project will provide for losses to fish and wildlife resources caused by construction and operation of the four dams (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite) constituting the Lower Snake River Project, authorized by PL 79-14, as is required by the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) in accordance with the requirements of the Lower Snake River Fish and Wildlife Compensation Plan negotiated in accordance therewith and subsequently authorized by PL 94-587 and PL 99-662.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Complete vegetation mapping, initiate Habitat Evaluation Procedure (HEP) study, and analysis of costs to complete with streamlines restoration methods	\$662,000
Complete planting at the Willow Bar site	386,000
Complete planting at the Swift Bar site	373,000
Initiate planting at the Ayers site	377,000
Complete closeout actions at the Asotin, Hells Canyon, and Skookum restoration sites	<u>210,000</u>
Total	\$2,008,000 <u>8/</u>

8/ Includes unobligated carry-in from FY 2012

FISCAL YEAR 2014: The requested amount will be applied as follows:

Complete P&S at the Central Ferry site	\$150,000
Complete planting at the Ayers site	400,000
Complete planting at the Knoxway Canyon site	450,000
Initiate P&S for multiple Lower Monumental Pool sites	325,000
Complete HEP study, initiate PACR (if required) and closeout actions at the Willow and Swift Bar sites	<u>675,000</u>
Total	\$2,000,000

NON-FEDERAL COSTS: Costs allocable to power presently estimated at \$237,771,000 are reimbursable. This project is a part of the Federal Columbia River Power System. Bonneville Power Administration (BPA), the Federal marketing agency, establishes system rate levels adequate to recover all capital investment costs for generating projects (including Corps generating projects) within a 50-year period and to repay annual operation and maintenance and interest expenses. BPA submits an annual financial statement to Congress, as required by law, on repayment and periodically recommends rate adjustments as required for meeting repayment obligations. In addition, a cash contribution to expand the Lyons Ferry Hatchery (\$223,000) has been furnished.

Division: Northwestern

District: Walla Walla

Lower Snake River Fish and Wildlife Compensation, WA, OR, ID

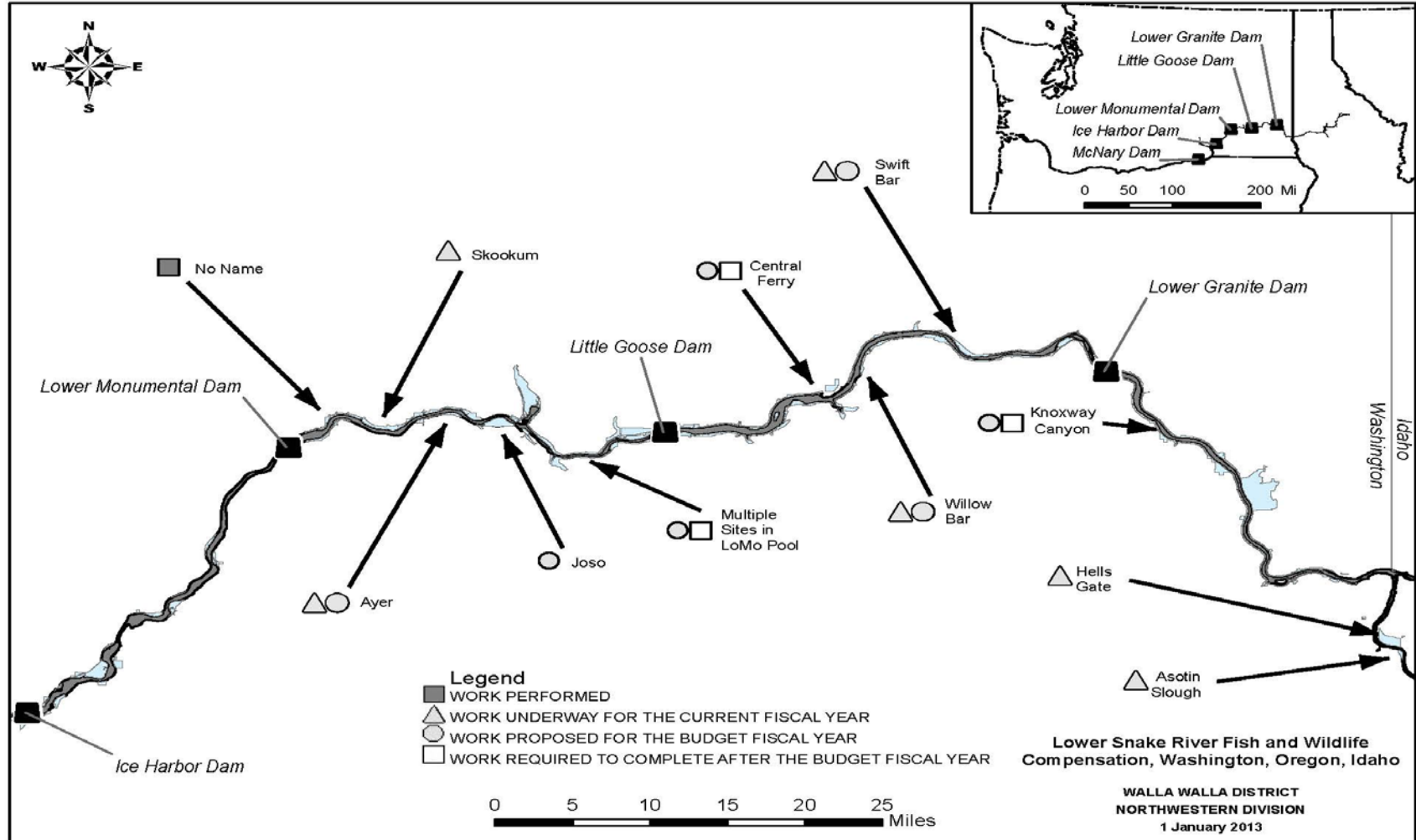
STATUS OF LOCAL COOPERATION: None required for construction.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$261,000,000 is the same as last presented to Congress (FY 2013). See Other Information.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 29 October 1977. Additional environmental documentation pursuant to the National Environmental Policy Act will be accomplished as necessary. Consultations with the National Marine Fisheries Service will be held and biological assessments prepared as necessary to conform to requirements of the Endangered Species Act.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1978 and funds to initiate construction were appropriated in FY 1979.

The current Federal cost estimate may exceed the WRDA 1986 Section 902 limit. The actions in the FY 2014 budget request are within the Section 902 limit and necessary to meet mitigation goals. Vegetation mapping will be completed in FY 2013 and a HEP study will be completed in FY 2014 to determine creditable habitat acres and identify remaining mitigation gaps, if any. If required by the findings of the HEP analysis, a Post Authorization Change Report would be prepared to address the updated cost estimate for the remaining work. As budgeted through FY 2014, there will be \$2,498,000 of remaining authorization within the current Section 902 limit.



APPROPRIATION TITLE: Construction, Flood and Coastal Storm Damage Reduction, Fiscal Year 2014

PROJECT: Mount St. Helens Sediment Control, Washington (Continuing)

LOCATION: A sediment retention structure on the North Fork Toutle River, 3 miles upstream from its confluence with the Green River; a Fish Collection Facility located on the North Fork Toutle River, 8,500 feet downstream of the Sediment Retention Structure; levee improvements at Kelso, WA on the Cowlitz river; and dredging in the Cowlitz River from the mouth to river mile 20; all located in Cowlitz County, southwest WA. The river systems impacted by the project include the Toutle, Cowlitz and a portion of the Coweeman River. Most of the population affected by the problems reside in the WA communities of Longview, Kelso, Lexington and Castle Rock.

DESCRIPTION: The purpose of this project is to reduce the risk of flooding to the WA communities of Longview, Kelso, Lexington and Castle Rock. The project consists of an earth and rock fill sediment retention structure with a spillway (125 feet high and a length of 1,800 feet and a retention capacity of 258 million cubic yards of sediment); a 300 foot long barrier type fish trap facility, a 210 foot fish ladder and levee raises and improvements on the Cowlitz River at Kelso, WA; dredging in the Cowlitz River from the mouth to river mile 20 and system-wide flood protection throughout the fifty year project life (1985-2035) at congressionally authorized levels.

AUTHORIZATION: Supplemental Appropriations Act, 1985, PL 99-88.

REMAINING BENEFIT - REMAINING COST RATIO: 5.3 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 6.1 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 3.0 to 1 at 8 5/8 percent. The benefit to cost ratio is based on the project functioning independently.

BASIS OF BENEFIT-COST RATIO: Benefits are from a Level I Economic Update approved in June 2012 at 2012 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$304,566,000				
Programmed Construction	304,566,000			Sediment Retention		
Un-programmed Construction	0			Structure	100	Feb 1990
				Dredging	100	Mar 1990
Estimated Non-Federal Cost		\$25,311,000		Future Dredging	0	TBD
Programmed Construction	25,311,000			Entire Project	49	TBD
Cash Contribution	4,311,000					
Other Costs	21,000,000					
Total Estimated Programmed Construction Cost		\$329,877,000				
Total Estimated Unprogrammed Construction Cost		0				
Total Estimated Project Cost		\$329,877,000				
Allocations to 30 September 2010		137,320,000				
Allocation for FY 2011		1,182,000				
Allocation for FY 2012		6,370,000				
Conference Allowance for FY 2013		3,500,000	5/			
Allocations through FY 2013		148,372,000	1/ 2/ 3/ 6/	49%		
Estimated Unobligated Carry-in Funds		0	4/			
President's Budget for FY 2014		600,000		49%		
Programmed Balance to Complete after FY 2014		155,594,000	7/			
Un-programmed Balance to Complete after FY 2014		0				

1/ \$27,639,000 reprogrammed to the project.

2/ \$14,000 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$ 0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED Costs of \$ 0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Dam: Type - Earth and Rock fill; Spillway Height - 125 feet; Length - 1,800 feet; Spillway Width - 400 feet; Fish Trap Facility: 300 feet long, concrete with stilling basin; Fish Ladder: 210 feet long by 6 feet wide, concrete; Lands and Damages: Acres - 5,374 (Sediment Retention Structure), 1,300 (Disposal Sites for Dredging), 25 (Levee Improvements); Ultimate Sediment Capacity: 258 million cubic yards.

Division: Northwestern

District: Portland

Mount St. Helens Sediment Control, WA

1 May 2013

NWD-105

JUSTIFICATION: The eruption of Mount St. Helens in May 1980 dramatically altered the hydraulic and hydrologic regimes of the Cowlitz and Toutle River watersheds. The Supplemental Appropriation Act, 1985 authorized the US Army Corps of Engineers to construct, operate and maintain a sediment retention structure (SRS) with such design features and associated actions necessary to provide flood protection to the WA communities of Longview, Kelso, Lexington and Castle Rock. About 50,000 people and their property are at risk if the flood protection is not maintained.

Changing hydraulic and hydrologic conditions impact the dynamic downstream deposition of sediment that is now infringing on the congressionally authorized levels of flood protection. Without dredging and other actions in the watershed the authorized level of flood protection cannot be maintained.

The ongoing data collection and sediment management analysis work is a critical step in determining what additional measures should be implemented to maintain long-term flood protection for these communities. Potential alternatives to regain/maintain the authorized levels of protection through 2035 include: dredging, improving levee integrity, increasing flood control storage, installation of a sediment storage sump, or establishment of a main channel above the SRS to reduce sediment delivery.

This project, in addition to preventing damage to property, is effective in reducing a high risk to life for the populations in the project area. That risk must be considered in evaluating the project justification in addition to economic analyses. Risk is created by both hydrologic factors (flood depth, velocity, and short warning time) and cultural factors (size of population and available routes of egress from the floodplain).

The Average annual benefits are \$54,432,000.

FISCAL YEAR 2013: The total unobligated dollars are being applied as follows:

Continue annual monitoring	\$ 600,000	
Develop Limited Reevaluation Report (LRR) and EIS	2,182,000	
Construction Management	141,000	
Complete spillway raise construction	<u>1,021,000</u>	<u>8/</u>
Total	\$3,944,000	<u>9/</u>

FISCAL YEAR 2014: The requested amount will be applied as follows:

Continue annual monitoring	\$400,000	
Complete LRR	<u>\$200,000</u>	<u>10/</u>
Total	\$600,000	

8/ The work items have been adjusted due to construction claim for increased quantities.

9/ Includes unobligated carry-in from FY2012.

10/ The LRR is expected to complete in FY2015 with FY2014 funding.

NON-FEDERAL COST: In accordance with the agreement between the United States of America and the State of Washington for local cooperation at, along and near the Cowlitz and Toutle Rivers, Cowlitz County, State of Washington, the total estimated non-Federal cost for construction is \$25,311,000 including allowances for inflation. The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction	Annual Operation Maintenance and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$16,911,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	400,000	
Mitigation for dredging operations	4,400,000	\$846,000
Sales & Use Tax Offset from the State of Washington	3,600,000	
Total Non-Federal Payments During Construction	\$25,311,000	

STATUS OF LOCAL COOPERATION: A Local Cooperation Agreement for the Sediment Control project was signed on 26 April 1986. The State of Washington is the sponsor for the SRS and dredging portions of the project. Consolidated Diking Improvement District No. 3 and Drainage Improvement District No. 1 are sponsors for the Kelso levee improvement.

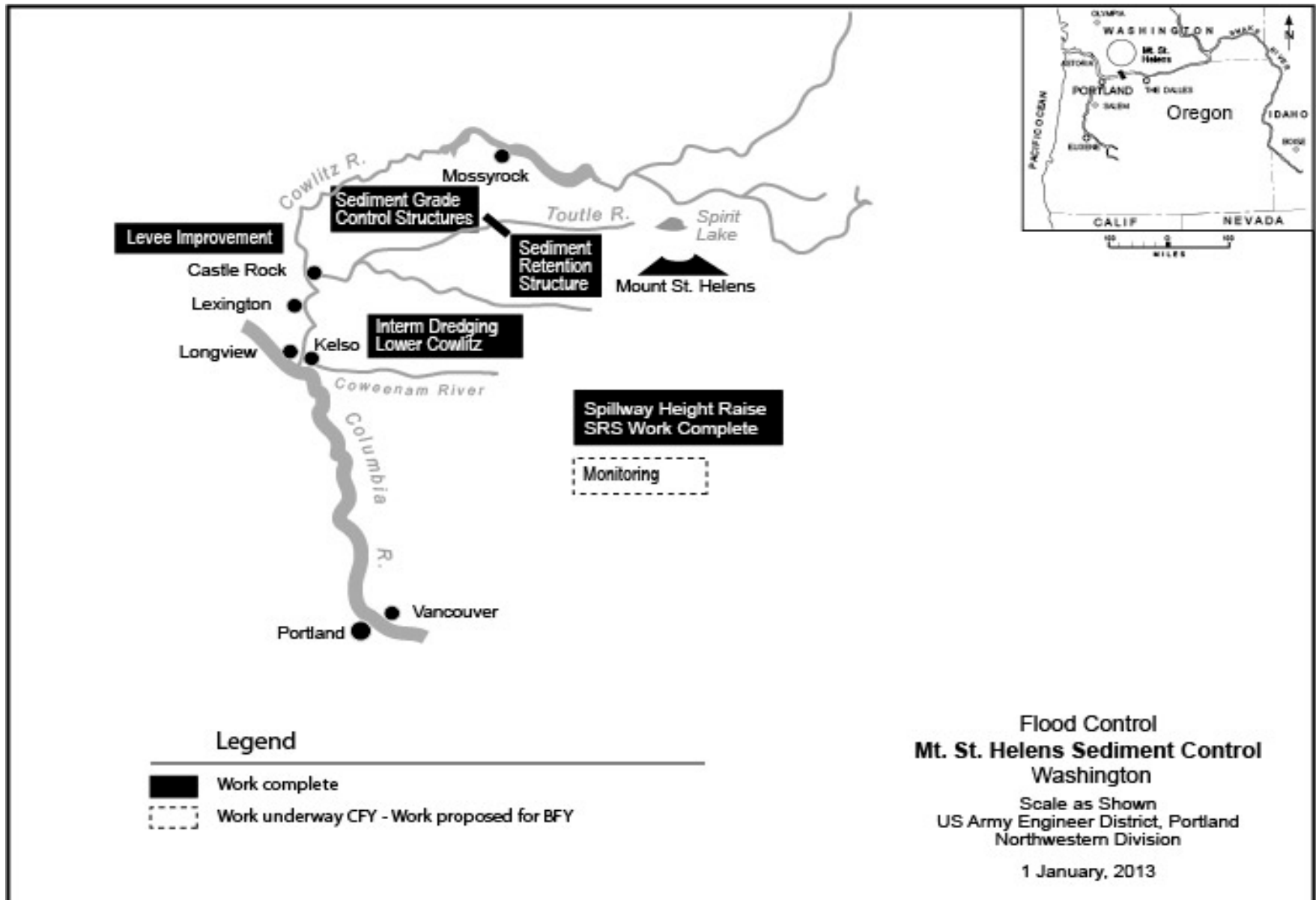
Land rights have been obtained by the State over the lands required for initial construction of the SRS. All persons residing within the SRS acquisition boundary have been relocated. The Diking and Drainage Districts have been furnished right-of-way requirements and are continuing their acquisition program. The State is continuing to acquire rights-of-way for additional dredge disposal areas should future dredging be required to preserve authorized flood protection levels.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$304,566,000 is an increase of \$4,166,000 from the latest estimate \$300,400,000 submitted to Congress (FY 2013). This change includes the following items.

Item	Amount
Price Escalation	\$3,497,000
Design Changes	<u>669,000</u>
Total	\$4,166,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency (EPA) in December, 1984.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1985 and funds to initiate construction were appropriated in FY 1986. The project remains open because of the unique circumstances created by the eruption of Mt. St. Helens. Since the small explosive eruption that occurred 1 October 2004, there have been several larger eruptions of steam and ash, with some additional growth of the lava dome within the mountain's existing crater. Significant sediment from the Mt.St. Helen's debris avalanche continues to deposit in the Lower Cowlitz River and is beginning to infringe on the authorized level of flood protection. An analysis of alternative approaches and actions to manage the sediment depositing in the Lower Cowlitz is needed in order to maintain flood damage reduction benefits to the WA communities of Longview, Kelso, Lexington and Castle Rock through 2035.



OPERATIONS & MAINTENANCE

KEY TO ABBREVIATIONS:

N = NAVIGATION
FRM = FLOOD RISK MANAGEMENT
RC = RECREATION
H = HYDROPOWER
EN = ENVIRONMENT
WS = WATER SUPPLY

COLORADO

O&M JUSTIFICATION SHEET

PROJECT NAME: Bear Creek Lake, CO

AUTHORIZATION: PL 90-483 (Recreation, Flood Control, Fish & Wildlife), PL 89-72 (Recreation)

LOCATION AND DESCRIPTION: Bear Creek Dam is located in the Denver metropolitan area on the southwest edge of Lakewood at the confluence of the Bear Creek and Turkey Creek. Construction was authorized in 1968 and was completed in 1982. The dam consists of two segments commonly referred to as the Main Embankment and the South Embankment. The main embankment measures 5,300 feet in length and has a maximum height of 179.5 feet; and the south embankment measures 2,100 feet in length with a maximum height of 65 feet. The reservoir impounded by the dam is 0.5 miles long with a maximum depth of 48 feet at the dam. The primary purpose of the dam is flood damage reduction. Fish and wildlife, and recreation are also authorized purposes.

CONFERENCE AMOUNT FOR FY 2013: \$ 840,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 467,000 O: \$ 455,000 T: \$ 912,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 884,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes rehabilitation of the earth cut spillway to repair active erosion on the downstream end.

RC: \$ 11,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 17,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$3,800,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Chatfield Lake, CO

AUTHORIZATION: PL 81-516, PL 99-662, PL 89-72, PL 93-251

LOCATION AND DESCRIPTION: Chatfield Dam is located in the Denver metropolitan area southwest of Denver on the South Platte River. Construction was authorized in 1967 and was completed in 1975. The dam measures 13,136 feet in length and has a maximum height of 147 feet. Chatfield Lake is 2.0 miles long with a maximum depth of 47 feet at the intake tower. The project provides benefits to flood damage reduction, fish and wildlife, water supply, and recreation.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,445,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 443,000 O: \$ 1,404,000 T: \$ 1,847,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 1,582,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project.

RC: \$ 177,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the following routine activities will include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 0 – NA

EN: \$ 88,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$10,500,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cherry Creek Lake, CO

AUTHORIZATION: PL 77-228, PL 78-534, PL 79-732

LOCATION AND DESCRIPTION: Cherry Creek Dam is located in the Denver metropolitan area in Aurora, Colorado. Construction of the dam was authorized in 1948 and was completed in 1950. The dam measures 14,300 feet in length and has a maximum height of 141 feet. Cherry Creek Reservoir is 3.25 miles long with a maximum depth of 46 feet at the intake tower under normal operation. The project provides benefits for flood damage reduction, fish and wildlife, and recreation.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,518,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 557,000 **O:** \$ 1,390,000 **T:** \$ 1,947,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 1,798,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes installation of additional relief wells to control embankment under seepage and corrosion repairs and repainting of flood tunnel emergency gates.

RC: \$ 123,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the following routine activities will include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans. Program includes funding for park improvements cost shared with the State of Colorado.

H: \$ 0 – NA

EN: \$ 26,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$1,150,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

IDAHO

O&M JUSTIFICATION SHEET

PROJECT NAME: Albeni Falls Dam, ID

AUTHORIZATION: Construction of a multipurpose dam and powerhouse was authorized by the Flood Control Act of 1950 (Public Law 516, 81st Congress, Second Session with reference to Senate Doc 9, 81st Congress, 1st Session) Navigation, hydroelectric power and flood control are authorized under Public Law 81-516. Recreation was authorized in the Flood Control Act of 1944, Section 4 (PL 78-534).

LOCATION AND DESCRIPTION: Albeni Falls Dam is located 26 miles west of Sandpoint, Idaho and 4 miles east of Newport, WA, near the Washington/Idaho border on the Pend Oreille River in Bonner County, ID. The dam is a 90-foot-high concrete gravity, gate-controlled structure with a spillway 472 feet long. Overall length, including the non-overflow abutment section, is 755 feet. Ten spillway gates are the vertical lift roller-chain type. The powerhouse contains three Kaplan turbines and generators for a total installed rated capacity of 42,600 kilowatts. The project is multi-purpose, providing flood control, power generation, and regulation of stream flow for 15 downstream federal and non-federal hydroelectric projects. Lake Pend Oreille water storage seasonally augments flows on the Columbia and Pend Oreille Rivers for power production downstream. Other purposes include navigation, recreation, and fish and wildlife conservation.

CONFERENCE AMOUNT FOR FY 2013: \$1,260,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$434,000 O: \$810,000 T: \$1,244,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$29,000 - Albeni Falls Project provides flow augmentation for downstream navigation interests.

FRM: \$20,000 - Albeni Falls provides flood protection for upstream interests.

RC: \$1,143,000 - Albeni Falls has four major recreation areas and two day-use areas, with the largest campground program in Seattle District. The bulk of our budget is targeted for operating and maintaining recreation areas safely for public use. This includes hiring park attendants; recreation area garbage collection and grounds maintenance; utilities for all the facilities; maintaining the grounds, campsites, and beaches; water safety activities; and security for our visitors. A Class B Visitor Center with interpretive displays, restrooms, a theatre, and viewing areas is also operated and maintained.

H: \$0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is directly funded by Bonneville Power Administration.

EN: \$52,000 - Albeni Falls must assure compliance with environmental mandates and legal requirements in areas such as mitigation compliance, endangered species protection, cultural resources management, healthy & sustainable lands and waters, level one natural resources inventory completion, and master plan completion.

WS: \$0 - N/A

OTHER INFORMATION: Total visitation to this project for FY12 was 277,898 visitors.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Seattle

Albeni Falls Dam, ID

O&M JUSTIFICATION SHEET

PROJECT NAME: Dworshak Dam and Reservoir, ID

AUTHORIZATION: PL 87-874 (Flood Control Act of 1962)

LOCATION AND DESCRIPTION: A multi-purpose project located in Northern Idaho on the north fork of the Clearwater River; near Orofino, ID. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$2,730,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,157,000 **O:** \$3,645,000 **T:** \$4,802,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$449,000 – Funds for Emergency Action Plan revision, dam safety routine activities for instrumentation data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures Safety inspections. Provides the navigation component for the operations and maintenance of the joint features of the project.

FRM: \$2,424,000 – Funds routine operations and maintenance of the dam, routine bridge inspections, instrumentation maintenance and repair, Hydraulic Steel Structures inspections, update emergency notification plan, dam safety training, flood damages reports and inspection and data collection. Non-routine will include inspection of the spillway gates, redesign of the locking mechanism of the eccentric cylinder, evaluation of the crane and replacement of a deteriorated bridge crossing over railroad tracks with an at grade crossing. Provides the flood risk management component for the operations and maintenance of the joint features.

RC: \$849,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage outgranted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine O&M of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$1,080,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. In an effort to manage and conserve natural resources, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Funding also will be used for fish hatchery operations and biological opinions requirements and commitments to Native American tribes' ancestral remains affected by project operation.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a reservoir that has a gross storage capacity of 3,468,000 acre-feet of water, a powerhouse with an installed capacity of 400 Megawatts, 30,935 acres of land that provides recreation facilities and wildlife mitigation habitat, and the Dworshak National Fish Hatchery.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Dworshak Dam and Reservoir, ID

O&M JUSTIFICATION SHEET

PROJECT NAME: Lucky Peak Dam and Lake, ID

AUTHORIZATION: PL 79-526 (Flood Control Act of 1946)

LOCATION AND DESCRIPTION: Project is located in Southern Idaho on the Boise River, 15 minutes from Boise, Idaho.

CONFERENCE AMOUNT FOR FY 2013: \$2,350,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$641,000 O: \$1,742,000 T: \$2,383,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$1,493,000 – Funding will be used to meet the operations and maintenance requirements of the Flood Risk Management mission. Activities include performing routine operations of the dam, routine maintenance, routine bridge inspections, instrumentation maintenance and repair, to update emergency notification plan, dam safety training, security guards, flood damages reports and inspection and data collection.

RC: \$756,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – N/A

EN: \$134,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for water quality activities and section 106 funding required for cultural resources mandates, clearances and inspections.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a flood control and irrigation reservoir that has a gross storage capacity of 306,000 acre-feet of water. The reservoir and 4,288 acres of land provides recreation facilities to over a million visitors annually and valuable wildlife mitigation habitat.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

IOWA

O&M JUSTIFICATION SHEET

PROJECT NAME: Missouri River Fish and Wildlife Recovery, IA, KS, MO, MT, NE, ND & SD

AUTHORIZATION: Water Resource and Development Act (WRDA) 1986 & 1999 and WRDA 2007

LOCATION AND DESCRIPTION: The Missouri River Recovery Program (MRRP) is authorized to construct habitat features necessary to comply with the USFWS' 2003 Missouri River Biological Opinion and to mitigate for construction of the Missouri River Bank Stabilization and Navigation Project. The MRRP is located on the lower 800 miles of the Missouri River. Habitat features include numerous land tracts purchased in fee that have been restored with native vegetation and include aquatic features such as side channel chutes, 'notches' and other alterations of river training structures. Day-to-day site management of land tracts is provided by various State and Federal Agencies with funding by the Corps of Engineers. This project is split between Omaha District, Sioux City, IA, to Rulo, NE, and Kansas City District, Rulo, NE, to the mouth.

CONFERENCE AMOUNT FOR FY 2013: \$ 0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,100,000 O: \$ 1,100,000 T: \$ 2,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA.

FRM: \$ 0 – NA.

RC: \$ 0 – NA.

H: \$ 0 – NA.

EN: \$ 2,200,000 – Operation and maintenance of Missouri River Fish and Wildlife mitigation sites by the Corps of Engineers and its state and local partners. Work includes basic land and water management such as habitat plantings, maintenance of water control structures, control of noxious species, dredging of chutes and backwaters, protection of endangered species, and management of public use including signing and patrols to protect established habitats. This funding provides for overall stewardship of land tracts, physical management of land tracts to maintain desired conditions, periodic maintenance of chutes and modified river training structures, and monitoring of terrestrial and aquatic habitat to ensure habitats are performing as designed.

WS: \$ 0 – NA.

OTHER INFORMATION: NA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Missouri River, Sioux City to Mouth, IA,NE,KS & MO

AUTHORIZATION: Flood Control Acts of 1912 (P.L. 62-241), 1917 (P.L. 64-), 1925 (P.L. 68-585), 1927 (P.L. 70-560), 1930 (P.L. 73-67), 1935 (P.L. 73-409), 1945 (P.L. 79-14), 1970 (P.L. 91-611)

LOCATION AND DESCRIPTION: The Missouri River project was designed to be a self-scouring channel that uses 5,000 separate river structures and the erosive forces of flowing water to maintain channel widths and depths. Dike and revetment structures must be maintained in design condition to achieve the desired flow patterns and channel dimensions necessary for commercial navigation. This project is split between Omaha District, Sioux City, IA, to Rulo, NE, and Kansas City District, Rulo, NE, to the mouth.

CONFERENCE AMOUNT FOR FY 2013: \$ 7,767,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 5,630,000 O: \$ 2,754,000 T: \$ 8,384,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,381,000 – Critical operations and maintenance activities to support minimum channel requirements. Operations funding supports river field offices which includes some support staff; channel reconnaissance; hydro-surveys; mile board maintenance; and daily boat reports to include mileage, tonnage, and obstacles. Maintenance funding includes: structural improvements of low-flow navigation problem areas; repair of damaged dikes for bank stabilization and navigation; and emergency dredging in support of navigation activities. Significant costs include: floating plant labor costs; fleet maintenance costs; purchase of rock for repairs; plant replacement and improvement program costs; General Services Administration vehicles, fuel and travel.

FRM: \$0 – NA.

RC: \$0 – NA.

H: \$0 – NA.

EN: \$1,003,000 – Operation and maintenance of Missouri River Fish and Wildlife mitigation sites by the States of Missouri, Kansas, and the US Fish and Wildlife Service. Work includes maintenance of habitat plantings and mitigation water control structures, control of noxious species, installation of annual wildlife food plots, protection of endangered species, and management of public use including signing and patrols to protect mitigation site habitats, and Endangered Species Act compliance. Most activities in Omaha district are performed in-house, while most activities in Kansas City district are performed with contract actions with US Fish and Wildlife Service, and the states of Missouri and Kansas.

WS: \$0 – NA.

OTHER INFORMATION: Tonnage of commodities transported is approximately 4.3 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City Missouri River, Sioux City to Mouth, IA,
NE, KS, MO

O&M JUSTIFICATION SHEET

PROJECT NAME: Rathbun Lake, IA

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located on the Chariton River, near Centerville, IA, and is located in Wayne, Lucas, Monroe and Appanoose Counties. The project includes an earth-fill dam 10,600 feet long with a crest about 102 feet above the original streambed. The dam has gated outlet works and an uncontrolled chute-type spillway, and total reservoir storage capacity of 570,500 acre-feet. Regional Benefits include: Flood damage reduction on the Chariton, Missouri and Mississippi Rivers; recreation; fish and wildlife management; downstream water quality improvement; and water supply for one of the largest rural water systems in the country, the Rathbun Regional Water Association (RRWA).

CONFERENCE AMOUNT FOR FY 2013: \$ 2,359,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 963,000 O: \$ 2,229,000 T: \$ 3,192,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$2,073,000 - Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special item included in FY14 budget amount is Phase 2 to update the water control manual to prevent flood damages around lake from high water and repairs to Buck Creek sewage lagoon.

RC: \$979,000 - Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Typical operation and maintenance activities include interpretive services, water safety, mowing, sign program, fee collection, and law enforcement; and maintenance of miscellaneous facilities such as campgrounds, access roads, parking areas, trails, visitor center, kiosks, shower houses, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$133,000 - Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$7,000 - Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$159,000,000. FY12 public visitation was 675,000 which produced \$255,000 in associated recreation fees. The Project provides 2.5B gallons of water annually to approx 80,000 customers via the RRWA distribution of allocated storages. Also, the project utilizes volunteers and partnerships to assist with maintenance activities. Their work was valued at over \$68,000 in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Rathbun Lake, IA

KANSAS

O&M JUSTIFICATION SHEET

PROJECT NAME: Clinton Lake, KS

AUTHORIZATION: Flood Control Act of 1962 (P.L. 87-874)

LOCATION AND DESCRIPTION: The project is located on the Wakarusa River, 1 mile west of Lawrence, in Douglas County, Kansas. The project includes an earth-fill dam about 9,250 feet long with a crest about 114 feet above the original streambed, and reservoir total storage capacity of 411,200 acre-feet. This project provides flood protection, water supply, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,257,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 602,000 O: \$ 1,851,000 T: \$ 2,453,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,449,000 – Critical routine operations and maintenance including the dam, control tower, and outlet works. Funds cover hydrologic engineers in the reservoir control center, river gauging stations, and onsite personnel to operate the gates for flood and low flow releases. Also includes district support to address harmful algae blooms.

REC: \$860,000 - Operations and maintenance of facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing for approximately 1,700,000 visitors per year. Clinton Lake collects \$170,000 in associated recreation related fees. In FY12, \$105,000 was used to maintain recreation facilities including roads, water and wastewater treatment, and showers and restrooms. The project depends on service contracts in the amount of \$217,000, \$85,000 in utility cost, \$480,000 for labor, and \$22,000 in vehicles expenses to meet the mission. Clinton Lake also utilizes volunteer labor valued at \$85,000 to assist with maintenance activities, helping to reduce some expenses.

H: \$0 – NA.

EN: \$137,000 – Basic stewardship and curation of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Investigations include project review, field investigations, and coordination with various state historical societies for 144 sites. Other activities include maintaining and improving prairie grass stands, improve wildlife carrying potential, control erosion through maintenance of residues and the maintenance of terraces, and enhance wildlife carrying potential by providing wildlife food plots on approximately 14,400 acres. Conservation efforts also focus on the control and reduction of noxious weeds on approximately 10,000 acres and invasive species 5,000 acres.

WS: \$7,000 – Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: Visitation last year was approximately 8,766,000 visitor hours. Damages prevented in 2011 equaled \$2,300 and cumulative damages prevented from project implementation has totaled \$1,209,540,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Clinton Lake, KS

1 May 2013

NWD-124

O&M JUSTIFICATION SHEET

PROJECT NAME: Hillsdale Lake, KS

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located approximately 12 miles above the mouth of Big Bull Creek, a tributary of the Marais des Cygnes River and about 2 ½ miles west of Hillsdale, in Miami County, Kansas. The project includes an earth-fill embankment about 11,600 feet long (including approximately 3,300 feet of dike section) with a crest about 100 feet above the original streambed, and reservoir storage capacity of 163,900 acre-feet. This project provides flood protection, water supply, water quality, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 835,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 416,000 O: \$ 713,000 T: \$ 1,129,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,019,000 – Critical routine operations and maintenance flood risk management including the dam, control tower, and outlet works. Funds cover hydrologic engineers in the reservoir control center, river gauging stations, and onsite personnel to operate the gates for flood and low flow releases. Also includes, rehabilitation of dam and north access roads which serve as a major commuter route for local residents, R30 insulation for project facilities, and district support to address harmful algae blooms.

RC: \$64,000 – The recreation funding at Hillsdale Lake provides for the operation and maintenance of facilities and oversight of Kansas Department of Wildlife, Parks, and Tourism, leased lands for activities for the general public such as camping, fishing, boating, trails, hunting and site seeing for approximately 350,000 visitors per year. In FY-12, \$16,000 was used to maintain recreation facilities including roads, visitor center, and wastewater treatment. Hillsdale Project has a staff of 2 permanent employees with a recreation related labor cost of \$70,000 for FY-12. Hillsdale Lake also utilizes volunteer labor valued at \$30,000 to assist in the visitor's center and to perform maintenance activities to reduce expenses.

H: \$0 – NA.

EN: \$41,000 – Provides for oversight of basic stewardship, and curation, of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Investigations include project review, field investigations, and coordination with various state historical societies for 142 sites. Other activities include maintaining and improving prairie grass stands, improve wildlife carrying potential, and enhance wildlife carrying potential by providing wildlife food plots on approximately 8,000 acres. Conservation efforts also focus on the control and reduction of noxious weeds on approximately 6,000 acres and invasive species 4,000 acres.

WS: \$5,000 – Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: NA

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Hillsdale Lake, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Kanopolis Lake, KS

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: The project is located on the Smoky Hill River, about 184 river miles above the mouth of the stream, and about 11 miles northwest of Marquette, Kansas. The project includes an earth-fill dam with a crest of about 121 feet above the original streambed, having a total length of 15,360 feet, including dike sections on the left and right abutments; and reservoir storage capacity of 413,500 acre-feet. This project provides flood protection and recreation for central Kansas.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,513,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 330,000 O: \$ 1,101,000 T: \$ 1,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$769,000 – Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special item included in FY14 budget amount is service bridge pier repair and District support to address harmful algae blooms.

RC: \$473,000 – Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Typical operation and maintenance activities include interpretive services, water safety, mowing, sign program, fee collection, and law enforcement; and maintenance of miscellaneous facilities such as campgrounds, access roads, parking areas, trails, visitor center, kiosks, shower houses, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$181,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$8,000 – Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$1,650,000. FY12 public visitation was 250,000 which produced \$75,000 in associated recreation fees. The Project provides 225,000,000 gallons of water annually to customers via the Ellsworth County Rural Water District #5. Also, the project utilizes volunteers and partnerships to assist with maintenance activities, work valued at over \$21,000 in FY12, helping to reduce some of the operation and maintenance expenses.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Melvern Lake, KS

AUTHORIZATION: Flood Control Acts of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located in Osage County, Kansas, 8 miles south of Lyndon. The project includes an earth-fill dam about 9,700 feet long with a crest about 119 feet above the original streambed, and reservoir storage capacity of 358,600 acre-feet. This project provides flood protection, water supply, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,092,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$440,000 O: \$1,733,000 T: \$2,173,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,271,000 – Provide critical routine operations and maintenance functions on a 9,700 foot earthen dam structure with a volume of 9,100,000 cubic yards. The embankment also includes an intake/double gated outlet structure with an 822 foot conduit, and a 200 foot uncontrolled spillway. During the drought period of FY 2012, flood damages prevented by project operations were \$196,000. Cumulative flood damages prevented from 1973 through FY 2012 total \$221,000,000. In addition to flood control, Melvern Lake also provides critical support to downstream area water supply and water quality valued at over \$4,800,000 each FY.

RC: \$766,000 - Funding is used for operation and maintenance of recreation facilities on Melvern Lake including campgrounds, beaches, day use parks, fishing docks, and boat ramp. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities to support the 6,495,400 visitor hours per year. The 6,930 acre Melvern Lake provides the various Recreational Activities at 5 Public Use Areas. Maintenance of Recreation facilities - \$51,000; service contracts such as law enforcement and gate attendants - \$260,000; Labor to support mission - \$433,000; General Services Administration vehicles - \$24,000; and other items. Fees collected are approximately \$280,000. FY12 Volunteer savings per year – 56 volunteers provided 3,508 hours for \$76,000.

H: \$0 – NA.

EN: \$130,000 – Provides for basic stewardship of cultural resources and compliance with Sections 106 and 110 of the National Historic Preservation Act, to include project review, field investigations, and coordination with various state historical societies. Funding at this level will provide minimal boundary surveillance, prescribed burning and lake sampling.

WS: \$6,000 – Critical routine operations performed under the Water Supply Agreement. Supplemental support to downstream area water supply and quality valued at over \$4,800,000 occurred in FY12.

OTHER INFORMATION: Visitation last year was approximately 5,503,000 visitor hours.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Milford Lake, KS

AUTHORIZATION: Flood Control Act of 1954 (P.L. 81-780)

LOCATION AND DESCRIPTION: The project is located in Geary, Clay, and Riley Counties, on the Republican River near the village of Alida, about 10 miles above the confluence of the Republican and Smokey Hill Rivers, which form the Kansas River; near Fort Riley, Kansas and about 4 miles northwest of Junction City, Kansas. The project includes an earth-fill dam about 6,300 feet long with a crest about 143 feet above the original streambed, and reservoir storage capacity of 1,131,000 acre-feet. This project provides flood protection, water supply, water quality control, fish and wildlife management, navigation supplementation, and recreation for northeast Kansas.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,113,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 649,000 O: \$ 1,726,000 T: \$ 2,375,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,360,000 - Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special items included in FY14 budget amount are installation of potable water at project office, dam relief well rejuvenation and District support to address harmful algae blooms.

RC: \$929,000 – Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Typical operation and maintenance activities include interpretive services, water safety, mowing, sign program, fee collection, and law enforcement; and maintenance of miscellaneous facilities such as campgrounds, access roads, parking areas, trails, visitor center, kiosks, shower houses, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$81,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$5,000 – Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented in FY12 limited to \$25,000 due to widespread drought across Midwest. Cumulative flood damages prevented from project implementation has totaled \$1,316,000,000. FY12 public visitation was 850,000 which produced \$160,000 in associated recreation fees. Also, the project utilizes volunteers and partnerships to assist with maintenance activities, work valued at over \$64,000 in FY12, helping to reduce some of the operations and maintenance expenses.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Milford Lake, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Perry Lake, KS

AUTHORIZATION: Flood Control Act of 1954 (P.L. 81-780)

LOCATION AND DESCRIPTION: The project is located on the Delaware River, 2 miles north of Perry, in Jefferson County, Kansas. The project includes an earth-fill dam about 7,750 feet long with a crest about 121 feet above the original streambed, and reservoir storage capacity of 715,500 acre-feet. This project provides flood protection, water supply, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,259,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 696,000 O: \$ 1,627,000 T: \$ 2,323,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,118,000 - Perry reservoir provides critical support to the Missouri River during times of flooding and during periods of drought. Funds will also be used to purchase a work barge, provide rejuvenation of the relief well system and the required District support of harmful algae bloom program.

RC: \$1,037,000 - The recreation funding at Perry Lake provides activities for the general public such as camping, fishing, boating, trail activities, hunting and site seeing adventures for approximately 5,000,000 visitor hours per year that generates \$243,000 in collected fees. Perry Lake uses volunteers to assist with maintenance activities with a value of \$263,000 in savings to the Government. The Maintenance of Recreations Facilities for FY12 was \$223,000. With a staff of only ten permanent employees and one summer hire, and a labor cost of \$410,000 per year, the project depends on service contracts in the amount of \$418,000, and \$26,000 in vehicles expenses to meet the mission.

H: \$0 – NA

EN: \$163,000 - Provides for basic stewardship of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Investigations include project review, field investigations, and coordination with various state historical societies. Also, maintain and improve prairie grass stands, improve wildlife carrying potential, control erosion through maintenance of residues and the maintenance of terraces, and enhance wildlife carrying potential by providing wildlife food plots..

WS: \$5,000 - Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: Visitation last year was approximately 5,316,000 visitor hours. Damages prevented in 2011 equaled \$12,665,000 and cumulative damages prevented from project implementation has totaled \$5,438,812,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pomona Lake, KS

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located in Osage County, Kansas, approximately 8 miles northwest of Pomona and 34 miles upstream from Ottawa. The project includes an earth-fill dam about 7,750 feet long with a crest about 119 feet above the original streambed, and reservoir storage capacity of 239,500 acre-feet. This project provides flood protection, water quality, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,053,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 655,000 O: \$ 1,349,000 T: \$ 2,004,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,132,000 – Critical routine operations and maintenance functions on a 7,750 foot earthen dam structure with a volume of 5,200,000 cubic yards. The embankment also includes an intake/double gated outlet structure with a 720 foot conduit, and a 200 foot uncontrolled spillway. During the drought period of FY12, flood damages prevented by project operations were \$0. Cumulative flood damages prevented from 1963 through FY12 total \$210,026,000.

RC: \$729,000 - Funding is used for operation and maintenance of recreation facilities on Pomona Lake including campgrounds, beaches, day use parks, fishing docks, boat ramp, etc. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities to support the 2,929,377 visitor hours per year. The 3,865 acre Pomona Lake provides the various recreational activities at 7 public use areas including maintaining recreation facilities - \$58,900; service contracts such as law enforcement and gate attendants - \$190,000; Labor to support mission - \$459,000; General Services Administration vehicles - \$25,000; and other items. Fees collected are approximately \$139,000. FY12 volunteer savings per year – 7 full time plus groups provided 2,979 hours for \$65,000.

H: \$0 – NA.

EN: \$139,000 - This provides for basic stewardship of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Also included is tree cutting/pruning, seeding, erosion control projects, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and bald eagle monitoring of eagle nests.

WS: \$4,000 - Critical routine operations performed under the Water Supply Agreement. 6,691 acre feet of water was supplied for supplemental water quality and supply in FY12, in addition to the 55,000,000 gallons of routine water supply.

OTHER INFORMATION: Visitation last year was approximately 2,929,377 visitor hours.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Pomona Lake, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Tuttle Creek Lake, KS

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-645), WRDA 1986 (P.L. 99-662)

LOCATION AND DESCRIPTION: The project is located at mile 10 on the Big Blue River, 6 miles north of Manhattan in Riley County, Kansas. An earth and rock-fill dam 7,500 feet long with a crest about 166 feet above the original streambed, gated outlet works, and gated concrete spillway. The reservoir storage capacity is 2,141,300 acre-feet. The project provides flood protection, low-flow supplementation to the Kansas and Big Blue Rivers, navigation supplementation on the Missouri River, water quality, and recreation to the State of Kansas and the region.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,245,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 927,000 O: \$ 1,166,000 T: \$ 2,093,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,342,000 - Critical operation and maintenance for: 1.5 miles embankment; 4 hydraulic service gates, an emergency gate, several hundred instruments (dam safety): Spillway; 18 tainter gates and bridge deck (State Highway K-13): Blue Rapids Levee; one mile long with instrumentation (dam safety), two gravity sluice gates, and Pumping plant. Planned expenditures include relief well rejuvenation (critical to the dam safety) and District support to address harmful algae bloom and zebra mussel monitoring.

RC: \$509,000 – Operate two Class A campgrounds and four day-use park areas, includes \$390,000 labor, \$26,000 service contracts, \$42,000 in miscellaneous contractual services and supplies, and \$32,000 in General Services Administration vehicles. Project has no law enforcement supplemental contracts. One Class A campground and three day-use areas are monitored by volunteer labor (camp hosts and custodians). Annual average visitation is 1,993,000 visitor hours.

H: \$0 – NA.

EN: \$235,000 – Basic stewardship of cultural resources and compliance with Sections 106 and 110 of National Historic Preservation Act. Also included is erosion control projects, gate installation and maintenance, controlled burns, detection and control of invasive species, water sampling, and bald eagle nest monitoring. The Missouri River Biological Opinion recognizes that regulation of the Kansas River for flood control and navigation has adverse impacts on least tern and piping plover nesting on the Kansas River. Work includes monitoring and evaluation of nesting activities and fulfills requirements of the current Biological Opinion.

WS: \$7,000 - Critical routine operations for Water Supply Agreement flows for water supply and water quality are met, and also at times navigation support flows for the Missouri River are met.

OTHER INFORMATION: Damages prevented in 2011 equaled \$133,886,000 and cumulative damages prevented from project implementation has totaled \$6,553,330,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Tuttle Creek, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Wilson Lake, KS

AUTHORIZATION: Flood Control Act of 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: Wilson Lake is located near Russell, in Russell County, Kansas. A small arm of the lake extends into Lincoln County. The project includes an earth-fill dam about 5,600 feet long with a crest about 172 feet above the original streambed, and reservoir storage capacity of 766,300 acre-feet. The Corps of Engineers lake project purposes include flood protection, recreation, navigation (until irrigation is developed), irrigation (when developed), fish and wildlife, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,515,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 922,000 O: \$ 1,421,000 T: \$ 2,343,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,746,000 - Critical routine operations and maintenance for flood risk management. Also, repair elevator controls in tower, Zebra Mussel protection phase I, design/build wind turbine, periodic bridge inspection, flume and piezometers at Station 70, spillway stage frequency study, embankment cracking study and District support to address harmful algae bloom.

RC: \$512,000 - Activities required to open parks to accommodate visitation. 13 contracts consisting of park attendant, custodian, janitor, refuse collection, herbicide, and mowing will account for \$191,000. Electric and water utilities are anticipated to account for \$110,000.

H: \$0 – NA.

EN: \$77,000 – Provides for basic stewardship, and curation of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act for 84 sites. Investigations include project review, field investigations, and coordination with various state historical societies. Other activities include maintaining and improving prairie grass stands, improve wildlife carrying potential, control erosion through maintenance of residues and the maintenance of terraces, and enhance wildlife carrying potential by providing wildlife food plots on approximately 75 acres. Base effort for the prevention of the direct, immediate degradation of loss of natural resources. Increased effort to return project prairie lands to a sustainable condition through the implementation of prescribed fire and invasive species management. Conservation efforts also focus on the control and reduction of noxious weeds and invasive species on approximately 4,500 acres and invasive species.

WS: \$8,000 - Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: FY 2012 visitation was 200,928 with 2,127,723 visitor hours. Volunteer hours were 759 hours valued at \$17,000. FY 2012 Recreation revenue collected was \$215,000. Damages prevented in 2012 equaled \$11,000 and cumulative damages prevented from project implementation has totaled \$1,650,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District Kansas City

Wilson Lake, KS

MISSOURI

O&M JUSTIFICATION SHEET

PROJECT NAME: Harry S. Truman Dam and Reservoir, MO

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761), 1941(P.L. 77-228), 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: Harry S Truman Dam is located 1 mile west of Warsaw, Missouri. This project has an earth-fill dam about 5,000 feet long with a crest about 126 feet above the original streambed; a gate-controlled overfall spillway; and powerhouse with six inclined pump-generating units with a combined nameplate capacity of 160,000 kilowatts; and 5,187,000 acre-feet reservoir storage capacity. This project provides flood protection, hydropower, water supply, fish and wildlife, and recreation to central Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 7,834,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 4,440,000 O: \$ 4,725,000 T: \$ 9,165,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$596,000 – Critical joint routine operations (i.e. water control/management), maintenance, and repairs necessary to avoid forced facility closures, dam/life safety concerns, lessee/outgrant non-compliance issues, non-compliance with environmental laws and regulations. Funds also used to perform critical dam safety activities (i.e. dam safety inspections, instrumentation, engineering analysis, etc.).

RC: \$2,446,000 – Critical routine operations and maintenance to include labor, service contracts, utilities, General Services Administration fleet expenses, materials and supplies to accomplish the recreation mission. Recreation facilities under Corps of Engineers management include: 9 Campgrounds with over 1100 campsites, 6 swim beaches, 13 boat ramps and the associated facilities to support these areas. The program supports over 16M visitor hours and generates recreation revenues of \$533,000. Volunteers contributed labor valued at \$199,000.

H: \$5,299,000 – Funds critical routine operations, maintenance, and repairs necessary to prevent forced unit outages and lost power production and revenue for the U.S. Treasury. Average annual capacity and energy benefits of the plant is \$20,700,000. Funds also used to ensure compliance with North American Electric Reliability Corporation standards avoiding notice of violations and costly penalties and repair of Unit 6 main shaft coupling stud failure.

EN: \$817,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$ 7,000 – Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$1,870,000,000 and average annual capacity and energy benefit for the power plant is \$20,700,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City Harry S. Truman Dam & Reservoir, MO

O&M JUSTIFICATION SHEET

PROJECT NAME: Little Blue River Lakes, MO

AUTHORIZATION: Flood Control Acts of 1968 (P.L. 90-483)

LOCATION AND DESCRIPTION: This project consists of two lakes in Jackson County, Missouri, located in Kansas City, Missouri and suburban communities. The Blue Springs Lake site is on the East Fork of the Little Blue River about ½ mile south of U.S. Highway 40, and the Longview Lake site is on the main stem at approximately 109th Street. The Blue Springs Dam is an earth-fill embankment about 2,500 feet long with a crest about 80 feet above the original streambed, and total reservoir storage capacity of 26,600 acre-feet. The Longview Dam is an earth-fill embankment about 1,900 feet long with a crest about 117 feet above the original streambed, and total reservoir storage capacity of 46,900 acre-feet. The project provides flood protection, water quality, and recreation to the surrounding area, and greater metropolitan Kansas City, Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,154,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 344,000 O: \$ 583,000 T: \$ 927,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$835,000 – Funding used to provide critical routine operations and maintenance for flood risk management on both lake projects plus special item work for FY14 to include remove and replace Blue Springs and Longview Control Tower electrical conduit and fixtures, Longview bridge inspection and periodic inspection and dewatering.

RC: \$19,000 – Funding used to support approximately 900K visitor hours per year and for operation and maintenance of 1600 sf Administrative and Information Center and picnic pavilion, Coordination with Cost Share Partner; janitorial contract; labor to support mission; and General Services Administration vehicle cost.

H: \$0 – NA.

EN: \$67,000 – To provide basic cultural resources stewardship and compliance with Sec. 106 & 110 of the National Historic Preservation Act, to include investigations, project review, field investigations, and coordination with state historic preservation officers and Native American Tribes. Other activities include oversight of historic properties and updating historical property management plans. Also, provide basic resource management program oversight and protection programs, and real estate program guidance and oversight. Plant trees, mow early succession fields, spray herbicide to control invasive species.

WS: \$6,000 – Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: Cumulative damages prevented since project implementation has totaled \$50,813,000. Volunteers provided 1460 volunteer labor hours valued at \$32,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Long Branch Lake, MO

AUTHORIZATION: Flood Control Acts of 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: The project is located on the East Fork Little Chariton River in north central Missouri, about 2 miles west of Macon, in Macon County. An earth-fill dam about 3,800 feet long with a crest about 76 feet above the original streambed, and total reservoir storage capacity of 64,500 acre-feet. This project provides flood protection, water supply, water quality, and recreation for north central Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,093,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 181,000 O: \$ 826,000 T: \$ 1,007,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$815,000 – Critical Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special item included in FY14 budget amount is 5-yr periodic dam safety inspection.

RC: \$118,000 – Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Parks at this project are operated by the State of Missouri which keeps operation and maintenance costs for recreation at a minimum. Typical operation and maintenance activities include interpretive services, water safety, sign program, and law enforcement; and maintenance of misc. facilities such as access roads, parking areas, visitor center, kiosks, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$69,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$5,000 – Basic administration of existing Water Supply Agreement.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$50,200,000. FY12 public visitation was 157,000. The Project collected approximately \$95,000 from water supply revenues in FY12 from the City of Macon, MO. Also, the project utilizes volunteers and partnerships to assist with maintenance activities, work valued at over \$2,000 in FY12, helping to reduce some of the operation and maintenance expenses.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pomme de Terre Lake, MO

AUTHORIZATION: Flood Control Acts of 1938 (P.L. 75-761), 1944 (P.L. 78-534), 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: The project is located in Hickory and Polk counties, 4 miles south of Hermitage and 20 miles north of Bolivar, Missouri. The project includes an earth and rock-fill dam about 4,630 feet long plus a dike section about 2,790 long on the left abutment with a crest about 156 feet above the original streambed, and total reservoir storage capacity of 644,200 acre-feet. This project provides flood protection, water quality, and recreation to southwest Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,170,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 608,000 O: \$ 1,689,000 T: \$ 2,297,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,044,000 - Funding supports critical routine operations and maintenance of dam and appurtenant structures. Funds are utilized for labor, service contracts, utilities, General Services Administration fleet expenses, materials and supplies. The dam provides direct flood protection for 21 river miles below the dam. The reservoir and dam provide flood reduction benefits for the Osage and Missouri Rivers.

RC: \$894,000 – This funding supports critical routine operations and maintenance of the projects recreation program. It includes service contracts, utilities, General Services Administration fleet expenses, materials and supplies. Recreation facilities under Corps of Engineers management include: 6 Day Use Areas, 6 Campgrounds with over 400 campsites, 2 swim beaches, 6 boat ramps and the associated facilities to support these areas. The recreation program supports almost 12 million visitor hours and generates recreation revenues of \$286,000. Volunteers contribute 5,400 hours of labor worth \$119,000 to enhance the recreation program.

H: \$0 – NA.

EN: \$359,000 – Funding will be used to operate the Shoreline Management Program. It is the largest shoreline management program in Northwestern Division with 645 private boat docks, 346 vegetation modification permits and 68 private real estate licenses. This also funds the fisheries and wildlife management program with 7,800 acres of water and 8,100 acres of wildlife lands. The funding provides for basic stewardship of cultural resources and compliance with Sections 106 and 110 of the National Historic Preservation Act, to include project review, field investigations, and coordination with various state historical societies.

WS: \$0 – NA.

OTHER INFORMATION: The economic impact of 1.5 million annual visits to Pomme de Terre Lake result in an estimated \$31,300,000 in total sales and creates 600 jobs. During its life the project has provided \$69,169,600 in flood reduction benefits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Pomme de Terre Lake, MO

O&M JUSTIFICATION SHEET

PROJECT NAME: Smithville Lake, MO

AUTHORIZATION: Flood Control Act of 1965 (P.L. 89-298)

LOCATION AND DESCRIPTION: Smithville Lake is about 1 mile northeast of Smithville, and about 5 miles north of Kansas City, in Clay and Clinton counties, Missouri. The project includes an earth-fill dam about 4,200 feet long with a crest about 96 feet above the original streambed; and a dike about 2,400 feet long. The dam has gated outlet works and an uncontrolled service spillway, and a total reservoir storage capacity of 241,500 acre-feet. The project provides flood protection, water supply, water quality, and recreation to the surrounding area, and greater metropolitan Kansas City, Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,312,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 616,000 O: \$ 971,000 T: \$ 1,587,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,299,000 - Critical routine functions on an earthen dam structure, including an intake and outlet structures to include periodic inspection and dewatering, underground fuel storage tank, periodic bridge inspection, periodic failure mode assessment and installation of additional piezometers.

RC: \$123,000 - Operation and maintenance of a 10,000 square foot Class A Visitor Center and Admin facility with trail and group pavilion plus patrol of 31 public access points - \$130,000; Coordination with Cost Share Partners; service contracts such as lawn mowing, janitorial and refuse pickup - \$26,000; Labor to support mission - \$130,000; other items such as General Services Administration vehicles and fuel - \$30,000.

H: \$0 – NA.

EN: \$161,000 – Provides for basic stewardship of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Investigations include project review, field investigations, and coordination with various state historical societies. Provide basic stewardship of soil, water, vegetative and wildlife resources on project lands. Monitor soil erosion on lake shore and implement improvements as necessary by placing rip rap on disturbed areas and planting native grass strips in erosion reduction zones. Also includes admin of 40 agriculture leases and numerous public hunting areas. Removal of invasive species including zebra mussels, lespedeza, multi-flora rose, honey locust, and Russian olives.

WS: \$4,000 - Critical routine operations performed under the Water Supply Agreement, and support to Cities of Smithville and Plattsburg, Missouri, for water supply operations.

OTHER INFORMATION: Cumulative flood damages prevented from 1982 through FY 2012 total \$970,247,100. Project visitation is approximately 1.3 million visitor hours per year. Annual volunteer labor averages 3,281 volunteer hours valued at \$72,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Smithville Lake, MO

O&M JUSTIFICATION SHEET

PROJECT NAME: Stockton Lake, MO

AUTHORIZATION: Flood Control Act of 1954 (Public Law 83-780)

LOCATION AND DESCRIPTION: Stockton Lake is located in Cedar, Dade, and Polk counties, approximately 1 mile east of Stockton, Missouri. The project is a rock-shell dam with impervious core about 5,100 feet long with a crest about 156 feet above the original streambed; a gate-controlled overfall spillway; and a powerhouse with a single generating unit with a nameplate capacity of 45,200 kilowatts. The reservoir storage capacity is 1,651,000 acre-feet. This project provides flood protection, hydropower, water supply, fish and wildlife, and recreation to southwest Missouri.

CONFERENCE AMOUNT FOR FY 2013: \$ 4,664,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,678,000 O: \$ 2,931,000 T: \$ 4,609,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$1,198,000 – Critical routine program joint maintenance and repair costs (i.e. vegetation removal, dam safety inspections, instrumentation, etc.) necessary for the safe operation of the dam, and joint operating costs necessary for water management (water control & quality) activities.

RC: \$1,696,000 – Supports critical routine operations and maintenance of the Stockton Recreation Program. Funds labor, service contracts, utilities, General Services Administration fleet expenses, materials/supplies to accomplish the recreation mission. Recreation facilities under Corps of Engineers management include: 9 campgrounds with over 500 campsites, 5 swim beaches, 10 boat ramps and the associated facilities to support these areas. The program supports over 8 million visitor hours and generates recreation revenues of \$374,000. Volunteers contribute over 2300 hours of labor worth \$52,000.

H: \$1,540,000 - Essential operating costs necessary to meet minimum operating requirements of the power plant, and funds critical routine operations of generation and transmission equipment. The power plant plays a critical part in producing power for customers within the Southwestern Power Administration region. These funds are used to protect from lost power production, lost revenue for the US Treasury, and customers having to purchase replacement power at higher rates.

EN: \$168,000 – This provides for basic stewardship of cultural resources at lake projects and compliance with Sections 106 and 110 of the National Historic Preservation Act. Includes tree cutting/pruning, seeding, erosion control projects, gate installation and maintenance, controlled burns, detection and control of invasive species, water sampling, and bald eagle monitoring of eagle nests.

WS: \$7,000 - Critical routine operations performed under the Water Supply Agreement.

OTHER INFORMATION: Visitation last year was approximately 7,809,000 visitor hours. Damages prevented in 2011 equaled \$144,000 and cumulative damages prevented from project implementation has totaled \$206,831,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Stockton Lake, MO

MONTANA

O&M JUSTIFICATION SHEET

PROJECT NAME: Fort Peck Dam & Lake, MT

AUTHORIZATION: PL 74-409, PL 75-259, PL 75-529, PL 74-409, PL 92-500, PL 93-205, PL 99-662

LOCATION AND DESCRIPTION: The project is located 20 miles southeast of Glasgow, Montana on Montana Highway 24. Construction began in 1933 and was completed in 1940. The dam is 21,026 feet long and has a maximum height of 250.5 feet. The lake behind the dam measures 134 miles long and a maximum depth of 220 feet. The water at Fort Peck provides benefits of the flood damage reduction, power generation, navigation, fish and wildlife, recreation, irrigation, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 5,235,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 391,000 **O:** \$ 5,149,000 **T:** \$ 5,540,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$ 799,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,091,000 - Funding will provide portion of activities serving multiple project purposes allocated to flood risk management.

RC: \$ 1,172,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 1,642,000 – Funding will provide portion of activities serving multiple project purposes allocated to hydropower. Funding for routine O&M activities and management expenses of hydropower facilities are provided by the Fort Peck continuing fund, which is managed by Western Area Power Administration and funded through customer receipts.

EN: \$ 586,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 250,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, from the beginning to FY11, \$12,061,000,000. Plant installed generation capacity of 185 Megawatts, produced \$35,000,000 in power production in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

O&M JUSTIFICATION SHEET

PROJECT NAME: Libby Dam (Lake Kocanusa), MT

AUTHORIZATION: Flood Control Act of 1950 (PL81-516)

LOCATION AND DESCRIPTION: Libby Dam is located on the Kootenai River in Lincoln County, MT, 17 road miles northeast of the town of Libby on State Highway 37. The Libby Dam is a multi-purpose concrete gravity dam. Its operations primarily benefit flood control, power generation and regulation of stream flow for 16 downstream hydroelectric projects. The powerhouse came on line in 1975 has five turbines with a total installed rated capacity of 605 megawatts. Libby Dam is a high head dam and holds back 90 miles of water in Lake Kocanusa. Forty-eight miles of the reservoir lie within U.S. borders, the other 42 miles are in Canada.

CONFERENCE AMOUNT FOR FY 2013: \$1,718,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$442,000 O: \$1,370,000 T: \$1,812,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A.

FRM: \$882,000 - Libby Dam provides storage for downstream flood protection in the Kootenai River and lower Columbia River. Funding will be utilized for operating and maintaining the dam structure, supporting facilities and equipment. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific.

RC: \$416,000 - Recreation is one of the congressionally authorized purposes as part of the enabling legislation that authorized Libby Dam. Included in this mission is a Class A Visitor Center, campgrounds, boats ramps, swimming facilities and day use areas. The bulk of this budget is utilized for operating and maintaining public use areas. This funding also pays for hiring seasonal park rangers to accommodate increased visitation in summer months.

H: \$0 - Routine operation and maintenance of Hydropower plant is direct funded by the Power Marketing Agency.

EN: \$416,000 - Libby Dam carries out the full range of responsibilities in public lands stewardship, including US Fish and Wildlife, Endangered Species Act requirements, Cultural Resources Management, water quality and monitoring, Environmental Compliance Coordination, and forestry. This funding also assures compliance with legal mandates and regulations regarding biological opinions.

WS: \$0 - N/A

OTHER INFORMATION: The visitation for FY12 was 191,379 and the estimated benefit to the local economy was \$4,501,505.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

NEBRASKA

O&M JUSTIFICATION SHEET

PROJECT NAME: Gavins Point Dam & Lewis and Clark Lake, NE & SD

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: Gavins Point Dam is located 4 miles west of Yankton, SD on Highway 52, south across the dam or 13 miles north of Crofton, NE on Highway 121. Gavins Point Dam construction began in 1952 and was completed in 1956. The dam measures 8,700 feet in length and has a maximum height of 74 feet. Lewis and Clark Lake is 25 miles long, creates 90 miles of shoreline, and has a maximum depth of 45 feet at the dam.

CONFERENCE AMOUNT FOR FY 2013: \$ 8,018,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,080,000 O: \$ 7,272,000 T: \$ 9,352,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$ 882,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,210,000 - Funding will provide portion of activities serving multiple project purposes allocated to flood risk management. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

RC: \$ 787,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 5,858,000 – Funding will provide for critical routine O&M activities and management of hydropower facilities, which includes operation and maintenance of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, and allocated portion of multi-purpose activities. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

EN: \$ 540,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 75,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, through FY11, \$645,000,000. Plant installed generation capacity of 132 Megawatts, produced \$23,000,000 in power production in FY12.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Gavins Point Dam & Lewis and
Clark Lake, NE & SD

O&M JUSTIFICATION SHEET

PROJECT NAME: Harlan County Lake, NE

AUTHORIZATION: Flood Control Act of 1938 (P.L. 75-761), 1941 (P.L. 77-228), 1944 (P.L. 78-534)

LOCATION AND DESCRIPTION: Harlan County Lake is located in south central Nebraska on the Republican River, 7 miles east of Alma and 60 miles south of Kearney, Nebraska. The project includes an earth-fill dam with a crest about 107 feet above original streambed; total length of 11,827 feet including a gate-controlled, concrete, gravity-type spillway; and reservoir storage capacity of 163,900 acre-feet. Project purposes include flood protection, irrigation, recreation, fish and wildlife, and water quality benefits to the south central Nebraska, north central Kansas regions.

CONFERENCE AMOUNT FOR FY 2013: \$ 6,256,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 11,088,000 O: \$ 1,521,000 T: \$ 12,609,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – NA.

FRM: \$11,672,000 – Routine operations and maintenance of dam, intakes, control tower, conduits, outlet channels, structures, and administration facilities for flood risk management. Typical activities include gate adjustments, embankment mowing and monitoring, instrument reading, and contract management. Special items included in FY14 budget amount are tainter gate and spillway rehab phases 4A and 4B, repair of stilling basin wall drains, replace case loader, replace dam gallery electric wiring, repair and replace dam guardrail, construct irrigation stoplogs, and replace corrugated metal pipe drains on downstream toe.

RC: \$780,000 – Routine operations and maintenance of recreation facilities and activities for the general public such as camping, fishing, boating, trail opportunities, hunting and site seeing. Typical operation and maintenance activities include interpretive services, water safety, mowing, sign program, fee collection, and law enforcement; and maintenance of miscellaneous facilities such as campgrounds, access roads, parking areas, trails, visitor center, kiosks, shower houses, boat ramps, and restrooms.

H: \$0 – NA.

EN: \$157,000 – Basic stewardship of natural environments, cultural resources, and compliance with Sections 106 and 110 of the National Historic Preservation Act. Typical activities are tree cutting/pruning, seeding, erosion control, gate installation and maintenance, controlled burns, detection and control of invasive species, lake wide water sampling, and monitoring/protection of eagle nests.

WS: \$0 – NA.

OTHER INFORMATION: Flood Damages prevented from project implementation has totaled \$228,600,000. FY12 public visitation was 600,000 which produced \$200,000 in associated recreation fees. The Project provides irrigation supply to 23,000 acres of land in Nebraska and 42,000 acres in Kansas. Also the project utilizes volunteers and partnerships to assist with maintenance activities, work valued at over \$65,000 in FY12, helping to reduce some of the operations and maintenance expenses.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0.00. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Kansas City

Harlan County Lake, NE

O&M JUSTIFICATION SHEET

PROJECT NAME: Missouri River - Kenslers Bend, NE to Sioux City, IA

AUTHORIZATION: PL 79-14.

LOCATION AND DESCRIPTION: Missouri River Kenslers Bend Project provides operation and maintenance of 15 miles of the Missouri River channel stabilization from Big Sioux Bend near Sioux City IA to Ponca Bend near Ponca, Nebraska. Program responsibilities include maintenance of dikes revetments, environmental notches, chevron dikes, L-dikes, sills, kicker dikes, chute closures, water control and water quality studies.

CONFERENCE AMOUNT FOR FY 2013: \$81,000 2/

BUDGET FOR FY 2014: M: \$ 18,000 O: \$ 74,000 T: \$ 92,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 92,000 – The funding will be used to meet the minimum O&M requirements of the Flood Risk Management mission. Program responsibilities include maintenance of stabilization structures; dikes, revetments, environmental notches, chevron dikes, L-dikes, sills, kicker dikes and chute closures. Funding will provide maintenance to critically damaged or degraded structures, structure surveys, dredging, water control and water quality studies necessary to maintain a stable river channel.

RC: \$ 0 – N/A

H: \$ 0 – NA

EN: \$ 0 – N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$198,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Papillion Creek and Tributaries Lakes, NE

AUTHORIZATION: PL 90-483, PL 89-72.

LOCATION AND DESCRIPTION: The Papillion (Papio) Creek Projects consist of Glenn Cunningham, Standing Bear, Zorinsky and Wehrspann Lakes and Dams, all of which are located within the Greater Omaha area. The Corps of Engineers built the dams and developed the initial recreation plan as part of the Papio Creek and Tributaries lakes project. Extensive flooding in 1964 and 1965 resulted in the loss of 7 lives and \$5.5M in property damage, prompting Congress to authorize construction of the Papio dams. The dams and reservoirs were built primarily to reduce flood damage in the Papio Creek watershed. Recreational opportunities, wildlife habitat and improved water quality are additional benefits derived from the Papios. The Corps cooperates with other agencies to manage and protect the natural resources of these lakes and surrounding lands.

CONFERENCE AMOUNT FOR FY 2013: \$ 778,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 131,000 **O:** \$ 807,000 **T:** \$ 938,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 833,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project.

RC: \$ 27,000 - Funding will allow the Corps to meet minimum Recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 78,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$66,400,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Papillion Creek and
Tributaries Lakes, NE

O&M JUSTIFICATION SHEET

PROJECT NAME: Salt Creek and Tributaries, NE

AUTHORIZATION: PL 78-534, PL 85-500.

LOCATION AND DESCRIPTION: The Salt Creek and Tributaries Flood Control Project in Nebraska was authorized by the Federal Flood Control Act of 1958 to provide flood damage reduction, water quality, recreation, and fish and wildlife enhancement. The basin drains a 1645 square mile area of southeastern Nebraska, encompassing the City of Lincoln. The ten Salt Creek Lakes furnish much needed recreation for local residents as well as providing vital habitat for wildlife. These projects cover 11,239 acres, of which 4,289 are surface acres of water. The Corps of Engineers leases all but one of its Salt Creek Reservoirs to the State of Nebraska Game and Parks Commission (NGPC). The NGPC refers to these projects as the Salt Valley Lakes. Holmes Lake is leased to the City of Lincoln, Nebraska

CONFERENCE AMOUNT FOR FY 2013: \$ 1,025,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 112,000 O: \$ 963,000 T: \$ 1,075,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 970,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project.

RC: \$ 24,000 - Funding will allow the Corps to meet minimum Recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 81,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$250,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

NORTH DAKOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Bowman Haley Lake, ND

AUTHORIZATION: PL 87-874.

LOCATION AND DESCRIPTION: Located 11 miles south of Bowman, North Dakota on highway 85 then 5 miles east, Bowman-Haley Dam was constructed for flood damage reduction, fish and wildlife enhancement, recreation, as well as municipal and industrial water supply. Construction of the dam began in June 1964 and was completed in 1966. The dam measures approximately 5,730 feet in length, with a maximum height of 79 feet from the stream bed to the top of the dam. Bowman-Haley Lake formed at the confluence of Spring Creek, Alkali Creek, and North Fork Grand River; has 17 miles of shoreline and an average depth of 39 feet.

CONFERENCE AMOUNT FOR FY 2013: \$ 214,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 224,000 T: \$ 224,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 193,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes project survey to support periodic dam safety assessment and inspection.

RC: \$ 5,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 26,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$22,600,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Garrison Dam & Lake Sakakawea, ND

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: The Garrison Project is located 75 miles upstream from Bismarck, North Dakota. Garrison Dam construction began in 1947 and was completed in 1953. The dam measures 13,200 feet long and has a maximum height of 210 feet. Lake Sakakawea is 178 miles long with approximately 1,300 miles of shoreline and a maximum depth of 180 feet. The water at Garrison Dam provides benefits of flood damage reduction, power generation, navigation, fish and wildlife, recreation, irrigation, water supply and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 12,050,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,209,000 O: \$ 10,118,000 T: \$ 12,327,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,063,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,764,000 - Funding will provide for critical routine operation and maintenance, engineering, oversight to safely meet flood control mission, as well as allocated portion of multipurpose activities.

RC: \$ 682,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 6,699,000 – Funding will provide for critical routine O&M activities and management of hydropower facilities, which includes operation and maintenance of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, and allocated portion of multi-purpose activities.

EN: \$ 1,869,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 250,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, from the beginning to FY11, \$15,978,000,000. Plant installed generation capacity of 583 Megawatts, produced \$79,800,000 in power production in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Garrison Dam & Lake Sakakawea, ND

O&M JUSTIFICATION SHEET

PROJECT NAME: Pipestem Lake, ND

AUTHORIZATION: PL 89-298, PL 89-72.

LOCATION AND DESCRIPTION: Located 4 miles north of Jamestown, North Dakota, off highway 52/281. Pipestem Dam was constructed for flood damage reduction, fish and wildlife enhancement, and recreation. Construction of the dam began in June 1971, and was completed in 1973. The dam measures approximately 4,000 feet in length, with a maximum height of 107.5 feet from the stream bed to the top of the dam. Pipestem Lake is 5.5 miles long and has a maximum depth of 30 feet under normal operation. The lake drains an approximate 594 square mile area, and has a multipurpose storage capacity of 8,944 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: \$ 835,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 4,000 O: \$ 1,182,000 T: \$ 1,186,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 1,069,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes investigation of the erosion potential of the uncontrolled unlined earth cut spillway to verify dam safety.

RC: \$ 27,000 - Funding will allow the Corps to meet minimum Recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 90,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$123,000,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

OREGON

O&M JUSTIFICATION SHEET

PROJECT NAME: Applegate Lake, OR

AUTHORIZATION: PL 87-874, 1962 Flood Control Act

LOCATION AND DESCRIPTION: Near River Mile 46.5 on the Applegate River, 23.5 miles south of Medford, Oregon. Flood reduction project with rock-fill embankment dam, 1300-ft long & 242-ft high, gate controlled concrete spillway on left abutment, regulating outlet conduit & intake tower with multi-level intakes and reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 937,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 336,000 O: \$ 914,000 T: \$ 1,250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 1,061,000 – Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment. Also includes funds to replace regulating outlet gates hydraulic operation cylinders and a qualified energy audit to provide the tools necessary to reduce green house gas emission.

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 189,000 – Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides 75,000 acre-feet of usable storage for flood control and water conservation utilization. Project controls runoff from a drainage area of 223 square miles. In addition to flood control, the reservoir is operated to provide irrigation, fish and wildlife enhancement, water quality control, and recreation benefits.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Blue River Lake, OR

AUTHORIZATION: P.L. 81-51, 1950 Flood Control Act

LOCATION AND DESCRIPTION: On Blue River, 38 miles east of Eugene, Oregon. Rock-fill embankment dam 1420-ft long, 319-ft high, spillway 70-ft long, outlet works in left abutment, earth & gravel-fill dike 1535-ft long between Blue & McKenzie Rivers & Reservoir, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 579,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 65,000 O: \$ 506,000 T: \$ 571,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 494,000 – Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 22,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 55,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Project controls runoff from drainage area of 88 square miles. Reservoir provides 85,000 acre-feet of usable flood control storage and is operated as a unit of the coordinated reservoir system to protect the Willamette River Valley and provide increased low water flows for navigation and other purposes.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

O&M JUSTIFICATION SHEET

PROJECT NAME: Bonneville Lock and Dam, OR & WA

AUTHORIZATION: 1933 WPA project, 1935 PL. 409 and 1950 Flood Control Act PL. 81-516

LOCATION AND DESCRIPTION: On Columbia River, 42 miles east of Portland, Oregon; Multi-purpose w/power; 1 Dam, spillways and fish passage; 1 Navigation Lock, 2 Powerhouses w/ 20 generation units; regional visitor center and recreation areas.

CONFERENCE AMOUNT FOR FY 2013: \$ 7,039,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,726,000 O: \$ 4,751,000 T: \$ 7,477,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 4,398,000 – Funding will provide for routine navigation lock operations & maintenance including periodic navlock inspections. Also includes cost associated with support of navigation to ensure project performs to meet authorized purposes. Additionally includes cost for Remediation of Contaminated Sites Record of Decision for Bradford Island.

FRM: \$ 0 - N/A

RC: \$ 1,636,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which include recreation management, interpretive services, visitor assistance program implementation, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,443,000 – Funding will provide for routine operation & maintenance activities and management for the Environmental Stewardship. Activities include mitigation requirements for fish passage facilities & natural resource management and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides a spillway dam with overflow crest at 24 ft. above mean sea level. Two powerhouses consisting of 18 units and two fish attraction units for a total power generation capacity of 1,145.7 megawatts. Fish ladders to serve main channel, Bradford Slough Channel, and Powerhouse II channel. Recreation visitation exceeds 600,000 a year at the dam site and 2,700,000 project wide. Project also provides for navigation with a lock chamber 86 feet wide with a 19' depth of water over the sill.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Chetco River, OR

AUTHORIZATION: Rivers and Harbors Acts of 1950 and 1945, P.L. 79-14

LOCATION AND DESCRIPTION: On the Oregon Coast about 290 miles south of the mouth of the Columbia River; two stone jetties; 14 foot deep, 120 feet wide channel entrance; barge turning basin; and small boat access channel.

CONFERENCE AMOUNT FOR FY 2013: \$ 0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 21,000 T: \$ 21,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 21,000 – Annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides \$8.6 million annually in commerce including 2,000 tons of fish and shellfish landings and 4,000 tons of other commodities (2005). Economic effect of the port is \$25 million. There are over 47,000 recreational bar crossings and over 5,500 commercial bar crossings annually. Project is also a critical Harbor of Refuge and priority location for United States Coast Guard.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Columbia and Lower Willamette Rivers below Vancouver, WA and Portland OR

AUTHORIZATION: Rivers and Harbors Acts 1912 (30' channel), 1930 (deepen to 35'), 1962 (deepen to 40'), 1999 (deepen to 43')

LOCATION AND DESCRIPTION: Columbia River Mouth to Vancouver, WA (106.5 miles) and Willamette River Mouth to Broadway Bridge (11.6 miles). The deep-draft federal navigation channel in the Columbia River from RM 3 to 106.5, and in the Willamette River from RM 0 to 11.6.

CONFERENCE AMOUNT FOR FY 2013: \$ 28,066,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 31,990,000 O: \$ 2,527,000 T: \$ 34,517,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 34,517,000 - Funding will allow annual dredging needed for safe transit of commercial and recreational vessels. Also funded is Dredge Material Management Plan for material disposal capacity for the recently deepened 43' channel.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Channel provides environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation. The maintenance of the channel has experienced significant cost increases due to the increased cost of fuel; increased dredge mobilization and operating costs; and recent high flows resulting in depth restrictions in the channel in 2012. The project is an important part of the Columbia – Snake River inland navigation system that provides water access as far inland as Lewiston, ID.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Columbia River at the Mouth, OR and WA

AUTHORIZATION: River and Harbor Act of 1884, as amended and River and Harbor Acts of 1905, (build Jetties & dredge) 1954 (deepen to 48'), 1983 (deepen to 55')

LOCATION AND DESCRIPTION: Entrance to the Columbia River between the states of Oregon and Washington. Deep Draft Navigation entrance channel 6 miles long, 2640 ft wide, 55/48 feet deep, north and south entrance jetties and interior jetty north side at river mile 3.

CONFERENCE AMOUNT FOR FY 2013: \$ 19,277,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 17,831,000 O: \$ 386,000 T: \$ 18,217,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 18,217,000 - Funding includes annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project is considered one of the world's most dangerous coastal inlets due to large waves and strong currents. The project provides efficient movement of 48 million tons of cargo worth over \$16 billion from the Rockies to the Pacific Ocean each year. It is the world's 2nd largest grain export system and provides for the passage of 12,000 commercial and 100,000 recreation vessels each year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Columbia River between Vancouver, WA to The Dalles, OR

AUTHORIZATION: Rivers and Harbors Acts, 1937 (27' channel), 1946 P.L. 79-525

LOCATION AND DESCRIPTION: Columbia River between Vancouver, Washington and The Dalles, Oregon. The deep-draft Federal navigation channel in the Columbia River from RM 106.5 at Vancouver, WA, to RM 192 at The Dalles Dam.

CONFERENCE AMOUNT FOR FY 2013: \$ 931,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 716,000 O: \$ 162,000 T: \$ 878,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 878,000 - Funding will allow routine dredging needed for safe transit of deep draft commercial vessels and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides for more than 40% of United States wheat exports being shipped via ports on the Columbia and Willamette Rivers. Also provides for all transit cargo between Portland and Lewiston, ID.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

O&M JUSTIFICATION SHEET

PROJECT NAME: Coos Bay, OR

AUTHORIZATION: Rivers and Harbor Acts of 1910 (dredging), 1919 (22' channel), 1930 (deepen to 24'), 1970 (deepen to 45'), 1995 (deepen to 47')

LOCATION AND DESCRIPTION: Coos Bay is located on the central Oregon coast at Coos Bay, Coos County, Oregon about 200 miles south of the Columbia River. The existing project includes: two rubble-mound, high tide jetties at the entrance; a channel across the outer bar 47-feet deep and 700-feet wide, dimensions reducing gradually to 37-feet deep and 300-feet wide at River Mile 1, an inner channel 37-feet deep and 300-feet wide to River Mile 9, thence a channel 37- feet deep and 400-feet wide to River Mile 15; two turning basins; and a boat basin access channel located in Charleston.

CONFERENCE AMOUNT FOR FY 2013: \$ 5,843,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 5,456,000 O: \$ 613,000 T: \$6,069,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 6,069,000 - Funding will be used for annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides 2.3 million tons of cargo annually, mainly wood products, valued at approximately \$25.1 million. Economic benefits include 26 million pounds of fish and shellfish landings. Project is a Critical Harbor of Refuge and United States Coast Guard Headquarters and Air Station.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cottage Grove Lake, OR

AUTHORIZATION: 1938 Flood Control Act. P.L. 75-761

LOCATION AND DESCRIPTION: On Coast Fork of Willamette River, Oregon River Mile 29, about 25 miles S.E. of Eugene, Oregon. Flood reduction and earth fill dam 1750-ft long, and concrete gravity spillway 264-ft long, outlet works consisting of 3 gate-controlled conduits, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,266,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 317,000 O: \$ 1,153,000 T: \$ 1,470,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 960,000 – Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 296,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 214,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Reservoir provides 30,060 acre-feet of usable flood control storage and controls runoff of drainage area of 104 square miles. Project is operated as a unit of the coordinated reservoir system that protects the Willamette River Valley and provides increased low water flow for navigation and for other purposes. Recreational development consists of day use and overnight facilities at five sites operated by the Corps of Engineers.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cougar Lake, OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On the South Fork McKenzie River, 42 miles east of Eugene, Oregon. Multi-purpose project with power; dam, spillway and powerhouse with 2 generating units.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,934,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 87,000 O: \$ 1,915,000 T: \$ 2,002,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 7,000 – Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions.

FRM: \$ 646,000 – Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 41,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,255,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 53,000 - Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes.

OTHER INFORMATION: Reservoir is 6 miles long with storage capacity at full pool of 219,000 acre-feet and controls runoff of tributary streams. Power plant consists of two 12,500-kilowatt units with minimum provisions for installing a third unit of 35,000 kilowatts for future peaking capacity.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Detroit Lake, OR

AUTHORIZATION: 1938 Flood Control Act, P.L. 75-761

LOCATION AND DESCRIPTION: On North Santiam River 45 miles S.E. of Salem, Oregon. Multi-purpose w/power; main dams and spillways include; powerhouse w/2 generating units and a re-regulating dam (Big Cliff) powerhouse w/1 generating unit, and recreation.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,008,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 63,000 O: \$ 1,020,000 T: \$ 1,083,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 6,000 – Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions.

FRM: \$ 549,000 - Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 61,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 361,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 106,000 - Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes.

OTHER INFORMATION: Main dam and a re-regulating dam, both with power-generating facilities. Spillway is a gate-controlled overflow section, and outlet works are gate-controlled conduits through the dam. Powerhouses combined have three units with a total capacity of 118 megawatts. Reservoir has a storage capacity at full pool of 454,900 acre-feet and controls runoff of a tributary drainage area of 438 square miles.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Dorena Lake, OR

AUTHORIZATION: 1938 Flood Control Act, P.L. 75-761

LOCATION AND DESCRIPTION: On Row River, Oregon, River Mile 7 about 20 miles S.E. of Eugene, Oregon. Flood reduction, earth fill dam 3352-ft long, 131-ft high, spillway 200-ft long, outlet works include 5 conduits controlled by hydraulic operated slide gates & reservoir, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,040,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 111,000 O: \$ 959,000 T: \$ 1,070,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 625,000 - Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 246,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 199,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Reservoir provides 70,500 acre-feet of usable flood control storage and controls runoff from a basin of 265 square miles. The Project is operated as a unit of the coordinated reservoir system to protect the Willamette River Valley and provides increased low water flows for navigational and other purposes.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fall Creek Lake, OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On Fall Creek 19 miles S.E. of Eugene, Oregon; flood reduction, dam 5100-ft long, 180-ft high, gate controlled spillway, stilling basin & reservoir, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 3,602,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,197,000 O: \$ 1,062,000 T: \$ 2,259,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 1,804,000 - Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment. Also includes repair of structural deformities on spillway gates and development of a communication plan.

RC: \$ 50,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 405,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Reservoir provides 115,000 acre-feet of usable flood control storage and is operated as a unit of the coordinated reservoir system to protect the Willamette River Valley and provide increased low water flows for navigation and other purposes.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fern Ridge Lake, OR

AUTHORIZATION: 1938 Flood Control Act, P.L. 75-761

LOCATION AND DESCRIPTION: On Long Tom River Oregon, River Mile 24 about 10 miles west of Eugene, Oregon; flood reduction, earth fill dam 6330-ft long, 2 auxiliary dikes, spillway with 6 automatic radial gates, outlet works in spillway structure & reservoir, and recreation sites. Project also includes the Long Tom River Channel downstream of dam.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,791,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 175,000 O: \$ 1,824,000 T: \$ 1,999,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 1,275,000 – Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 164,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - N/A

EN: \$ 560,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Reservoir provides 110,000 acre-feet of usable flood control storage and controls runoff of tributary drainage area of 275 square miles. Reservoir protects Long Tom River Valley and is operated as a unit of the coordinated reservoir system to protect the Willamette River Valley generally and to increase low water-flows for navigation and other purposes.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Green Peter – Foster Lake, OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: Foster Lake is on the South Santiam River 7 miles downstream from Green Peter Lake which is on the middle fork of the Santiam River about 35 miles N.E. of Eugene, Oregon. Multi-purpose w/power; main dams and spillways including powerhouse with 2 generating units and a re-regulating dam (Foster) and powerhouse with 2 generating units, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 4,321,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 609,000 O: \$ 1,783,000 T: \$ 2,392,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 12,000 - Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions. Also includes funding for contract administration of repair to structurally deficient spillway gate.

FRM: \$ 1,255,000 - Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions. Also includes funding for contract administration of repair to structurally deficient spillway gate.

RC: \$ 263,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 692,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 170,000 – Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes. Also includes funding for contract administration of repair to structurally deficient spillway gate.

OTHER INFORMATION: Main dam and a re-regulating dam, both with power-generating facilities. Power plants consist of four units with an installed capacity of 100,000 kilowatts. Reservoirs provide storage capacity at full pool of 491,000 acre-feet and control runoff of tributary drainage area of 277 square miles.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Hills Creek Lake, OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On Middle Fork Willamette River, 45 miles S.E. of Eugene, Oregon; Multi-purpose w/power; Dam, spillway and powerhouse w/ 2 generating units, and recreation facilities.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,257,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 50,000 O: \$ 1,277,000 T: \$ 1,327,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 17,000 - Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions.

FRM: \$ 745,000 - Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 27,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 410,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 128,000 – Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes.

OTHER INFORMATION: Powerhouse with two 15,000-kilowatt generators. Hills Creek Lake is about 8.5 miles long and provides storage capacity at full pool of 356,000 acre-feet. Project controls runoff of a drainage area of 389 square miles and is an integral unit of the comprehensive plan for development of the water resources of Willamette River Basin.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: John Day Lock and Dam, OR and WA

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On Columbia River, 112 miles East of Portland, Oregon. The project is multi-purpose w/power consisting of one dam, spillways, fish passage, one navigation lock, one powerhouse w/16 generation units, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 4,329,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 996,000 O: \$ 3,506,000 T: \$ 4,502,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,643,000 – Funding will provide for routine navigation lock operations & maintenance including periodic navlock inspections. Also includes cost associated with support of navigation to ensure project performs to meet authorized purposes.

FRM: \$ 212,000 – Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 857,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which include recreation management, interpretive services, visitor assistance program implementation, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,790,000 - Funding will provide for routine operation & maintenance activities and management for the Environmental Stewardship. Activities include mitigation requirements for fish passage facilities & natural resource management and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: The project provides 500,000 acre-feet of flood control storage between elevations 257 and 268. The powerhouse has space for 20 generating units of 135,000 kilowatts each; 16 units have been installed for a present capacity of 2.2 megawatts.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lookout Point Lake, OR

AUTHORIZATION: Flood Control Acts, 1944, P.L. 75-761, 1950, PL. 81-516

LOCATION AND DESCRIPTION: On Middle Fork Willamette River, 22 miles S.E. of Eugene, Oregon. Multi-purpose w/power; main dams, spillways, powerhouse w/3 generating units and a re-regulating dam (Dexter) powerhouse w/1 generating unit, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,168,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 6,991,000 O: \$ 2,354,000 T: \$ 9,345,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 125,000 – Routine operation & maintenance cost associated with support of navigation to ensure project performs to meet authorized purposes and evolving conditions. Also includes critical spillway gate strengthening.

FRM: \$ 7,701,000 – Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions. Also includes critical spillway gate strengthening.

RC: \$ 221,000 – Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,047,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates.

WS: \$ 251,000 – Routine operation & maintenance cost associated with support of water supply to ensure project performs to meet authorized purposes. Also includes critical spillway gate strengthening.

OTHER INFORMATION: Main dam reservoir provides storage of 456,000 acre-feet at full-pool level. Re-regulating dam forms a full pool of 27,500 acre-feet. Reservoirs control runoff of a tributary drainage area of 991 square miles. Powerhouses combined have four main generating units with a capacity of 135,000 kilowatts.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lost Creek Lake, OR

AUTHORIZATION: 1962 Flood Control Act, P.L. 87-874

LOCATION AND DESCRIPTION: On upper Rogue River, 27 miles N.E. of Medford, Oregon. Multi-purpose project with power; dam, spillway, powerhouse with 2 generating units, and recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 3,866,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 354,000 O: \$ 2,802,000 T: \$ 3,156,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 654,000 - Routine operation & maintenance cost associated with support of flood risk management to ensure project performs to meet authorized purposes and evolving conditions.

RC: \$ 717,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which includes recreation management, law enforcement, public sanitation and ranger patrols. Also includes cost associated with support of recreation to ensure project performs to meet authorized purposes.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 1,676,000 - Funding will provide for routine operation & maintenance for natural resource management to prevent habitat degradation of known special status species and to meet hatchery mitigation requirements and Endangered Species Act mandates. Also includes cost associated with support of environmental stewardship to ensure project performs to meet authorized purposes.

WS: \$ 109,000 - Routine operation cost associated with planning, coordinating, and monitoring local water supply agreements for authorized storage. Also includes cost associated with support of water supply to ensure project performs to meet authorized purposes.

OTHER INFORMATION: Powerhouse has two main generating units with installed capacity of 24,500 kilowatts each. Regulating outlet facility with provisions for temperature regulation for releases in interest of fishery enhancement is provided. Reservoir 10 miles long provides 315,000 acre-feet of usable storage. Project provides control of runoff of drainage area of 674 square miles.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: McNary Lock and Dam, OR & WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Central Oregon on the Columbia River near Umatilla Oregon. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$5,872,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,105,000 **O:** \$2,804,000 **T:** \$6,909,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,360,000 – Funding will be used to meet the operations and maintenance requirements of critical lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including Emergency Action Plan revision, dam safety routine activities for data collection, evaluation, and surveys to monitor dam performance, water management coordination/quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital project costs for actions to improve plant performance, preclude forced facility closure/outages and life safety concerns, rehabilitation of nine of the fifteen levee pumping plants installed in 1953 and an upgrade of the potable water system.

FRM: \$0 – N/A

RC: \$1,600,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services, visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine O&M of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$949,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation and biological opinions for listed endangered species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 980 Megawatts, a navigation lock with a vertical lift of 75 feet, two fish ladders, a system of levees and pumping plants, a reservoir that has a water surface area of 38,800 acres; 16,908 acres of land that provides recreation facilities and wildlife mitigation habitat; and a juvenile fish holding, loading, and bypass facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

McNary Lock and Dam, OR & WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Siuslaw River, OR

AUTHORIZATION: The Rivers and Harbors Act of 1890, as amended, and Section 107 Continuing Authority, 1890 (build jetties), 1925 (12' channel), 1958 (deepen to 16')

LOCATION AND DESCRIPTION: The project is located at the Siuslaw River, Oregon, approximately 130 miles south of the Columbia River. The project provides for navigation access to the Siuslaw River and consists of two high-tides, rubble-mound jetties 750-feet apart at the outer end: the north jetty 8,390-foot long, and the south jetty 4,200-foot long. The project also includes: an entrance channel 18-foot deep and 300-foot wide from the deep water in the ocean to a point 1,500-feet inside the outer end of the existing north jetty; a channel 16-foot deep, 200-foot wide with additional widening at bends, and about 5 miles long, to a turning basin which is 16-foot deep, 400-foot wide, and 600-foot long, opposite the Siuslaw dock at Florence; a channel 12-foot deep, 150-foot wide from Florence to mile 16.5; a turning basin 12-foot deep, 300-foot wide, and 500-foot long at RM 15.5.

CONFERENCE AMOUNT FOR FY 2013: \$ 0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 32,000 T: \$ 32,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 32,000 – Funding will be used for annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides approximately 38,000 pounds of fish plus lumber, and other commodities. The economic effect of the port is \$12.5 million. There are 1,354 commercial bar crossings annually. The project is also a critical Harbor of Refuge and priority location for United States Coast Guard. There were 56 search and rescue cases in 2011.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Willamette River at Willamette Falls, OR

AUTHORIZATION: Rivers and Harbors Act of 1910 (P.L. 61-264)

LOCATION AND DESCRIPTION: Willamette Falls Locks is a multiple-lift navigation lock located on the Willamette River in West Linn, Oregon.

CONFERENCE AMOUNT FOR FY 2013: \$ 110,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 60,000 T: \$ 60,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 60,000 - Funding will be used to provide critical operation for caretaker status activities.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: The project includes four locks, a canal basin, and an extra guard lock used to prevent flooding when river levels are high. The system acts as a fluid staircase between the upper and lower reaches of the Willamette River. Due to structural/safety concerns, the project is maintained in a caretaker status.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Willamette River Bank Protection, OR

AUTHORIZATION: Flood Control Acts; 1936 (bank protection and channel clearing), 1938 PL. 75-685 (added flood protection), 1950 PL. 81-519 (add'l 77 locations)

LOCATION AND DESCRIPTION: Approximately 90 miles of bank protection, drift embankments, drift barriers and channel improvements at 223 locations along the Willamette River and its tributaries from about River Mile 25 to River Mile 225 on the Willamette River Basin.

CONFERENCE AMOUNT FOR FY 2013: \$ 0

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$ 81,000 T: \$ 81,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 81,000 – Funding will be provided to identify potential restoration sites associated with existing Corps revetments in Willamette Basin. The information collected from this effort will be used to assess overall strategies to meet the intent of the Biological Opinion in a cost-effective manner.

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: The program consists of 223 federally constructed projects that were authorized to clear, slope andrevet river banks, construct pile and timber bulkheads and drift barriers, minor channel improvements and maintenance of existing works constructed under the 1936 and 1938 Flood Control Acts for control of floods and preventing erosion at various locations along the Willamette River and tributaries.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Willow Creek Lake, OR

AUTHORIZATION: 1965 Flood Control Act, P.L. 89-298

LOCATION AND DESCRIPTION: On Willow Creek at Heppner, Oregon; flood reduction, roller compacted concrete dam, ancillary features include center uncontrolled spillway, minor flow works and diversion works, outlet works & reservoir.

CONFERENCE AMOUNT FOR FY 2013: \$ 677,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 108,000 O: \$ 573,000 T: \$ 681,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 673,000 - Funding will provide for routine operation & maintenance of flood control dam, reservoir, project service facilities, and permanent operating equipment.

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 8,000 - Funding will provide for routine operation & maintenance for stewardship management and oversight for the protection of project natural resources and to meet minimum requirements for State and Federal regulations.

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides flood protection to the city of Heppner and downstream area by controlling runoff from a drainage area of 96 square miles. Gross storage capacity of the project is 13,250 acre-feet, consisting of 7,750 acre-feet for exclusive flood control, 1,750 acre-feet for joint flood control and irrigation, 1,750 acre-feet exclusive irrigation, and 2,000 acre-feet for fish, wildlife, recreation, sediment accumulation, and aesthetics.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Yaquina Bay and Harbor, OR

AUTHORIZATION: Rivers and Harbors Act of: 14 Jun 1880, 2 Mar 1919 (construct jetties), 1945 (26' channel), 1946 (construct boat basin), 1958 (deepen 40 entrance, 30' river channel) 1960 (boat basin S. shore) P.L. 86-645.

LOCATION AND DESCRIPTION: On the Oregon Coast about 110 miles south of the Columbia River. Deep draft project with two stone jetties; small boat access channel and South Beach Marina.

CONFERENCE AMOUNT FOR FY 2013: \$ 2,780,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$ 2,000,000 O: \$ 0 T: \$ 2,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 2,000,000 - Funding will be used for annual dredging needed for safe transit of commercial and recreational vessels.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: Critical harbor of refuge, large commercial fishing fleet and distant water fleets, OSU Marine Science Facility center, NOAA Marine Operations Center, and USCG Search and Rescue base located in bay; hazardous waters with high commercial and recreational use; 39.5K tons of fish & shellfish landings valued at \$43,800,000 in 2011 (NMFS). Newport is ranked as 19th major port in the US for fish landings in 2011. Growing interest from lumber industry to start exporting from Yaquina Bay in 2013.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

SOUTH DAKOTA

O&M JUSTIFICATION SHEET

PROJECT NAME: Big Bend Dam & Lake Sharpe, SD

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: The Big Bend Project is located northwest of Chamberlain, South Dakota, on South Dakota Highway 47, near Ft. Thompson, South Dakota. Construction on the dam began in 1959 and closure of the embankment occurred in 1963. The dam measures 10,570 feet in length and has a maximum height of 95 feet. Lake Sharpe extends 80 miles upstream, creates 200 miles of shoreline, and has a maximum depth of 78 feet at the dam.

CONFERENCE AMOUNT FY 2013: \$ 9,567,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,153,000 O: \$ 8,012,000 T: \$ 10,165,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$ 0 – N/A

FRM: \$ 0 - N/A

RC: \$ 729,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 8,379,000 – Funding will provide for critical routine O&M activities and management of hydropower facilities, which includes operation and maintenance of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, and reservoir scheduling.

EN: \$ 957,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 100,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, beginning to FY11, \$631,000,000. Plant installed generation capacity of 497 Megawatts, produced \$35,600,000 in power production in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cold Brook Lake, SD

AUTHORIZATION: PL 77-228, PL 78-534

LOCATION AND DESCRIPTION: Cold Brook Dam is located 1 mile north of Hot Springs South Dakota. The dam is 925 feet in length and has a height of 127 feet. Cold Brook Lake is 1.2 miles in length and its multipurpose pool contains 520 acre-feet of water. Cold Brook Dam was constructed to reduce flood damage in the Fall River basin. In years past, the Fall River was subject to flash flooding, causing damage to Hot Springs, South Dakota and nearby rural areas. The Flood Control Act of 1941 authorized the construction of these two dams and the channel improvements within the community of Hot Springs.

CONFERENCE AMOUNT FOR FY 2013: \$ 453,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 19,000 O: \$ 358,000 T: \$ 377,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 – NA

FRM: \$ 270,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes project surveys to support periodic dam safety assessment and inspection.

RC: \$ 59,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 48,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from project implementation through FY11 totals \$2,100,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cottonwood Springs Dam & Lake, SD

AUTHORIZATION: PL 77-228, PL 78-534

LOCATION AND DESCRIPTION: Cottonwood Springs Dam is located 4.5 miles west of Hot Springs South Dakota. The dam and channel improvements were constructed under the authorization of Flood Control Act of 1941 to reduce flood damage in the Fall River basin. In years past, the Fall River was subject to flash flooding, causing damage to Hot Springs, South Dakota and nearby rural areas. The dam is 1,190 feet in length and stands 123 feet high.

CONFERENCE AMOUNT FOR FY 2013: \$ 394,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 14,000 **O:** \$ 1,102,000 **T:** \$ 1,116,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$ 0 – NA

FRM: \$ 1,022,000 - Funding will be used to meet the O&M requirements of the Flood Risk Management mission. Activities include performing routine critical operations and maintenance required to operate the project, necessary engineering, oversight, inspection and monitoring to assure continued safe operation of the project. Non-routine work includes rehabilitation of the outlet tunnels to repair cracks at the conduit joints to ensure project safety and reliability.

RC: \$ 50,000 - Funding will allow the Corps to meet minimum recreation O&M requirements for providing quality public outdoor recreation experiences for the public. Specifically the funding will provide for the minimum real estate management needs of the project.

H: \$ 0 – NA

EN: \$ 44,000 – Funding will be used to meet the O&M requirements of the Environmental Stewardship mission. In an effort to manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities for this year will include natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, shoreline management activities, real estate use evaluations management plan updates.

WS: \$ 0 - N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fort Randall Dam & Lake Francis Case, SD

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: Fort Randall Dam is located 12 miles west of Wagner, South Dakota. Construction on Fort Randall Dam began in 1946 and was completed in 1956. The dam measures 10,700 feet in length and has a maximum height of 140 feet. Lake Francis Case extends 107 miles upstream, creates 540 miles of shoreline, and has a maximum depth of 140 feet at the dam. The water in Lake Francis Case is stored for flood damage reduction, power generation, navigation support, fish and wildlife, recreation, irrigation, water supply, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 8,848,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,429,000 O: \$ 7,976,000 T: \$ 10,405,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 758,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,036,000 - Funding will provide portion of activities serving multiple project purposes allocated to flood risk management.

RC: \$ 165,000 - Funding will provide for routine O&M of recreation facilities, including interpretive services, public outreach, visitor assistance program, Title 36 enforcement, reservation services support, recreation fee management, and completion of updates to required management plans.

H: \$ 6,943,000 – Funding will provide for critical routine O&M of hydropower facilities, which includes O&M of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, and allocated portion of multi-purpose activities. Non-routine work includes repacking of penstock articulation joints on Units 1, 4 and 6.

EN: \$ 1,428,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 75,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, through FY11, \$10,588,000,000. Plant installed generation capacity of 320 Megawatts, produced \$57,900,000 in power production in FY12.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Fort Randall Dam & Lake
Francis Case, SD

O&M JUSTIFICATION SHEET

PROJECT NAME: Oahe Dam & Lake Oahe, SD

AUTHORIZATION: PL 78-534, PL 93-205

LOCATION AND DESCRIPTION: The Oahe project is located 7 miles north of Pierre, South Dakota. Construction on Oahe Dam began in 1948 and the project began generating electricity in 1962. The dam measures 9,300 feet in length and has a maximum height of 245 feet. The project provides benefits of flood damage reduction, power generation, navigation, fish and wildlife, recreation, irrigation, water supply, and water quality.

CONFERENCE AMOUNT FOR FY 2013: \$ 11,215,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 2,033,000 O: \$ 10,763,000 T: \$ 12,796,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014

N: \$ 1,230,000 – Funding will provide portion of activities serving multiple project purposes allocated to Navigation. Multi-purpose activities include maintenance of spillway and outlet structures, dam safety monitoring, studies and inspections, reservoir scheduling and real estate management.

FRM: \$ 1,682,000 - Funding will provide portion of activities serving multiple project purposes allocated to flood risk management.

RC: \$ 474,000 - Funding will provide for critical routine O&M activities and management of recreation facilities, which include recreation management, interpretive services, public outreach, visitor assistance program implementation, Title 36 enforcement, reservation services support, recreation use fee management, and completion of updates to required Master and/or management plans.

H: \$ 7,731,000 – Funding will provide for critical routine O&M activities and management of hydropower facilities, which includes operation and maintenance of the hydroelectric power plant, power transmission facilities and associated water control structures, dam safety monitoring, studies and inspections, reservoir scheduling, real estate management, and allocated portion of multi-purpose activities. Non-routine multi-purpose work includes surveys and borings to determine the stability and erosion potential of the unlined earth cut spillway.

EN: \$ 1,429,000 – Funding will provide for critical routine O&M activities and management for the Environmental Stewardship. Activities include, natural resource inventories, special status species monitoring, invasive species control (both pest and noxious weed), implementation of mitigation requirements, enhancement actions, real estate use evaluations and management plan updates.

WS: \$ 250,000 - Missouri River system-wide water reallocation study to determine if storage from the main stem reservoirs is available to meet the long-term water demands in the basin.

OTHER INFORMATION: Cumulative flood damages prevented, through FY11, \$11,584,000,000. Plant installed generation capacity of 786 Megawatts, produced \$93,600,000 in power production in FY12

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Omaha

Oahe Dam & Lake, SD

WASHINGTON

O&M JUSTIFICATION SHEET

PROJECT NAME: Chief Joseph Dam, WA

AUTHORIZATION: Rivers and Harbor Act of 1946 as modified by 1958 Fish and Wildlife Coordinator Act.

LOCATION AND DESCRIPTION: Chief Joseph Dam is located in Bridgeport, WA, 545 river miles above the mouth of the Columbia River, 51 river miles downstream from Grand Coulee Dam. The dam consists of a 19-bay gated concrete gravity spillway that abuts the right bank and connects to a curved non-overflow concrete section founded on a rock outcropping. The 2,047-foot-long powerhouse encloses 27 Francis turbines with a total installed rated capacity of 2,614 megawatts, 2 station service generators, maintenance shops and control room, and the visitor center. Routine hydropower and joint O&M costs, and capital investment costs, are direct funded by Bonneville Power Administration (BPA). Appropriation funds are used to continue normal O&M activities for the recreation program.

CONFERENCE AMOUNT FOR FY 2013: \$653,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$180,000 O: \$457,000 T: \$637,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$0 - N/A

RC: \$637,000 - Funding provides for routine operations and maintenance for recreation program at the Corps' largest hydropower project. Routine program includes operation of project Visitor Center, supports 10 public day-use areas.

H: \$0 – Routine hydropower O&M costs are 100% direct funded by BPA..

EN: \$0 – Routine joint O&M costs, including environmental stewardship, are 100% direct funded by BPA.

WS: \$0 - N/A

OTHER INFORMATION: The project produced a total of 12,517 megawatts with an approximate value of \$376,000,000. FY12 public visitation was approximately 267,407 with an estimated benefit to the local economy of \$6,700,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Columbia River Fish Mitigation, WA, OR & ID

AUTHORIZATION: 1933 Federal Emergency Administration of Public Works; 1935, 1945 and 1950 River and Harbor Acts; 1937 Bonneville Project Act; 1938, 1948, 1950 and 1954 Flood Control Acts; WRDA 1986, Section 906(b)(1); WRDA 1996, Section 511, as amended by WRDA 1999, Sec.582 and WRDA 2007, Sec. 5025.

LOCATION AND DESCRIPTION: Maintain the infrastructure installed by the Columbia River Fish Mitigation improvements on eight hydro-system dams and the navigation locks on the Lower Columbia and Snake Rivers. To include Juvenile fish bypass systems, fish transport and passage monitoring facilities. Also fish transport barges and moorage, spillway flow deflectors and weirs, adult fish ladders and passage monitoring facilities and lamprey passage facilities.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,350,000 O: \$0 T: \$3,350,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$0 – N/A

RC: \$0 – N/A

H: \$0 – N/A

EN: \$3,350,000 – Funding will be used to meet the maintenance requirements of the Columbia River Fish Mitigation funded infrastructure that has been installed to benefit fish passage within the Federal Columbia River Power System. Maintenance funds are for maintenance of newly constructed spillway weirs, bypass systems, and avian arrays. Routine preventative maintenance will be performed on these new capital assets in order to maintain their performance into the future.

WS: \$0 – N/A

OTHER INFORMATION: Columbia River Fish Mitigation provided mitigation for the impact of Corps' dams on migrating salmon. Mitigation measures considered were a result of the Northwest Power Planning Council's regional rebuilding efforts for upriver salmon stocks, the National Marine Fisheries Service listing of salmon as threatened/ endangered, the National Marine Fisheries Service Biological Opinions on operation of the Federal Columbia River Power System issued 1995, 1998, 2000, 2004, 2008 and the 2010 Supplemental BiOp which includes the Adaptive Management Implementation Plan and amendments, the 2008 Columbia Basin Fish Accords.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Everett Harbor and Snohomish River, WA

AUTHORIZATION: River and Harbor Act of June 25, 1910 and modified by subsequent acts.

LOCATION AND DESCRIPTION: Located in central Puget Sound on the eastern shore of Possession Sound. The project channel runs approximately six miles upstream from its mouth at Port Gardner Bay. The project accommodates deep draft shipping in its outer harbor and also barge traffic on the Snohomish River. The project provides for the East Waterway, a 30 feet-deep, 900 feet-wide and 2,400 feet-long channel leading to the facilities on the west side of the Everett Navy Home Port. There is also an 8 to 15 feet-deep by 150 feet-wide channel up the Snohomish River. The project includes two settling basins to concentrate shoaling and promote maintenance dredging efficiency. The lower river channel is flanked by a system of training and spur dikes.

CONFERENCE AMOUNT FOR FY 2013: \$851,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,749,000 O: \$0 T: \$1,749,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,749,000 - Funding provides for hydraulic pipeline dredging of upstream and downstream settling basins w/upland disposal for navigation purposes on the Snohomish River. Channel project condition survey will be conducted to report conditions to users and ongoing coordination on sediment characterization regarding ongoing maintenance coordination.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A.

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: FY13 removal of dredged material for beneficial reuse by the Port of Everett is expected to reach 120,000 cubic yards. The annual shipping averages 1.4 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Grays Harbor and Chehalis River, WA

AUTHORIZATION: The Rivers and Harbors Act of 30 August 1935 and Section 202 of WRDA 1986.

LOCATION AND DESCRIPTION: Grays Harbor is located on the southwest coast of Washington state. The project's 24-mile long channel and entrance structures serve deep-draft commerce to the Port of Grays Harbor and facilities at the cities of Aberdeen, Hoquiam and Cosmopolis. The deep-draft channel is secured by a complex system of coastal structures including the north and south jetties, groin, revetments and timber breakwaters. The North Jetty is at the south end of Ocean Shores and the South Jetty is at Westport, near Half Moon Bay. The Point Chehalis Revetment and Groins are located along the north and west edge of Westport. The breakwaters A, B, and C provide protection for the Westport Marina. This complex navigation project is large with ongoing Federal O&M activities including required dredging, structure repair, and mitigation on an annual basis.

CONFERENCE AMOUNT FOR FY 2013: \$9,778,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$9,728,000 O: \$237,000 T: \$9,965,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$9,965,000 - Funding provides for routine operations and maintenance for navigation, including extensive export activity, US Coast Guard (USCG) Search & Rescue, Tribal fishing activities and critical fleet maintenance support service. Annual contract clamshell dredging of the inner harbor channels will be continued with open water disposal. Government hopper dredges YAQUINA and ESSAYONS will be used to provide a safe bar and entrance channel conditions with annual dredging. Project condition surveys will be conducted to apprise navigation users and the USCG of channel conditions with sediment characterization continued for open water and beneficial use disposal of the dredged resources. State required survey to meet multi-agency mitigation agreement. Funds will be used to finalize environmental impact statement for the Long Term Maintenance System at Half Moon Bay.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A.

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Annual shipping averages approximately 2 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Howard A. Hanson Dam, WA

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: The project is located on the upper reach of the Green-Duwamish River in King County, 63.76 river miles above the mouth. It is in the city of Tacoma's municipal watershed 35 road miles east of Tacoma, 6 miles upstream from Palmer, and 24 miles from Mud Mountain Dam. This project is protected from public access.

CONFERENCE AMOUNT FOR FY 2013: \$3,187,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$729,000 O: \$2,567,000 T: \$3,296,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$2,718,000 - Operations and Maintenance activities. Continue to support the fish passage project delivery team, plan and prepare for removing and rehabilitating the 45-ton stop log, and clean the intake trash rack.

RC: \$0 - N/A

H: \$0 - N/A.

EN: \$565,000 - Continue in river deposition of woody debris and gravel for mitigation. Continue efforts with implementation of the Reasonable and Prudent Measures in the Biological Opinion.

WS: \$13,000 - Continue to support the water supply mission and to interface with the City of Tacoma water system.

OTHER INFORMATION: The facility provides flood protection within the Green-Duwamish watershed with an accumulative flood prevention benefit of over \$752 million since 1962 (\$3,400,000 prevented in FY05 alone). The Biological Opinion and the Endangered Species Act mandate the construction and annual maintenance of mitigation sites consisting of gravel and woody debris below the dam – approximately \$545,000 annually. The Construction General program constructed the mitigation sites. FY 2007 was the first year in which O&M became responsible for maintenance of the mitigation sites.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ice Harbor Lock and Dam, WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on the Snake River about 12 miles east of Pasco Washington. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$4,237,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,425,000 O: \$2,149,000 T: \$4,574,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,618,000 – Funds routine operations and maintenance requirements of critical Lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including Emergency Action Plan revision, dam safety routine activities for instrumentation data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital projects to improve plant performance, preclude forced facility closure/outages and life safety concerns also to rehabilitate the skin plate on the spillway gates and non-overflow elevators.

FRM: \$0 – N/A

RC: \$1,189,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine operation and maintenance of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$767,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation, passage research, water quality activities and biological opinions for listed endangered or threatened species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 603 Megawatts, a navigation lock with a vertical lift of 100 feet, two fish ladders, reservoir that has a water surface area of 9,200 acres, 3,576 acres of land that provides recreation facilities and wildlife mitigation habitat, and a juvenile fish bypass facility.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Ice Harbor Lock and Dam, WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Washington Ship Canal, WA

AUTHORIZATION: River and Harbor Act of 1910, House Document 953, 60th Congress.

LOCATION AND DESCRIPTION: Located in the City of Seattle, the 30-foot deep canal connects Puget Sound on the west with Lake Washington eight miles to the east. A dam, gated spillway, fish ladder and two navigational locks are located 1½ miles east of the west entrance. The canal and locks provide a navigation link from freshwater Lake Washington and Lake Union to the saltwater Puget Sound. The project has materially contributed to the industrial, commercial and recreational development of the area.

CONFERENCE AMOUNT FOR FY 2013: \$8,646,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,077,000 O: \$7,339,000 T: \$9,416,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,940,000 - Funding provides for routine operations and maintenance for navigation, including 24/7 year-round staffing for lock operations to transit 69,000 commercial and recreational boats. Of these funds, \$1,000,000 will fund critical repairs to structures (spillway tainter gate lifting machinery and trunnions

FRM: \$0 - N/A.

RC: \$756,000 - Funding provides routine operations and maintenance for recreation program including uniformed rangers and grounds maintenance staff. Funds provide support for the contract to operate the Regional Class A Visitor Center, tour program, and environmental education programs.

H: \$0 - N/A.

EN: \$720,000 - Funding provides routine operations and maintenance for fish passage facilities, regional coordination of fish and wildlife activities, and district support for listed endangered species. Funding is necessary to carry out Endangered Species Act requirements for listed species to meet US Fish & Wildlife Service/National Oceanographic Atmospheric Administration biological opinions for bull trout, Chinook salmon, and steelhead.

WS: \$0 - N/A

OTHER INFORMATION: This is the busiest navigation lock in the United States. The recreation area of the Lake Washington Ship Canal project receives over one million visitors per year. Since 1995, an average of 16,180 lockage's, 69,000 boats and over 1.5 million tons of cargo have passed through the locks annually.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Little Goose Lock and Dam, WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on the Snake River about 50 miles west of Lewiston Idaho. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$2,341,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,752,000 **O:** \$958,000 **T:** \$2,710,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,069,000 – Funding will be used to meet the operations and maintenance requirements of critical Lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including dam safety routine activities for instrumentation data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital projects to improve plant performance, preclude forced facility closure/outages and life safety concerns.

FRM: \$0 – N/A

RC: \$407,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine operation and maintenance of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$234,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation, passage research, water quality activities and biological opinions for listed endangered or threatened species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 810 Megawatts, a navigation lock with a vertical lift of 98 feet, one fish ladder, a reservoir that has a water surface area of 10,025 acres; 5,398 acres of land that provides recreation facilities and wildlife mitigation habitat; and juvenile fish holding, loading, and bypass facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Little Goose Lock and Dam, WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Granite Lock and Dam, WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on the Snake River about 33 miles west of Lewiston, Idaho. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$3,062,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$8,226,000 **O:** \$1,395,000 **T:** \$9,621,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$8,083,000 – Funding will be used to meet the operations and maintenance requirements of critical Lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including Emergency Action Plan revision, dam safety routine activities, data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital projects to improve plant performance, preclude forced facility closure/outages and life safety concerns and rehabilitate the skin plate on the spillway gates.

FRM: \$0 – N/A

RC: \$1,499,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage outgranted recreation areas, and support to leased activities not managed by the District.

H: \$0 - Routine operation and maintenance of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$39,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation and biological opinions for listed endangered species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 810 Megawatts, a navigation lock with a vertical lift of 100 feet, one fish ladder, a system of levees and pumping plants, a reservoir that has a water surface area of 8,900 acres; 5,778 acres of land that provides recreation facilities and wildlife mitigation habitat; juvenile fish holding, loading, and bypass facilities, and adult-fish trapping facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Lower Granite Lock and Dam, WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Lower Monumental Lock and Dam, WA

AUTHORIZATION: PL 79-14 (Section 2 of the River and Harbor Act of 1945)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on the Snake River about 45 miles northeast of Pasco Washington. The project is part of the Federal Columbia River Power System.

CONFERENCE AMOUNT FOR FY 2013: \$2,603,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,480,000 **O:** \$1,000,000 **T:** \$2,480,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,801,000 – Funding will be used to meet the operations and maintenance requirements of critical Lock operations to ensure continued safe and reliable operations to avoid unscheduled navigation lock outages. Provides the navigation component for the operations and maintenance of the joint features of the project which are non-hydropower specific; including Emergency Action Plan revision, dam safety routine activities for instrumentation data collection, evaluation, and surveys to monitor dam performance, water management control coordination and water quality analysis and Hydraulic Steel Structures inspections. Non-routine will include critical small capital projects to improve plant performance, preclude forced facility closure/outages and life safety concerns.

FRM: \$0 – N/A

RC: \$478,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – Routine operation and maintenance of the hydropower plant is direct funded by the Power Marketing Agency.

EN: \$201,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Also includes funding for juvenile fish transportation and biological opinions for listed endangered species.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a powerhouse with an installed capacity of 810 Megawatts, a navigation lock with a vertical lift of 98 feet, two fish ladders, a reservoir that has a water surface area of 6,590 acres; 8,336 acres of land that provides recreation facilities and wildlife mitigation habitat; and a juvenile fish holding, loading, and bypass facilities.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Walla Walla

Lower Monumental Dam, WA

O&M JUSTIFICATION SHEET

PROJECT NAME: Mill Creek Lake, WA

AUTHORIZATION: PL 75-761 (Flood Control Act of 1938)

LOCATION AND DESCRIPTION: Project is located in Eastern Washington on Mill Creek near Walla Walla Washington.

CONFERENCE AMOUNT FOR FY 2013: \$2,243,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$942,000 O: \$1,481,000 T: \$2,423,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$1,529,000 – Funding will be used to meet the operations and maintenance requirements of the Flood Risk Management mission. Activities include performing routine operations of the dam, routine maintenance, routine bridge inspections, instrumentation maintenance and repair, to update emergency notification plan, dam safety training, flood damages reports and inspection and data collection. Non-routine funding will be used to replace a 12 yr old gas powered electric utility vehicle with an electric utility vehicle and solar charging station.

RC: \$409,000 – Funding will allow the Corps to meet minimum recreation operations and maintenance requirements providing quality outdoor recreation experiences for the public. Activities include operations and maintenance of recreational sites/facilities, health and safety services (including visitor assistance, security, water safety), Real Estate services to manage out-granted recreation areas, and support to leased activities not managed by the District.

H: \$0 – N/A

EN: \$485,000 – Funding will be used to meet the operations and maintenance requirements for the Environmental Stewardship mission. To manage and conserve natural resources, consistent with ecosystem management principles, specific routine and non-routine activities will include operation and maintenance of lands and wildlife mitigation areas designed to protect, restore and conserve natural resources within project. Funding also will be used to coordinate and implement National Marine Fisheries Service Biological Opinion for listed threatened Mid-Columbia River steelhead and U.S. Fish and Wildlife Service biological opinion for listed threatened bull trout. Also includes Section 106 funding required for cultural resources mandates, clearances and inspections.

WS: \$0 – N/A

OTHER INFORMATION: The project includes the dam, a reservoir that has a gross storage capacity of 8,300 acre-feet of water, a flood control channel, 612 acres of land that provides recreation facilities and wildlife mitigation habitat, and a diversion dam and levee with two fish ladders.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mount St Helens Sediment Control, WA

AUTHORIZATION: Supplemental Appropriation Act 1985, P.L. 99-88

LOCATION AND DESCRIPTION: On the North Fork Toutle River and on the Cowlitz River in Cowlitz County, Washington; flood reduction, sediment retention structure on the North Fork Toutle River.

CONFERENCE AMOUNT FOR FY 2013: \$ 266,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 40,000 O: \$ 220,000 T: \$ 260,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 0 - N/A

FRM: \$ 260,000 - Funding will provide for routine operation & maintenance of sediment retention structure, project service facilities, and permanent operating equipment.

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: As authorized, the project will provide a permanent solution to potential flooding on the Cowlitz River from sedimentation problems created by the eruption of Mt. St. Helens.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Mud Mountain Dam, WA

AUTHORIZATION: Section 5 of the Flood Control Act of 1936, dated 22 June 1936 for flood control and fish collection

LOCATION AND DESCRIPTION: The project is located on the White River, six miles upriver and southeast of Enumclaw and 38 miles east of Tacoma. Facility provides flood protection within the White River watershed. When the original flood control project was built in 1948, a fish passage trap facility was constructed six miles downstream of the dam to facilitate migration. The facility is still used yearly to capture salmonids for trucking above the dam where they are released.

CONFERENCE AMOUNT FOR FY 2013: \$3,698,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$687,000 O: \$2,856,000 T: \$3,543,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A.

FRM: \$2,734,000 - Operations and Maintenance activities. Continue to monitor and support the construction general projects.

RC: \$265,000 - Continue to operate and maintain the public park, trails and over look areas in a safe manner.

H: \$0 - N/A

EN: \$544,000 - Continue trap and haul fish mitigation and efforts with implementation of the Reasonable and Prudent Measures in the Biological Opinion. Perform cultural resources survey and complete the projects Section 106 consultation. Complete the wildlife management and historical property Management Plans.

WS: \$0 - N/A

OTHER INFORMATION: The dam provides flood protection within the White River watershed with an accumulative flood prevention benefit of over \$665,000,000 since 1960. The FY12 visitation was 115,071 with an estimated benefit to the local economy of \$2,500,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Olympia Harbor, WA

AUTHORIZATION: The Rivers and Harbor Act of 1927

LOCATION AND DESCRIPTION: Olympia Harbor is a deep draft port at the south end of Puget Sound. This project provides a channel, 30 feet deep and 500 feet wide, extending from deep water in Budd Inlet to the Port Terminal. The project also includes East Bay (Swantown) Marina, with a 13-foot-deep 150-foot-wide entrance channel and two access channels 12 to 13 feet deep.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$603,000 T: \$603,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 603,000 – This appropriation will allow funding for environmental document preparations and dredging activities of Olympia Harbor which has not been dredged since the minor dredge in 2008. As this waterway is still an active aquatic State of Washington - Model Toxics Control Act Site, full sediment characterization is required. Sediment is known to contain polynuclear aromatic hydrocarbons, pentachlorophenol and dioxins. In addition, side scan sonar and multibeam hydrosurvey techniques will be used to locate numerous debris fields of wood and other debris remaining from earlier industrial uses of the waterway.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Olympia Harbor is a moderate use waterway (over 1,000,000 tons) with increasing amounts of non-containerized bulk cargo; such as timber products, steel pipe, and scrap metals.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Puget Sound and Tributary Waters, WA

AUTHORIZATION: The Rivers and Harbor Act of 1892

LOCATION AND DESCRIPTION: The Puget Sound and its Tributary Waters in Washington State. Removal of all hazards to navigation in the Federal Navigation Channel waters.

CONFERENCE AMOUNT FOR FY 2013: \$1,057,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$995,000 O: \$80,000 T: \$1,075,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,075,000 - Funding provides for routine operations and maintenance for the debris vessel M/V PUGET and support vessel, within Puget Sound Waters. Funded activities include the removal of hazards to navigation composed of man-made and large woody debris in the Federal Navigation Channel waters of Puget Sound, thus reducing collision hazards for the shipping industry and public users. Funding also allows appropriate disposal of the collected debris not used for environmental restoration projects and allows stockpiling of large debris to be used for restoration projects for local Government agencies. Funding provides for the upkeep of 3 large flat-deck barges used to collect and transport debris.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: 9,000 to 11,000 tons of debris is removed annually.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Seattle Harbor, WA

AUTHORIZATION: The Rivers and Harbors Act of March 2, 1919.

LOCATION AND DESCRIPTION: Seattle Harbor is located on the east side of central Puget Sound in Washington State. The project is located on the lower Duwamish River from Elliott Bay upstream approximately five miles along the river to the head of the federal navigation channel. The project consists of the East Waterway, 34 to 51 feet deep; the West Waterway, 34 feet deep; Duwamish Waterway, 30 feet deep for 2.6 miles, 20 feet deep for 0.8 miles, and 15 feet deep for 1.8 miles to the head of navigation.

CONFERENCE AMOUNT FOR FY 2013: \$957,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$110,000 T: \$110,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$110,000 - Funding provides multibeam and sidescan sonar channel project condition survey to report conditions to extensive and diverse waterway users. Area surveyed is the entire project from tip to tail performed twice yearly to determine shoaling patterns in this rapidly changing waterway. Also included in the surveys are East and West Waterways evaluations as deep draft vessels are regularly calling on these waterways. These funds allow documentation of navigation changes through multiple seasons.

FRM: \$0 - N/A

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Annual shipping handled by Seattle Harbor is 27 million tons.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Stillaguamish River, WA

AUTHORIZATION: Sec 5 of the Flood Control Act of 1936 (Public No. 738) dated 22 June 1936

LOCATION AND DESCRIPTION: The project is located downstream of Arlington in Snohomish County, in northwestern Washington state. The project provides for works to reduce bank erosion and channel changes on the Stillaguamish River between Arlington and the head of Hat Slough, a distance of 15 miles, and on Cook Slough, 3 miles long, as follows: Revetments at 26 places on the river and Cook Slough; a concrete control weir 275 feet long between steel-sheet pile piers at the head of Cook Slough to limit flow through the slough; and two cut-off channels, each about 900 feet long, to eliminate sharp bends of Cook Slough.

CONFERENCE AMOUNT FOR FY 2013: \$273,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$280,000 T: \$280,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A

FRM: \$280,000 - Budgeted funds will be used to continue brush removal from bank revetments, and normal maintenance and repair of bank erosion from winter flows. Further work entails design and coordination work for the Cook Slough weir rehabilitation. Brush removal will occur in the March/April timeframe.

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from 1939 through FY 2012 total \$12,600,000.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Tacoma Harbor, WA

AUTHORIZATION: Rivers and Harbors Act, March 3, 1905

LOCATION AND DESCRIPTION: The project is located in Tacoma, Washington. Provides for ,(a) channel in City Waterway 500 feet wide and 29 feet deep from deep water in Commencement Bay to 11th Street Bridge, 500 feet wide and 22 feet deep to 14th Street Bridge, and varying from 500 to 250 feet wide and 19 feet deep from 14th Street Bridge to end of this waterway, a total length of 8,500 feet; (b) channel in Hylebos Waterway 30 feet deep, 3.1 miles long, and 200 feet wide except where width is increased to 250 feet at the bend below East 11th Street, to 300 feet at Lincoln Avenue bend, and to 510 feet and 770 feet, respectively, at the channel widening above Lincoln Avenue and the turning basin at the head of the waterway; (c) construction of two training walls, each about 700 feet long at mouth of Puyallup River; (d) channel in Blair Waterway 2.6 miles long, including a portion seaward of East 11th Street 650 feet wide and 51 feet deep over southerly 350 feet, and 51 feet deep over northerly 300 feet; and remaining portion 51 feet deep and 150 feet wide at East 11th Street, 600 feet wide between East 11th Street and Lincoln Avenue, and 300 feet wide between Lincoln Avenue and a 1,200-foot wide turning basin at head of waterway. All depths refer to the plane of mean lower low water.

CONFERENCE AMOUNT FOR FY 2013: \$ 1,033,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 1,369,000 O: \$ 525,000 T: \$ 1,894,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014 :

N: \$ 1,894,000 – This appropriation will allow funding for environmental document preparations and dredging activities of Blair Waterway which has not been dredged since the extensive deepening (through Section 107 with Port of Tacoma) 10 years ago. As this waterway is still an active aquatic Superfund Site, full sediment characterization including high resolution dioxin and PCB congeners is required. In addition side scan sonar and multibeam hydrosurvey techniques will be used to locate numerous debris fields of wood and scrap metal remaining from former industrial users of the Waterway.

FRM: \$ 0 - N/A

RC: \$ 0 - N/A

H: \$ 0 - N/A

EN: \$ 0 - N/A

WS: \$ 0 - N/A

OTHER INFORMATION: The Blair Waterway is the primary waterway for the Port of Tacoma which has recently expanded its container business by over 30% (5-7 million additional tons high value containers shipped) with the addition of the Grand Alliance shipping groups.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0 . This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Northwestern

District: Seattle

Tacoma Harbor, WA

1 May 2013

NWD-203

O&M JUSTIFICATION SHEET

PROJECT NAME: Tacoma-Puyallup River, WA

AUTHORIZATION: Sec 5 of the Flood Control Act of 1936 (Public No. 738) dated 22 June 1936

LOCATION AND DESCRIPTION: The project is located on the Puyallup River near Tacoma, WA. It provides for a channel with a capacity of 50,000 cubic feet per second between the East 11th Street bridge and the lower end of the inner-county improvement, a distance of about 2.2 miles, by straightening the channel, building levees, (revetted the channel and levees), and making all necessary bridge changes. The Flood Control Act of 28 June 1938 provides for Federal maintenance of the project. The improvement was planned in conjunction with Mud Mountain Dam, and affords protection against floods approximately 50 percent greater than the maximum discharge of record.

CONFERENCE AMOUNT FOR FY 2013: \$144,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$148,000 T: \$148,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 - N/A

FRM: \$148,000 - The funds will be used to brush excessive vegetation from levee tops and side slopes, grading of levee top, pickup garbage, and control noxious weeds and to manage and coordinate project modifications and real estate actions.

RC: \$0 - N/A

H: \$0 - N/A

EN: \$0 - N/A

WS: \$0 - N/A

OTHER INFORMATION: Cumulative flood damages prevented from 1950 through FY 2012 total \$102,067,202.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: The Dalles Lock and Dam, WA & OR

AUTHORIZATION: 1950 Flood Control Act, P.L. 81-516

LOCATION AND DESCRIPTION: On the Columbia River, 90 miles east of Portland, Oregon. Multi-purpose with power; 1 Dam, spillways and fish passage; 1 Navlock, 1 Powerhouse with 24 generating units and Recreation sites.

CONFERENCE AMOUNT FOR FY 2013: \$ 3,196,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 910,000 O: \$ 2,240,000 T: 3,150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,888,000 – Funding will provide for routine navigation lock operations & maintenance including periodic navlock inspections. Also includes cost associated with support of navigation to ensure project performs to meet authorized purposes.

FRM: \$ 0 - N/A

RC: \$ 574,000 - Funding will provide for routine operation & maintenance activities and management of recreation facilities, which include recreation management, interpretive services, visitor assistance program implementation, law enforcement, public sanitation and ranger patrols.

H: \$ 0 - Joint costs have been allocated to the appropriate business line. Routine operation and maintenance of Hydropower plant is Power Marketing Agency direct funded.

EN: \$ 688,000 - Funding will provide for routine operation & maintenance activities and management for the Environmental Stewardship. Activities include mitigation requirements for fish passage facilities & natural resource management and Endangered Species Act mandates.

WS: \$ 0 - N/A

OTHER INFORMATION: Project provides for navigation and hydroelectric power generation. Powerhouse has 26 main generating units with a capacity of 1,800 megawatts. Also provides Fish-passage facilities including two ladders and a fish lock. Dispersed recreation occurs at 4 minimally developed sites and on over 4000 acres of lands and natural resource areas surrounding Lake Celilo.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

WYOMING

O&M JUSTIFICATION SHEET

PROJECT NAME: Jackson Hole Levees, WY

AUTHORIZATION: PL 81-516 (Flood Control Act of 1950)

LOCATION AND DESCRIPTION: Project is located in Western Wyoming on the Snake River near Jackson Hole Wyoming. The project includes 22 miles of levees located on both sides of the Snake River and 2.5 miles on the Gros Ventre River. The levees provide flood control protection.

CONFERENCE AMOUNT FOR FY 2013: \$2,356,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,179,000 O: \$195,000 T: \$2,374,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0 – N/A

FRM: \$2,374,000 – Funding will be used to meet the operations and maintenance requirements of the Flood Risk Management mission. Activities include performing routine annual maintenance and levee patrol, periodic inspection with local sponsor and environmental compliance for flood damages. Also included is the annual cleaning and inspection of project culverts, riprap replacement, vegetation removal and the establishment of the Levee Safety Action Classification ratings for the Jackson Project levees.

RC: \$0 – N/A

H: \$0 – N/A

EN: \$0 – N/A

WS: \$0 – N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PACIFIC OCEAN DIVISION

PACIFIC OCEAN DIVISION
JUSTIFICATION MATERIAL
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JUSTIFICATION OF ESTIMATE

INVESTIGATIONS

ALASKA

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Alaska Regional Ports, AK Tier 1, Alaska Deep Draft Arctic Ports Alaska District	3,161,000	1,411,000	250,000	0	300,000 2/	500,000 1/	700,000
Alaska Regional Ports, AK Tier 2, Point Mackenzie Shoal Alaska District (completion)	1,000,000	0	0	750,000	0 2/3/	250,000 1/	0

The Alaska Regional Ports study focuses on evaluating the problems, opportunities, and needs for regional ports throughout the State of Alaska. Navigation access to local ports is critical to all the 200 plus coastal communities in Alaska, which are primarily served by a regional port system where small barges transship cargo from ocean going barges and small freighters. Since there are few connecting roads and the economy is primarily based on commercial fishing and natural resources development, consideration of regional ports is needed due to the economic, social and cultural dependence these communities have on marine resources and waterborne transportation. The Alaska Department of Transportation and Public Facilities (ADOT&PF) requested the study for harbor improvements in Alaska that focuses on developing a regional ports system that would serve as an integrated intermodal system of importance to the state, the nation, and global markets.

The reconnaissance study was completed in May 2008 and determined that additional systems-based feasibility studies appear to be in the Federal interest and to warrant investigation of regional navigation improvements. The Feasibility Cost Sharing Agreement was signed on 21 September 2009 with the Alaska Department of Transportation and Public Facilities (ADOT&PF). Phase I of the Feasibility Study culminated with the November 18, 2010 Alaska Regional Ports Conference that was attended by harbor users, local, state, and Federal government agencies.

As resource extraction demands increase for the Arctic and the sea ice continues to melt, deep draft commercial vessels usage of the Northern Sea Route for passage between Pacific and Atlantic ports has been increasing exponentially. A planning charette was held in May 2011 that focused attention on the need for deep-draft port capability in the Arctic. As natural resource extraction becomes more economically feasible, harbors of refuge would be needed to provide safe moorage and tug assistance to vessels in distress. Regional ports would provide a comprehensive harbor network for national defense support and safe moorage for the fishing fleet and small commercial ships. The Alaska Regional Ports Study is being conducted on a tiered approach.

Tier 1 Agreement, Alaska Deep-Draft Arctic Ports, Alaska. As an Arctic Nation, the Alaska Department of Transportation and Public Facilities (ADOT&PF) requested a Tier 1 Agreement to study the problems, opportunities, and need to develop a deep-draft port system in the Arctic. Vessel traffic in the Arctic is on the rise; oil and gas industry activities on the Outer Continental Shelf began in the summer 2012; cruise liners, military craft, tugs and barges, and fishing vessels are all present and active in the Arctic. There are significant safety concerns as well as implications related to the Nation's economy, environment, and national security. The study is primarily focusing on transportation/extraction of resources and minerals, with particular interest in involving a Public-Private Partnership with industry and the state. The Feasibility Cost Sharing Agreement was executed in December 2011.

Tier 2 Agreement, Point MacKenzie Shoal, Alaska. Based on concerns expressed by the shipping industry, the ADOT&PF requested a Tier 2 Agreement to study the Point MacKenzie Shoal which is encroaching on the navigation channel serving both the Port of Anchorage and Port Mackenzie. The scope of the investigation is to determine the composition and consistency of the Point MacKenzie Shoal and to provide a long-term solution to the problems posed by the growth of the shoal. The Feasibility Cost Sharing Agreement for Tier 2 was executed on 14 June 2012. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$7,434,000
Reconnaissance Phase (Federal)	888,000
Feasibility Phase (Federal)	3,273,000
Feasibility Phase (Non-Federal)	3,273,000

Tier 1 (Alaska Deep Draft Arctic Ports)

Total Estimated Study Cost	\$5,434,000
Reconnaissance Phase (Federal)	888,000
Feasibility Phase (Federal)	2,273,000
Feasibility Phase (Non-Federal)	2,273,000

Tier 2 (Point Mackenzie Shoal)

Total Estimated Study Cost	\$2,000,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

Fiscal Year (FY) 2013 funds will be used to complete the Tier 1 (Alaska Deep-Draft Arctic Ports) potential Arctic port site assessment and continue site specific Arctic port investigations. FY 2014 funds would be used to continue the Tier 1 (Alaska Deep Draft Ports) site specific Arctic port investigations and complete the Tier 2 (Point MacKenzie Shoal) shoal investigations.

The study is being conducted under the Study Resolution on Rivers and Harbors in Alaska adopted on 2 December 1970 by the Committee on Public Works of the U.S. House of Representatives.

The Tier 1 (Alaska Deep Draft Arctic Ports) feasibility completion is TBD. The Tier 2 (Point MacKenzie Shoal) study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$667,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. This amount will be used to continue investigations of the Point MacKenzie Shoal.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Little Diomed SBH, AK Alaska District (completion)	1,893,000	1,543,000	200,000	50,000	0 2/3/	100,000 1/	0

The City of Diomed lies on the west coast of Little Diomed Island, Alaska, 2.5 miles from Big Diomed Island, Russia. The two Diomed islands lie in the center of the Bering Straits, 135 miles northwest of Nome (the nearest harbor). Access to Diomed is limited to weekly helicopter service during the summer open water periods and intermittent fixed wing aircraft during the winter, which is dependent upon construction of an ice runway. Both types of service are very weather dependent. Service is also very limited in the size and type of goods that can be shipped. Diomed has no protected harbor, and regular freight barges have ceased delivering cargo because of the high risk of barge damage and weather delays. Some independent barge operators will go to Diomed for premium fees. New construction, equipment, major repairs to infrastructure, and even replacement of household appliances are impacted and delayed because of increased transportation costs. During some winters, an ice runway can be built on the sea ice for fixed wing aircraft, which can deliver some larger items, but at exorbitant costs. A harbor would greatly reduce the cost of goods and increase access to the village. In addition, coastal storms damage the infrastructure, and there are no alternatives for relocating the infrastructure. A cost-sharing agreement for the feasibility study was signed on November 6, 2006 with Kawerak, Inc. (regional non-profit tribal corporation) as agents for the Native Village of Diomed, and the study is ongoing. The community of Diomed is almost 94% Alaska Native. Most residents rely on subsistence for survival, most of which comes from the sea, and over 35% of the residents are defined as being in poverty.

The estimated cost of the feasibility phase is \$3,168,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Fiscal Year (FY) 2012 funds were used to perform Phase 2 of the feasibility study. No funds were received in FY 2013, unobligated funds carried in from FY 2012 are being used to continue feasibility study activities. FY 2014 funds will be used to complete the feasibility report.

Total Estimated Study Cost	\$3,477,000
Reconnaissance Phase (Federal)	309,000
Feasibility Phase (Federal)	1,584,000
Feasibility Phase (Local)	1,584,000

The study is being conducted under the Study Resolution on Rivers and Harbors in Alaska adopted on 2 December 1979 by the Committee on Public Works of the U.S. House of Representatives.

The feasibility study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$121,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. This amount will be used to continue feasibility study activities.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Matanuska Watershed, AK Alaska District	3,812,000	1,517,000	499,000	296,000	100,000 2/	200,000 1/	1,200,000

The Matanuska-Susitna Watershed is located about 50 miles north of Anchorage, Alaska in the Matanuska-Susitna Borough. The Matanuska-Susitna Borough has experienced increased development in recent years (~4%/year) with resulting concerns about flooding, stream bank erosion, aquatic habitat degradation, and overall health within their watershed. The ongoing collaborative study includes partners such as the Matanuska Watershed Coalition, The Native Village of Chickaloon, and the Mat-Su Salmon Partnership, a pilot project under the National Fish Habitat Initiative. The study is investigating water resource related concerns in the Matanuska and Susitna watershed and develop a comprehensive water resources plan to provide the Borough, Federal and State agencies with a planning tool that would assist in making better decisions related to future development within the watershed. In a collaborative effort with District Regulatory personnel, USEPA, and USFWS, the watershed plan will provide a comprehensive approach to managing wetland impacts and evaluating wetland quality so that appropriate mitigation can be applied on a consistent basis throughout the watershed. A Feasibility Cost Sharing Agreement was executed on 27 September 2007 with Matanuska-Susitna Borough.

Fiscal Year (FY) 2012 were used to continue the feasibility study and gather data needed to evaluate the water resource needs of the watershed. FY 2013 funding are being used to continue wetland mapping and application of functional assessment process. FY 2014 funds will be used to initiate development of the watershed plan requirements.

Total Estimated Study Cost	\$7,329,000
Reconnaissance Phase (Federal)	295,000
Feasibility Phase (Federal)	3,517,000
Feasibility Phase (Local)	3,517,000

The study is being conducted under the Rivers and Harbors in Alaska Resolution, 2 December 1970. The feasibility study completion date is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

HAWAII

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Ala Wai Canal, Oahu, HI Honolulu District	4,830,000	3,085,000	(1,000)	383,000	400,000 2/	400,000 1/	563,000

The Ala Wai watershed encompasses more than 19 square miles on the island of Oahu. The study area extends from the ridge of the Koolau Mountains to the nearshore waters of Malama Bay and includes Makiki, Manoa and Palolo streams. These streams all drain to the Ala Wai Canal, a two-mile long, man-made waterway constructed during the 1920's to drain extensive coastal wetlands. Due to development and alterations over the years, residents of the Ala Wai watershed are at risk to flood damages and the aquatic ecosystem is significantly degraded.

Approximately 3,000 properties are at risk of damage from a 100-year flood event under existing conditions. In 1965, 1967, and 1992, Waikiki experienced severe flooding. In 2004, Manoa stream overflowed its banks and caused over \$80M in damages to property and irreplaceable documents in the University of Hawaii's library. In 2006, the Makiki neighborhood also experienced heavy flooding.

The Ala Wai watershed supports important habitat for marine, estuarine and freshwater ecosystems. Endemic amphidromous species such as native gobies and freshwater shrimp are dependent upon healthy streams, estuaries and marine habitat as they transit through these systems during their life-cycles. Alterations to the stream channel over time have altered stream flow, making the streams impassable for much of the year. Urban uses and activities further exacerbate ecosystem degradation through loading of sediment and pollutants that impair fish habitat and health. As a result, the streams and the Canal are included on the Environmental Protection Agency Section 303(d) List of Impaired Waters.

The project is a cooperative effort with Federal, State and local agencies. The project goal is to improve the overall quality of the Ala Wai watershed. Based on recent flood events and a re-scoping charette held in October 2012, the primary focus has shifted to Flood Risk Management with ecosystem restoration in specific reaches to improve aquatic habitat.

The feasibility cost sharing agreement was executed in April 2001 with the State Department of Land and Natural Resources and subsequently amended in August 2006 and November 2012 for a total study cost of \$9,258,000. In October 2012, a re-scoping charette was held to ensure compliance with US Army Corps of Engineers' Specific, Measurable, Attainable, Risk Informed, Timely planning initiative. The estimated total cost to complete the study is \$2,269,000. The Draft Feasibility/Environmental Impact Statement (EIS) is scheduled for Fiscal Year (FY) 2014 with the Chief's Report scheduled for FY 2015 or earlier. FY 2013 funds are being used to receive concurrence on the final array of alternatives and identify the tentatively selected plan. FY 2014 funds will be used to seek concurrence on the tentatively selected plan, publish the Draft Feasibility/EIS Report, conduct concurrent public, policy, technical reviews, including Independent External Peer Review (IEPR).

The total estimated cost of the feasibility phase is shared on a 50-50 percent basis by Federal and non-Federal interests, except for the IEPR which is funded at 100% federal cost and is estimated to cost \$152,000. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$9,383,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	4,705,000
Feasibility Phase (Non-Federal)	4,553,000

The study is authorized under Section 209 of the Rivers and Harbors Act of 1962, Harbors and Rivers in Hawaii.

The reconnaissance phase was completed in August 1999. The feasibility phase is scheduled for completion in TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$1,000 was rescinded from the project in FY 2011

\$408,000 was transferred to the Flood Control and Coastal Emergencies (FCCE) in FY 2011

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Hilo Harbor Modifications, Hawaii, HI Honolulu District	1,671,000	96,000	0	351,000	0 2/3/	775,000 1/	449,000

Hilo Harbor is located on the northeast coast of the island of Hawaii, the State of Hawaii's southernmost island. The harbor is approximately two miles from the business district of Hilo, the island's city and county seat and is the principal commercial port for the island (the second being Kawaihae Harbor on the west side of the island) and the fourth largest port in the State in terms of total goods shipped. The harbor provides a wide range of maritime facilities and services including the island's only pier large enough to accommodate visiting cruise ships. Among the commodities moving through the harbor are liquid bulk cargo, including all of the island's petroleum products, container cargo, and new vehicles.

Hilo Harbor was constructed by the Corps of Engineers in 1930 and consists of a 10,080-foot long breakwater protecting a 35-foot deep turning basin. Vessel traffic is currently resulting in maximum usage of the existing commercial harbor facilities. The State of Hawaii, Department of Transportation, Harbors Division (DOT-Harbors) recently completed an updated master plan for Hilo Harbor which identified the need for modification or expansion of the existing harbor to accommodate larger vessels with the intent of increasing operating efficiency at the harbor and reducing cargo transportations costs. The master plan recommended enlarging the turning basin to accommodate future construction and/or extension of piers, as well as use of the area by larger ships. The existing harbor is unable to accommodate larger vessels without significant grounding risk. Additionally, adverse surge conditions during winter months often preclude users from safely mooring and operating their vessels. DOT-Harbors is the sponsor for this project. In December 2011, DOT-Harbors provided a letter of intent indicating that they fully understand the feasibility cost-sharing requirements. A final 905(b) was approved in July 2012. A Feasibility Cost Share Agreement (FCSA) is scheduled to be executed in Fiscal Year (FY) 2013. The reconnaissance phase is scheduled for completion in FY 2013.

FY 2013 funds would be used to initiate the feasibility phase upon execution of the FCSA in FY 2013. FY 2014 funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests, with the exception of the Independent External Peer Review (IEPR). The estimated cost of the IEPR is \$150,000 and will be fully Federal funded. A summary of the study cost sharing follows:

Total Estimated Study Cost	\$3,096,000
Reconnaissance Phase (Federal)	96,000
Feasibility Phase (Federal)	1,575,000
Feasibility Phase (Non-Federal)	1,425,000

This study is authorized under Section 209 of the Rivers and Harbors Act of 1962 (Public Law 87-874).

The feasibility study is scheduled for completion in TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is \$351,000. This amount will be used to perform work on the project as follows: continue feasibility study activities.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$378,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. Part of this amount will be used to execute the FCSA and initiate feasibility study activities, the remainder will be carried over into FY 2014.

\$0 was rescinded from the project.

\$0 was transferred to the Flood Control and Coastal Emergencies (FCCE).

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
West Maui Watershed, Maui, HI Honolulu District	2,594,000	385,000	49,000	399,000	0 2/3/	538,000 1/	1,223,000

The West Maui watershed includes the 5 watersheds from Kaanapali to Honolua on the island of Maui, Hawaii (24,000 acres). Coral reefs provide \$360 million annually in net economic benefits to Hawaii. Coral reefs support complex food systems, diverse biological life, recreation, commerce, shoreline protection, and cultural resources. In West Maui, nearly one-fourth of all living corals have been lost in the last 13 years. Without dramatic steps to restore favorable conditions, reefs statewide risk rapid degradation. Causes of coral reef decline are complex and not yet fully understood. However, land-based pollution is known to be a serious threat to coral reef ecosystems. Increased sedimentation associated with loss of forest land, historical agriculture practices, stream channelization, and rapid development has clearly impacted coral reef health. The study area supports 60 Endangered Species Act (ESA) listed terrestrial and marine species and 62 ESA designated critical habitat units. The Hawaiian Humpback Whale National Marine Sanctuary and two state designated Marine Protected Areas lie within the study area. By reducing land-based pollution in a more comprehensive manner, coral reef ecosystem functions and health and coastal water quality will improve in a way not possible with isolated actions.

The watershed plan will provide a comprehensive and integrated water resource management (IWRM) strategy for the West Maui Ridge to Reef Initiative. The initiative engages various federal and state agencies and organizations in the implementation of actions to reduce the threats of land-based pollution to coral reefs in West Maui. As an action oriented initiative, the State and federal and non-governmental organizations are funding technical studies, public education and on-the-ground actions as they are identified within the comprehensive strategy. Partner agencies include National Oceanic and Atmospheric Administration, Environmental Protection Agency, Department of Interior, Natural Resources Conservation Service, and National Fish and Wildlife Foundation. The West Maui Watershed has been identified as a national priority by the U.S. Coral Reef Task Force, the National Ocean Council, and the federal Interagency Task Force on Climate Change Adaptation – providing an alternative approach to IWRM. The cost share agreement was executed in August 2012.

Available funds are being used in Fiscal Year (FY) 2013 to hold the public scoping meeting, scoping planning charette, complete the problems and opportunities identification and identify and seek concurrence on the final array of alternatives. FY 2014 funds will be used to develop, evaluate and compare alternative approaches and seek concurrence on the tentative selected strategy. The total estimated cost of the assessment is \$3,000,000, which will be shared on a 75-25 percent basis by Federal and non-Federal interests.

A summary of the study cost sharing follows:

Total Estimated Study Cost	\$3,344,000
Reconnaissance Phase (Federal)	344,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	750,000

The study is authorized by Sec 729 of the WRDA 86 (PL 99-662) as amended.

The reconnaissance phase was completed in August 2012. The feasibility study is scheduled for completion in TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is \$8,000. This amount will be used to perform work on the study as follows: administer Architect-Engineer contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$481,000 of unobligated FY 2012 funds were carried into FY 2013. This amount will be used to continue feasibility study activities.

\$0 was rescinded from the project.

\$0 was transferred to the Flood Control and Coastal Emergencies (FCCE).

OPERATION AND MAINTENANCE

Key to Abbreviations:

N = Navigation

FRM = Flood Risk Management

Rec = Recreation

Hydro = Hydropower

ES = Environmental Stewardship

WS = Water Supply

ALASKA

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Anchorage Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, July 3, 1958, Public Law 85-500, (Anchorage Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) and 2) The Consolidated Appropriations Act 2005, Division C – Energy and Water Development Appropriations, Public Law 108-447

LOCATION AND DESCRIPTION: The Port of Anchorage is located in Anchorage, Alaska at the northern end of Cook Inlet in south central Alaska. The project accommodates three dry cargo berths and two petroleum handling facilities. It serves as Alaska's regional and provides services to approximately 90% of the total population of Alaska, including five military bases. Anchorage Harbor has been designated a national strategic port by the Department of Defense and is also used by military vessels. The Corps of Engineers has dredged the Port of Anchorage annually at full federal expense to its authorized depth of -35 feet mean lower low water since the 1960's. Vessels with drafts up to 40 feet dock during high tide and offload their cargo, thus requiring full project depth year around.

CONFERENCE AMOUNT FOR FY 2013: \$13,930,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$9,431,000 O: \$0.0 T: \$9,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$9,431,000 will be used to perform annual maintenance dredging to remove an estimated 1.4 million cubic yards of glacial silts and sands from the existing and newly expanded project area. The annual dredging period is from 1 May through 1 November. These funds will sustain navigation performance by maintaining the availability and reliability of Anchorage Harbor that receives 90% of all goods entering the State of Alaska.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Anchorage is expanding the intermodal facility that will move the dock 400 feet seaward and lengthen it by about 5,000 ft, nearly tripling its length, and doubling the uplands storage capacity. The dock expansion has increased the dredging area maintained by the Corps from approximately 115 acres to 202 acres. An Environmental Assessment and Finding of no Significant Impact was completed in August 2008.

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$100,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Chena River Lakes Flood Control Project, North Pole, Alaska

AUTHORIZATION: Flood Control Act of 13 August 1968, Public Law 90-483.

LOCATION AND DESCRIPTION: The Chena River Lakes Flood Control Project is located in North Pole, Alaska approximately 17 mile east of Fairbanks, Alaska. The 20,000-acre project consists of an 8-mile long zoned rock-filled dam that provides flood protection to Fairbanks, Alaska, and adjacent areas including Fort Wainwright, from recurring flood damage from the Chena River.

CONFERENCE AMT. FOR FY 2013: \$3,328,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$755,000 O: \$2,166,000 T: \$2,921,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,121,000 is requested to provide annual project operations, maintenance, and periodic inspections for flood control. Approximately \$1,760,000 is required for dam operations and \$361,000 will be used to correct dam safety deficiencies. Operation of the dam at the minimum level of service prevents downstream flooding on average about once each year with average annual damages prevented of \$9,231,000.

REC: \$345,000 to perform routine management of the non-leased recreational lands and fund the annual law enforcement cooperation agreement with the local police department. Funding of this increment prevents increased vandalism and prevents exposure of the Government to unwanted safety liabilities related to use of public lands.

H: N/A

ES: \$455,000 to perform routine environmental compliance and stewardship activities relating to the natural resources management program. Funding of this increment will decrease the likelihood of citations and notice of violations for improper storage of hazardous materials, improper or unsafe working conditions, or environmental damage due to poor/insufficient maintenance of project features.

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$100,000. This amount will be used to perform the work as follows: Complete the administration of the FY 2013 service and repair contracts.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Cook Inlet Shoals (Cook Inlet Navigation Channel), Alaska

AUTHORIZATION: (1) Water Resources Development Act of 1996 (Public Law 104-303, 104th Congress) authorizes the expenditure of \$5,700,000 subject to the report of the Chief of Engineers. (2) The Energy and Water Development Appropriations Act, 1999 (Public Law 105-245, Oct. 7 1998) increases the project total not to exceed \$12,600,000. (3) Energy and Water Appropriations Act, 2005, allows the Secretary to modify the channel to run the entire length of Fire Island Range and Point Woronzof Range to a depth of - 45 feet mean lower low water.

LOCATION AND DESCRIPTION: Cook Inlet is a 250-mile long estuary in south-central Alaska that serves as the navigation corridor for bulk goods and supplies transported to the Port of Anchorage. The construction of the original project authorization was completed in September 2000 and provides a navigation channel approximately 11,000 feet long by 1,100 feet wide and maintained to a project depth of -38 feet mean lower low water. The work authorized in the 2005 Energy and Water Appropriations Act awaits cost share study funding from the sponsor. The Port of Anchorage is a Department of Defense designated national strategic port and provides services to approximately 90% of the total population of Alaska, including five military bases. Vessels with drafts up to 40 feet travel the channel to the Port of Anchorage.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,188,000 O: \$0.0 T: \$6,188,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$6,188,000 will be used to prepare contract plans and specifications for maintenance dredging, award a maintenance dredging contract, and perform dredging.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The 2012 condition survey found the channel depth 8 to 10 feet above the project depth, with a volume of 4.1 million cubic yards that require removal.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Dillingham Harbor, Alaska

AUTHORIZATION: Rivers and Harbors Act, July 3, 1958, Section 101, Public Law 85-500.

LOCATION AND DESCRIPTION: Dillingham Harbor is located approximately 350 miles south west of Anchorage at the head of Nushagak Bay and at the confluence of the Wood and Nushagak Rivers in Bristol Bay. The City borders the largest remaining wild salmon fishery in the world. Dillingham Harbor provides half-tide access and all-tide moorage for about 320 commercial fishing and recreational craft. Commercial salmon fishing is the cornerstone of the community's economy with subsistence hunting and fishing continuing as vital local activities. The harbor is also a harbor of refuge, providing both moorage and an alternate landing area for lighterage vessels. All transportation to the area is by water or air.

CONFERENCE AMT. FOR FY 2013: \$1,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,080,000 O: \$0 T: \$1,080,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,080,000 will be used to continue annual maintenance dredging of the harbor and entrance channel to the authorized depth of +2 feet mean lower low water. This funding would maintain reliability and availability to commercial and subsistence fishing vessels to off-load fish products and re-supply for continued fishing.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$45,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Homer Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, July 3, 1958, Section 101, Public Law 85-500, (Homer Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) as adopted and 2) Amendment to the Alaska Omnibus Act, August 19, 1964, Public Law 88-451.

LOCATION AND DESCRIPTION: Homer Harbor is located in south-central Alaska, approximately 230 road miles from Anchorage, AK, near the southern tip of the Kenai Peninsula. Homer Harbor provides sheltered moorage for approximately 1,525 vessels. The project extends the fishing season an extra four months each year and is an integral part of Homer's economy. Annual commercial tonnage for the harbor is 0.1 million tons.

CONFERENCE AMT. FOR FY 2013: \$467,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$487,000 O: \$0.0 T: \$487,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$487,000 will be used to perform annual maintenance dredging of the harbor entrance channel. This will enable commercial and subsistence fishing vessels harbor to off-load fish products for processing and be able to re-supply for continued operations. These funds would assure the continued availability of this critical harbor of refuge for the Cook Inlet commercial and subsistence fishing fleet. Tug and barge operations, which support freight delivery and oil exploration, will continue. Home-ported in Homer Harbor are the U.S. Coast Guard Cutter *Roanoke Island* and the U.S. Fish and Wildlife's Research Vessel *Tiglax*; dredging will allow these vessels to continue operating in the harbor without interruption.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date of this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$50,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Lowell Creek, Seward, Alaska

AUTHORIZATION: (1) Public Resolution No. 52, 9 February 1927 (69th Congress) provided for the construction of an intake dam and timber flume through the city of Seward. (2) Public Law No. 336, 14 February 1933 provided for the maintenance of the authorized project. (3) Flood Control Act, 25 August 1937 (House Doc. 154, 75th Congress, 1st Session) provided for the construction of a diversion dam 25 feet high and 400 feet long, and for a concrete lined tunnel 10 feet in diameter and 2,070 feet long through Bear Mountain to protect the city of Seward from the floodwaters of Lowell Creek. (4) Water Resources Development Act, 2007, Section 5032, Lowell Creek Tunnel, requires the Secretary to assume responsibility for the long-term maintenance and repair of the Lowell Creek tunnel for a period of 15 years or until an alternative method of flood diversion is constructed, whichever is earlier. The Secretary shall conduct a study to determine whether an alternative method of flood diversion in Lowell Canyon is feasible and shall carry out the alternative method. The Federal share of the cost of carrying out an alternative method under shall be the same as the Federal share of the cost of the construction of the Lowell Creek Tunnel.

LOCATION AND DESCRIPTION: Lowell Creek is located in the city of Seward, which is 125 miles south of Anchorage by highway. The lower reaches of Lowell Creek were diverted away from the city of Seward, which sits on its alluvial fan, by this project. The original project consists of a dam, 400 long with a maximum crest height of 25 feet and a tunnel to divert the creek away from the city and through Bear Mountain into Resurrection Bay. The tunnel is 10 feet in diameter, 2,068 feet long, and exits to a concrete flume above the ocean's edge.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$150,000 O: \$0.0 T: \$150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$150,000 will be used to prepare plans and specifications and environmental documents for repairs of the concrete in the tunnel. An annual inspection will be performed. The 2012 inspection report noted continued deterioration of concrete through wear and cracking.

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Ninilchik Harbor, Alaska

AUTHORIZATION: Rivers and Harbors Act, July 3, 1958, Public Law 85-500, (Ninilchik Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) as adopted.

LOCATION AND DESCRIPTION: The Ninilchik Harbor is located in Ninilchik, Alaska, approximately 100 air miles southwest of Anchorage on the Kenai Peninsula. The small boat basin provides protected moorage with half-tide access for 32 vessels. The basin and channel also provide access for Cook Inlet commercial fishing boats to unload their catch and take on supplies. The basin is an important harbor-of-refuge for lower Cook Inlet.

CONFERENCE AMT. FOR FY 2013: \$454,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$400,000 O: \$0.0 T: \$400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$400,000 will be used to perform annual maintenance dredging of the basin and entrance channel. Funding will assure access for the commercial and subsistence fishing fleet to this critical harbor of refuge.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$5,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Nome Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, August 8, 1917 (House Doc. 1932, 64th Congress, 2nd Session) as adopted by Public Law No. 37; and 2) Water Resources Development Act 1999, Section 101(a) (3), Public Law 106-53.

LOCATION AND DESCRIPTION: Nome Harbor is located on the southern coast of the Seward Peninsula in western Alaska. The city is approximately 540 miles northwest of Anchorage, and is the transportation and commerce center for Northwest Alaska. The recently completed improvement project consists of a new 3,600 foot-long entrance channel protected by a 3,025-foot long rubblemound breakwater, a new causeway bridge, a 270-foot long rubblemound breakwater extension on the existing causeway, and sediment collection basins. The harbor provides protected moorage for the existing 170 vessels as well as a fleet of 40 barges and transshipment vessels providing cargo and fuel service to the region.

CONFERENCE AMT. FOR FY 2013: \$1,151,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,244,000 O: \$0.0 T: \$1,244,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,244,000 - Funds will be used to perform annual maintenance dredging. Funding will assure 90% availability for this critical harbor of refuge, subsistence, and major commercial distribution and transfer center for Northwest Alaska and Seward Peninsula.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$39,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

HAWAII

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Barbers Point Deep Draft Harbor, Oahu, Hawaii

AUTHORIZATION: River and Harbor Act, October 27, 1965, PL 89-298

LOCATION AND DESCRIPTION: The Barbers Point Harbor is a Federally authorized harbor, completed in 1985 and located on the Ewa plain along the southwestern coast of the island of Oahu, approximately 20 road miles west of Honolulu.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Barbers Point Harbor, Pacific Regional Visitor Center, Oahu, Hawaii

AUTHORIZATION: River and Harbor Act, October 27, 1965, Public Law 89-298.

LOCATION AND DESCRIPTION: The Barbers Point Harbor, Pacific Regional Visitor Center is located in Honolulu, Hawaii on the second floor of historic Battery Randolph at Fort DeRussy adjacent to Waikiki Beach on the island of Oahu. The Pacific Regional Visitor Center is designed to educate the public about the Corps of Engineers and the Corps role in water resource development in the Pacific.

CONFERENCE AMT. FOR FY 2013: \$238,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$228,000 T: \$228,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

REC: \$228,000 Funding provides for operation of the Pacific Regional Visitor Center (RVC). The RVC functions as an informational visitor center designed to educate the public of the Corps' work in the Pacific and focuses on the POH's Civil Works Water Resources Development Program. The presentation reflects the historic and ongoing relationship between the military and civil works in the Pacific. The RVC participates in outreach activities such as Earth Day, Public Lands Day and Water Monitoring Day. The RVC reaches over 76,000 visitors a year.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Hilo Harbor, Hawaii, HI

AUTHORIZATION: The project was authorized under the River and Harbor Act of 1907 and subsequent work authorized under the River and Harbor Act of 1912 and 1925.

LOCATION AND DESCRIPTION: The Hilo Deep Draft Harbor is located on the northeast coast of the island of Hawaii. The project was completed in 1930 and consists of a 10,080-foot-long breakwater protecting a 35-foot-deep basin. Hilo Harbor is one of the two main commercial ports for the Island of Hawaii.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Honolulu Harbor, Oahu; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1990.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Honolulu Harbor, Oahu, Hawaii

AUTHORIZATION: The project was authorized by the River and Harbor Acts of 3 March 1905, 8 August 1917, 3 July 1930 and 3 September 1954.

LOCATION AND DESCRIPTION: Honolulu Harbor is located on the southwestern coast of the island of Oahu. The harbor consists of an entrance channel (4,000 feet long, 500 feet wide and 45 feet deep); a main harbor basin (3,300 feet long, 1,520 feet wide and 40 feet deep); a west harbor basin (3,400 feet long, 1,000 feet wide and 40 feet deep); and a connecting channel (400 feet wide and 40 feet deep); and Kalihi Channel (400 feet wide, 23 feet deep).

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: NA

REC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Kahului Deep Draft Harbor, Maui, Hawaii

AUTHORIZATION: The federal project was authorized by the River and Harbor Acts of 27 July 1916, 25 June 1919, 21 January 1927, and 14 July 1960.

LOCATION AND DESCRIPTION: Kahului Harbor is Maui's only commercial port and is located on the northern coast of the island. The Federal project consists of rubble mound breakwaters on the east and west sides of the harbor, approximately 2,766 and 2,315 feet in length, respectively; an entrance channel 600 feet wide between the breakwaters; and a harbor basin 2,050 feet wide, 2,400 feet long at 35 feet deep.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10 years. Dredging at this project was last completed in February 1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Nawiliwili Deep Draft Harbor, Kauai, Hawaii

AUTHORIZATION: The project was authorized under the River and Harbor Act of 2 March 1919 and September 1954.

LOCATION AND DESCRIPTION: Nawiliwili Harbor is located on the southeast coast of the island of Kauai and is the island's principal commercial harbor. The harbor consists of a breakwater 2,045 feet in length, and an S-shaped entrance channel 40 feet deep with a minimum width of 600 feet and a length of 2,400 feet.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; and Kahului Deep Draft Harbor, Maui. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10 years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PACIFIC OCEAN DIVISION

PACIFIC OCEAN DIVISION
JUSTIFICATION MATERIAL
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JUSTIFICATION OF ESTIMATE

INVESTIGATIONS

ALASKA

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Alaska Regional Ports, AK Tier 1, Alaska Deep Draft Arctic Ports Alaska District	3,161,000	1,411,000	250,000	0	300,000 2/	500,000 1/	700,000
Alaska Regional Ports, AK Tier 2, Point Mackenzie Shoal Alaska District (completion)	1,000,000	0	0	750,000	0 2/3/	250,000 1/	0

The Alaska Regional Ports study focuses on evaluating the problems, opportunities, and needs for regional ports throughout the State of Alaska. Navigation access to local ports is critical to all the 200 plus coastal communities in Alaska, which are primarily served by a regional port system where small barges transship cargo from ocean going barges and small freighters. Since there are few connecting roads and the economy is primarily based on commercial fishing and natural resources development, consideration of regional ports is needed due to the economic, social and cultural dependence these communities have on marine resources and waterborne transportation. The Alaska Department of Transportation and Public Facilities (ADOT&PF) requested the study for harbor improvements in Alaska that focuses on developing a regional ports system that would serve as an integrated intermodal system of importance to the state, the nation, and global markets.

The reconnaissance study was completed in May 2008 and determined that additional systems-based feasibility studies appear to be in the Federal interest and to warrant investigation of regional navigation improvements. The Feasibility Cost Sharing Agreement was signed on 21 September 2009 with the Alaska Department of Transportation and Public Facilities (ADOT&PF). Phase I of the Feasibility Study culminated with the November 18, 2010 Alaska Regional Ports Conference that was attended by harbor users, local, state, and Federal government agencies.

As resource extraction demands increase for the Arctic and the sea ice continues to melt, deep draft commercial vessels usage of the Northern Sea Route for passage between Pacific and Atlantic ports has been increasing exponentially. A planning charette was held in May 2011 that focused attention on the need for deep-draft port capability in the Arctic. As natural resource extraction becomes more economically feasible, harbors of refuge would be needed to provide safe moorage and tug assistance to vessels in distress. Regional ports would provide a comprehensive harbor network for national defense support and safe moorage for the fishing fleet and small commercial ships. The Alaska Regional Ports Study is being conducted on a tiered approach.

Tier 1 Agreement, Alaska Deep-Draft Arctic Ports, Alaska. As an Arctic Nation, the Alaska Department of Transportation and Public Facilities (ADOT&PF) requested a Tier 1 Agreement to study the problems, opportunities, and need to develop a deep-draft port system in the Arctic. Vessel traffic in the Arctic is on the rise; oil and gas industry activities on the Outer Continental Shelf began in the summer 2012; cruise liners, military craft, tugs and barges, and fishing vessels are all present and active in the Arctic. There are significant safety concerns as well as implications related to the Nation's economy, environment, and national security. The study is primarily focusing on transportation/extraction of resources and minerals, with particular interest in involving a Public-Private Partnership with industry and the state. The Feasibility Cost Sharing Agreement was executed in December 2011.

Tier 2 Agreement, Point MacKenzie Shoal, Alaska. Based on concerns expressed by the shipping industry, the ADOT&PF requested a Tier 2 Agreement to study the Point MacKenzie Shoal which is encroaching on the navigation channel serving both the Port of Anchorage and Port Mackenzie. The scope of the investigation is to determine the composition and consistency of the Point MacKenzie Shoal and to provide a long-term solution to the problems posed by the growth of the shoal. The Feasibility Cost Sharing Agreement for Tier 2 was executed on 14 June 2012. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$7,434,000
Reconnaissance Phase (Federal)	888,000
Feasibility Phase (Federal)	3,273,000
Feasibility Phase (Non-Federal)	3,273,000

Tier 1 (Alaska Deep Draft Arctic Ports)

Total Estimated Study Cost	\$5,434,000
Reconnaissance Phase (Federal)	888,000
Feasibility Phase (Federal)	2,273,000
Feasibility Phase (Non-Federal)	2,273,000

Tier 2 (Point Mackenzie Shoal)

Total Estimated Study Cost	\$2,000,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

Fiscal Year (FY) 2013 funds will be used to complete the Tier 1 (Alaska Deep-Draft Arctic Ports) potential Arctic port site assessment and continue site specific Arctic port investigations. FY 2014 funds would be used to continue the Tier 1 (Alaska Deep Draft Ports) site specific Arctic port investigations and complete the Tier 2 (Point MacKenzie Shoal) shoal investigations.

The study is being conducted under the Study Resolution on Rivers and Harbors in Alaska adopted on 2 December 1970 by the Committee on Public Works of the U.S. House of Representatives.

The Tier 1 (Alaska Deep Draft Arctic Ports) feasibility completion is TBD. The Tier 2 (Point MacKenzie Shoal) study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$667,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. This amount will be used to continue investigations of the Point MacKenzie Shoal.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Little Diomed SBH, AK Alaska District (completion)	1,893,000	1,543,000	200,000	50,000	0 2/3/	100,000 1/	0

The City of Diomed lies on the west coast of Little Diomed Island, Alaska, 2.5 miles from Big Diomed Island, Russia. The two Diomed islands lie in the center of the Bering Straits, 135 miles northwest of Nome (the nearest harbor). Access to Diomed is limited to weekly helicopter service during the summer open water periods and intermittent fixed wing aircraft during the winter, which is dependent upon construction of an ice runway. Both types of service are very weather dependent. Service is also very limited in the size and type of goods that can be shipped. Diomed has no protected harbor, and regular freight barges have ceased delivering cargo because of the high risk of barge damage and weather delays. Some independent barge operators will go to Diomed for premium fees. New construction, equipment, major repairs to infrastructure, and even replacement of household appliances are impacted and delayed because of increased transportation costs. During some winters, an ice runway can be built on the sea ice for fixed wing aircraft, which can deliver some larger items, but at exorbitant costs. A harbor would greatly reduce the cost of goods and increase access to the village. In addition, coastal storms damage the infrastructure, and there are no alternatives for relocating the infrastructure. A cost-sharing agreement for the feasibility study was signed on November 6, 2006 with Kawerak, Inc. (regional non-profit tribal corporation) as agents for the Native Village of Diomed, and the study is ongoing. The community of Diomed is almost 94% Alaska Native. Most residents rely on subsistence for survival, most of which comes from the sea, and over 35% of the residents are defined as being in poverty.

The estimated cost of the feasibility phase is \$3,168,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Fiscal Year (FY) 2012 funds were used to perform Phase 2 of the feasibility study. No funds were received in FY 2013, unobligated funds carried in from FY 2012 are being used to continue feasibility study activities. FY 2014 funds will be used to complete the feasibility report.

Total Estimated Study Cost	\$3,477,000
Reconnaissance Phase (Federal)	309,000
Feasibility Phase (Federal)	1,584,000
Feasibility Phase (Local)	1,584,000

The study is being conducted under the Study Resolution on Rivers and Harbors in Alaska adopted on 2 December 1979 by the Committee on Public Works of the U.S. House of Representatives.

The feasibility study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$121,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. This amount will be used to continue feasibility study activities.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Matanuska Watershed, AK Alaska District	3,812,000	1,517,000	499,000	296,000	100,000 2/	200,000 1/	1,200,000

The Matanuska-Susitna Watershed is located about 50 miles north of Anchorage, Alaska in the Matanuska-Susitna Borough. The Matanuska-Susitna Borough has experienced increased development in recent years (~4%/year) with resulting concerns about flooding, stream bank erosion, aquatic habitat degradation, and overall health within their watershed. The ongoing collaborative study includes partners such as the Matanuska Watershed Coalition, The Native Village of Chickaloon, and the Mat-Su Salmon Partnership, a pilot project under the National Fish Habitat Initiative. The study is investigating water resource related concerns in the Matanuska and Susitna watershed and develop a comprehensive water resources plan to provide the Borough, Federal and State agencies with a planning tool that would assist in making better decisions related to future development within the watershed. In a collaborative effort with District Regulatory personnel, USEPA, and USFWS, the watershed plan will provide a comprehensive approach to managing wetland impacts and evaluating wetland quality so that appropriate mitigation can be applied on a consistent basis throughout the watershed. A Feasibility Cost Sharing Agreement was executed on 27 September 2007 with Matanuska-Susitna Borough.

Fiscal Year (FY) 2012 were used to continue the feasibility study and gather data needed to evaluate the water resource needs of the watershed. FY 2013 funding are being used to continue wetland mapping and application of functional assessment process. FY 2014 funds will be used to initiate development of the watershed plan requirements.

Total Estimated Study Cost	\$7,329,000
Reconnaissance Phase (Federal)	295,000
Feasibility Phase (Federal)	3,517,000
Feasibility Phase (Local)	3,517,000

The study is being conducted under the Rivers and Harbors in Alaska Resolution, 2 December 1970. The feasibility study completion date is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

HAWAII

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Ala Wai Canal, Oahu, HI Honolulu District	4,830,000	3,085,000	(1,000)	383,000	400,000 2/	400,000 1/	563,000

The Ala Wai watershed encompasses more than 19 square miles on the island of Oahu. The study area extends from the ridge of the Koolau Mountains to the nearshore waters of Malama Bay and includes Makiki, Manoa and Palolo streams. These streams all drain to the Ala Wai Canal, a two-mile long, man-made waterway constructed during the 1920's to drain extensive coastal wetlands. Due to development and alterations over the years, residents of the Ala Wai watershed are at risk to flood damages and the aquatic ecosystem is significantly degraded.

Approximately 3,000 properties are at risk of damage from a 100-year flood event under existing conditions. In 1965, 1967, and 1992, Waikiki experienced severe flooding. In 2004, Manoa stream overflowed its banks and caused over \$80M in damages to property and irreplaceable documents in the University of Hawaii's library. In 2006, the Makiki neighborhood also experienced heavy flooding.

The Ala Wai watershed supports important habitat for marine, estuarine and freshwater ecosystems. Endemic amphidromous species such as native gobies and freshwater shrimp are dependent upon healthy streams, estuaries and marine habitat as they transit through these systems during their life-cycles. Alterations to the stream channel over time have altered stream flow, making the streams impassable for much of the year. Urban uses and activities further exacerbate ecosystem degradation through loading of sediment and pollutants that impair fish habitat and health. As a result, the streams and the Canal are included on the Environmental Protection Agency Section 303(d) List of Impaired Waters.

The project is a cooperative effort with Federal, State and local agencies. The project goal is to improve the overall quality of the Ala Wai watershed. Based on recent flood events and a re-scoping charette held in October 2012, the primary focus has shifted to Flood Risk Management with ecosystem restoration in specific reaches to improve aquatic habitat.

The feasibility cost sharing agreement was executed in April 2001 with the State Department of Land and Natural Resources and subsequently amended in August 2006 and November 2012 for a total study cost of \$9,258,000. In October 2012, a re-scoping charette was held to ensure compliance with US Army Corps of Engineers' Specific, Measurable, Attainable, Risk Informed, Timely planning initiative. The estimated total cost to complete the study is \$2,269,000. The Draft Feasibility/Environmental Impact Statement (EIS) is scheduled for Fiscal Year (FY) 2014 with the Chief's Report scheduled for FY 2015 or earlier. FY 2013 funds are being used to receive concurrence on the final array of alternatives and identify the tentatively selected plan. FY 2014 funds will be used to seek concurrence on the tentatively selected plan, publish the Draft Feasibility/EIS Report, conduct concurrent public, policy, technical reviews, including Independent External Peer Review (IEPR).

The total estimated cost of the feasibility phase is shared on a 50-50 percent basis by Federal and non-Federal interests, except for the IEPR which is funded at 100% federal cost and is estimated to cost \$152,000. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$9,383,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	4,705,000
Feasibility Phase (Non-Federal)	4,553,000

The study is authorized under Section 209 of the Rivers and Harbors Act of 1962, Harbors and Rivers in Hawaii.

The reconnaissance phase was completed in August 1999. The feasibility phase is scheduled for completion in TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$1,000 was rescinded from the project in FY 2011

\$408,000 was transferred to the Flood Control and Coastal Emergencies (FCCE) in FY 2011

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Hilo Harbor Modifications, Hawaii, HI Honolulu District	1,671,000	96,000	0	351,000	0 2/3/	775,000 1/	449,000

Hilo Harbor is located on the northeast coast of the island of Hawaii, the State of Hawaii's southernmost island. The harbor is approximately two miles from the business district of Hilo, the island's city and county seat and is the principal commercial port for the island (the second being Kawaihae Harbor on the west side of the island) and the fourth largest port in the State in terms of total goods shipped. The harbor provides a wide range of maritime facilities and services including the island's only pier large enough to accommodate visiting cruise ships. Among the commodities moving through the harbor are liquid bulk cargo, including all of the island's petroleum products, container cargo, and new vehicles.

Hilo Harbor was constructed by the Corps of Engineers in 1930 and consists of a 10,080-foot long breakwater protecting a 35-foot deep turning basin. Vessel traffic is currently resulting in maximum usage of the existing commercial harbor facilities. The State of Hawaii, Department of Transportation, Harbors Division (DOT-Harbors) recently completed an updated master plan for Hilo Harbor which identified the need for modification or expansion of the existing harbor to accommodate larger vessels with the intent of increasing operating efficiency at the harbor and reducing cargo transportations costs. The master plan recommended enlarging the turning basin to accommodate future construction and/or extension of piers, as well as use of the area by larger ships. The existing harbor is unable to accommodate larger vessels without significant grounding risk. Additionally, adverse surge conditions during winter months often preclude users from safely mooring and operating their vessels. DOT-Harbors is the sponsor for this project. In December 2011, DOT-Harbors provided a letter of intent indicating that they fully understand the feasibility cost-sharing requirements. A final 905(b) was approved in July 2012. A Feasibility Cost Share Agreement (FCSA) is scheduled to be executed in Fiscal Year (FY) 2013. The reconnaissance phase is scheduled for completion in FY 2013.

FY 2013 funds would be used to initiate the feasibility phase upon execution of the FCSA in FY 2013. FY 2014 funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests, with the exception of the Independent External Peer Review (IEPR). The estimated cost of the IEPR is \$150,000 and will be fully Federal funded. A summary of the study cost sharing follows:

Total Estimated Study Cost	\$3,096,000
Reconnaissance Phase (Federal)	96,000
Feasibility Phase (Federal)	1,575,000
Feasibility Phase (Non-Federal)	1,425,000

This study is authorized under Section 209 of the Rivers and Harbors Act of 1962 (Public Law 87-874).

The feasibility study is scheduled for completion in TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is \$351,000. This amount will be used to perform work on the project as follows: continue feasibility study activities.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$378,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. Part of this amount will be used to execute the FCSA and initiate feasibility study activities, the remainder will be carried over into FY 2014.

\$0 was rescinded from the project.

\$0 was transferred to the Flood Control and Coastal Emergencies (FCCE).

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
West Maui Watershed, Maui, HI Honolulu District	2,594,000	385,000	49,000	399,000	0 2/3/	538,000 1/	1,223,000

The West Maui watershed includes the 5 watersheds from Kaanapali to Honolua on the island of Maui, Hawaii (24,000 acres). Coral reefs provide \$360 million annually in net economic benefits to Hawaii. Coral reefs support complex food systems, diverse biological life, recreation, commerce, shoreline protection, and cultural resources. In West Maui, nearly one-fourth of all living corals have been lost in the last 13 years. Without dramatic steps to restore favorable conditions, reefs statewide risk rapid degradation. Causes of coral reef decline are complex and not yet fully understood. However, land-based pollution is known to be a serious threat to coral reef ecosystems. Increased sedimentation associated with loss of forest land, historical agriculture practices, stream channelization, and rapid development has clearly impacted coral reef health. The study area supports 60 Endangered Species Act (ESA) listed terrestrial and marine species and 62 ESA designated critical habitat units. The Hawaiian Humpback Whale National Marine Sanctuary and two state designated Marine Protected Areas lie within the study area. By reducing land-based pollution in a more comprehensive manner, coral reef ecosystem functions and health and coastal water quality will improve in a way not possible with isolated actions.

The watershed plan will provide a comprehensive and integrated water resource management (IWRM) strategy for the West Maui Ridge to Reef Initiative. The initiative engages various federal and state agencies and organizations in the implementation of actions to reduce the threats of land-based pollution to coral reefs in West Maui. As an action oriented initiative, the State and federal and non-governmental organizations are funding technical studies, public education and on-the-ground actions as they are identified within the comprehensive strategy. Partner agencies include National Oceanic and Atmospheric Administration, Environmental Protection Agency, Department of Interior, Natural Resources Conservation Service, and National Fish and Wildlife Foundation. The West Maui Watershed has been identified as a national priority by the U.S. Coral Reef Task Force, the National Ocean Council, and the federal Interagency Task Force on Climate Change Adaptation – providing an alternative approach to IWRM. The cost share agreement was executed in August 2012.

Available funds are being used in Fiscal Year (FY) 2013 to hold the public scoping meeting, scoping planning charette, complete the problems and opportunities identification and identify and seek concurrence on the final array of alternatives. FY 2014 funds will be used to develop, evaluate and compare alternative approaches and seek concurrence on the tentative selected strategy. The total estimated cost of the assessment is \$3,000,000, which will be shared on a 75-25 percent basis by Federal and non-Federal interests.

A summary of the study cost sharing follows:

Total Estimated Study Cost	\$3,344,000
Reconnaissance Phase (Federal)	344,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	750,000

The study is authorized by Sec 729 of the WRDA 86 (PL 99-662) as amended.

The reconnaissance phase was completed in August 2012. The feasibility study is scheduled for completion in TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is \$8,000. This amount will be used to perform work on the study as follows: administer Architect-Engineer contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$481,000 of unobligated FY 2012 funds were carried into FY 2013. This amount will be used to continue feasibility study activities.

\$0 was rescinded from the project.

\$0 was transferred to the Flood Control and Coastal Emergencies (FCCE).

OPERATION AND MAINTENANCE

Key to Abbreviations:

N = Navigation

FRM = Flood Risk Management

Rec = Recreation

Hydro = Hydropower

ES = Environmental Stewardship

WS = Water Supply

ALASKA

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Anchorage Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, July 3, 1958, Public Law 85-500, (Anchorage Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) and 2) The Consolidated Appropriations Act 2005, Division C – Energy and Water Development Appropriations, Public Law 108-447

LOCATION AND DESCRIPTION: The Port of Anchorage is located in Anchorage, Alaska at the northern end of Cook Inlet in south central Alaska. The project accommodates three dry cargo berths and two petroleum handling facilities. It serves as Alaska's regional and provides services to approximately 90% of the total population of Alaska, including five military bases. Anchorage Harbor has been designated a national strategic port by the Department of Defense and is also used by military vessels. The Corps of Engineers has dredged the Port of Anchorage annually at full federal expense to its authorized depth of -35 feet mean lower low water since the 1960's. Vessels with drafts up to 40 feet dock during high tide and offload their cargo, thus requiring full project depth year around.

CONFERENCE AMOUNT FOR FY 2013: \$13,930,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$9,431,000 O: \$0.0 T: \$9,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$9,431,000 will be used to perform annual maintenance dredging to remove an estimated 1.4 million cubic yards of glacial silts and sands from the existing and newly expanded project area. The annual dredging period is from 1 May through 1 November. These funds will sustain navigation performance by maintaining the availability and reliability of Anchorage Harbor that receives 90% of all goods entering the State of Alaska.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Anchorage is expanding the intermodal facility that will move the dock 400 feet seaward and lengthen it by about 5,000 ft, nearly tripling its length, and doubling the uplands storage capacity. The dock expansion has increased the dredging area maintained by the Corps from approximately 115 acres to 202 acres. An Environmental Assessment and Finding of no Significant Impact was completed in August 2008.

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$100,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Chena River Lakes Flood Control Project, North Pole, Alaska

AUTHORIZATION: Flood Control Act of 13 August 1968, Public Law 90-483.

LOCATION AND DESCRIPTION: The Chena River Lakes Flood Control Project is located in North Pole, Alaska approximately 17 mile east of Fairbanks, Alaska. The 20,000-acre project consists of an 8-mile long zoned rock-filled dam that provides flood protection to Fairbanks, Alaska, and adjacent areas including Fort Wainwright, from recurring flood damage from the Chena River.

CONFERENCE AMT. FOR FY 2013: \$3,328,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$755,000 O: \$2,166,000 T: \$2,921,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,121,000 is requested to provide annual project operations, maintenance, and periodic inspections for flood control. Approximately \$1,760,000 is required for dam operations and \$361,000 will be used to correct dam safety deficiencies. Operation of the dam at the minimum level of service prevents downstream flooding on average about once each year with average annual damages prevented of \$9,231,000.

REC: \$345,000 to perform routine management of the non-leased recreational lands and fund the annual law enforcement cooperation agreement with the local police department. Funding of this increment prevents increased vandalism and prevents exposure of the Government to unwanted safety liabilities related to use of public lands.

H: N/A

ES: \$455,000 to perform routine environmental compliance and stewardship activities relating to the natural resources management program. Funding of this increment will decrease the likelihood of citations and notice of violations for improper storage of hazardous materials, improper or unsafe working conditions, or environmental damage due to poor/insufficient maintenance of project features.

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$100,000. This amount will be used to perform the work as follows: Complete the administration of the FY 2013 service and repair contracts.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Cook Inlet Shoals (Cook Inlet Navigation Channel), Alaska

AUTHORIZATION: (1) Water Resources Development Act of 1996 (Public Law 104-303, 104th Congress) authorizes the expenditure of \$5,700,000 subject to the report of the Chief of Engineers. (2) The Energy and Water Development Appropriations Act, 1999 (Public Law 105-245, Oct. 7 1998) increases the project total not to exceed \$12,600,000. (3) Energy and Water Appropriations Act, 2005, allows the Secretary to modify the channel to run the entire length of Fire Island Range and Point Woronzof Range to a depth of - 45 feet mean lower low water.

LOCATION AND DESCRIPTION: Cook Inlet is a 250-mile long estuary in south-central Alaska that serves as the navigation corridor for bulk goods and supplies transported to the Port of Anchorage. The construction of the original project authorization was completed in September 2000 and provides a navigation channel approximately 11,000 feet long by 1,100 feet wide and maintained to a project depth of -38 feet mean lower low water. The work authorized in the 2005 Energy and Water Appropriations Act awaits cost share study funding from the sponsor. The Port of Anchorage is a Department of Defense designated national strategic port and provides services to approximately 90% of the total population of Alaska, including five military bases. Vessels with drafts up to 40 feet travel the channel to the Port of Anchorage.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,188,000 O: \$0.0 T: \$6,188,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$6,188,000 will be used to prepare contract plans and specifications for maintenance dredging, award a maintenance dredging contract, and perform dredging.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The 2012 condition survey found the channel depth 8 to 10 feet above the project depth, with a volume of 4.1 million cubic yards that require removal.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Dillingham Harbor, Alaska

AUTHORIZATION: Rivers and Harbors Act, July 3, 1958, Section 101, Public Law 85-500.

LOCATION AND DESCRIPTION: Dillingham Harbor is located approximately 350 miles south west of Anchorage at the head of Nushagak Bay and at the confluence of the Wood and Nushagak Rivers in Bristol Bay. The City borders the largest remaining wild salmon fishery in the world. Dillingham Harbor provides half-tide access and all-tide moorage for about 320 commercial fishing and recreational craft. Commercial salmon fishing is the cornerstone of the community's economy with subsistence hunting and fishing continuing as vital local activities. The harbor is also a harbor of refuge, providing both moorage and an alternate landing area for lighterage vessels. All transportation to the area is by water or air.

CONFERENCE AMT. FOR FY 2013: \$1,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,080,000 O: \$0 T: \$1,080,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,080,000 will be used to continue annual maintenance dredging of the harbor and entrance channel to the authorized depth of +2 feet mean lower low water. This funding would maintain reliability and availability to commercial and subsistence fishing vessels to off-load fish products and re-supply for continued fishing.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$45,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Homer Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, July 3, 1958, Section 101, Public Law 85-500, (Homer Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) as adopted and 2) Amendment to the Alaska Omnibus Act, August 19, 1964, Public Law 88-451.

LOCATION AND DESCRIPTION: Homer Harbor is located in south-central Alaska, approximately 230 road miles from Anchorage, AK, near the southern tip of the Kenai Peninsula. Homer Harbor provides sheltered moorage for approximately 1,525 vessels. The project extends the fishing season an extra four months each year and is an integral part of Homer's economy. Annual commercial tonnage for the harbor is 0.1 million tons.

CONFERENCE AMT. FOR FY 2013: \$467,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$487,000 O: \$0.0 T: \$487,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$487,000 will be used to perform annual maintenance dredging of the harbor entrance channel. This will enable commercial and subsistence fishing vessels harbor to off-load fish products for processing and be able to re-supply for continued operations. These funds would assure the continued availability of this critical harbor of refuge for the Cook Inlet commercial and subsistence fishing fleet. Tug and barge operations, which support freight delivery and oil exploration, will continue. Home-ported in Homer Harbor are the U.S. Coast Guard Cutter *Roanoke Island* and the U.S. Fish and Wildlife's Research Vessel *Tiglax*; dredging will allow these vessels to continue operating in the harbor without interruption.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date of this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$50,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Lowell Creek, Seward, Alaska

AUTHORIZATION: (1) Public Resolution No. 52, 9 February 1927 (69th Congress) provided for the construction of an intake dam and timber flume through the city of Seward. (2) Public Law No. 336, 14 February 1933 provided for the maintenance of the authorized project. (3) Flood Control Act, 25 August 1937 (House Doc. 154, 75th Congress, 1st Session) provided for the construction of a diversion dam 25 feet high and 400 feet long, and for a concrete lined tunnel 10 feet in diameter and 2,070 feet long through Bear Mountain to protect the city of Seward from the floodwaters of Lowell Creek. (4) Water Resources Development Act, 2007, Section 5032, Lowell Creek Tunnel, requires the Secretary to assume responsibility for the long-term maintenance and repair of the Lowell Creek tunnel for a period of 15 years or until an alternative method of flood diversion is constructed, whichever is earlier. The Secretary shall conduct a study to determine whether an alternative method of flood diversion in Lowell Canyon is feasible and shall carry out the alternative method. The Federal share of the cost of carrying out an alternative method under shall be the same as the Federal share of the cost of the construction of the Lowell Creek Tunnel.

LOCATION AND DESCRIPTION: Lowell Creek is located in the city of Seward, which is 125 miles south of Anchorage by highway. The lower reaches of Lowell Creek were diverted away from the city of Seward, which sits on its alluvial fan, by this project. The original project consists of a dam, 400 long with a maximum crest height of 25 feet and a tunnel to divert the creek away from the city and through Bear Mountain into Resurrection Bay. The tunnel is 10 feet in diameter, 2,068 feet long, and exits to a concrete flume above the ocean's edge.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$150,000 O: \$0.0 T: \$150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$150,000 will be used to prepare plans and specifications and environmental documents for repairs of the concrete in the tunnel. An annual inspection will be performed. The 2012 inspection report noted continued deterioration of concrete through wear and cracking.

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Ninilchik Harbor, Alaska

AUTHORIZATION: Rivers and Harbors Act, July 3, 1958, Public Law 85-500, (Ninilchik Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) as adopted.

LOCATION AND DESCRIPTION: The Ninilchik Harbor is located in Ninilchik, Alaska, approximately 100 air miles southwest of Anchorage on the Kenai Peninsula. The small boat basin provides protected moorage with half-tide access for 32 vessels. The basin and channel also provide access for Cook Inlet commercial fishing boats to unload their catch and take on supplies. The basin is an important harbor-of-refuge for lower Cook Inlet.

CONFERENCE AMT. FOR FY 2013: \$454,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$400,000 O: \$0.0 T: \$400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$400,000 will be used to perform annual maintenance dredging of the basin and entrance channel. Funding will assure access for the commercial and subsistence fishing fleet to this critical harbor of refuge.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$5,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Nome Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, August 8, 1917 (House Doc. 1932, 64th Congress, 2nd Session) as adopted by Public Law No. 37; and 2) Water Resources Development Act 1999, Section 101(a) (3), Public Law 106-53.

LOCATION AND DESCRIPTION: Nome Harbor is located on the southern coast of the Seward Peninsula in western Alaska. The city is approximately 540 miles northwest of Anchorage, and is the transportation and commerce center for Northwest Alaska. The recently completed improvement project consists of a new 3,600 foot-long entrance channel protected by a 3,025-foot long rubblemound breakwater, a new causeway bridge, a 270-foot long rubblemound breakwater extension on the existing causeway, and sediment collection basins. The harbor provides protected moorage for the existing 170 vessels as well as a fleet of 40 barges and transshipment vessels providing cargo and fuel service to the region.

CONFERENCE AMT. FOR FY 2013: \$1,151,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,244,000 O: \$0.0 T: \$1,244,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,244,000 - Funds will be used to perform annual maintenance dredging. Funding will assure 90% availability for this critical harbor of refuge, subsistence, and major commercial distribution and transfer center for Northwest Alaska and Seward Peninsula.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is \$39,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

HAWAII

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Barbers Point Deep Draft Harbor, Oahu, Hawaii

AUTHORIZATION: River and Harbor Act, October 27, 1965, PL 89-298

LOCATION AND DESCRIPTION: The Barbers Point Harbor is a Federally authorized harbor, completed in 1985 and located on the Ewa plain along the southwestern coast of the island of Oahu, approximately 20 road miles west of Honolulu.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Barbers Point Harbor, Pacific Regional Visitor Center, Oahu, Hawaii

AUTHORIZATION: River and Harbor Act, October 27, 1965, Public Law 89-298.

LOCATION AND DESCRIPTION: The Barbers Point Harbor, Pacific Regional Visitor Center is located in Honolulu, Hawaii on the second floor of historic Battery Randolph at Fort DeRussy adjacent to Waikiki Beach on the island of Oahu. The Pacific Regional Visitor Center is designed to educate the public about the Corps of Engineers and the Corps role in water resource development in the Pacific.

CONFERENCE AMT. FOR FY 2013: \$238,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$228,000 T: \$228,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

REC: \$228,000 Funding provides for operation of the Pacific Regional Visitor Center (RVC). The RVC functions as an informational visitor center designed to educate the public of the Corps' work in the Pacific and focuses on the POH's Civil Works Water Resources Development Program. The presentation reflects the historic and ongoing relationship between the military and civil works in the Pacific. The RVC participates in outreach activities such as Earth Day, Public Lands Day and Water Monitoring Day. The RVC reaches over 76,000 visitors a year.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Hilo Harbor, Hawaii, HI

AUTHORIZATION: The project was authorized under the River and Harbor Act of 1907 and subsequent work authorized under the River and Harbor Act of 1912 and 1925.

LOCATION AND DESCRIPTION: The Hilo Deep Draft Harbor is located on the northeast coast of the island of Hawaii. The project was completed in 1930 and consists of a 10,080-foot-long breakwater protecting a 35-foot-deep basin. Hilo Harbor is one of the two main commercial ports for the Island of Hawaii.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Honolulu Harbor, Oahu; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1990.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Honolulu Harbor, Oahu, Hawaii

AUTHORIZATION: The project was authorized by the River and Harbor Acts of 3 March 1905, 8 August 1917, 3 July 1930 and 3 September 1954.

LOCATION AND DESCRIPTION: Honolulu Harbor is located on the southwestern coast of the island of Oahu. The harbor consists of an entrance channel (4,000 feet long, 500 feet wide and 45 feet deep); a main harbor basin (3,300 feet long, 1,520 feet wide and 40 feet deep); a west harbor basin (3,400 feet long, 1,000 feet wide and 40 feet deep); and a connecting channel (400 feet wide and 40 feet deep); and Kalihi Channel (400 feet wide, 23 feet deep).

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: NA

REC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Kahului Deep Draft Harbor, Maui, Hawaii

AUTHORIZATION: The federal project was authorized by the River and Harbor Acts of 27 July 1916, 25 June 1919, 21 January 1927, and 14 July 1960.

LOCATION AND DESCRIPTION: Kahului Harbor is Maui's only commercial port and is located on the northern coast of the island. The Federal project consists of rubble mound breakwaters on the east and west sides of the harbor, approximately 2,766 and 2,315 feet in length, respectively; an entrance channel 600 feet wide between the breakwaters; and a harbor basin 2,050 feet wide, 2,400 feet long at 35 feet deep.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10 years. Dredging at this project was last completed in February 1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Nawiliwili Deep Draft Harbor, Kauai, Hawaii

AUTHORIZATION: The project was authorized under the River and Harbor Act of 2 March 1919 and September 1954.

LOCATION AND DESCRIPTION: Nawiliwili Harbor is located on the southeast coast of the island of Kauai and is the island's principal commercial harbor. The harbor consists of a breakwater 2,045 feet in length, and an S-shaped entrance channel 40 feet deep with a minimum width of 600 feet and a length of 2,400 feet.

CONFERENCE AMT. FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$206,000 O: \$0 T: \$206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: \$206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; and Kahului Deep Draft Harbor, Maui. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10 years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

South Atlantic Division

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Justification of Estimate

Investigations

Alabama

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Neuse River Basin, North Carolina	1,500,000	0	0	88,000 3/	0 2/	450,000 1/	962,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (ECOSYSTEM RESTORATION)

Wilmington District

The Neuse River basin is located in the eastern part of North Carolina and encompasses approximately 11 percent of the geographic footprint of the State of North Carolina. The basin is approximately 180 miles long, with a maximum width of about 46 miles. The Neuse River is formed by the confluence of the Eno and Flat Rivers, about 8 miles north of Durham, and has a drainage area of approximately 5,710 square miles. At the City of New Bern, the Neuse River system changes from a free-flowing river to a tidal estuary. Increased urbanization in the Raleigh-Durham area, sediment and nutrient loading from agricultural areas in the lower half of the basin, and over-harvesting of certain fisheries in the Neuse Estuary have had adverse impacts on the basin, particularly on wetlands and submerged aquatic vegetation (SAV). The feasibility study, authorized by House Resolution adopted 23 July 1997, was completed in September 2012. Ecosystem restoration features will include stabilization of up to 3,500 feet of the Gum Thicket Creek and 5,200 feet of the Cedar Creek shorelines to protect 60 acres of eroding marsh habitat and to create up to 42 acres of estuarine wetland habitat; restoration of 80 acres of oyster reef habitat in the lower Neuse River Estuary; modification of the lowhead dam on the Little River to restore connectivity to 46 miles of spawning habitat for anadromous fish; and restoration of bottomland hardwood forest at Kinston to improve wetlands function and connectivity of adjacent habitats. The fully funded total project cost is estimated to be \$38,156,000 with the Federal portion \$24,801,000 and the non-Federal portion \$13,355,000. The design agreement is scheduled to be executed with the sponsor, the State of North Carolina, when local funds are first available. This is estimated to be August 2013. The total PED estimate has increased \$800,000 from that last reported (Fiscal Year 2013) due to additional features being added to the recommended plan. PED will ultimately be cost shared at the rate for the project constructed, estimated now to be 65% Federal and 35% non-Federal, but will be financed through the PED period at 75% Federal and 25% non-Federal. Any adjustments necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$2,000,000	Total Estimated Preconstruction Engineering and Design Costs	\$2,000,000
Initial Federal Share	1,500,000	Ultimate Federal Share	1,300,000
Initial Non-Federal Share	500,000	Ultimate Non-Federal Share	700,000

The project is not authorized for construction. Fiscal Year 2012 carry-in funds will be used to execute the Design Agreement in the fourth quarter of Fiscal Year 2013. Fiscal Year 2014 funds will be used to continue PED activities. The completion of PED is TBD.

Division: South Atlantic

Division: Wilmington

Neuse River Basin, NC

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$83,000. This amount will be used to perform work on the project as follows: Continue PED activities.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Of the \$431,000 appropriated to PED phase in Fiscal Year 2012; \$200,000 was reallocated to feasibility phase, \$143,000 was reprogrammed away from the project, and \$88,000 allocated to PED phase.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Florida

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Flagler County, Florida (Completion)	1,767,000	854,000	286,000	237,000	0 2/	390,000 1/	0

Jacksonville District

Flagler County is located on the northeast coast of Florida about 60 miles south of Jacksonville, Florida and about 75 miles north of Canaveral Harbor, Florida. Matanzas Inlet and Ponce de Leon Inlet are located to the north and south of the county, respectively. The county has approximately 18 miles of Atlantic coast shoreline comprised primarily of residential structures with a few small commercial developments and a few condominiums dispersed throughout. During storms, northeasterly winds of significant magnitude extending over a large fetch on the order of 1,000 miles can produce extreme water levels and large waves that transmit considerable energy to the shoreline. Storm induced shoreline recession in the county threatens upland private and public development as well as State Road A1A, one of the area's major hurricane evacuation routes. The Flagler County shoreline was severely impacted during the passing of Hurricane Charley and subsequent events in 2004 and 2005 causing extensive beach recession. A population of 4,000 is at risk of flood inundation within the project area. The study is assessing the need for hurricane and storm damage reduction measures along the coast of Flagler County including 10.2 miles of State classified critically eroded shoreline. A restored beach would provide hurricane and storm damage protection for residential and commercial structures and assist in the protection and recovery of Federal and State listed threatened species including sea turtles. The Feasibility Cost Sharing Agreement was executed in September 2004. The local sponsor is Flagler County, Florida. Fiscal Year 2014 funds will be used to conduct an Independent External Peer Review (IEPR) and coordinate the Division Engineer's Transmittal Letter, Chief's Report, Civil Works Review Board, and State and Agency review. Indicating their support for the study, an Accelerated Funds Agreement was executed with the local sponsor in July 2012 which allowed continuation of study efforts in the absence of Fiscal Year 2013 funding.

The study was not included in the Fiscal Year 2013 President's Budget, yet the sponsor signed and received County Board approval to move forward with an Accelerated Funds Agreement dated July 2012 which will allow completion of the Alternative Formulation Briefing, Public Review, and final feasibility report. The estimated cost of the feasibility phase is \$3,138,000 which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests, less the \$200,000 estimated cost of the IEPR that is done at 100% Federal expense. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,236,000
Reconnaissance Phase (Federal)	98,000
Feasibility Phase (Federal)	1,669,000
Feasibility Phase (Non-Federal)	1,469,000

The study was authorized by the House Resolution 2676 adopted May 22, 2002.

The reconnaissance phase was completed in September 2004. The feasibility study is scheduled for completion in FY2014.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Georgia

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Savannah Harbor Expansion	23,479,000	11,610,000	3,194,000	3,075,000	2,800,000 <u>2/</u>	1,280,000 <u>1/</u>	1,520,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (NAVIGATION)

Savannah District

The Savannah Harbor area includes the lower 21.3 miles of the Savannah River, which is the principal boundary between the states of Georgia and South Carolina. The City of Savannah is located 15 miles from the river mouth. Savannah Harbor has been the fastest growing United States container port since 1995, with an average annual growth rate of over 10 percent. The Harbor's Garden City Terminal is the second largest container port on the East Coast by container volume, and the fourth largest in the nation and the largest single terminal in North America. According to the Georgia Ports Authority, over 82 percent of ships currently calling upon the Savannah Harbor are constrained in some way by the project's current depth with significantly larger deeper drafting vessel expected after the expansion of the Panama Canal by 2015. The project has an estimated cost of \$656,957,000, the average annual costs are \$38,900,000 and the average annual benefits are \$174,200,000 at 2012 price levels for BCR of 3.8:1 at 7%. Benefits are derived from increased transportation efficiencies through reduced tidal delays as described in the General Re-evaluation Report, dated January 2012 and amended July 2012, and Chief's Report, dated 17 August 2012. The sponsor, Georgia Department of Transportation, is aware of project cost sharing requirements. Upon completion of construction, credit may be given to the local sponsor for the Federal share of the PED cost in accordance with Section 119, Public Law 109-7 (Consolidated Appropriations Resolution Fiscal Year 2003). The Georgia Ports Authority has funded initial costs of technical PED activities as needed. The final selected plan is the 47 foot alternative resulting in an aggregated cost share of approximately 70% Federal and 30% non-Federal.

Total Estimated Preconstruction

Engineering and Design Costs	\$46,269,000
Initial Federal Share	\$23,479,000
Initial Non-Federal Share	\$22,790,000

Total Estimated Preconstruction

Engineering and Design Costs	\$46,269,000
Ultimate Federal Share	\$32,388,000
Ultimate Non-Federal Share	\$13,880,000

The Georgia Ports Authority conducted the initial Feasibility Study under the authority of Section 203 of the Water Resources Development Act of 1986 and was responsible for funding the associated study costs. The Feasibility Report was submitted to the Secretary of the Army in August 1998. The project was authorized in the Water Resources Development Act of 1999, with final approval contingent upon completion of a positive Chief's Report by the end of Calendar Year 1999. A favorable Chief's Report for the project was signed on 21 October 1999 indicating construction is contingent upon the approval of a General Reevaluation Report and Tier II Environmental Impact Statement by the Environmental Protection Agency, the Department of the Interior, the Department of Commerce and the U.S. Army Corps of Engineers. The final General Re-evaluation Report and Tier II Environmental Impact Statement documents were completed July 2012 and final Cooperating agency approvals were obtained August 2012 satisfying the conditional authorization. As previously stated, the project was conditionally authorized in WRDA 1999 at a total cost of \$230,174,000. The current Section 902 limit with inflation is \$473,538,000 as detailed in the final GRR dated January

Division: South Atlantic

District: Savannah

Savannah Harbor Expansion, GA

2012 and amended in July 2012, and the Chief's Report dated 17 August 2012, at 1 Oct 2012 price levels. The current total project cost is \$656,957,000 which exceeds the 902 limit by more than 20 percent. A change is proposed to the authorized total project cost limit. Fiscal Year 2013 funds are being used to complete Office of Management & Budget review and obtain a Record of Decision; complete the designs necessary for an efficient start of construction. The PED estimate increased \$2,479,000 from the Fiscal Year 2013 Justification Statement due to the pre-construction monitoring requirements. Fiscal Year 2014 funds will be used to initiate pre-construction environmental monitoring. The completion of PED is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$2,000 rescinded from the project in Fiscal Year 2003.

\$3,000 rescinded from the project in Fiscal Year 2005.

\$8,000 rescinded from the project in Fiscal Year 2006.

\$6,218 rescinded from the project in Fiscal Year 2011.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

North Carolina

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Neuse River Basin, North Carolina	1,500,000	0	0	88,000 3/	0 2/	450,000 1/	962,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (ECOSYSTEM RESTORATION)

Wilmington District

The Neuse River basin is located in the eastern part of North Carolina and encompasses approximately 11 percent of the geographic footprint of the State of North Carolina. The basin is approximately 180 miles long, with a maximum width of about 46 miles. The Neuse River is formed by the confluence of the Eno and Flat Rivers, about 8 miles north of Durham, and has a drainage area of approximately 5,710 square miles. At the City of New Bern, the Neuse River system changes from a free-flowing river to a tidal estuary. Increased urbanization in the Raleigh-Durham area, sediment and nutrient loading from agricultural areas in the lower half of the basin, and over-harvesting of certain fisheries in the Neuse Estuary have had adverse impacts on the basin, particularly on wetlands and submerged aquatic vegetation (SAV). The feasibility study, authorized by House Resolution adopted 23 July 1997, was completed in September 2012. Ecosystem restoration features will include stabilization of up to 3,500 feet of the Gum Thicket Creek and 5,200 feet of the Cedar Creek shorelines to protect 60 acres of eroding marsh habitat and to create up to 42 acres of estuarine wetland habitat; restoration of 80 acres of oyster reef habitat in the lower Neuse River Estuary; modification of the lowhead dam on the Little River to restore connectivity to 46 miles of spawning habitat for anadromous fish; and restoration of bottomland hardwood forest at Kinston to improve wetlands function and connectivity of adjacent habitats. The fully funded total project cost is estimated to be \$38,156,000 with the Federal portion \$24,801,000 and the non-Federal portion \$13,355,000. The design agreement is scheduled to be executed with the sponsor, the State of North Carolina, when local funds are first available. This is estimated to be August 2013. The total PED estimate has increased \$800,000 from that last reported (Fiscal Year 2013) due to additional features being added to the recommended plan. PED will ultimately be cost shared at the rate for the project constructed, estimated now to be 65% Federal and 35% non-Federal, but will be financed through the PED period at 75% Federal and 25% non-Federal. Any adjustments necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$2,000,000	Total Estimated Preconstruction Engineering and Design Costs	\$2,000,000
Initial Federal Share	1,500,000	Ultimate Federal Share	1,300,000
Initial Non-Federal Share	500,000	Ultimate Non-Federal Share	700,000

The project is not authorized for construction. Fiscal Year 2012 carry-in funds will be used to execute the Design Agreement in the fourth quarter of Fiscal Year 2013. Fiscal Year 2014 funds will be used to continue PED activities. The completion of PED is TBD.

Division: South Atlantic

District: Wilmington

Neuse River Basin, NC

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$83,000. This amount will be used to perform work on the project as follows: Continue PED activities.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Of the \$431,000 appropriated to PED phase in Fiscal Year 2012; \$200,000 was reallocated to feasibility phase, \$143,000 was reprogrammed away from the project, and \$88,000 allocated to PED phase.

\$0 rescinded from the project.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Surf City and North Topsail Beach, North Carolina (Completing)	1,343,000	0	597,000	296,000	225,000 2/	225,000 1/	0

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (FLOOD RISK MANAGEMENT)

Wilmington District

The towns of Surf City and North Topsail Beach are located in the central and northern part of Topsail Island in the southeastern part of North Carolina. Topsail Island is a barrier island located about 25 miles northeast of Wilmington, NC between New Topsail Inlet and New River Inlet. From north to south, this island includes the communities of North Topsail Beach, Surf City and Topsail Beach. As a result of Hurricane Fran in 1996 and Hurricane Floyd in 1999, the damage to publicly owned properties exceeded \$5,000,000 and the total losses paid to privately owned property by the Federal Emergency Management Agency was about \$32,000,000. Further, Hurricanes Bertha, also in 1996, and Fran eroded at least 25 feet of coastline leaving 66 percent of the Surf City and North Topsail Beach shoreline without its natural vegetation. This erosion, along with recent hurricanes, has either severely damaged or destroyed the primary dune system along the ocean shoreline leaving the towns vulnerable to damage from future storm events. Average damages without the proposed project are \$21,100,000 per year. The study was authorized by Resolutions adopted by the House Committee on Transportation and Infrastructure dated 16 February 2000 and 11 April 2000. The Chief's Report was transmitted to Congress in April 2011. The recommended plan includes constructing a sand dune at an elevation of 15 feet above national geodetic vertical datum and a berm with a crown width of 50 feet and a top elevation of 7 feet above national geodetic vertical datum over approximately 10 miles of shoreline. The recommended project, estimated to cost \$328,674,000 with an estimated Federal cost of \$182,808,000 and an estimated non-Federal cost of \$145,866,000, includes reducing storm damages for the shoreline extending from the town limits of Topsail Beach/Surf City to the northern end of the island. The average annual benefits for coastal storm damage reduction are \$18,642,000 and total \$40,779,000, including recreation benefits. The benefit-cost ratio is 2.8 to 1 based on the Chief's Report. Both sponsors, the towns of Surf City and North Topsail Beach, have expressed their support for this plan. The Design Agreement was executed in August 2011. The total PED estimate has increased by \$290,000 since that last reported (Fiscal Year 2013) due to additional sediment sampling requirements. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal and 75 percent Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$1,790,000	Total Estimated Preconstruction Engineering and Design Costs	\$1,790,000
Initial Federal Share	1,343,000	Ultimate Federal Share	1,164,000
Initial Non-Federal Share	447,000	Ultimate Non-Federal Share	626,000

Division: South Atlantic

District: Wilmington

Surf City and North Topsail Beach, NC

The project is not authorized for construction. Fiscal Year 2013 funds are being used to perform supplemental sampling of the remaining borrow areas and complete 95% plans. Fiscal Year 2014 funds will be used to complete PED in FY2014. This completion date is a ten-month slip from that last reported (Fiscal Year 2013) due to delay in issuance of the beach profile contract and the additional sediment sampling requirement.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$1,352 rescinded from the project in FY 2011.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Wilmington Harbor Improvements, North Carolina	1,640,000	189,000	103,000 3/	500,000	50,000 2/	500,000 1/	298,000

Wilmington District

The Wilmington Harbor project, a 42 to 44 foot deep draft port located at the city of Wilmington on the southeastern coast of North Carolina, requires improvements in order to address navigation inefficiencies and potential safety issues being faced by navigation vessels currently calling on the Port of Wilmington. The current alignment of the entrance channel near Bald Head Island is subject to rapid and persistent shoaling and is problematic for navigation under typical wind and tidal conditions. The Battery Island navigation channel turn is problematic for some container vessels under certain conditions of wind and tide. The current anchorage/turning basin dimensions are not adequate to properly accommodate the turning of some of the larger container vessels currently calling at the port or larger ships that may potentially call on the port in the future. Alternatives to address these existing problems are being evaluated in a cost-shared feasibility study with the State of North Carolina. This detailed evaluation includes examining multiple channel alignments and basin widths in order to address the issues defined above. Fiscal Year 2014 funds will be used to continue the feasibility study including public review of the draft report and environmental impact statement. The state of North Carolina is committed to study completion, shown by execution of the Feasibility Cost Sharing Agreement in April 2012.

Fiscal Year 2013 funds are being used to complete data collection, fully develop and analyze alternatives, and identify a tentatively selected plan. The preliminary estimated cost of the feasibility phase is \$2,700,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests with the exception of \$100,000 for an independent external peer review, which will be 100% federally funded. The total estimated study cost decreased by \$2,490,000 since last reported (Fiscal Year 2013) due to a study re-scope in accordance with policy guidance. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,940,000
Reconnaissance Phase (Federal)	240,000
Feasibility Phase (Federal)	1,400,000
Feasibility Phase (Non-Federal)	1,300,000

This study is authorized under House Committee on Transportation and Infrastructure study resolution dated 28 June 2006.

The reconnaissance phase was completed in April 2012. The feasibility phase is scheduled for completion in TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

Division: South Atlantic

District: Wilmington

Wilmington Harbor Improvements, NC

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Of the \$103,000 appropriated to the reconnaissance phase in FY 2011, \$52,000 was reallocated to the feasibility phase.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

South Carolina

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	\$	\$	\$	\$	\$	\$	\$
Charleston Harbor, South Carolina	6,186,000	149,000	199,000	2,400,000	1,578,000 2/	1,165,000 1/	695,000

Charleston District

Charleston Harbor is located about midway along South Carolina's Atlantic coastline. Latest commercial tonnage as reported by the Waterborne Commerce Statistics Center for Fiscal Year 2011 was 17.9 million tons of cargo. The major commodity imported and exported is manufactured equipment and machinery. Per United States Department of Commerce/Bureau of the Census, the 2011 value of waterborne commerce through Charleston was \$58,900,000,000. Charleston Harbor is one of 17 US strategic ports because of the presence of the Joint Base Charleston, Military Surface Deployment and Distribution Command, Defense Energy Support Center and Army Strategic Logistics Activity Charleston. Mega-ships built to carry more cargo require ports to have deeper channels to accommodate them. The existing channel depths, widths, and alignments constrain the ability of these vessels to utilize the port to their design capacity, increase transit time due to limited ability to pass except at designated locations, and/or present hazardous conditions. Proposed improvements would allow deep draft vessels to safely navigate the channel, while remaining full loaded, thus avoiding the need for lightering or steaming under partial loads. Improvements to be investigated include (1) deepening channel(s) to a variety of depths up to 50 feet Mean Lower Low Water, (2) widening channel(s), (3) adjusting existing channel alignments/bend easing, and (4) widening and/or lengthening turning basins. The Feasibility Cost Sharing Agreement was executed with the South Carolina State Ports Authority in June 2011. The funds requested for Fiscal Year 2014 will be used to continue the feasibility phase of the study. An amendment to the Feasibility Cost Sharing Agreement, allowing for accelerated funding from the sponsor, was executed on 8 September 2011. The South Carolina General Assembly passed the State Fiscal Year 2013 Budget in June 2012 and it included an increase in the Harbor Deepening Reserve Fund to \$300,000,000. The State and the South Carolina State Ports Authority want to show that South Carolina is committed to moving forward with this project as quickly as possible, even if that means at some point paying for the full cost of the deepening.

Fiscal Year 2013 funds are being used for data collection and analysis, numerical modeling, and continued formulation of alternatives. The estimated cost of the feasibility phase is \$11,755,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. The estimated cost of the external peer review is \$250,000 and 100% federally funded. The study was re-scoped in June 2012 in accordance with policy guidance. The sponsor attended the re-scoping charette and concurred with the findings which resulted in significant cost savings. The current Federal study cost estimate of \$6,186,000 is a change from the last estimate reported (Fiscal Year 2013) of \$10,473,000. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$11,938,000
Reconnaissance Phase (Federal)	\$183,000
Feasibility Phase (Federal)	\$6,003,000
Feasibility Phase (Non-Federal)	\$5,752,000

Division: South Atlantic

District: Charleston

Charleston Harbor, SC

The study was authorized by Section 216 FCA 1970 (P.L. 91-611).

The reconnaissance phase was completed in June 2011. The feasibility study completion date is TBD.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

\$ 0 rescinded from the study.

\$ 0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Construction

Florida

APPROPRIATION TITLE: Construction - Shore Protection (Flood Risk Management)

PROJECT: Fort Pierce Beach, Florida (Continuing)

LOCATION: The Fort Pierce Beach Shore Protection Project is located on Hutchinson Island in St. Lucie County on the east coast of Florida. The project is located about 120 miles north of Miami, Florida and about 225 miles south of Jacksonville, Florida. The authorized project extends south beginning at the south jetty of the entrance to the Fort Pierce Harbor Federal navigation project for a distance of 1.3 miles to Surfside Park at its southern limit.

DESCRIPTION: The authorized project includes restoration by beach fill and periodic nourishment of 1.3 miles of ocean shore extending southward from the Fort Pierce navigation inlet, a Federal project. Under the original authority, a mean high water extension of 50 feet was recommended with a berm elevation of +10 feet mean low water chosen to tie in with the existing berm elevation. Ultimate cost sharing for the project is nonstandard due to 60 percent of the erosional impacts to the project being attributable to the Federal navigation project as well as the evaluation of shoreline ownership and public access in the length of the project. Initial Construction is cost shared at 52% Federal and 48% non-Federal. Renourishments 1 through 6 are cost shared at 47.4% Federal and 52.6% non-Federal. Renourishments 7 through 12 are to be cost shared at 77.76% Federal and 22.24% non-Federal in accordance with the December 2006 Limited Reevaluation Report (LRR) approved by South Atlantic Division on September 6, 2007 which adjusted the nourishment cycle to 2 years and incorporated downdrift impacts from the Federal navigation channel. The Federal participation period of the project is 50 years.

AUTHORIZATION: The Beach Erosion Control Study for St. Lucie County (Fort Pierce Beach), Florida was authorized by the River and Harbor Act of 1965 (P.L. 89-298 approved 27 October 1965) in accordance with the Recommendations of the Chief of Engineers in House Document No. 84, 89th Congress. The project authorization was modified by Section 102 of the 1968 River and Harbor Act (P.L. 90-483 approved 13 August 1968) to provide for construction of the project and periodic nourishment for 10 years by the Secretary of the Army. Although Federal participation was initially limited to 10 years, it was extended to 15 years by the Assistant Secretary of the Army for Civil Works in October 1978 under the authority of Section 156 of the Water Resources Development Act of 1976 (P.L. 94-587 approved 22 October 1976) . Federal participation expired in 1985. A Section 934 report was approved by the Assistant Secretary of the Army for Civil Works in June 1995, extending Federal participation to a period of 50 years beginning on the date of initiation of construction of the project. The Water Resources Development Act of 1996 (P.L. 104-303 approved 12 October 1996) authorized extension of Federal participation to a period of 50 years beginning on the date of initiation of construction of the project. The Water Resources Development Act of 1996 also authorized preparation of a General Reevaluation Report to evaluate the feasibility of extending the 1.3-mile project an additional mile south. The Water Resources Development Act of 1999 (P.L. 106-53 approved 17 August 1999) authorized the 1.0-mile extension described in the General Reevaluation Report but this was later proven to be unjustified in the 2006 LRR.

REMAINING BENEFIT-REMAINING COST RATIO: 1.0 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 5.1 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 6 5/8 percent (FY 1978)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Level 1 economic update approved in July 2012 at FY 2012 price levels based on the Fort Pierce Shore Protection Project LRR dated December 2006 using 2006 price levels. The Initial Benefit-Cost Ratios are from the Fort Pierce Shore Protection Project St. Lucie County, Florida, General Reevaluation Report with Environmental Assessment dated September 1998.

Division: South Atlantic

District: Jacksonville

Fort Pierce Beach, FL

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			\$ 42,300,000			
Initial Construction	\$ 1,715,000			Initial Construction	100	Apr 1971
Periodic Nourishment	\$ 40,585,000			Periodic Nourishment	67	TBD
Estimated Non-Federal Cost			\$ 23,300,000	Entire Project	69	TBD
Initial Construction	\$ 1,813,000					
Cash Contributions	\$ 1,801,000					
Other Costs	\$ 12,000					
Periodic Nourishment	\$ 21,487,000					
Cash Contributions	\$ 21,487,000					
Other Costs	\$ 0					
Total Estimated Project Cost			\$65,600,000			
Initial Construction	\$ 3,528,000					
Periodic Nourishment	\$62,072,000					
Allocations to 30 September 2010	\$16,759,000					
Allocation for FY 2011	\$ 6,100,000					
Allocation for FY 2012	\$ 784,000					
Conference Allowance for FY 2013	\$ 126,000	5/				
Allocations through FY 2013	\$ 23,769,000	1/ 2/ 3/ 6/	56.2			
Estimated Unobligated Carry-In Funds	\$0	4/				
President's Budget for FY 2014	\$ 5,200,000		68.5			
Programmed Balance to Complete after FY 2014	\$13,331,000	7/				
Un-programmed Balance to Complete after FY 2014	\$0					

1/ \$2,126,000 reprogrammed to the project.
2/ \$28,000 rescinded from the project.
3/ \$0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of \$370,000 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Initial construction of the project occurred in 1971 with the placement of 718,000 cubic yards (cy) of material. First renourishment of the project was completed in 1980 with placement of 346,000 cubic yards of material. A 2006 LRR modified the renourishment interval to a 2 year interval, adjusted the cost sharing to reflect the down drift impacts due to the Federal navigation project at Fort Pierce Harbor, and determined that a 1 mile extension to the project was not justified due to an accreting beach.

JUSTIFICATION: The initial construction of the project completed in 1971 with a placement of 718,000 cubic yards of material of fill placed along the 1.3-mile project shoreline at an initial cost of \$628,000. No quantity of initial cubic yards of sand is included in the Chief of Engineer's Report. The renourishment cycle was adjusted from 5 years to 2 years according to the 2006 LRR. The authorized number of years of renourishment from commencement of initial construction is 50. The scheduled last year of renourishment is 2018. 8 renourishment cycles have been completed to date including 1980 (346,000 cy), 1999 (830,000 cy), 2003 (325,000 cy), 2004 (406,000 cy), 2005 (650,000 cy), 2007 (499,000 cy), 2009 (185,000 cy), and 2012 (416,000 cy). The project is extremely sensitive to storm direction and results in a varying amount of fill, but has a highly erosive area which requires frequent renourishment. The project provides protection to residential and multi-family residential upland structures, developed land, and coastal armor, for the purpose of hurricane and storm damage reduction. Any interruption in the short 2 year periodic beach renourishment cycle is felt almost immediately as drastic erosion occurs in the northern ½ mile of this project and impacts the resulting downdrift portion of the project. The last renourishment occurred late in the cycle resulting in cost escalation due to the required use of a truck haul renourishment per poor project conditions. The Current Reliability Shore Protection Condition for the project is a "Poor" rating. Project profile is below both the renourishment and the design profile. Periodic renourishment is also required to mitigate impacts due to the Federal navigation channel at Fort Pierce Inlet, Florida as recession of the shoreline is 60 percent attributable to the Federal navigation project. The average annual damages for this project are \$3,950,000 based on the without project condition. The average annual damages for the with project condition are \$97,000. The eyes of Hurricanes Frances and Jeanne passed over this reach of shoreline in 2004. During this flood event, the project protected upland structures from damage but sacrificed itself in the process. In October 2012, Hurricane Sandy caused wash over near the main evacuation route State Road A1A. Further erosive condition may threaten the closing down of evacuation routes. Shorefront development within the project limits is a mix of single family, multi-family, commercial, and park improvements. There is a population at risk of 4,500 people within the flood inundation area. The risk warning time is 36 hours with a risk depth of 2.0 feet. Justification for the authorized project is based on the remaining 8 years of the project economic life. The average annual benefits for the authorized project are as follows:

Annual Benefits	Amount
Storm Damage Prevention	\$ 3,950,000
Total	\$ 3,950,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Continue Post Construction Monitoring	\$ 350,000
Initiate Plans and Specifications for the 9th Renourishment	280,000
Total	\$ 630,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Construct the 9th Periodic Renourishment	\$ 4,580,000
Engineering During Construction	\$ 260,000
Construction Management	\$ 360,000
Total	\$ 5,200,000

NON-FEDERAL COST: In accordance with the cost-sharing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	\$ 12,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	\$ 23,288,000	
Total Non-Federal Cost	\$ 23,300,000	

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

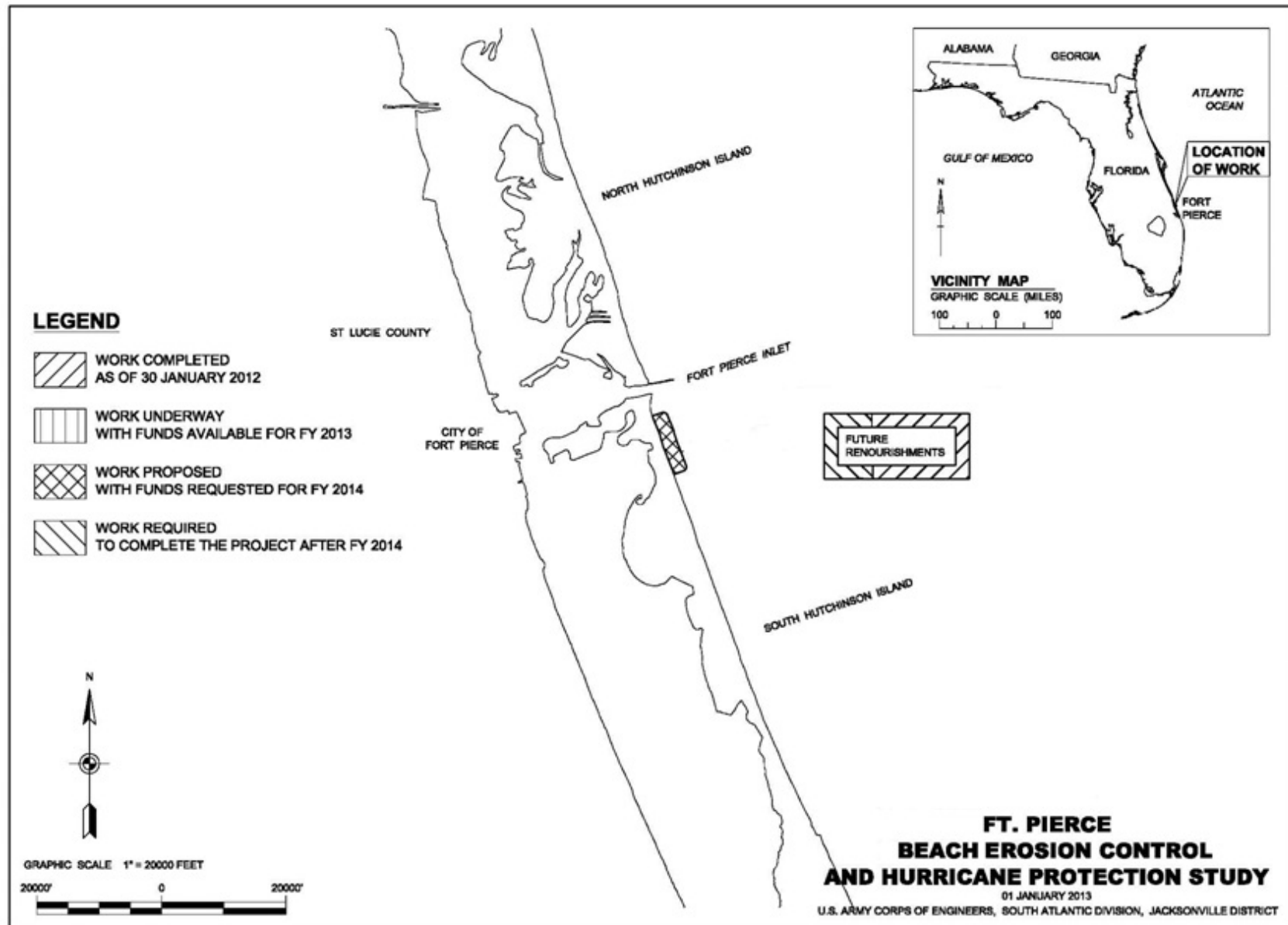
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the St. Lucie County Board of Commissioners. A Project Cooperation Agreement was executed 3 September 1998 to extend Federal participation to the year 2020 for the 1.3-mile authorized project. An amendment to the PCA was executed on 17 August 2008 to reflect the cost share changes for periodic renourishments 7 through 12 based on mitigation of down drift impacts due to the Federal channel at Fort Pierce Inlet as identified in the Dec 2006 Fort Pierce Shore Protection Project LRR, approved September 2007. The non-Federal share is derived from a combination of general county revenue and state sponsored funds. The non-Federal sponsor is willing and able to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$42,300,000 is an increase of \$5,100,000 from the latest estimate (\$37,200,000) presented to Congress (FY 2013). This increase includes the following:

Item	Amount
Price Escalation on Construction Features	\$ 5,745,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$ (645,000)
Total	\$ 5,100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Final Environmental Assessment was prepared in 1998 and an Environmental Impact Statement was completed in 2002.

OTHER INFORMATION: Funds to reimburse the sponsor for preconstruction engineering and design and construction of the initial fill were first appropriated in FY 1972 under the construction appropriation. Initial fill was completed in FY 1971 by the non-Federal sponsor. Fish and Wildlife Mitigation costs including dune re-vegetation, exotic plant removal, and artificial reef totaled \$2,857,000. All fish and wildlife mitigation construction activities are complete. 43 of 50 years of beach nourishment have been completed. A detailed review of project authorization was conducted in May 2012. As of the date of this J-sheet, the revision in FY 2013 activities reflects a change to the scope of monitoring work which was last reported erroneously to include a physical monitoring requirement and report preparation attributed to navigation impacts.



APPROPRIATION TITLE: Construction – (Flood Risk Management – Dam Safety Action Classification (DSAC) I Replacement)

PROJECT: Herbert Hoover Dike, Florida (Continuing)

LOCATION: The Herbert Hoover Dike (HHD) is located in Lake Okeechobee, Florida. The HHD system encircles Lake Okeechobee entirely, except in the vicinity of Fisheating Creek on the western shore. The existing embankments total about 143 miles in length with typical crest elevations rising about 25 feet above adjacent land elevations.

DESCRIPTION: The Major Rehabilitation Report (MRR), approved in November 2000, divided the dike into 8 Reaches and included a detailed analysis of alternatives in Reach 1. The MRR proposed construction of a seepage/drainage berm along the landside toe of the dike for Reach 1. Following input from a variety of expert sources, the U.S. Army Corps of Engineers (Corps) convened an independent technical review panel to further evaluate the design of the proposed repairs, which were underway. After reviewing the findings of this panel, the Corps decided to fundamentally alter its plans for strengthening the HHD. The new design concept includes toe-ditch fill, cut-off wall at the center of the dike, and seepage berm. The former Reach by Reach approach has now been replaced with a system wide risk reduction approach as required for safety modifications to dams. Implementation will utilize this risk reduction strategy by addressing the culvert structures as the first order of work while completing cutoff wall installation to address seepage and piping in Reach 1 between the cities of Port Mayaca and Belle Glade, Florida.

AUTHORIZATION: HHD is a component of the Central and Southern Florida (C&SF) Project for Flood Control and Other Purposes. The C&SF Project was authorized in the Rivers and Harbors Act of 1930, the Flood Control Acts of 1948, 1954, 1958, 1960, 1965 and 1968; 1970, Section 103 and, the Water Resources Development Acts of 1986, 1988, 1990, 1992, 1996, 2007.

REMAINING BENEFIT - REMAINING COST RATIO for the project as a whole: N/A; DSAC, Level 1 Life Safety Risk

TOTAL BENEFIT - COST RATIO for the project as a whole: N/A; DSAC, Level 1 Life Safety Risk

INITIAL BENEFIT - COST RATIO – N/A; DSAC, Level 1 Life Safety Risk

BASIS OF BENEFIT - COST RATIO: The latest economic analysis performed is in the November 2000 MRR, which estimated that the benefit-cost ratio for the project as a whole would be 0.94 to 1 at a 6 1/8 percent discount rate, using October 2000 price levels. This is the equivalent of a benefit-cost ratio of 0.96 to 1 at a 7 percent discount rate. Since that time, in response to the views of external peer reviewers and the findings of the independent technical review panel, the Corps made revisions to the project plan. The resulting plan would cost roughly three times as much as the plan proposed in the 2000 report.

These benefit-cost ratios do not, however, reflect the benefits of reduced risk of loss of life, which cannot be quantified in economic terms. The Corps has classified the HHD as a DSAC Level 1. Structures in this class are critically near failure or extremely high risk under normal operations without intervention. In this case, there is a concern even at a relatively low pool level due to the limitations of current outlet structures. As an interim measure, the Corps has changed the operating regime for Lake Okeechobee to lower the probability of failure from seepage. However, it is also proceeding to repair the dike as quickly as is practical in order to further mitigate the risk.

Division: South Atlantic

District: Jacksonville

Herbert Hoover Dike, FL

1 May 2013

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SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$2,044,666,000		Levees	35	TBD
Estimated Non-Federal Cost	\$32,586,000		Culverts	14	TBD
Cash Contributions	\$0		Remaining Levees	0	TBD
Other Costs	\$32,586,000				
Total Estimated Project Cost	\$2,077,252,000		Entire Project	21	TBD
Allocation to 30 September FY 2010	\$320,359,000	8/			
Allocations for FY 2011	\$107,583,000				
Allocations for FY 2012	\$85,000,000				
Conference Allowance for FY 2013	\$130,000,000	5/			
Allocations through FY 2013	\$642,942,000	1/ 2/ 3/ 6/	31.0		
Estimated Unobligated Carry-In Funds	\$0	4/			
President's Budget Amount for FY 2014	\$86,000,000		35.7		
Programmed Balance to Complete after FY 2014	\$1,315,724,000	7/			
Un-programmed Balance to Complete after FY 2014	\$0				

1/ \$(12,284,000) reprogrammed from the project.

2/ \$(7,034,000) rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-In Funding: As of the date this justification was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ In accordance with Section 4035 of the Water Resources Development Act of 2007, appropriations were received in FY 2008 and FY 2010 for the supplemental report to the 2000 MRR. The Allocations to 30 September FY 2010 has been corrected to include these funds.

PHYSICAL DATA: The HHD system consists of implementation of risk reduction features throughout approximately 143 miles of levee surrounding Lake Okeechobee, with the replacement of 28 culverts and removal or abandonment of 4 culverts.

JUSTIFICATION: The work on HHD involves the construction of a cutoff wall between Port Mayaca and Belle Glade. Landside construction includes features such as partial seepage berms, relief trenches and structural solutions for removing or replacing existing culverts and other penetrations through the embankment. Chance of breach or failure is dependent on lake elevation and other factors such as hurricanes that could affect a population of 40,000 at risk with a risk-warning time of 1 hour and a LSHI of 1433.3. Currently, the probability of catastrophic dike failure due to piping is unacceptably high. Such an event would produce flooding, which could (depending on its location) lead to the loss of life and/or significant economic damage. The Corps is proceeding first with work in the areas of the dike where the potential risk is the greatest. Any such failure would also adversely affect the ecosystem of Lake Okeechobee (directly) and the estuaries of the Indian River Lagoon and the Caloosahatchee River (indirectly). It would also reduce the ability to store water in the lake for release in dry years for consumptive uses and to benefit the ecosystem of the Everglades.

FISCAL YEAR 2013: The Total unobligated dollars are being applied as follows:

Continue Construction of Culverts	\$124,712,000
Continue Engineering During Construction	\$2,905,000
Continue Design/Field Investigation	\$9,299,000
Continue HHD Dam Safety Modification Study	\$7,003,000
Continue Construction Management	\$9,081,000
Total	\$153,000,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue Construction of Culverts	\$64,919,000
Continue Engineering During Construction	\$3,509,000
Continue Design/Field Investigation	\$6,234,000
Continue HHD Dam Safety Modification Study	\$3,500,000
Continue Construction Management	\$7,838,000
Total	\$86,000,000

NON-FEDERAL COST: There is no cost share requirement for the current project as authorized for construction. Non-Federal cost listed in the previous financial summary table are in accordance with the cost sharing and financing concepts reflected in the original, 1930's-era legislation.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	\$0	\$0
Total Non-Federal Costs	\$0	\$0

STATUS OF LOCAL COOPERATION: A Partnership Agreement (PA) was not required for the Herbert Hoover Dike Project. There are resolutions through which the sponsor, South Florida Water Management District (SFWMD), commits to items of local cooperation. This consists of Resolutions 12 (1948) and 398 (1949). The repairs to the Herbert Hoover Dike are being 100% federally funded. Any additional real estate or easements required for the repairs are the responsibility of the local sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,044,666,000 is an increase of \$3,490,000 from the latest estimate (\$2,041,176,000) presented to Congress (FY 2013). The change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$3,490,000
Total	\$3,490,000

The FY 2009 Federal cost estimate was based on the rough cost estimate developed for the 2000 Major Rehabilitation Report (MRR), escalated yearly. Since the 2000 MRR, additional detailed information has been compiled and developed regarding the cut-off wall and the landside rehabilitation features. In 2008 and 2009 the project schedule, activities and cost were reviewed and overhauled based on award of the 11 miles of cut-off all, utilizing four contractors. The actual cost of construction was used as a basis to update the remaining costs associated with the project.

The land side rehabilitation features of relief wells, relief trenches and seepage berm have also been developed and refined since the 2000 MRR and reviewed by the agency technical review team. In March/April 2009 rough costs were developed both by Corps in-house and by Architectural-Engineer firms for Reach 1 for the geotechnical solutions for these land side rehabilitation features. These estimates were reviewed by the Agency Technical Review team and were extrapolated through the balance of Reaches 1, 2 and 3. In February 2010 a cost risk analysis was completed by the Walla Walla District Corps of Engineers Cost Engineering

COMPARISON OF FEDERAL COST ESTIMATES (Continued)

Center of expertise on initial cut-off wall and land side rehabilitation for Reaches 2 and 3. Because of the cost increases in the redesign recommended by the independent technical review panel alternative designs are also being evaluated to assess cost and feasibility.

The cost estimates used for culvert replacements and removals were based on concept designs. These estimates will be revised as designs are refined and actual construction costs are realized.

The project schedule is based on maximum capability for reduction of risk for the entire system. The project is scheduled with the last construction contract being awarded in FY 2021. The subsequent project estimate increased due to substantial cost information based on actual construction and more definitive land side rehabilitation cost estimates. The rehabilitation will be analyzed for risk and risk reduction and there may come a point in time where the risk is decreased to a point that rehabilitation features will either no longer be needed or reduced below the costs of rehabilitation.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT (EIS) COMPLIANCE: A Supplemental EIS was prepared in January 2005 and the Record of Decision was signed in September 2005.

The preparation of a required Environmental Assessment (EA) for the removal and replacement of the federal culverts within the HHD system was completed in May 2011.

The preparation of a required Environmental Assessment (EA) for the seepage collection/filtering system pilot test was completed in December 2011.

OTHER INFORMATION: Funding for the major rehabilitation was first appropriated in FY 2001. All funding prior to FY 2001 was appropriated through dam safety.

A value engineering (VE) study was done on design for Reach 1 described in the 2000 MRR. The VE recommendation was a modified plan of the recommended plan in the MRR. Subsequently, a Detailed Design Report (DDR) analyzed the VE plan and determined that it permitted too much seepage flow through the section and impacted local flood control. Following input from a variety of expert sources, the Corps convened an independent technical review panel to further evaluate the design of the proposed repairs, which were underway. After reviewing the findings of this panel, the Corps fundamentally altered its design for strengthening the HHD. Preliminary analyses indicated that construction of a cut-off wall in conjunction with landside repairs would be required within a 27-mile stretch in the southwestern portion of the dike, which when complete would increase reliability of the portion of the dike at greatest risk of failure to authorized levels of protection. The most recent approved MCASES cost estimate is contained in the 2000 MRR. A HHD Dam Safety Modification Report is being prepared for the entire HHD system, which will also evaluate the feasibility of alternative designs for their feasibility and potential to reduce the project cost.

The HHD Project is a multi-purpose project authorized for flood control, water supply, and navigation. The Comprehensive Everglades Restoration Plan (CERP) assumed the dike was fully functional. A fully functional dike will support the authorized ecosystem restoration benefits of the CERP. The current effort to strengthen the dike, when completed, will allow the Corps to hold more water safely in the lake. This will enable the Corps to release excess water to the estuaries of the Indian River Lagoon and the Caloosahatchee River in a more controlled, less damaging, fashion. In the long-term, it will also enable the Corps to release more water during dry periods to benefit the ecosystem of the Everglades.

As of the date of this J-sheet, the FY 2013 distribution of funds reflects the current schedule and a \$23,000,000 carry-in due to contract awards in FY 2012 that were less than anticipated.

Division: South Atlantic

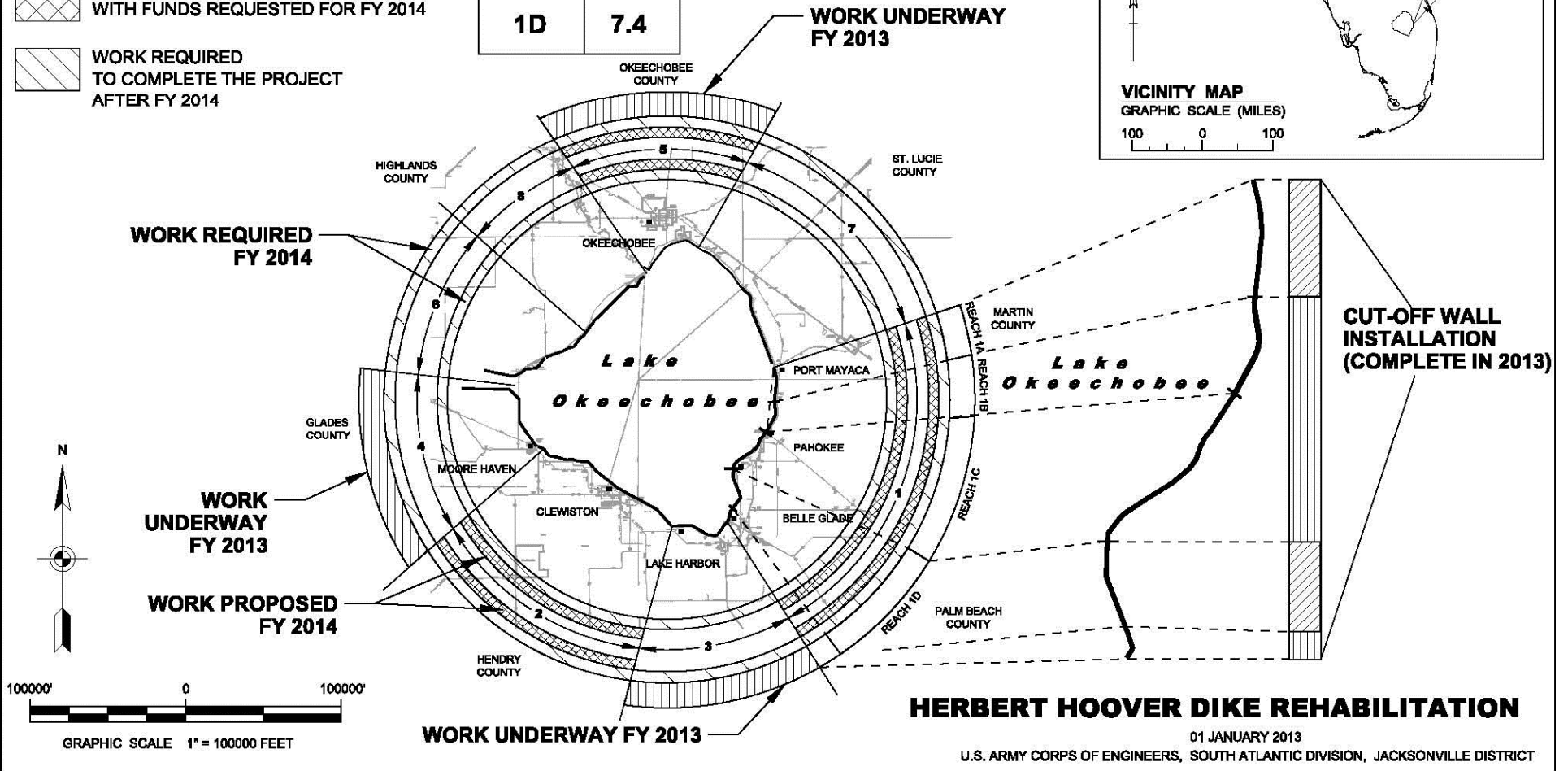
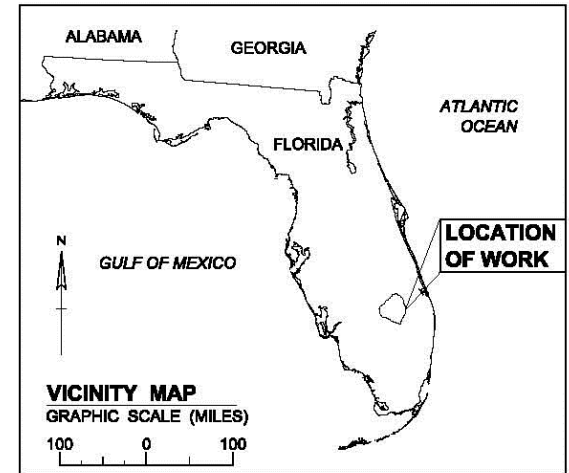
District: Jacksonville

Herbert Hoover Dike, FL

LEGEND

-  WORK COMPLETED AS OF 30 JANUARY 2012
-  WORK UNDERWAY WITH FUNDS AVAILABLE FOR FY 2013
-  WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
-  WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014

REACH	MILES
1A	4.9
1B	4.0
1C	6.2
1D	7.4



HERBERT HOOVER DIKE REHABILITATION

01 JANUARY 2013
 U.S. ARMY CORPS OF ENGINEERS, SOUTH ATLANTIC DIVISION, JACKSONVILLE DISTRICT

APPROPRIATION TITLE: Construction – Shore Protection (Flood Risk Management)

PROJECT: Nassau County, Florida (Continuing)

LOCATION: The Nassau County Shore Protection Project is located along the Northeastern coast of Florida in Nassau County adjacent to the Florida/Georgia border and 20 miles north of Jacksonville Harbor. The project area begins approximately 0.7 miles south of the south jetty of St. Mary's Entrance Channel and proceeds 3.6 miles to the south terminating near Sadler Road in Fernandina Beach, Florida.

DESCRIPTION: The recommended shore protection plan is comprised of initial fill and beach renourishment for hurricane and storm damage reduction of 3.6 miles of Nassau County shoreline located between Florida Department of Environmental Protection (FDEP) monuments R-13 through R-33. The design template berm elevation is +13.0 feet mean low water and would result in a pre-project mean high water extension of 40 feet. The design slopes reflect the natural existing conditions of 1 vertical (V) on 15 horizontal (H) to mean low water and 1V on 25H to existing ground. The primary borrow source consists of the South Channel Borrow area, immediately south of the St. Mary's Entrance Channel, located approximately 2 miles from the center of the project area. Ultimate cost sharing for the project is nonstandard due to 50 percent of erosion to the project being attributable to the Federal navigation project at Fernandina Harbor as well as the evaluation of shoreline ownership and public access in the length of the project. The Nassau County shore protection project is cost shared at 79.1% Federal and 20.9% non-Federal.

AUTHORIZATION: Section 3(a) (3) of Water Resources Development Act of 1988 (P.L. 100-676, approved 17 November 1988) authorized the project for construction.

REMAINING BENEFIT-REMAINING COST RATIO: 4.0 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 3.6 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 3.9 to 1 at 5 7/8 percent (FY 2006)

BASIS OF BENEFIT-COST RATIO: Benefit-cost ratios are based upon the Nassau County Level 1 Reaffirmation Report approved in July 2011 at FY 2011 price levels. The basis of the Level 1 economic update is the 2006 Nassau County, Florida, Shore Protection Project, General Reevaluation Report (GRR) dated April 2006 at October 2005 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			\$163,600,000			
Initial Construction	\$ 15,250,000			Initial Construction	100	Jun 2008
Periodic Nourishment	\$148,350,000			Periodic Nourishment	0	TBD
Estimated Non-Federal Cost			\$ 43,600,000	Entire Project	10	TBD
Initial Construction	\$ 4,430,000					
Cash Contributions	\$ 4,030,000					
Other Costs	\$ 400,000					
Periodic Nourishment	\$ 39,170,000					
Cash Contributions	\$ 39,170,000					
Other Costs	\$ 0					
Total Estimated Project Cost			\$207,200,000			
Initial Construction	\$ 19,680,000					
Periodic Nourishment	\$187,520,000					
Allocations to 30 September 2010	\$ 16,471,000					
Allocation for FY 2011	\$ 300,000					
Allocation for FY 2012	\$ 686,000					
Conference Allowance for FY 2013	\$ 0	5/				
Allocations through FY 2013	\$ 17,457,000	1/ 2/ 3/ 6/	10.7			
Estimated Unobligated Carry-In Funds	\$ 320,000	4/				
President's Budget for FY 2014	\$ 9,000,000		16.2			
Programmed Balance to Complete after FY 2014	\$137,143,000	7/				
Un-programmed Balance to Complete after FY 2014	\$ 0					

1/ \$308,000 reprogrammed to the project.

2/ \$30,000 rescinded from the project

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$320(x1000). This amount will be used to perform work on the project as follows:

Construction management activities for the 1st periodic renourishment.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$1,856,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Initial nourishment completed in June 2008 consisted of 2,535,000 cubic yards (cy) of placement. The project consists of 9 periodic renourishments with scheduled placement of 1,472,000 cubic yards every 5 years.

JUSTIFICATION: Initial construction was completed in June 2008 and consisted of 2,535,000 cubic yards of placement. The Chief's Report does not contain a value for quantity of fill. The renourishment cycle is every 5 years at 1,472,000 cy per cycle. The project is authorized for 50 years of renourishment from commencement of initial construction and the scheduled last year of renourishment. The last scheduled renourishment is in 2045. 0 cycles have been completed to date. The first periodic renourishment is required in Nassau County to provide hurricane and storm damage protection for residential and commercial structures. The project assists in the protection and recovery of Federal or state listed threatened or endangered species including a high density area of sea turtle nesting. Beach nourishment is also required to mitigate impacts due to the Federal navigation project at Fernandina Harbor. Section 314 of Public Law 106-53 based off of the April 1999 (Revised April 2006) General Reevaluation Report determined 50 percent of recession of the shoreline of the project area is a result of dredging impacts from the Federal navigation project at Fernandina Harbor. The project has not been renourished since initial construction and a FY 2014 renourishment would allow the project to only be 1 year behind authorized renourishment cycle. There is a population at risk within the project inundation area of 1,500. The risk warning time is 36 hours with a risk depth of 0.5 feet. Average annual damages for the without project condition are \$10,417,000. Average annual damages for the "with" project condition are \$333,000. The average annual benefits are as follows:

Annual Benefits	Amount
Storm Damage Prevention	\$ 10,084,000
Total	\$ 10,084,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Water Quality Certificate	\$ 100,000
Plans and specifications for 1 st periodic renourishment	\$ 700,000
Total	\$ 800,000

Funds in the amount of \$320,000 are scheduled to be carried over unobligated into FY 2014.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Construction of the 1st Periodic Renourishment	\$ 7,800,000
Engineering During Construction	\$ 836,000
Construction Management	\$ 684,000
Total	\$ 9,320,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursement	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way	\$ 400,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	\$ 43,200,000	
Total Non-Federal Cost	\$ 43,600,000	

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

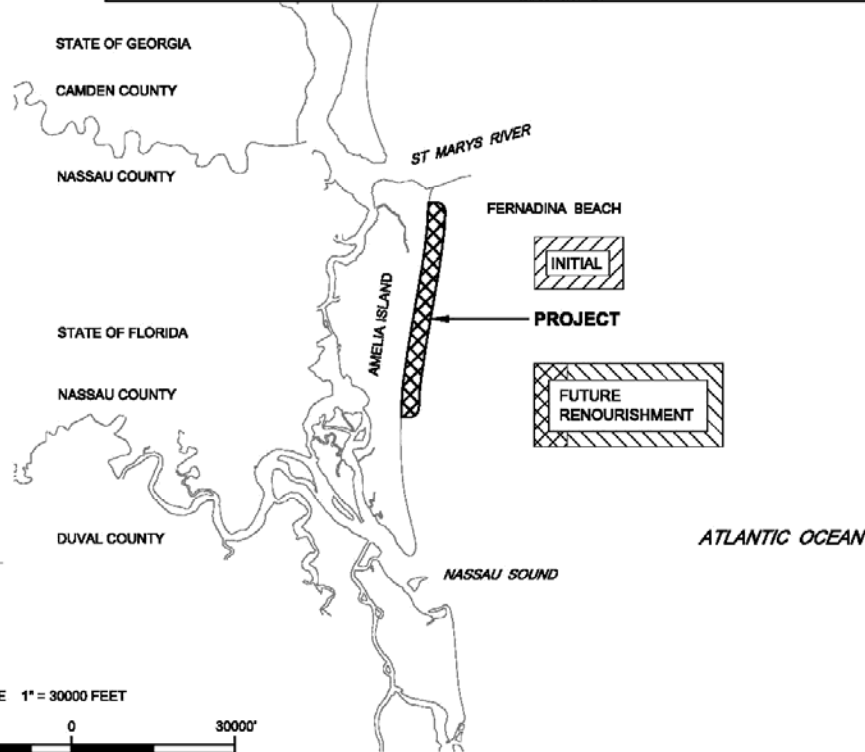
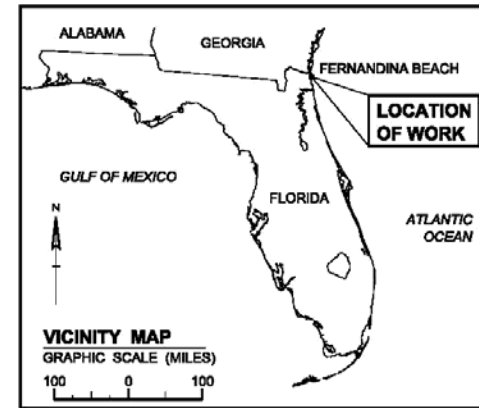
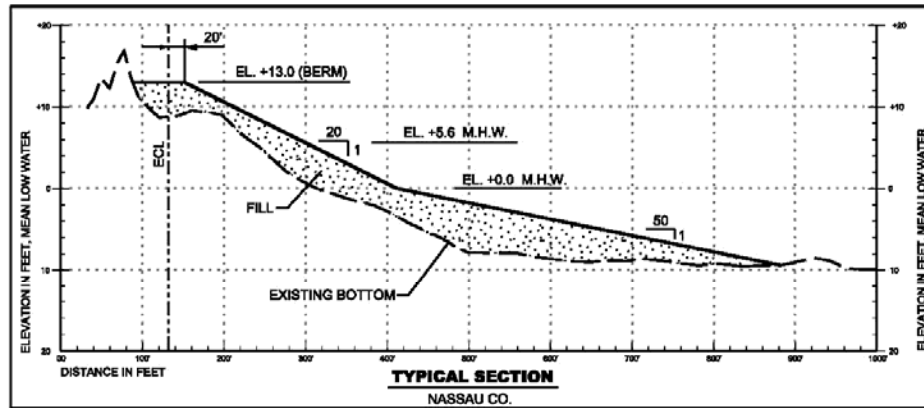
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the City of Fernandina. A Project Cooperation Agreement was executed 28 September 2007. The non-Federal share is derived from a combination of city and county developed general revenue and state sponsored funds. The sponsor is willing and able to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$163,600,000 is an increase of \$7,300,000 from the latest estimate (\$156,300,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Schedule Changes	\$ 6,200,000
Price Escalation on Construction Features (including Contingency adjustments)	\$ 1,100,000
Total	\$ 7,300,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment and a Finding of No Significant Impact (dated December 2005) were prepared and included in the Nassau County, Florida, Shore Protection Project, April 2006 General Reevaluation Report dated April 1, 2006.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were first appropriated in FY 1992 and funds to initiate construction were first appropriated in FY 2003. Section 314 of Water Resources Development Act of 1999 (P.L. 106-53, approved 17 August 1999) provided an increase to the total authorized maximum project cost. 5 of 50 years of beach nourishment have been completed. A detailed review of project authorization was conducted in May 2012. As of the date of this J-sheet, the revision in FY 2013 activities reflects a change to the scope of monitoring work which was last reported erroneously to include a physical monitoring requirement and report preparation attributed to navigation impacts.



PROJECT STATUS MAP (RCS CECW-B-13)

APPROPRIATION TITLE: Construction – (Flood Risk Management)

PROJECT: Pinellas County, Florida (Continuing)

LOCATION: The project is located along the west-central Gulf coast of Florida, adjacent to Tampa and St. Petersburg, approximately 100 miles southwest of Orlando, covering about 25 miles of the island beaches in the Clearwater-St. Petersburg area of Pinellas County, extending from Dunedin Pass to Pass-A-Grille.

DESCRIPTION: The project provides for initial fill and periodic beach renourishment at four separable elements: restoration of 5,000 feet of beach at Clearwater Beach Island; 41,700 feet of beach at Sand Key (including Indian Rocks Beach and Redington Beach); 10,700 feet of beach at Treasure Island; and, 2,800 feet of beach on Long Key. The project also includes advance nourishment of each segment, construction of 600 feet of revetment at Long Key and breakwaters at locations along Sand Key, along with periodic nourishment of each segment as needed. Unprogrammed work is the Clearwater Beach segment, pending a decision to construct these features. Cost sharing is nonstandard due to evaluation of shoreline ownership and public access in the length of the project. The Clearwater Beach element is cost shared at 61.4% Federal and 38.6% non-Federal. The Sand Key element is cost shared at 50% Federal and 50% non-Federal for initial construction; 62.8% Federal and 37.2% non-Federal for periodic renourishment. The Treasure Island element is cost shared at 50% Federal and 50% non-Federal for initial construction; 57.8% Federal and 42.2% non-Federal for periodic renourishment. The Long Key element is cost shared at 50% Federal and 50% non-Federal for initial construction; 60.8% Federal and 39.2% non-Federal for periodic renourishment.

AUTHORIZATION: Project authorized for construction by Section 101 of the Rivers and Harbors Act of 1966 (P.L. 89-789 approved 7 November 1966).

REMAINING BENEFIT-REMAINING COST RATIO: 3.2 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 8.2 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 9.4 to 1 at 3 1/4 percent (FY 1968)

BASIS OF BENEFIT-COST RATIO: Benefit-cost ratios are based upon the latest Level 1 economic update evaluation approved in July 2012 at 2012 price levels. The basis of the Level 1 economic update is the approved Limited Reevaluation Report and Environmental Summary for Pinellas County, Florida, Beach Erosion Control Project dated April 1994 (revised August 1994) at October 1993 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			\$185,500,000	Groins:	100	Dec 1987
Programmed Construction		\$163,700,000		Treasure Island	100	Sep 1976
Initial Construction	\$21,019,000			Treasure Island Groin	100	Sep 1976
Periodic Nourishment	\$142,681,000			No. 2 Extension	100	Jun 1983
	0			Pass-A-Grille	100	Jun 1984
Unprogrammed Construction		\$21,800,000		Rehabilitation of N.Groin at St. John's Pass	100	Dec 1987
Initial Construction	\$2,880,000					
Periodic Nourishment	\$18,920,000					
Estimated Non-Federal Cost			\$123,500,000	Breakwaters:	100	Sep 1986
Programmed Construction		\$109,800,000		Long Key	100	Sep 1986
Initial Construction	\$21,280,000			Sand Key Breakwater	100	Mar 1986
Cash Contributions	\$21,203,000			Initial Construction	75	TBD
Other Costs	\$ 77,000			Treasure Island	100	Jul 1969
Periodic Nourishment	\$88,520,000			Long Key	100	Apr 1980
Cash Contributions	\$88,367,000			Sand Key	100	Sep 1993
Other Costs	\$153,000			Clearwater	0	TBD
Unprogrammed Construction		\$13,700,000		Periodic Nourishment	47	TBD
Initial Construction	\$1,810,000			Treasure Island	90	TBD
Cash Contributions	\$1,803,000			Long Key	60	TBD
Other Costs	\$ 7,000			Sand Key	37	TBD
Periodic Nourishment	\$11,890,000			Clearwater	0	TBD
Cash Contributions	\$11,828,000			Entire Project	50	TBD
Other Costs	\$62,000					
Total Estimated Programmed Construction Cost			\$273,500,000			
Initial Construction		\$42,299,000				
Periodic Nourishment		\$231,201,000				

Division: South Atlantic

District: Jacksonville

Pinellas County, FL

SUMMARIZED FINANCIAL DATA(continued)			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Total Estimated Unprogrammed Construction Cost		\$35,500,000				
Initial Construction	\$4,690,000					
Periodic Nourishment	\$30,810,000					
 Total Estimated Project Cost		 \$309,000,000				
Initial Construction	\$46,989,000					
Periodic Nourishment	\$262,011,000					
 Allocations to 30 September 2010	 \$96,883,000					
Allocation for FY 2011	\$11,593,000					
Allocation for FY 2012	\$0					
Conference Allowance for FY 2013	\$0	<u>5/</u>				
Allocations through FY 2013	\$108,476,000	<u>1/ 2/ 3/ 6/</u>	66.3			
Estimated Unobligated Carry-In Funds	\$0	<u>4/</u>				
President's Budget for FY 2014	\$ 7,700,000		71.1			
Programmed Balance to Complete after FY 2014	\$47,524,000	<u>7/</u>				
Unprogrammed Balance to Complete after FY 2014	\$21,800,000					

1/ \$723,000 reprogrammed to (from) the project.

2/ \$145,000 rescinded from the project.

3/ \$283,000 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$25,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

	Initial Beach Fill Cubic Yards (cy)		Periodic Nourishment
Sand Key	2,173,000 cy		365,200 cy every 5 years
Treasure Island	599,000 cy		275,000 cy every 5 years
Long Key	67,000 cy		275,000 cy every 5 years
Clearwater Beach Island	130,000 cy		55,000 cy every 5 years

Division: South Atlantic

District: Jacksonville

Pinellas County, FL

JUSTIFICATION: Initial construction was completed for; Treasure Island in 1969 with an initial fill of 599,000 cy, Long Key in 1980 with an initial fill of 67,000 cy and Sand Key in 1993 with an initial fill of 2,173,000 cy; Clearwater has not been constructed. The renourishment cycle is 5 years for all 4 segments. The Treasure Island segment is authorized for 50 years of renourishment from the commencement of initial construction. The scheduled last year of renourishment is 2014. 9 cycles have been completed to date for Treasure Island. The cy placed in each cycle are as follows: 1971 (75,000 cy), 1972 (155,000 cy), 1976 (380,000 cy), 1980 (169,000 cy), 1983 (270,000 cy), 1996 (107,000 cy), 2000 (389,000 cy), 2004 (225,000 cy), and 2010 (275,000 cy). (The project protects against damage to highly developed commercial and multi-residential upland properties as a result of storm damage. The current profile of the Treasure Island beach segment is below the design berm profile giving a current profile rating of "Poor" according to the Shore Protection Reliability Index. Latest inspection performed after the Tropical Storm Debbie event in June 2012 revealed significant scarping and up to 30 feet of eroded dune as a result of the storm. The county has requested Emergency Funds from effects of Tropical Storm Debbie for all segments in accordance with Presidential Declaration of affected counties. Delay in construction would leave upland structures further exposed to effects from tropical storms/hurricanes. Nourishment completed to date along the Treasure Island segment has been highly successful providing storm damage protection benefits. Assessing the after effects of the renourishment of the Sand Key segment through Florida Department of Environmental Protection required monitoring is critical to determining if the project is performing better than expected and at least meeting the design profile. The Treasure Island segment has a population at risk within the project inundation area of 7,000. The risk warning time is 36 hours with a risk depth of 4.2 feet. The Sand Key segment has a population at risk within the project inundation area of 13,000. The risk warning time is 36 hours with a risk depth of 4.2 feet. Average annual damages for the without project condition are: \$32,194,000 for Sand Key; \$9,924,000 for Treasure Island; \$632,000 for Long Key; and \$557,000 for the Clearwater Beach segment. Average annual damages for the "with" project condition are: \$13,225,000 for Sand Key; \$0 for Treasure Island; \$293,000 for Long Key; and \$122,000 for the Clearwater Beach segment. The average annual benefits for each project segment are as follows:

Annual Benefits	Amount
Storm Damage Prevention	
Sand Key	\$ 18,969,000
Treasure Island	\$ 9,924,000
Long Key	\$ 339,000
Clearwater Beach	\$ 679,000
Total	\$ 29,911,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Construction Management on the Sand Key segment	\$ 299,000
Water Quality Certificate for Treasure Island	\$ 100,000
Environmental Assessment for Treasure Island	\$ 90,000
Total	\$ 489,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate and Complete the 10th and Final Periodic Renourishment of Treasure Island segment	\$6,440,000
Engineering During Construction	\$640,000
Construction Management	\$420,000
Post Construction Monitoring of the Sand Key segment	\$200,000
Total	\$7,700,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursement	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Sand Key separable element		
Provide lands, easements, and rights-of-way	\$ 95,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	\$ 81,405,000	
Treasure Island separable element		
Provide lands, easements, and rights-of-way	\$ 34,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	\$ 10,566,000	
Long Key separable element		
Provide lands, easements, and rights-of-way	\$ 101,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	\$ 17,599,000	
Clearwater Beach separable element – Unprogrammed element		
Provide lands, easements, and rights-of-way	\$ 69,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	\$ 13,631,000	
Total Non-Federal Costs	\$123,500,000	
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.		

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the Pinellas County Board of County Commissioners. A Project Cooperation Agreement (PCA) was executed 7 April 1995 for the Treasure Island, Long Key and Sand Key segments. The PCA is supported by the approved Limited Reevaluation Report and Environmental Summary for Pinellas County, Florida, Beach Erosion Control Project dated April 1994 (revised August 1994). The non-Federal sponsor is willing to continue contributions. The non-Federal share is derived from a combination of county developed general revenue and state sponsored funds.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$185,500,000 is an increase of \$6,700,000 from the latest estimate (\$178,800,000) presented to Congress (FY 2010). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$5,700,000
Schedule Changes	\$1,000,000
Total	\$6,700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The initial Environmental Impact Statement for Sand Key, Pinellas County project, and Section 404(b) (1) Evaluation was filed with the Environmental Protection Agency on 8 November 1985. The final Environmental Assessment and Finding of No Significant Impact was completed for Sand Key on 9 June 2003. The Final Environmental Assessment and Finding of No Significant Impact was completed for the Treasure Island and Long Key segments on 14 December 2009.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1968 under the construction appropriation. Funds to initiate construction were appropriated in FY 1969 under the construction appropriation. Section 501 of the Water Resources Development Act of 1986 (P.L. 99-662 approved 17 November 1986) provided an increase in law to the total authorized maximum project cost. 33 of 50 years of beach nourishment have been completed for the Long Key separable element. 44 of 50 years of beach nourishment have been completed for the Treasure Island separable element. 20 of 50 years have been completed for the Sand Key separable element.

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENT

Sand Key			
Estimated Federal Cost			\$123,900,000
Initial Construction		\$19,292,000	
Periodic Nourishment		\$104,608,000	
Estimated Non-Federal Cost			\$81,500,000
Initial Construction		\$19,564,000	
Cash Contributions	\$19,558,000		
Other Costs	\$ 6,000		
Periodic Nourishment		\$61,936,000	
Cash Contributions	\$61,847,000		
Other Costs	\$ 89,000		
Total Estimated Project Cost			\$205,400,000
Initial Construction		\$38,856,000	
Periodic Nourishment		\$166,544,000	

REMAINING BENEFIT-REMAINING COST RATIO: 5.7 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 8.6 to 1.0 at 7 percent

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENT

Treasure Island			
Estimated Federal Cost			\$13,000,000
Initial Construction		\$747,000	
Periodic Nourishment		\$12,253,000	
Estimated Non-Federal Cost			\$10,600,000
Initial Construction		\$ 743,000	
Cash Contributions	\$733,000		
Other Costs	\$10,000		
Periodic Nourishment		\$9,857,000	
Cash Contributions	\$9,833,000		
Other Costs	\$24,000		
Total Estimated Project Cost			\$23,600,000
Initial Construction		\$1,490,000	
Periodic Nourishment		\$22,110,000	

REMAINING BENEFIT-REMAINING COST RATIO: 8.2 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 6.5 to 1.0 at 7 percent

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENT

Long Key			
Estimated Federal Cost			\$26,800,000
Initial Construction		\$980,000	
Periodic Nourishment		\$25,820,000	
Estimated Non-Federal Cost			\$17,700,000
Initial Construction		\$ 973,000	
Cash Contributions	\$ 912,000		
Other Costs	\$ 61,000		
Periodic Nourishment		\$16,727,000	
Cash Contributions	\$16,687,000		
Other Costs	\$ 40,000		
Total Estimated Project Cost			\$44,500,000
Initial Construction		\$1,953,000	
Periodic Nourishment		\$42,547,000	

REMAINING BENEFIT-REMAINING COST RATIO: 4.6 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 0.5 to 1.0 at 7 percent





SUMMARIZED FINANCIAL DATA FOR UNPROGRAMMED SEPARABLE ELEMENT

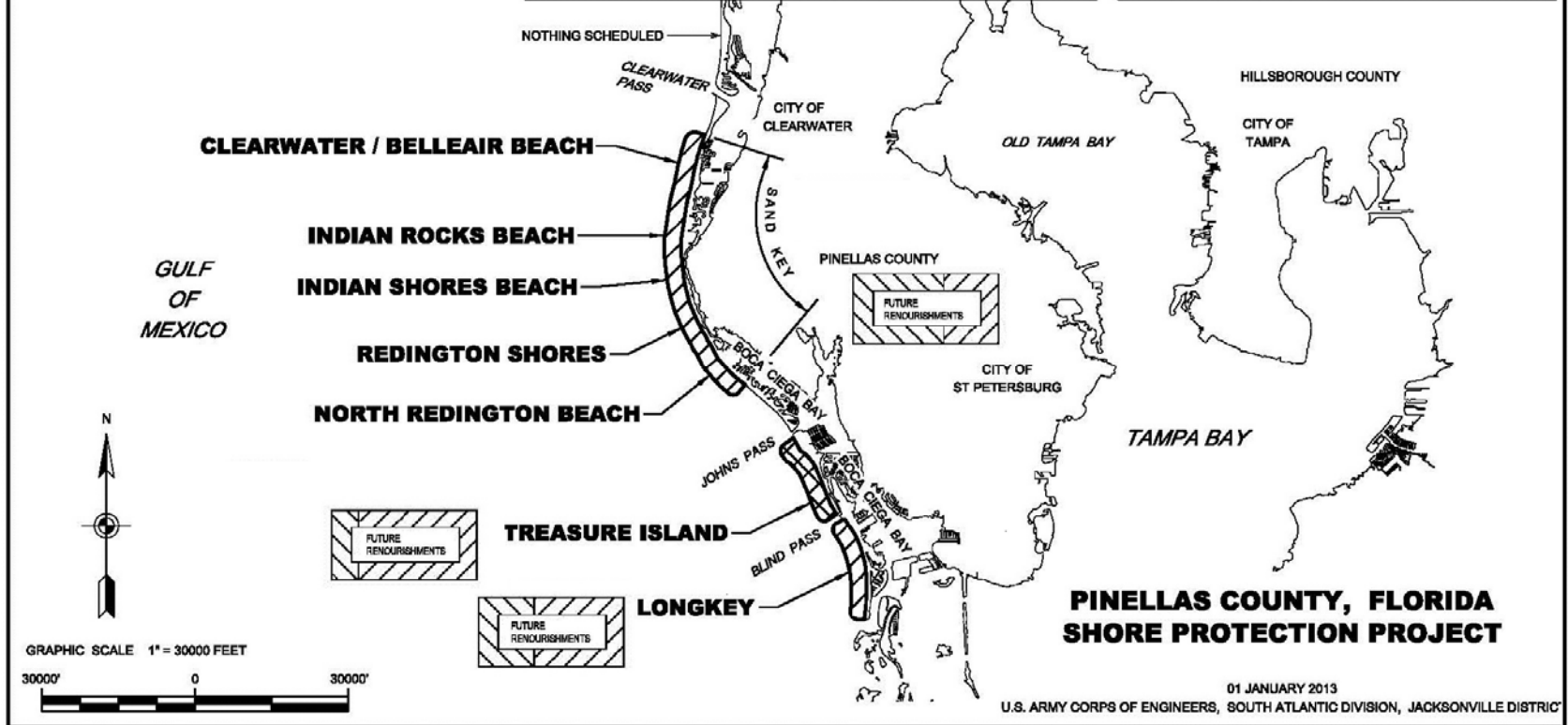
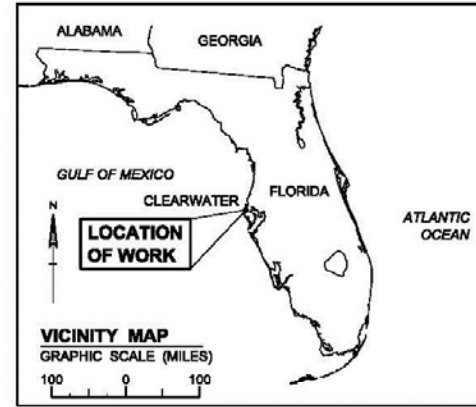
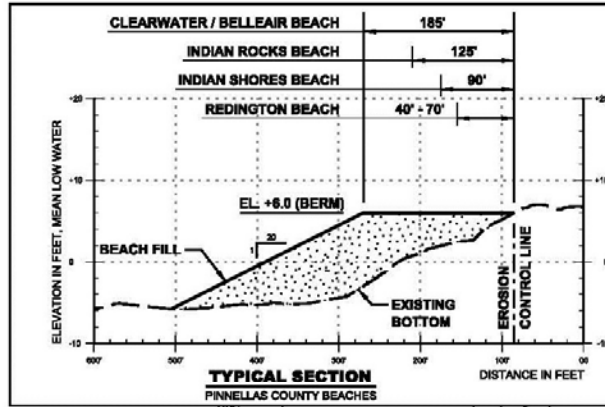
Clearwater Beach			
Estimated Federal Cost			\$21,800,000
Initial Construction		\$2,880,000	
Periodic Nourishment		\$18,920,000	
Estimated Non-Federal Cost			\$13,700,000
Initial Construction		\$1,810,000	
Cash Contributions	\$1,803,000		
Other Costs	\$ 7,000		
Periodic Nourishment		\$11,890,000	
Cash Contributions	\$11,828,000		
Other Costs	\$ 62,000		
Total Estimated Project Cost			\$35,500,000
Initial Construction		\$4,690,000	
Periodic Nourishment		\$30,810,000	

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1.0 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1.0 at 7 percent

LEGEND

-  WORK COMPLETED AS OF 30 OCTOBER 2012
-  WORK UNDERWAY WITH FUNDS AVAILABLE FOR FY 2013
-  WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
-  WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014



01 JANUARY 2013
U.S. ARMY CORPS OF ENGINEERS, SOUTH ATLANTIC DIVISION, JACKSONVILLE DISTRICT

PROJECT STATUS MAP (RCS CECW-8-13)

APPROPRIATION TITLE: Construction – Environmental Restoration

PROJECT: South Florida Ecosystem Restoration Program, Florida (SFER) (Continuing)

LOCATION: The SFER Program stretches from the southern Orlando area southward across the Everglades, the Florida Keys, and the contiguous and near-shore waters of South Florida, and across South Florida from east to west including portions of the drainage areas of the Indian River Lagoon and the Caloosahatchee River, as well as population centers along the southeast and southwest coasts. The project area is defined by the political boundaries of the South Florida Water Management District (SFWMD), and includes all of the Everglades. It encompasses an area of approximately 18,000 square miles, which includes all or part of 18 counties in the southeast part of the state of Florida. Principle areas are the Kissimmee River Basin, Lake Okeechobee, Everglades Agricultural Area, Upper East Coast, Lower East Coast, Big Cypress Basin, Water Conservation Areas, Everglades National Park, Southwest Florida, Florida Bay and the Florida Keys.

DESCRIPTION: The objective of the SFER Program is to restore, protect and preserve the South Florida ecosystem including the Everglades, while providing for other water related needs of the region. The SFER Program includes the Central and Southern Florida (C&SF) Project, the Kissimmee River Restoration Project, the Everglades and South Florida (E&SF) Restoration Project, and the Modified Waters Deliveries Project.

The completed C&SF Project includes 1,000 miles of canals, 720 miles of levees and several hundred water control structures, which provide water supply, flood damage reduction, water management and other benefits to south Florida. Under SFER, numerous C&SF projects— including West Palm Beach Canal, C-111 (South Dade), Comprehensive Everglades Restoration Plan (CERP), and Manatee Pass Thru Gates—are being undertaken to address adverse environmental impacts caused by the C&SF project's modification of historic Everglades flows.

The E&SF Restoration projects include the following separable elements: East Coast Canal Structures, Western C-11 Basin, Seminole Big Cypress, Ten Mile Creek, Tamiami Trail (Western Culverts), Florida Keys Carrying Capacity, Lake Okeechobee Water Retention, Southern CREW, and Lake Trafford.

The CERP Picayune Strand (Southern Golden Gate Estates) Restoration Project was authorized under Section 1001(15) of the Water Resources Development Act (WRDA) of 2007. The purpose of this project is to restore and enhance 55,247 acres of wetlands in the Southern Golden Gates Estates area of Picayune Strand and in adjacent public lands by restoring historical overland waterflows to the South while maintaining flood control measures for areas to the North. Implementation of the restoration plan would restore the cypress/freshwater marsh and wet prairie improving the functionality of habitat for the Florida Panther, Smalltooth Sawfish, Manatee and Wood Stork and improve the water quality of coastal estuaries by moderating the large salinity fluctuations caused by freshwater point discharge of the Faka Union Canal. The plan would also aid in protecting the City of Naples eastern Golden Gate wellfield by improving groundwater and aquifer recharge. The project includes a combination of spreader canals, canal plugs, road and tram removal and pump stations for the Prairie, Merritt, Faka Union and Miller Canals.

The CERP Site 1 Impoundment project was authorized under Section 1001(16) of the Water Resources Development Act of 2007. The purpose of the project is to restore 147,000 acres of degraded sawgrass wetlands, reduce water withdrawals and seepage losses from Loxahatchee National Wildlife Refuge and restore and improve the functionality of the habitat for the Wood Stork and Snail Kite. It includes a 1,660-acre project footprint with an eight foot deep above ground impoundment, pump station, discharge gated culvert, one combined service / auxiliary non-gated spillway and one auxiliary non-gated spillway, and a seepage control canal with an associated seepage pump station and overflow weir. An additional gated culvert structure is designed to control stages in L-36 Borrow Canal and North Springs Improvement District discharges into the Hillsboro Canal. Recreation features include boardwalks, viewing platforms, picnic shelters, canoe launches and information kiosks at one site within the footprint.

Division: South Atlantic

District: Jacksonville

South Florida Ecosystem Restoration, FL

The CERP Indian River Lagoon (IRL) project was authorized under Section 1001(14) of the Water Resources Development Act of 2007. It is identified as one of the most biologically diverse estuarine system in all of North America by the Smithsonian Marine Institute. The Project Implementation Report (PIR) recommends a plan in Martin, St. Lucie, and Okeechobee Counties that will reduce the damaging effects of watershed runoff, reduce high peak discharges, reduce nutrient loads, provide water quality benefits to control salinity, pesticides, and other pollutants presently discharged to the estuary, restores 117 acres of wetlands including seagrass, restores and improves the functionality of habitats for the Wood Stork, Green Sea Turtle and West Indian Manatee, and provide water supply for agriculture to offset reliance on the Floridian Aquifer. The plan includes 170,000 acre-feet of reservoir storage (C-44 Reservoir, C-23/24 North/South Reservoirs and C-25 Reservoir), and storm water treatment areas (C-44 West/East, C-23, C-24, and C-25), and provides storage on 92,000 acres of natural storage areas (Allapattah, Palmar, and Cypress Creek). The plan may also include steps to remove up to 7,900,000 cubic yards of muck from the St. Lucie River and Estuary.

The Kissimmee Basin includes 3,000 square miles stretching from Orlando to Lake Okeechobee in central Florida. The Kissimmee River Restoration project involves the ecosystem restoration of the historic floodplain to re-establish wetland conditions by implementing the following: modifications to the operation of the upper chain of lakes; modification of various structures; enlargement of canals 36 and 37; backfilling 22 miles of canal 38; excavation of about nine miles of new river channel; removal of two water control structures and locks, floodproofing of developments around the lakes and land acquisition of over 100,000 acres. It restores 110,000 acres of riverine wetland system including beakrush wet prairies, broadleaf march, hardwoods, cypress strands and sawgrass and restores/improves the functionality of habit for the Wood Stork, Caracara, Snail Kite and Bald Eagle. The project also includes acquisition of fee title for lands within the 5-year-floodplain and acquisition of flowage easements for lands between the five-year-flood line and the 100-year-flood line.

The E&SF Project separable elements must meet the following criteria: be within the C&SF Project and its near shore waters: provide immediate, independent, and substantial ecosystem restoration, protection, and preservation benefits; cost less than \$25 million in Federal funds; be consistent with the Governor's Commission's Conceptual Plan; and have a local sponsor to contribute a minimum of 50% of the total project cost. The Water Resources Development Act of 2007 amended authorization for the Seminole Big Cypress project to increase the Federal share of project costs from \$25 million to \$30 million.

The Modified Water Deliveries to Everglades National Park (MWD) involves construction of certain modifications to the C&SF Project water management system and related operational changes to improve water deliveries to Everglades National Park (ENP). The project consists of structural features with the intended purpose of improving the conveyance of water between Water Conservation Areas (WCA) north of ENP and the Shark River Slough within the Park. It also involves acquisition of structures and provides flood mitigation to remaining structures in the 8.5 Square Mile Area (SMA), a residential area adjacent to the Park expansion boundary in East Everglades.

AUTHORIZATION: Flood Control Acts of 1948, 1954, 1960, 1962, 1965, and 1968; Authorization in 1970 under Section 201 of the Flood Control Act of 1965, and the Water Resources Development Acts of 1986, 1988, 1990, 1992, 1996, 1999, 2000 and 2007. The Modified Water Deliveries to Everglades National Park was authorized under the Everglades Expansion Act of 1989 (PL 101-229). PL 101-229 specifically directs the Secretary of the Army, in consultation with the Secretary of Interior, to construct modifications to the C&SF Project to improve water deliveries to ENP.

REMAINING BENEFIT-REMAINING COST RATIO: N/A; Ecosystem Restoration Project

TOTAL BENEFIT-COST RATIO: The total benefit cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms. Incremental cost analysis (CE/ICA) was used to calculate the cost effectiveness of building the selected plans for each separable element within the SFER Program. For the CERP each of the projects highlighted in the Plan were further developed and analyzed in Project Implementation Reports and a CE/ICA was completed for each based on cost and environmental benefits. In addition, all projects recommended under the CERP alternative, undergo a Next Added Increment (NAI) analysis to determine what benefits the selected plan contributes to without regard to future CERP projects. It also determines whether sufficient benefits will accrue to justify the cost of the project if no additional CERP projects (other than those already existing or authorized) are implemented.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: N/A; Ecosystem Restoration Project

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (CoE)		\$4,995,563,000		Misc. Completed Works	100	October 1992
Programmed Construction	\$4,348,133,000			CERP	27	TBD
Un-programmed Construction	\$647,430,000			West Palm Beach	87	TBD
Estimated Federal Cost (OFA)		\$391,308,000		C-111 (South Dade)	88	TBD
Programmed Construction	\$391,308,000			Manatee Pass Gates	100	September 2012
Un-programmed Construction	\$0			E Coast Canal	100	September 2004
Estimated Total Federal Cost		\$5,386,871,000		Western C-111	100	September 2005
Programmed Construction	\$4,739,441,000			Seminole Big Cypress	98	TBD
Un-programmed Construction	\$647,430,000			Ten Mile Creek	TBD	TBD
Estimated Non-Federal Cost		\$4,145,499,000		Tamiami Trail:		
Programmed Construction	\$3,788,152,000			Western Culverts	5	TBD
Cash Contributions	\$1,703,007,000			Florida Keys:		
Other Costs	\$2,085,145,000			Carrying Capacity	100	December 2004
Un-programmed Construction	\$357,347,000			Lake Okeechobee:		
Cash Contributions	\$147,847,000			Water Retention and		
Other Costs	\$209,500,000			Phosphorus		
Total Estimated Programmed Construction Cost		\$8,527,593,000		Removal	99	January 2013
Total Estimated Un-programmed Construction Cost		\$1,004,777,000		Southern CREW	90	TBD
Total Estimated Project Cost		\$9,532,370,000		Lake Trafford	95	TBD
				Kissimmee	97	TBD
				Mod Waters Deliveries	98	TBD
				Picayune Strand	90	TBD
				Entire Project	49	TBD

Division: South Atlantic

District: Jacksonville

South Florida Ecosystem Restoration, FL

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CM PL	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September FY 2010	\$1,748,439,000				
Allocations for FY 2011	\$129,631,000				
Allocations for FY 2012	\$135,790,000				
Conference Allowance for FY 2013	\$88,880,000	<u>5/</u>			
Allocations through FY 2013	\$2,102,740,000	<u>1/</u> <u>2/</u> <u>3/</u> <u>6/</u>	48.3		
Estimated Unobligated Carry-In Funds	\$12,995,000	<u>4/</u>			
President's Budget for FY 2014	\$88,000,000		49.6		
Programmed Balance to Complete after FY 2014	\$2,157,393,000				
Un-programmed Balance to Complete after FY 2014	\$647,430,000				

1/ \$(6,518,000) reprogrammed from the project.

2/ \$(3,555,000) rescinded from the project.

3/ \$(26,500,000) transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2014 from prior appropriations for use on this project effort is \$12,995,000. Funding in the amount of \$19,763,000 will be de-obligated on the Kissimmee River Project in FY2013. These funds will be used to continue work on the Kissimmee Reaches 2 and 3 Backfill construction contracts and the Kissimmee S-69 Weir construction contract upon resolution of land acquisition required by the sponsor.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$515,306 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

Pumping Plants	38	Each
Floodway Control & Diversion Structures	235	Each
Relocations		
Highway Bridges	2	Each
Railroads Bridges	58	Each
Canals:		
New River Channel	9	Each
Water Control Structures Removal	2	Each
Locks	25	Each
Canals	999	Miles
Levees	720	Miles
Bridge	7	Each

JUSTIFICATION:

The Central and Southern Florida (C&SF) Project:

The C&SF project was originally authorized and designed as a flood control project in response to the maximum flood of record in 1947. Existing damages, without the project, were \$59,693,000 (\$366,903,000 at 1 October 1989 price levels). The 1947 flood frequency averages 1 in 25 years over the project area, with an average duration of 70 days. Minor floods occur almost yearly in the project area and major floods occur frequently. This situation is aggravated by wet antecedent conditions followed by heavy seasonal rainfall. The average degree of protection provided by the completed project is about a 10-year flood frequency protection. Approximately 2,853,700 acres are protected. This encompasses 2,765,100 agricultural acres and 88,600 urban acres. The present value of property subject to flood damages is about \$12,300,000,000. Property types include residential, commercial, industrial, public, and agricultural.

Average annual damages without the project would be \$110,580,000 and \$22,536,000 with the project. Damages attributable to urban property are 16.7 percent and 83.3 percent are attributable to rural property. The proportion of average annual damages prevented is 36.8 percent to existing development and 63.2 percent to future development.

Under Public Law 90-483 (River and Harbor Act of 1968), additional project features for the purpose of water supply were added to the Central and Southern Florida project. The storage capacity of the entire project is 2,953,000 average annual acre-feet divided into approximately 1,600,000 acre-feet for urban use by 2020 and 740,000 acre-feet for agricultural use by 2020. The Everglades National Park receives virtually its entire source of water (other than direct rainfall) from the Central and Southern Florida Project. The pumping rate for irrigation of 590 square miles would yield approximately 917,850 acre-feet per year for agricultural use. Recurrent drought conditions with resultant low flows require supplemental irrigation to ensure adequate crop yields.

Restoration projects in the Central and South Florida Project are being conducted under a variety of authorities. Examples include Picayune Strand, which restores 55,247 acres of wetlands and is a key component to connect state and federal preserve lands for plant and animal species as well as enhancement to adjacent wetland habitats; the Indian River Lagoon South project moderates unnatural salinity changes which cause detrimental effects to estuarine communities;

Division: South Atlantic

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the Site 1 Impoundment Project reduces seepage losses from the natural system and provides habitat improvement, while shifting consumptive water demands off of Loxahatchee National Wildlife Refuge (NWR) and Lake Okeechobee; the West Palm Beach Canal (C-51) project improves the quality of water entering Loxahatchee NWR & Lake Worth Lagoon as well as reducing freshwater pulse flows which adversely affect habitat in Lake Worth Lagoon.

The Modified Water Deliveries to Everglades National Park and C-111 (South Dade) Projects:

The Corps is working in stages to restore natural hydrological conditions in Everglades National Park (ENP). Public Law 90-483 and Public Law 101-229 (Everglades National Park Protection and Expansion Act) authorized modifications to the C&SF project for environmental restoration in the C-111 basin and Shark River Slough. The C-111 (South Dade) effort will help restore natural hydrologic conditions in Taylor Slough within Everglades National Park by providing immediate improvement in flow between upper Everglades Marsh (WCA 3a) and ENP which directly improves habitat for endangered species. Modified Water Deliveries (MWD) will take steps to restore natural hydrological flows to Shark River Slough in the Park. In addition, the Tamiami Trail portion of MWD provides immediate improvement in flow from north across Tamiami Trail (US Hwy 41) to south into ENP which directly improves habitat for endangered species. The Corps will evaluate the success of these projects, and incorporate the lessons learned into implementation efforts conducted under the WRDA 2000 Comprehensive Everglades Restoration Plan (CERP) authority with further steps to improve water deliveries to the park. Due to a significant increase in the costs of the option selected in November 2005 for the Tamiami Trail (Eastern Segment) feature of the Modified Water Deliveries Project, the Corps completed a Limited Reevaluation Report (LRR) to re-examine prior reports and environmental documentation associated with this feature in an effort to re-evaluate the immediate steps to increase flows of water under the highway and into the Park. The Integrated LRR and Environmental Assessment were approved by the Assistant Secretary of the Army for Civil Works on 1 August 2008. The approved plan provides improved flows under the eastern Tamiami Trail and begins the restoration of flow into the historic headwaters of the Shark River Slough in northern Everglades National Park.

Everglades and South Florida Restoration Project:

WRDA 1996 authorized implementation of the Everglades and South Florida (E&SF) Restoration Project in order to provide immediate, independent, and substantial ecosystem restoration, protection and preservation benefits. The authorization permitted implementation of nine projects that were justified on the basis of those benefits. Florida Keys Carrying Capacity Study, East Coast Canal Structure and Western C-11 projects have been completed. Lake Okeechobee Water Retention and Phosphorus Removal project will be completed and transferred to the sponsor in FY 2013. The Ten Mile Creek project, as originally planned, was physically completed in 2006. However, prior to turnover of the project, a determination was made that additional work will need to be performed to allow the project to perform properly. The Seminole Tribe Water Conservation Project located on the Big Cypress Reservation consists of building conveyance canals that will feed newly constructed impoundments. The impoundments function as natural habitats while improving water quality. The water flows from the Big Cypress Reservation and into the Big Cypress National Preserve.

Kissimmee River Restoration Project: Local water resource development of the Kissimmee River began in the late 1800's. In the 1960's, the river was channelized as part of the C&SF Project. Although the project has provided for navigation and reduced flood damages as intended, it also resulted in long-term degradation of the natural ecosystem. The 103-mile river that historically meandered across and inundated about 35,000 acres of wetlands over a broad flood plain was reduced to a 56-mile canal that has successfully contained almost all flows since its completion. The channelization coupled with the modifications of the Lower Basin tributary watersheds and efficient control of floodwaters and regulation of inflows from the Upper Basin significantly altered hydrologic characteristics of the ecosystem. Project formulation and scoping was based on the most cost-effective plan that would meet fish and wildlife resources objectives for restoring ecological integrity. Completion of the project will result in the restoration of 52 miles of river; 27,000 acres of wetlands; improved water quality characteristics for the Kissimmee River; and restored conditions for over 300 fish and wildlife species.

Average annual benefits of the CS&F Project, excluding restoration projects are as follows:

Annual Benefits	Amount
Flood Control	\$235,213,000
Municipal and Industrial Water Supply	\$25,664,000
Agricultural Water Supply	\$27,614,000
Recreation	\$11,109,000
Fish and Wildlife	\$238,000
Area Redevelopment	\$3,012,000
Total	\$302,850,000

FISCAL YEAR 2013: The Total unobligated dollars are being applied as follows:

Central and Southern Florida:

Non-CERP

Initiate Construction on the C-51 West Palm Beach Canal Trash Rake S-319 Mod	\$	6,300,000
Continue Construction on the C-51 West Palm Beach Canal Culvert Repairs	\$	6,229,000
Engineering and Design for C-51 West Palm Beach Canal-S319	\$	830,000
Engineering and Design for C-51 West Palm Beach Canal-Culvert Repairs	\$	841,000
Construction Management for C-51 West Palm Beach Canal-S319	\$	1,000,000
Construction Management for C-51 West Palm Beach Canal-Culvert Repairs	\$	1,100,000
Continue Negotiation of Project Cost Share Agreement Amendment for C-111 South Dade	\$	35,000
Non-CERP Sub-Total	\$	16,335,000

CERP

CERP Design

Engineering and Design for CERP Remaining Items to include Adaptive Assessment and Monitoring	\$	21,121,000
CERP Design Sub-total	\$	21,121,000

CERP Indian River Lagoon South C-44 Troup Indian Town (IT)

Continue Construction on the CERP Indian River Lagoon South C-44 Troup IT	\$	2,000,000
Construction Management for CERP Indian River Lagoon South	\$	1,000,000
Engineering and Design CERP Indian River Lagoon South	\$	1,350,000
Plans and Specifications for CERP Indian River Lagoon South	\$	2,999,000
CERP Indian River Lagoon South C-44 Troup IT Sub-total	\$	7,349,000

CERP Melaleuca

Construction Management for CERP Melaleuca Eradication	\$	155,000
CERP Melaleuca Sub-total	\$	155,000

CERP Site 1 Phase 1

Construction Management for CERP Site 1 Phase 1 Impoundment	\$	845,000
Engineering and Design for CERP Site 1 Phase 1 Impoundment	\$	630,000
CERP Site 1 Phase 1 Sub-total	\$	1,475,000

FISCAL YEAR 2013: The Total unobligated dollars are being applied as follows: (continued)

CERP Picayune Strand		
Initiate Construction on the CERP Picayune Strand Miller Pump Station	\$	71,200,000
Continue Construction on the CERP Picayune Strand Faka Union Pump Station	\$	1,500,000
Continue Construction on the CERP Picayune Strand Merritt Pump Station	\$	3,000,000
Construction Management for CERP Picayune Strand	\$	3,000,000
Engineering and Design for CERP Picayune Strand	\$	3,900,000
Plans and Specifications for CERP Picayune Strand	\$	2,291,000
CERP Picayune Strand Sub-total	\$	84,891,000
CERP Sub-Total	\$	114,991,000
Subtotal : Central and Southern Florida	\$	131,326,000
 Kissimmee:		
Lower Basin:		
Initiate Construction of McArthur Ditch portion of Reach 2 Backfill /8	\$	9,081,000
Initiate Construction of River Acres Contract 2	\$	1,500,000
Engineering During Construction	\$	308,000
Construction Management	\$	1,907,000
Lower Basin Sub-total	\$	12,796,000
Upper Basin:		
Continue Real Estate Crediting	\$	500,000
Subtotal: Kissimmee Upper & Lower Basin	\$	13,296,000
 Everglades and South Florida Ecosystem Restoration:		
Seminole Big Cypress		
Initiate Construction Seminole Big Cypress Basin 2	\$	4,100,000
Complete Construction Seminole Big Cypress Basin 4	\$	235,000
Construction Management for Seminole Big Cypress	\$	416,000
Seminole Big Cypress Sub-Total	\$	4,751,000
Maintain Caretaker Status for Ten Mile Creek	\$	25,000
Design Review for Sponsor Work In Kind Crediting on Southern Crew	\$	25,000
Complete Construction on Lake Okeechobee Water Retention	\$	250,000
Subtotal: Everglades and South Florida Ecosystem Restoration	\$	5,051,000
 South Florida Ecosystem Restoration FY 2013 Total Unobligated dollars	\$	149,673,000

8/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2014 from prior appropriations for use on this project effort is \$12,995,000. Funding in the amount of \$19,763,000 will be de-obligated on the Kissimmee River Project in FY2013. These funds will be used to continue work on the Kissimmee Reach 2 construction contract upon resolution of land acquisition required by the sponsor.

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FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Central and Southern Florida:

Non-CERP

Complete Construction on the C-51 West Palm Beach Canal Trash Rake S-319 Mod	\$	1,000,000
Continue Construction on the C-51 West Palm Beach Canal Culvert Repairs	\$	13,000,000
Engineering and Design for C-51 West Palm Beach Canal	\$	1,250,000
Construction Management for C-51 West Palm Beach	\$	2,750,000
Engineering and Design for C-111 (South Dade)	\$	100,000
Non-CERP Sub-Total	\$	18,100,000

CERP

CERP Design

Engineering and Design for CERP Remaining Items to include Adaptive Assessment and Monitoring	\$	21,500,000
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CERP Indian River Lagoon South

CERP Indian River Lagoon South C-44 Troup Indian Town (IT)		
Complete Construction on the CERP Indian River Lagoon South C-44 Troup IT	\$	1,900,000
CERP Indian River Lagoon South C-44 Troup IT Sub-total	\$	1,900,000
CERP Indian River Lagoon South C-44 Reservoir		
Initiate Construction on the CERP Indian River Lagoon South C-44 Reservoir	\$	10,615,000
Construction Management for CERP Indian River Lagoon South	\$	1,800,000
CERP Indian River Lagoon South C-44 Reservoir Sub-total	\$	12,415,000
Engineering and Design CERP Indian River Lagoon South	\$	2,676,000
Plans and Specifications for CERP Indian River Lagoon South	\$	1,000,000

CERP Indian River Lagoon South Sub-total	\$	17,991,000
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CERP Site 1

Continue Construction on the CERP Site 1 Phase I Impoundment	\$	1,424,000
Construction Management for CERP Site 1 Impoundment Phase 1	\$	1,000,000
Engineering and Design CERP Site 1 Impoundment Phase 1	\$	576,000
CERP Site 1 Sub-total	\$	3,000,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows: (continued)

CERP Picayune Strand		
Continue Construction on the CERP Picayune Strand Miller Pump Station	\$	3,000,000
Continue Construction on the CERP Picayune Strand Faka Union Pump Station	\$	2,000,000
Complete Construction on the CERP Picayune Strand Merritt Pump Station	\$	500,000
Construction Management for CERP Picayune Strand	\$	4,927,000
Engineering and Design for CERP Picayune Strand	\$	2,300,000
Plans and Specifications for CERP Picayune Strand	\$	1,573,000
CERP Picayune Strand Sub-total	\$	14,300,000
CERP Sub-Total	\$	56,791,000
Subtotal : Central and Southern Florida	\$	74,891,000
Kissimmee:		
Lower Basin:		
Initiate Construction of remaining portion of Reach 2 Backfill /9	\$	9,679,000
Initiate Construction of Reach 3 Backfill /9	\$	3,778,000
Plans and Specifications/ 9	\$	2,500,000
Engineering During Construction	\$	340,000
Construction Management	\$	1,900,000
Lower Basin Sub-total	\$	18,197,000
Upper Basin:		
Continue Real Estate Crediting	\$	215,000
Subtotal: Kissimmee	\$	18,412,000
Everglades and South Florida Ecosystem Restoration:		
Seminole Big Cypress		
Complete Construction on the Tamiami Trail Culverts	\$	850,000
Continue Construction Seminole Big Cypress Basin 2	\$	125,000
Subtotal: Everglades and South Florida Ecosystem Restoration	\$	975,000
South Florida Ecosystem Restoration FY 2014 Total Unobligated Dollars	\$	94,278,000

9/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2014 from prior appropriations for use on this project effort is \$12,995,000. Funding in the amount of \$19,763,000 will be de-obligated on the Kissimmee River Project in FY2013. These funds will be used to continue work on the Kissimmee Reaches 2 and 3 Backfill construction contracts and the Kissimmee S-69 Weir construction contract upon resolution of land acquisition required by the sponsor.

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NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in specific authorizing legislation and the Water Resources Development Act of 1986, 1996, 2000 and 2007 as applicable, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Completed Central and Southern Florida Works:		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	\$176,459,000	\$0
Cash Contribution/Work-In-Kind	\$232,241,000	\$0
Subtotal Non-Federal Costs: Completed Central and Southern Florida Works	\$408,700,000	\$0
Modified Water Deliveries to Everglades National Park (OFA Costs)		
Provide, with credit toward Department of Interior's share of the project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$156,000	\$0
Pay share of project costs and bear a percentage of costs of operation, maintenance, repair, rehabilitation, and replacement of the completed project, or functional portion of the project except water control structures and outlets in Water Conversation Area 3.	\$0	\$200,000
Subtotal Non-Federal Costs: Modified Water Deliveries to Everglades National Park (applied to OFA Costs)	\$156,000	\$200,000
C&SF C-111 (South Dade)		
Provide lands, easements, rights of way, and dredged material disposal areas.	\$148,280,000	\$0
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$419,000	\$0
Pay one-half of the cost of the project assigned to flood control and bear a percentage of costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	\$13,520,000	\$2,119,000
Subtotal Non-Federal Costs: C-111 (South Dade)	\$162,219,000	\$2,119,000
C&SF West Palm Beach Canal:		
Provide lands, easements, rights of way, and dredged material disposal areas.	\$16,011,000	\$0
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$ 1,470,000	\$0
Pay 12.8 percent of the separable costs allocated to flood control and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of facilities.	\$11,182,000	\$290,000
Subtotal Non-Federal Costs: West Palm Beach Canal	\$28,663,000	\$290,000

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Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
C&SF Manatee Pass-Through Gates:		
Pay applicable percentage of 0%, 15% or 20% based upon authorized cost share of each particular feature of the project and bear cost of operation, maintenance, repair, rehabilitation, and replacement of manatee protection features except for structures S-77, S-78, S-79, S-308 and S308B.	\$2,082,000	\$450,000
Subtotal Non-Federal Costs: Manatee Pass-Through Gates	\$2,082,000	\$450,000
C&SF Comprehensive Everglades Restoration Plan (CERP) :		
Provide lands, easements, rights of way, and dredged material disposal areas.	\$1,498,180,000	\$0
Pay one-half of the cost of the project assigned to flood control and bear one half of the cost of operation, maintenance, repair, rehabilitation, and replacement of CERP facilities.	\$1,499,046,000	\$0
Subtotal Non-Federal Costs: Comprehensive Everglades Restoration Plan (CERP)	\$2,997,226,000	\$0
E&SF Lake Okeechobee Water retention & Phosphorus Removal		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$3,077,000	\$0
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	\$0	\$0
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$11,198,000	\$364,000
Subtotal Non-Federal Costs: Lake Okeechobee Water retention & Phosphorus Removal	\$14,275,000	\$364,000
E&SF Southern CREW		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$28,664,000	\$0
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$0	\$0
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$11,008,000	\$175,000
Subtotal Non-Federal Costs: Southern CREW	\$39,672,000	\$175,000

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Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
E&SF East Coast Canal Structures		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$0	
Modify or relocate, with credit toward the non-Federal 50 percent share of project costs, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$0	
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$1,890,000	\$150,000
Subtotal Non-Federal Costs: East Coast Canal Structures	\$1,890,000	\$150,000
E&SF Western C-11 Basin		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$0	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$0	
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$9,287,000	
Subtotal Non-Federal Costs: Western C-11 Basin	\$9,287,000	
E&SF Seminole Big Cypress		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$7,500,000	\$0
Modify or relocate, with credit toward the non-Federal 50 percent share of project costs, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$0	\$0
Pay 50 percent of the costs allocated to environmental restoration, and bear 50% costs of operation, maintenance, repair, rehabilitation, and replacement.	\$22,500,000	\$1,075,000
Subtotal Non-Federal Costs: Seminole Big Cypress	\$30,000,000	\$1,075,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
E&SF Ten-Mile Creek		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$5,074,000	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$0	
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$23,426,000	
Subtotal Non-Federal Costs: Ten-Mile Creek	\$28,500,000	
E&SF Tamiami Trail Western Culverts		
Provide, with credit toward the non-Federal 84 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas	\$0	\$0
Modify or relocate, with credit toward the non-Federal 84 percent share of project costs, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$0	\$0
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$2,622,000	\$250,000
Subtotal Non-Federal Costs: Tamiami Trail Western Culverts	\$2,622,000	\$250,000
E&SF Lake Trafford		
Provide, with credit toward the non-Federal 95 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$1,356,000	\$0
Modify or relocate, with credit toward the non-Federal 95 percent share of project costs, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$0	\$0
Pay 84 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$20,554,000	\$70,000
Subtotal Non-Federal Costs: Lake Trafford	\$21,910,000	\$70,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
E&SF Florida Keys Carrying Capacity		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	\$0	\$0
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$0	\$0
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$3,000,000	\$0
Subtotal Non-Federal Costs: Florida Keys Carrying Capacity	\$3,000,000	\$0
CERP Indian River Lagoon South		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	\$811,969,000	\$0
Cash Contribution/Work-In-Kind/Bear 50% off costs of operation, maintenance, repair, rehabilitation, and replacement.	\$228,879,000	\$6,145,000
Subtotal Non-Federal Costs: CERP Indian River Lagoon South	\$1,040,848,000	\$6,145,000
CERP Picayune Strand		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	\$128,654,000	\$0
Cash Contribution/Work-In-Kind/Bear 50% off costs of operation, maintenance, repair, rehabilitation, and replacement.	\$112,561,000	\$2,950,000
Subtotal Non-Federal Costs: CERP Picayune Strand	\$241,215,000	\$2,950,000
CERP Site 1 Impoundment Phase 1		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	\$4,188,000	\$0
Cash Contribution/Work-In-Kind/Bear 50% off costs of operation, maintenance, repair, rehabilitation, and replacement.	\$48,147,000	\$347,000
Subtotal Non-Federal Costs: CERP Site 1 Impoundment Phase 1	\$52,335,000	\$347,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
CERP Melaleuca Eradication		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	\$0	\$0
Cash Contribution/Work-In-Kind/Bear 50% off costs of operation, maintenance, repair, rehabilitation, and replacement.	\$2,206,000	\$425,000
Subtotal Non-Federal Costs: CERP Melaleuca Eradication	\$2,206,000	\$425,000
Kissimmee River		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	\$407,550,000	\$0
Cash Contribution/Work-In-Kind/Bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	\$(15,987,000)	\$477,000
Subtotal Non-Federal Costs: Kissimmee River	\$391,563,000	\$477,000

STATUS OF LOCAL COOPERATION: Assurances of local cooperation have been accepted from the local sponsor, the South Florida Water Management District, for all works authorized under the Central and Southern Florida (C&SF) project. The Project Cooperation Agreement (PCA) for the C-111 (South Dade) separable element was executed with the South Florida Water Management District in January 1995. A PCA amendment is under negotiation with the Sponsor and a Post Authorization Change document is being developed for approval of the increase to total project cost and minor design changes. The Design Agreement for the South Florida Water Management District segment of the Comprehensive Everglades Restoration Plan (CERP) was signed on May 12, 2000. Additional Design Agreements for CERP features maybe executed with Seminole Tribe of Florida, the Miccosukee Tribe of Florida, the Florida Department of Environmental Protection and Miami-Dade County.

The Kissimmee Project Cooperation Agreement which reflects the cost sharing outlined in House Document 102-286 dated April 7, 1992 was executed with the South Florida Water Management District (SFWMD) in March 1994. The local sponsor will be required to provide a cash contribution for project costs in excess of land credit (reflecting credit for lands, easements, rights of way, relocations, and disposal areas).

PCAs were executed January 7, 2000 for East Coast Canal Structures, Tamiami Trail Culverts, Western C-11, Seminole Big Cypress, Southern Crew, Lake Okeechobee Water Retention, 10-Mile Creek, and Lake Trafford. A Feasibility Cost Share Agreement (FCSA) was executed December 1998 for Florida Keys Carrying Capacity. Local sponsors include: South Florida Water Management District (SFWMD), Seminole Tribe of Florida, and the Florida Department of Community Affairs (DCA).

PCAs were executed with the South Florida Water Management District September 1994 and July 2001 for the Modified Water Deliveries Project to implement modifications to the C&SF Project to improve water deliveries into Everglades National Park. PCA Amendment No. 2 was executed August 2008 for Tamiami Trail Modification

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STATUS OF LOCAL COOPERATION (Continued)

The CERP Master Agreement was executed on 13 August 2009 between the Corps and the South Florida Water Management District. A Project Partnering Agreement (PPA) was executed on the CERP: Picayune Strand project in August 2009 with the South Florida Water management District. The CERP Design Agreement was amended on 13 August 2009 to reflect authority to balance cost share of design and construction activities across CERP projects. Four additional PPAs were executed with SFWMD for CERP projects in FY 2010: Melaleuca Eradication and Other Exotic Plants (July), L-31 North Seepage Management Pilot Project (July), Site 1 Impoundment Project – Part 1 (August), and the Indian River Lagoon South Project – Phase 1 (September). Five Pre-Partnership Credit Agreements (PPCA) were executed with the South Florida Water management District in August 2009: Picayune Strand, Indian River Lagoon South, C-43 Caloosahatchee River West Basin Storage Reservoir, C-111 Spreader Canal, and the Biscayne Bay Costal Wetlands projects.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps cost estimate for the Corps' share of the overall restoration effort) cost estimate of \$4,995,563,000 is an decrease of \$26,115,000 from the latest estimate (\$4,969,448,000) presented to Congress (FY 2013). The changes include the following:

Item	Amount
Price Escalation of Construction Features	\$44,837,000
Post Contract Award and Other Estimating Adjustments for Kissimmee and CERP Picayune Strand	27,261,000
Favorable Bids for Construction Contracts for Kissimmee River	(\$3,799,000)
Reduced scope of work for survey contract on IRL-S and construction of C-111 South Dade	(\$25,305,000)
Adjustments in Real Estate and project features for Kissimmee River, C&SF C-111 South Dade, and CERP Picayune Strand Restoration	(\$16,879,000)
Total	\$26,115,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

The latest Programmatic Environmental Impact Statements for Central and Southern Florida project was the Comprehensive Review Study in April 1999. NEPA documents have also been completed for the Indian River Lagoon South, Picayune Strand, Site 1 Impoundment, Melaleuca Eradication, C-111 Spreader Canal, Caloosahatchee River (C-43) West Basin Storage Reservoir, Broward County Water Preserve Areas, and Biscayne Bay Coastal Wetlands projects.

The final Environmental Impact Statement for the Kissimmee project was filed with EPA on April 5, 1992. A supplement to the Environmental Impact Statement was integrated into the Upper Basin project modification report.

NEPA documents were completed prior to execution of the PCA for East Coast Canal Structures, Tamiami Trail Culverts (Western Culverts), Western C-11, Seminole Big Cypress, Southern Crew, Lake Okeechobee Water Retention, 10-Mile Creek, and Lake Trafford.

OTHER INFORMATION: Funds to initiate preconstruction planning and construction on the Central and Southern Florida project were appropriated in FY 1950.

Modified Water Deliveries to Everglades National Park Project: The Everglades National Park Protection and Expansion Act, signed December 13, 1989, authorized construction of works required to take steps to improve water deliveries to Shark River Slough in Everglades National Park, construction of flood mitigation works for the residential area in the East Everglades, and acquisition of 107,600 acres of privately owned wetlands in the East Everglades. The Department of the Interior and the State of Florida acquired the lands included in the ENP expansion area and the Secretary of the Army has responsibility for constructing all project modifications. Under the initial implementation plan, funds were appropriated to the National Park Service and transferred to the Corps of Engineers for this purpose. From FY 2006 to FY 2008, Congress provided funding for this project to both the National Park Service and the Corps of Engineers. All subsequent funding is expected to be provided through National Park Service appropriations. The construction of the final project components, the Tamiami Trail bridge and roadway raising, was initiated in FY 2010.

The Kissimmee Restoration Project was authorized by the Water Resources Development Act of 1992. The project cooperation agreement was executed in March 1994. Engineering and design and construction are on-going. Construction was initiated in FY 1997. A Post Authorization Change is being developed to address increased project costs in upper basin of the Kissimmee River that can be used to support a project reauthorization. The Kissimmee Basin Modified Water Control Plan (KBMWCP) Environmental Impact Statement effort will include an operational and structural analysis of the post-Kissimmee River Restoration operations for the existing and new structures in the Upper and Lower Kissimmee Basins.

The Water Resources Development Act of 1992 authorizes the Chief of Engineers to review the Central and Southern Florida (C&SF) project to determine whether modifications to the existing project are advisable at the present time due to significantly changed physical, biological, demographic, or economic conditions, with particular reference to modifying the project or its operation for improving the quality of the environment, improving protection of the aquifer, and improving the integrity, capability, and conservation of urban water supplies affected by the project or its operation. The central organizing theme of the Comprehensive Restudy was the restoration of the South Florida ecosystem while accommodating other demands for water and related land resources in south Florida. Recognizing the complexity of ecological restoration and the extensive interaction between the ecosystem and other uses of water and related land resources, oversight of the reconnaissance level study effort was provided by the interagency South Florida Ecosystem Restoration Task Force, which continues to provide policy guidance, interagency coordination, and facilitate appropriate agency participation. The Water Resources Development Act of 1996 (Section 528) required that a Comprehensive Restudy feasibility report be submitted to Congress, along with a Programmatic Environmental Impact Statement, in July 1999. The Final Integrated Feasibility Report and Programmatic Environmental Impact Statement were submitted to Congress on July 1, 1999. The report provided a Comprehensive Everglades Restoration Plan (CERP). Congress authorized this plan in WRDA 2000 as a conceptual framework for modifications and operational changes to the C&SF Project, providing specific authorization for 10 projects totaling \$1,100,000,000 (including \$100,000,000 for adaptive assessment and monitoring programs) and 4 pilot projects totaling \$69,000,000, and to allow for implementation of projects under a programmatic authority, not to exceed \$206,000,000. Two additional pilot projects that were part of the CERP were authorized in the WDRA of 1999 for \$29,000,000. The Energy and Water Appropriations Act of FY 2000, Public Law 106-50 appropriated the first funds to initiate design of elements of the CERP.

The Water Resources Development Act of 2007 provided authorization for the following three CERP projects: Picayune Strand, Indian River Lagoon South and Site 1 Impoundment. It also provided a new authorized project cost for the Hillsboro and Lake Okeechobee ASR Pilot and the Caloosahatchee ASR Pilot projects; and a provision for the establishment of Section 902 limits for the Programmatic Authority projects.

OTHER INFORMATION (Continued)

The Indian River Lagoon South Feasibility Study was initiated in 1996. This study evaluated potential modifications to the C&SF Project for ecological restoration of Indian River Lagoon ecosystem. A final feasibility report, which included components of the CERP, was submitted to HQUSACE in FY02. The Project Implementation Report (PIR), required by WRDA 2000, for Indian River Lagoon South was completed August 2004. A Chief's Report on the PIR was signed

August 4, 2004. Construction was authorized in WRDA 2007. Construction of the intake canal of the C-44 Reservoir and STA component was initiated in July 2011 and is scheduled for completion in March 2014.

The Picayune Strand Restoration Project: This project involves the restoration of natural flow across roughly 90 square miles in western Collier County, which were drained in the early 1960's. The project will restore wetlands in Picayune Strand (an abandoned real estate development formerly known as Southern Golden Gates Estates) and adjacent public lands by reducing over drainage while restoring a natural and beneficial sheetflow of water to the Ten Thousand Islands National Wildlife Refuge. Additionally, the project will benefit the endangered Florida panther, and improve wetland/upland mosaic habitat west of the Everglades. The Picayune Strand Project Implementation Report, which is a component of the Comprehensive Plan, was completed in December 2004. A Chief's Report on the PIR was signed on September 15, 2005. Construction was authorized in WRDA 2007. Construction was initiated with funds provided by the non-Federal sponsor and continues with the COE appropriated funds. Specifically, the local sponsor, South Florida Water Management District, completed construction of some of the road demolition and plugging of the Prairie canals. The Corps will complete the remaining construction of 3 pump stations (with capacities of 800, 2650 and 1200 cubic feet per second), road removal and plugging of canals. FY 2009 regularly appropriated and ARRA funds were used to award the first pump station, the Merritt pump station, in October 2009 and it is scheduled for completion in FY 2013 and transfer to the sponsor in FY 2014. The second pump station (Faka Union) was awarded on November 22, 2010 and is scheduled for completion in FY 2014 with transfer to the sponsor in FY 2015. Miller Pump station is currently under design and is scheduled to initiate construction in FY 2013. The area south and west of the project is currently under analysis to determine if flood mitigation features will be necessary to maintain current (year 2000) levels of flood risk. A multi-agency sub-team determined that the project will likely affect an established manatee warm-water refuge at the southern end of the project and designed a mitigation project that will begin construction in FY 2013. A Post Authorization Change is being developed to address increased project costs for the project due to price escalation and increases in supplies and materials for construction of the pump stations. The section 902 limit will not be exceeded in FY 2014.

The Site 1 Impoundment Project Implementation Report, which is a component of the Comprehensive Plan, was completed in August 2006. A Chief's Report on the PIR was signed on December 19, 2006, construction was authorized in WRDA 2007 and the PHI 1 construction contract was awarded in August 2010 using ARRA funds.

A Project Implementation Report for Broward County WPA, which is a component of the Comprehensive Plan, was completed in April 2007. However the final report was on hold pending a decision on the CERP land valuation policy, which was resolved in August 2009. The final report has been modified to reflect current CERP land valuation guidance as well as policy updates required since 2007. The Chief's Report was signed on May 21, 2012. The Record of Decision was signed and transmitted to Congress on November 2, 2012.

The Caloosahatchee River (C-43) West Basin Storage Reservoir Project Implementation Report, which is a component of the Comprehensive Plan, was completed in September 2007. However the final report was on hold pending a decision on the CERP land valuation policy, which was resolved in August 2009. A final report was prepared based on current CERP land valuation guidance and submitted to Headquarters November 17, 2009. The Chief's Report was signed in March 2010 and a Supplemental Chief's Report was signed in January 2011 to clarify cost sharing requirements on recreational features. The Record of Decision was signed and transmitted to Congress on April 13, 2011.

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South Florida Ecosystem Restoration, FL

OTHER INFORMATION (Continued)

The C-111 Spreader Canal Project Implementation Report, which is a component of the Comprehensive Plan, was completed in September 2009. The final PIR and Environmental Impact Statement (EIA) were approved at the Civil Works Review Board in December 2009. The Chief's Report was signed on January 31, 2012. The Record of Decision was signed on July 19, 2012 and transmitted to Congress on July 20, 2012.

The Biscayne Bay Coastal Wetlands Project Implementation Report, which is a component of the Comprehensive Plan, was completed in August 2011. The final PIR and Environmental Impact Statement (EA) were approved at the Civil Works Review Board in September 2011. The Chief's Report was signed on May 2, 2012. The Record of Decision was signed and transmitted to Congress on September 19, 2012.

The Everglades and South Florida Restoration project authorization limit of a total federal funding of \$75 million was increased to \$95 million in WRDA 2007. It also provided for an increased project Federal funding cap on the Seminole Big Cypress project from \$25 million to \$30 million. The local sponsors have elected, on some projects, to fund more than 50% of project costs to complete those projects.

The Enacted Energy and Water Development Appropriations Act of 2010 included a general provision to increase the Everglades and South Florida Ten Mile Creek federal funding cap by \$3.5 million, an increase from \$25 million to \$28.5 million, to complete a Post Authorization Change Report (PAC) and continue preventative maintenance. The PAC will evaluate options to address project design deficiencies and identify cost effective remedies. While the PAC is being completed, the constructed facility will be maintained in a minimum caretaker status, through 2013, to protect the property for health and safety.

Post Authorization Change (PAC) reports are being developed to address increased project costs in upper basin of the Kissimmee River and the CERP Picayune Strand Restoration project that can be used to support project reauthorizations. The current project cost estimates and work planned for FY 2014 for the Kissimmee River and the CERP Picayune Strand Restoration projects will not exceed the Section 902 limit on either project. Work planned to complete the CERP Site I Phase I construction in FY 2015 will not exceed the section 902 limit.

Funds to initiate construction for the Kissimmee River Restoration were appropriated in FY 1993. The Project Cost Share Agreement was signed with the South Florida Water Management District March 22, 1994. The current Total Project cost is approximately \$783,227,000 and will complete in FY 2016. The project was authorized in WRDA 1992 and separated the total project cost into two separate portions, the Kissimmee River know as the "Lower Basin" at a cost of \$426,885,000 and the Kissimmee River Headwaters known as the "Upper Basin" at a cost of \$92,210,000. The current Section 902 limit for the Lower Basin is with inflation is \$779,147,000 and the current Section 902 limit in the Upper Basin with inflation is \$187,243,000. The current project cost in the Lower Basin is \$568,393,000 which does not exceed the Section 902 Limit. However the current project cost in the Upper Basin is \$214,834,000 which exceeds the 902 limit by more than 15 percent. Construction was completed in the Upper Basin in December 2012; the Section 902 limit is exceeded by the excess real estate credits that the Sponsor has estimated they will submit for final crediting. Therefore the \$58,064 in estimated additional credits will not be afforded to the non Federal Sponsor until the PAC is approved and results in an amended authorization to increase the total project cost in the Upper Basin portion of the project. A proposed change to the authorized limit to combine both the Upper and Lower Basin cost estimates into one total authorized project cost was included in the Fiscal Year 2013 Senate Committee Mark Up.

OTHER INFORMATION (Continued)

As of the date of this J-sheet, the FY 2013 distribution of funds reflects the current schedule and a \$54,000,000 carry-in due to the following revised actions in FY 2012: a) \$30,000,000 due to a minimum of an 18 month delay in the execution of the C-111 South Dade PPA; and, b) \$24,000,000 due to savings in FY 2012 based on actual contract award values as compared to the budgeted estimate and delayed contract awards. Additionally, two construction contracts were terminated for convenience on the Kissimmee River project in FY2013 due to land issues related to operation of the features. The terminations resulted in a de-obligation of funds in the amount of \$19,763,000 in FY2013, of which \$12,995,000 is expected to be carried into FY2014. These funds will be used for the S-69 Weir construction contract and the Reaches 2 and 3 Backfill construction contracts. The Reaches 2 and 3 Backfill contracts are dependent upon resolution of land acquisition required by the sponsor.

SUMMARIZED FINANCIAL DATA – Separable Elements

C&SF Miscellaneous Completed Work

Estimated Federal Cost (CoE)		\$934,900,000
Programmed Construction	\$316,503,000	
Unprogrammed Construction	\$618,397,000	
Estimated Federal Cost (OFA)		\$0
Programmed Construction	\$0	
Unprogrammed Construction	\$0	
Estimated Total Federal Cost		\$934,900,000
Programmed Construction	\$316,503,000	
Unprogrammed Construction	\$618,397,000	
Estimated Non-Federal Cost		\$408,700,000
Programmed Construction	\$84,118,000	
Cash Contributions	\$58,843,000	
Other Costs	\$25,275,000	
Unprogrammed Construction	\$324,582,000	
Cash Contributions	\$173,398,000	
Other Costs	\$151,184,000	
Total Estimated Programmed Construction Cost		\$400,621,000
Total Estimated Unprogrammed Construction Cost		\$942,979,000
Total Estimated Project Cost		\$1,343,600,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

Modified Water Deliveries to Everglades National Park

Estimated Federal Cost (CoE)			\$77,493,000
Programmed Construction		\$77,493,000	
Unprogrammed Construction		\$0	
Estimated Federal Cost (OFA)			\$339,507,000
Programmed Construction		\$339,507,000	
Unprogrammed Construction		\$0	
Estimated Total Federal Cost			\$417,000,000
Programmed Construction		\$417,000,000	
Unprogrammed Construction		\$0	
Estimated Non-Federal Cost			\$156,000
Programmed Construction		\$156,000	
Cash Contributions	\$156,000		
Other Costs	\$0		
Unprogrammed Construction		\$0	
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$417,156,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$417,156,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

C&SF C-111 (South Dade)

Estimated Federal Cost (CoE)			\$156,521,000
Programmed Construction	\$156,521,000	1/	
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$5,801,000
Programmed Construction	\$5,801,000		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$162,322,000
Programmed Construction	\$162,322,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$162,219,000
Programmed Construction	\$162,219,000		
Cash Contributions	\$13,520,000		
Other Costs	\$148,699,000		
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$324,541,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$324,541,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/. Fed cost includes \$103K for Independent External Peer Review which is included in the total project cost, but is not to be cost shared with the local sponsor

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

C&SF West Palm Beach Canal

Estimated Federal Cost (CoE)			\$320,837,000
Programmed Construction	\$320,837,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$46,000,000
Programmed Construction	\$46,000,000		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$366,837,000
Programmed Construction	\$366,837,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$28,663,000
Programmed Construction		\$28,663,000	
Cash Contributions	\$11,182,000		
Other Costs	\$17,481,000		
Unprogrammed Construction		\$0	
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$395,500,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$395,500,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

C&SF Manatee Pass-Through Gates

Estimated Federal Cost (CoE)			\$14,578,000
Programmed Construction	\$14,578,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$14,578,000
Programmed Construction	\$14,578,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$2,082,000
Programmed Construction	\$2,082,000		
Cash Contributions	\$2,082,000		
Other Costs	\$0		
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$16,660,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$16,660,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

Comprehensive Everglades Restoration Plan (CERP)

Estimated Federal Cost (CoE)			\$3,004,570,000	1/
Programmed Construction	\$3,004,570,000			
Unprogrammed Construction	\$0			
Estimated Federal Cost (OFA)			\$0	
Programmed Construction	\$0			
Unprogrammed Construction	\$0			
Estimated Total Federal Cost			\$3,004,570,000	
Programmed Construction	\$3,004,570,000			
Unprogrammed Construction	\$0			
Estimated Non-Federal Cost			\$2,997,226,000	
Programmed Construction		\$2,997,226,000		
Cash Contributions	\$1,499,046,000			
Other Costs	\$1,498,180,000			
Unprogrammed Construction		\$0		
Cash Contributions	\$0			
Other Costs	\$0			
Total Estimated Programmed Construction Cost			\$6,001,796,000	
Total Estimated Unprogrammed Construction Cost			\$0	
Total Estimated Project Cost			\$6,001,796,000	

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Rollup summary for all CERP funding, includes costs for the four projects authorized for construction; Picayune Strand Restoration, Indian River Lagoon South, Site 1 Impoundment and Melalueca Eradication. The Fed cost also includes \$1.116M for Independent External Peer Review which is included in the total project cost, but is not to be cost shared with the local sponsor.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Lake Okeechobee

Estimated Federal Cost (CoE)			\$14,275,000
Programmed Construction		\$14,275,000	
Unprogrammed Construction		\$0	
Estimated Federal Cost (OFA)			\$0
Programmed Construction		\$0	
Unprogrammed Construction		\$0	
Estimated Total Federal Cost			\$14,275,000
Programmed Construction		\$14,275,000	
Unprogrammed Construction		\$0	
Estimated Non-Federal Cost			\$14,275,000
Programmed Construction		\$14,275,000	
Cash Contributions	\$11,198,000		
Other Costs	\$3,077,000		
Unprogrammed Construction		\$0	
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$28,550,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$28,550,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Southern CREW

Estimated Federal Cost (CoE)			\$332,000
Programmed Construction	\$332,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$332,000
Programmed Construction	\$332,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$39,672,000 1/
Programmed Construction	\$39,672,000		
Cash Contributions	\$11,008,000		
Other Costs	\$28,664,000		
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$40,004,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$40,004,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Construction assigned to sponsor due to Federal funding cap on Everglades and South Florida program.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF East Coast Canal Structures

Estimated Federal Cost (CoE)		\$1,890,000
Programmed Construction	\$1,890,000	
Unprogrammed Construction	\$0	
Estimated Federal Cost (OFA)		\$0
Programmed Construction	\$0	
Unprogrammed Construction	\$0	
Estimated Total Federal Cost		\$1,890,000
Programmed Construction	\$1,890,000	
Unprogrammed Construction	\$0	
Estimated Non-Federal Cost		\$1,890,000
Programmed Construction	\$1,890,000	
Cash Contributions	\$1,890,000	
Other Costs	\$0	
Unprogrammed Construction	\$0	
Cash Contributions	\$0	
Other Costs	\$0	
Total Estimated Programmed Construction Cost		\$3,780,000
Total Estimated Unprogrammed Construction Cost		\$0
Total Estimated Project Cost		\$3,780,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Western C-11 Basin

Estimated Federal Cost (CoE)			\$9,208,000
Programmed Construction		\$9,208,000	
Unprogrammed Construction		\$0	
Estimated Federal Cost (OFA)			\$0
Programmed Construction		\$0	
Unprogrammed Construction		\$0	
Estimated Total Federal Cost			\$9,208,000
Programmed Construction		\$9,208,000	
Unprogrammed Construction		\$0	
Estimated Non-Federal Cost			\$9,287,000
Programmed Construction		\$9,287,000	
Cash Contributions	\$9,287,000	1/	
Other Costs	\$0		
Unprogrammed Construction		\$0	
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$18,495,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$18,495,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/. Non Federal Cash Contribution includes \$79.5K for a betterment which is not included as part of cost share with the local sponsor.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Seminole Big Cypress

Estimated Federal Cost (CoE)			\$30,000,000
Programmed Construction	\$30,000,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$30,000,000
Programmed Construction	\$30,000,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$30,000,000
Programmed Construction		\$30,000,000	
Cash Contributions	\$22,500,000		
Other Costs	\$7,500,000		
Unprogrammed Construction		\$0	
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$60,000,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$60,000,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Ten Mile Creek

Estimated Federal Cost (CoE)			\$28,500,000
Programmed Construction	\$28,500,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$28,500,000
Programmed Construction	\$28,500,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$28,500,000
Programmed Construction	\$28,500,000		
Cash Contributions	\$23,426,000		
Other Costs	\$5,074,000		
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$57,000,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$57,000,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Tamiami Trail (Western Culverts)

Estimated Federal Cost (CoE)			\$2,622,000
Programmed Construction	\$2,622,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$2,622,000
Programmed Construction	\$2,622,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost		1/	\$2,622,000
Programmed Construction	\$2,622,000		
Cash Contributions	\$2,622,000		
Other Costs	\$0		
Unprogrammed Construction		\$0	
Cash Contributions		\$0	
Other Costs		\$0	
Total Estimated Programmed Construction Cost			\$5,244,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$5,244,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Construction assigned to sponsor due to Federal funding cap on Everglades and South Florida program.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Lake Trafford

Estimated Federal Cost (CoE)			\$4,134,000
Programmed Construction	\$4,134,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$4,134,000
Programmed Construction	\$4,134,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$21,910,000 1/
Programmed Construction	\$21,910,000		
Cash Contributions	\$20,554,000		
Other Costs	\$1,356,000		
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$26,044,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$26,044,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Construction assigned to sponsor due to Federal funding cap on Everglades and South Florida program.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Florida Keys Carrying Capacity

Estimated Federal Cost (CoE)			\$3,000,000
Programmed Construction	\$3,000,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$3,000,000
Programmed Construction	\$3,000,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$3,000,000
Programmed Construction	\$3,000,000		
Cash Contributions	\$3,000,000		
Other Costs	\$0		
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$6,000,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$6,000,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Letter Report Development

Estimated Federal Cost (CoE)			\$1,039,000
Programmed Construction	\$1,039,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$1,039,000
Programmed Construction	\$1,039,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$0
Programmed Construction		\$0	
Cash Contributions	\$0		
Other Costs	\$0		
Unprogrammed Construction		\$0	
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$1,039,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$1,039,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

CERP Indian River Lagoon South

Estimated Federal Cost (CoE)			\$1,040,848,000
Programmed Construction	\$1,040,848,000		
Unprogrammed Construction		\$0	
Estimated Federal Cost (OFA)			\$0
Programmed Construction		\$0	
Unprogrammed Construction		\$0	
Estimated Total Federal Cost			\$1,040,848,000
Programmed Construction	\$1,040,848,000		
Unprogrammed Construction		\$0	
Estimated Non-Federal Cost			\$1,040,848,000
Programmed Construction		\$1,040,848,000	
Cash Contributions	\$228,879,000		
Other Costs	\$811,969,000		
Unprogrammed Construction		\$0	
Cash Contributions		\$0	
Other Costs		\$0	
Total Estimated Programmed Construction Cost			\$2,081,696,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$2,081,696,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

CERP Picayune Strand

Estimated Federal Cost (CoE)			\$241,215,000
Programmed Construction	\$241,215,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$241,215,000
Programmed Construction	\$241,215,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$241,215,000
Programmed Construction	\$241,215,000		
Cash Contributions	\$112,561,000		
Other Costs	\$128,654,000		
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$482,430,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$482,430,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

CERP Site 1 Impoundment Phase 1

Estimated Federal Cost (CoE)			\$52,335,000
Programmed Construction	\$52,335,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$52,335,000
Programmed Construction	\$52,335,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$52,335,000
Programmed Construction		\$52,335,000	
Cash Contributions	\$48,147,000		
Other Costs	\$4,188,000		
Unprogrammed Construction		\$0	
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$104,670,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$104,670,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

CERP Melaleuca Eradication

Estimated Federal Cost (CoE)			\$2,206,000
Programmed Construction	\$2,206,000		
Unprogrammed Construction	\$0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$2,206,000
Programmed Construction	\$2,206,000		
Unprogrammed Construction	0		
Estimated Non-Federal Cost			\$2,206,000
Programmed Construction	\$2,206,000		
Cash Contributions	\$2,206,000		
Other Costs			
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$4,412,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$4,412,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

Kissimmee River Lower Basin

Estimated Federal Cost (CoE)			\$310,637,000 1/
Programmed Construction	\$310,637,000		
Unprogrammed Construction	0		
Estimated Federal Cost (OFA)			\$0
Programmed Construction	\$0		
Unprogrammed Construction	\$0		
Estimated Total Federal Cost			\$310,637,000
Programmed Construction	\$310,637,000		
Unprogrammed Construction	\$0		
Estimated Non-Federal Cost			\$257,756,000
Programmed Construction	\$257,756,000		
Cash Contributions	\$683,000		
Other Costs	\$257,073,000		
Unprogrammed Construction	\$0		
Cash Contributions	\$0		
Other Costs	\$0		
Total Estimated Programmed Construction Cost			\$568,393,000
Total Estimated Unprogrammed Construction Cost			\$0
Total Estimated Project Cost			\$568,393,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Kissimmee project cost shared 50/50. Fed cost includes \$51K for Independent External Peer Review which is included in the total project cost, but is not to be cost shared with the local sponsor.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

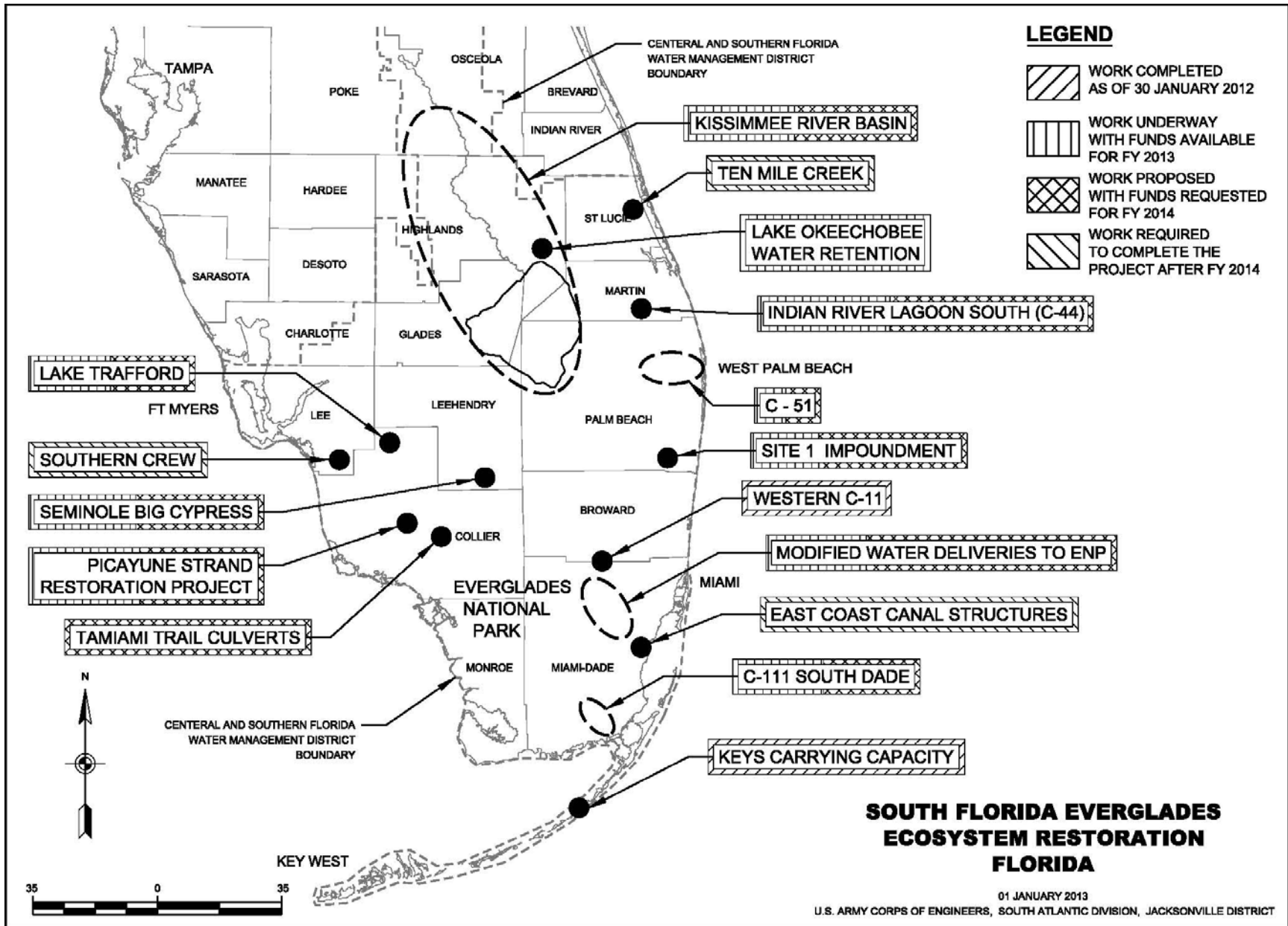
Kissimmee River Upper Basin

Estimated Federal Cost (CoE)			\$81,027,000 1/
Programmed Construction		\$51,994,000	
Unprogrammed Construction		\$29,033,000	
Estimated Federal Cost (OFA)			\$0
Programmed Construction		\$0	
Unprogrammed Construction		\$0	
Estimated Total Federal Cost			\$81,027,000
Programmed Construction		\$51,994,000	
Unprogrammed Construction		\$29,033,000	
Estimated Non-Federal Cost			\$133,807,000
Programmed Construction		\$104,776,000	
Cash Contributions	\$12,343,000		
Other Costs	\$92,433,000		
Unprogrammed Construction		\$29,031,000	
Cash Contributions	(\$29,013,000)		
Other Costs	\$58,044,000		
Total Estimated Programmed Construction Cost			\$156,770,000
Total Estimated Unprogrammed Construction Cost			\$58,064,000
Total Estimated Project Cost			\$214,834,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Kissimmee project cost shared 50/50. Fed cost includes \$50K for Independent External Peer Review which is included in the total project cost, but is not to be cost shared with the local sponsor.



APPROPRIATION TITLE: Construction - Channels and Harbors (Navigation)

PROJECT: Tampa Harbor, Florida Dredged Material Disposal Facility (Continuing)

LOCATION: Tampa Harbor is located about midway along the Gulf coast of Florida, approximately 85 miles southwest of Orlando, including both Tampa and Hillsborough Bays.

DESCRIPTION: The authorized Tampa Harbor Federal Navigation Project, Florida, includes approximately 67 miles of channels, at various depths and widths, in Hillsborough and Pinellas counties. The project is comprised of two major bay segments—Tampa Bay (TB) and Hillsborough Bay (HB)—and includes both Federal and non-Federal channels. The Final Dredged Material Management Plan (DMMP) for the Tampa Harbor Project, Florida, was approved on April 17, 2002. The DMMP recommended a base plan, along with raising the dikes of Dredged Material Management Areas (DMMA) 2-D and 3-D. United States Army Corps of Engineers Engineering Regulation 1105-2-100 requires periodic updates of DMMPs to reflect current conditions. The latest DMMP update was approved by South Atlantic Division, U.S. Army Corps of Engineers in April 2012 and covers the planning horizon from 2010 to 2030. For Federal dredging events that take place from the entrance channel through Cut B (TB), material is placed in the Ocean Dredged Material Disposal Site (ODMDS). For Federal dredging events that take place from Cut C (TB) through all other Federal cuts in the Tampa Harbor Federal Project, material is placed in DMMA 3-D. Only non-Federal dredged material would be placed in DMMA 2-D. Any placement, expansion, or other modifications of DMMA 2-D would be the responsibility of the local sponsor.

AUTHORIZATION: Rivers and Harbors Act of 1899 and the Water Resources Development Act of 1976.

REMAINING BENEFIT-REMAINING COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

TOTAL BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

INITIAL BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

BASIS OF BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		\$17,325,000			
Future Non-Federal Reimbursement	\$ 2,300,000		Disposal Area 3-D Raising	19	<u>8/</u> TBD
Estimated Federal Cost (Ultimate)		\$15,025,000			
Estimated Non-Federal Cost		\$ 8,075,000			
Cash Contributions	\$ 5,660,000				
Other Costs	\$ 115,000				
Reimbursements	\$ 2,300,000				
Navigation	\$ 2,300,000				
Total Estimated Project Cost		\$23,100,000	<u>9/</u>		
Allocations to 30 September 2010	\$ 0				
Allocation for FY 2011	\$ 0				
Allocation for FY 2012	\$ 2,940,000				
Conference Allowance for FY 2013	\$ 8,305,000	<u>5/</u>			
Allocations through FY 2013	\$11,686,000	<u>1/ 2/ 3/ 6/</u>	67.5		
Estimated Unobligated Carry-In Funds	\$ 0	<u>4/</u>			
President's Budget for FY 2014	\$ 3,380,000		87.0		
Programmed Balance to Complete after FY 2014	\$ 2,259,000	<u>7/</u>			
Un-programmed Balance to Complete after FY 2014	\$ 0				

1/ \$441,000 reprogrammed to the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ PCT CMPL is for DMDF 3-D only. The FY 2013 justification sheet included the channels.

9/ Total Estimated Project Cost is for DMDF work only. The FY 2013 justification sheet included the cost of the channels.

Division: South Atlantic

District: Jacksonville

Tampa Harbor, FL

1 May 2013

SAD - 105

PHYSICAL DATA: The Tampa Harbor project provides 67 miles of navigation channels ranging in depth from 30 feet to 45 feet in the entrance channel. DMMA 2-D was raised to 29 feet (NGVD 1929). DMMA 3-D was raised from 19 feet to 23 feet (NGVD 1929) by the project sponsor in 2005. FY 2013 funding will be used to raise DMMA 3-D from 23.0 feet to 33.0 feet (NGVD 1929). FY 2014 funding will be used to raise DMMA 3-D from 33.0 feet to 37.0 feet (NGVD 1929). The design height of DMMA 3-D is 40.0 feet (NGVD 1929).

JUSTIFICATION: Tampa Harbor is a high use harbor and among the nation's leading exporters of phosphate rock and chemicals (fertilizers). Major import commodities are chemicals (ammonia) and raw materials (limestone). Annual tonnage handled by the Port is over 44,174,000 tons per year for the past 10 years. Disposal Area 3-D is located on land owned by the Tampa Port Authority and is available. As of the date of this justification sheet, there is approximately 1,700,000 CY remaining disposal capacity in DMMA 3-D. Based on an estimated required disposal capacity need of 500,000 CY per year, DMMA 3-D disposal capacity will become critical during FY 2016. The only other dredge material disposal facility in the vicinity is DMMA 2-D and it is designated solely for maintenance material from non-Federal channels and is not available for disposal of material from the authorized Federal navigation channel. Based on these conditions and to meet the need for Federal operations and maintenance disposal capacity, construction of DMMA 3-D must be initiated with available funding during FY 2013. It has been determined that the most efficient procurement strategy for the DMMA 3-D is a construction contract that consists of a base and options. This acquisition strategy anticipates a duration of up to twenty four months to physically complete construction of DMMA 3-D.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate DMDF 3-D Construction dike raising from 23.0 feet to 33.0 feet (NGVD 1929)	\$ 9,352,000
Planning, Engineering and Design for DMDF 3-D	761,000
Construction Management	1,573,000
Total	\$ 11,686,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue DMDF 3-D Construction dike raising from 33.0' to 37.0' (NGVD 1929)	\$ 2,705,000
Engineering During Construction	220,000
Construction Management	455,000
Total	\$ 3,380,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended by the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	\$ 10,000	0
Pay 25 percent of the costs allocated to general navigation facilities during construction	5,660,000	0
Participate in Project Coordination Team, conduct audits of non-Federal costs, and perform investigations of hazardous substances	105,000	0
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as reduced by a credit allowed for the value of lands, easements, rights of way, and relocations provided for commercial navigation	2,300,000	0
Total Non-Federal Costs	\$ 8,075,000	0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and, for general navigation, reimburse its share of construction costs within a period of 30 years following completion of construction.

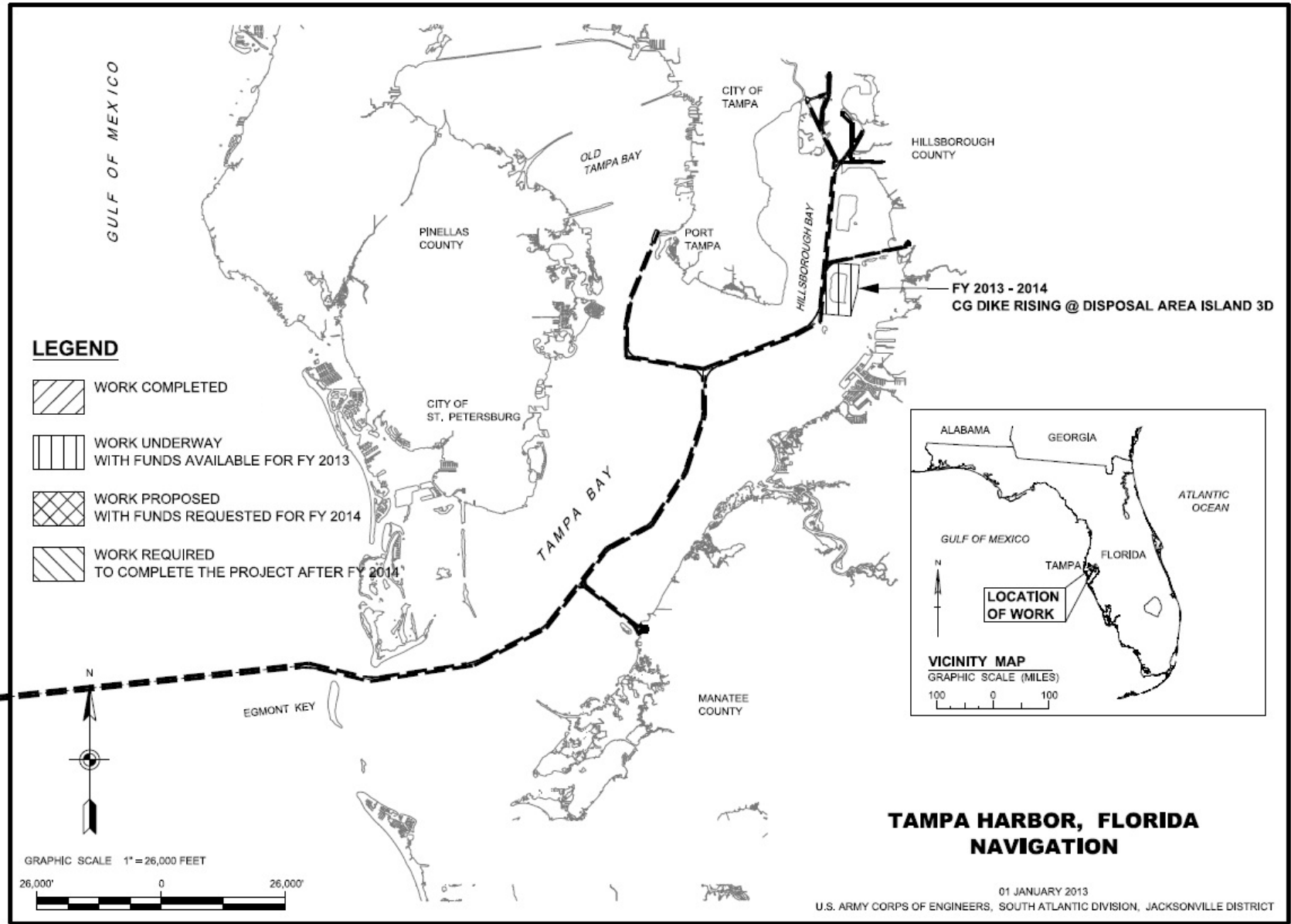
STATUS OF LOCAL COOPERATION: The Tampa Port Authority strongly supports this project. Letter of intent signed January 25, 2012. The PPA is scheduled for execution in May 2013. The source of sponsor funds is from local tax authority general revenues.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$17,325,000 is an increase of \$3,277,000 from the latest estimate (\$14, 048,000) last presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Authorized Modifications as described in the 2012 DMMP Update	\$ 3,000,000
Price Escalation on Construction Features	177,000
Schedule Changes	100,000
Total	\$ 3,277,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Dredged Material Management Plan (DMMP) was approved in April 2002 and an update was approved in April 2012. An Environmental Assessment was submitted along with the DMMP update. The Finding of No Significant Impact (FONSI) was signed in October 2011.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 2011. The sponsor raised DMMA 3-D from 19' to 23' (NGVD 1929) in 2005. The DMMP update dated 2012 supports a total dike raise of 21 feet for DMMA 3-D (from 19 feet to 40 feet NGVD 1929). Schedule Changes in the amount of \$100,000 and the FY 2013 unobligated carry-in is attributable to the delayed completion of the Integral Determination Report and the execution of the Project Partnership Agreement (PPA). This results in the base contract award being delayed from FY 2012 to FY 2013.



Georgia

APPROPRIATION TITLE: Construction – Channels and Harbors (Environmental Restoration)

PROJECT: Lower Savannah River Basin, Georgia and South Carolina (Continuing)

LOCATION: The project is located on the Savannah River between river mile 40.9 and river mile 42.0, approximately 20 river miles above the city of Savannah, Georgia. The project area itself is located within Effingham County, Georgia and Jasper County, South Carolina. A portion of the project is within the US Fish and Wildlife Service's Savannah National Wildlife Refuge.

DESCRIPTION: The project includes a large partial diversion structure at Savannah River Cut Number 3, a plug in Bend Number 3 below the mouth of Bear Creek and the realignment and restoration of the mouths of Bear and Mill Creek's to provide improved flows into both creeks. Five years of post construction monitoring is required per the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI).

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

TOTAL BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

INITIAL BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

BASIS OF BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$3,258,000		Cuts and Plugs	100	Sep 2002
Estimated Non-Federal Cost	\$1,086,000		Creek Realignments	100	Sep 2002
Cash Contributions	\$1,075,000		Monitoring	20	TBD
Other Costs	\$11,000				
Total Estimated Project Cost	\$4,344,000		Entire Project	73	TBD
Allocations to 30 September 2010	\$2,704,000				
Allocation for FY 2011	\$50,000				
Allocation for FY 2012	\$86,000				
Conference Allowance for FY 2013	\$30,000	<u>5/</u>			
Allocations through FY 2013	\$2,870,000	<u>1/</u> <u>2/</u> <u>3/</u> <u>6/</u>	88.1		
Estimated Carry-in Funds	\$0	<u>4/</u>			
President's Budget for FY 2014	\$50,000		89.6		
Programmed Balance to Complete after FY 2014	\$338,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY 2014	\$0				

1/ \$352,000 reprogrammed to the project.

2/ (\$4,000) rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$374,250 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Lower Savannah River Basin environmental restoration project consists of the following features: Diversion Structure at Cut 3; Bear Creek Plug; and, Bear and Mill Creek Realignment.

JUSTIFICATION: The Rivers and Harbor Act of 1950 authorized a 9-foot Federal navigation project extending from Augusta, Georgia to the upper limit of Savannah Harbor in Savannah, Georgia. As a method to improve navigation on the river, cuts were installed in the 1960's and 1970's. These cuts straightened and shortened the river course and, as a result, channeled flow away from the original watercourse. Depletion of natural river flows through the cutoff bends resulted in rapid siltation and loss of flow to creeks originating at the bends and their surrounding wetland areas. The authorized project restored the natural flow regime in creeks and wetland areas while simultaneously restoring the environment and wildlife habitat to their pre-navigation conditions. Environmental benefits consist of fish habitat and bottomland hardwoods. In addition, improvements to the environment will directly benefit at least nine species of plants and animals found on the Federal list of threatened and endangered species, including the shortnose sturgeon, peregrine falcon, bald eagle, and wood stork. This project restores 4,700 acres of bottomland habitat. The projects expected benefits are 1,000 habitat units annually and 1,900 bottomland functional values. No significant factors affecting the cost have been identified.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate year 2 of Post Construction Monitoring	\$30,000
Total	\$30,000

FISCAL YEAR 2014: The budget amount of \$50,000 plus carry-in funds of \$0 will be applied as follows:

Complete year 2 and initiate year 3 of Post Construction Monitoring	\$50,000
Total	\$50,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 as amended, and in the PCA executed on 24 July 2000, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged or excavated material disposal areas.	\$11,000	0
Pay 25% of the costs allocated ecosystem restoration to bring the total non-Federal share of ecosystem costs to 35%, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of ecosystem restoration features.	\$1,075,000	0
Total Non-Federal Costs	\$1,086,000	0

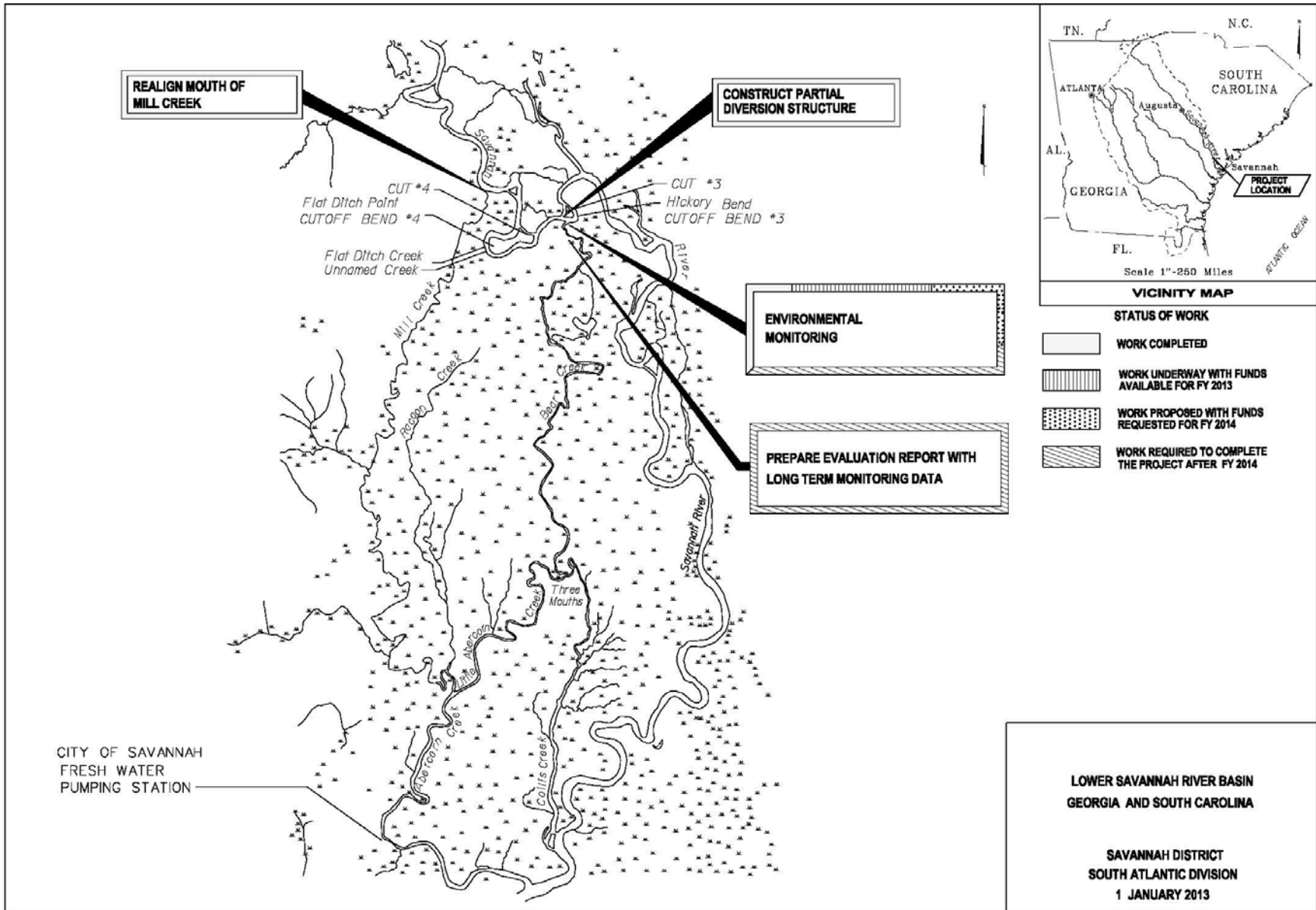
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The City of Savannah, Georgia is the non-Federal project sponsor. The Project Cooperation Agreement was executed on 24 July 2000. The project sponsor verbally indicated continued support on 9 April 2012.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$3,258,000 is the same as the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) was prepared for the project and a Finding of No Significant Impact (FONSI) was signed on 22 March 1996.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1996. Funds to initiate construction were appropriated in FY 2000. The construction was physically complete in FY 2002. The EA/FONSI, project authorization and permits require five years of post construction monitoring be conducted and an environmental close out report be prepared. Funding has been provided to complete one year of the five year required environmental monitoring.



APPROPRIATION TITLE: Construction - Multi Purpose Power (Hydropower)

PROJECT: Richard B. Russell Dam and Lake, Georgia and South Carolina (Continuing)

LOCATION: Richard B. Russell Dam is located on the Savannah River 275.1 miles above its mouth, 29.9 miles below Hartwell Dam, and about 37.4 miles above J. Strom Thurmond Dam (formerly Clark Hill Dam). This is approximately 16 miles southeast of Elberton, Georgia.

DESCRIPTION: The project consists of a concrete, gravity-type dam, flanked by earth embankments with a maximum height of 200 feet above the river. The total length of the dam is 5,616 feet and consists of a 1,884-foot concrete section and embankments with a total length of 3,732 feet. The gate-controlled spillway has a design capacity of 80,000 cubic feet per second. The project includes the installation of 328 megawatts of conventional power completed in January 1986 and 320 megawatts of reversible pumped storage power for a total available capacity of 648 megawatts completed in 1992. The installation of new main circuit breakers and static frequency converter system (MCB/SFC) will be completed in 2013 yielding reliable pump back operations and full hydropower generation capability; an especially important feature during periods of drought. The project will be considered complete after the 5 years of required environmental monitoring when full pump back operations is completed.

AUTHORIZATION: Flood Control Act of 1966, modified by Section 182 of the Water Resources Development Act of 1976 (Public Law 94-587) and Section 601 of the Water Resources Development Act of 1986 (Public Law 99-662).

REMAINING BENEFIT - REMAINING COST RATIO: N/A; funding is an environmental judicial requirement

TOTAL BENEFIT - COST RATIO: N/A; funding is an environmental judicial requirement

INITIAL BENEFIT - COST RATIO: N/A; funding is an environmental judicial requirement

BASIS OF BENEFIT - COST RATIO: N/A; funding is an environmental judicial requirement

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)		\$649,086,000		Dam & Spillway	100	1984
Future Non-Federal Reimbursement	\$590,583,000			Power Generation		
				Conventional (4)	100	1985
Estimated Federal Cost (Ultimate)	\$56,603,000			Pump Storage (4)	100	2002
				MCB/SFC (4)	10	2013
Estimated Non-Federal Cost	\$592,483,000			Monitoring		TBD
Cash Contributions	\$1,900,000			Pre-construction	100	2012
Other Costs	\$0			Post-construction	0	TBD
Reimbursements	\$590,583,000			Entire Project	98.8	TBD
Power	\$590,583,000					
Total Estimated Project Cost		\$649,086,000				
Allocations to 30 September 2010	\$637,642,000					
Allocation for FY 2011	\$943,000					
Allocation for FY 2012	\$3,132,000					
Conference Allowance for FY 2013	\$60,000	<u>5/</u>				
Allocations through FY 2013	\$641,777,000	<u>1/ 2/ 3/ 6/</u>	98.9			
Estimated Carry-In Funds	\$0	<u>4/</u>				
President's Budget for FY 2014	\$880,000		99.0			
Programmed Balance to Complete after FY 2014	\$6,429,000	<u>7/</u>				
Unprogrammed Balance to Complete after FY 2014	\$0					

1/ \$1,053,000 reprogrammed to the project.

2/ (\$103,000) rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Richard B. Russell Lake and Dam project consists of the following features:

Dam – Concrete Gravity; 200 feet high, 5,616 feet long

Spillway – Gate Controlled; 80,000 cubic feet per second

Power Generation

Conventional (4), 82 mega watts each

Pump Storage (4), 80 mega watts each

Reservoir Capacity (acre-feet)

Flood Control - 140,000

Power - 126,800

Dead Storage - 899,400

JUSTIFICATION: The 648 megawatts installation, including pumped storage, will help meet the increased power requirements and rapid growth demands in this region. The output can be fully utilized immediately upon project completion in Federal Energy Regulatory Commission (FERC) supply areas 21, 22, and 23. This includes all of South Carolina, most of North Carolina, Georgia, Alabama, and parts of Mississippi and Florida. The FERC has repeatedly stated the need for this power source. This project is an integral unit of the plan for development of the Savannah River Basin for flood control, navigation, power, and other purposes. The recreational facilities will serve an area surrounding the three-lake complex of J. Strom Thurmond (JST), Hartwell, and Richard B. Russell lakes. Average annual benefits are as follows:

Annual Benefits	Amount(\$)
Power	\$52,995,000
Flood Control	177,000
Recreation	3,597,000
Fish and Wildlife	71,000
Area Redevelopment	4,212,000
Total	\$61,052,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate year 1 of the required Post Construction Environmental Monitoring	\$741,000
Complete installation of the MCB/SFC System	\$28,000
Total	\$769,000

FISCAL YEAR 2014: The budget amount of \$880,000 plus carry-in funds of \$0 will be used as follows:

Complete year 1 and initiate year 2 of the required Post Construction Environmental Monitoring	\$880,000
Total	\$880,000

NON-FEDERAL COST: In accordance with Public Law 89-72, agreements for recreation development with the States of Georgia and South Carolina have been executed and were approved by the Secretary of the Army on 20 May 1974. The costs allocable to power are reimbursable, and have been reviewed and adjusted, based on construction costs as the project components become operational.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Pay all capital costs allocated to hydropower and bear annual costs of operation, maintenance, repair, rehabilitation and replacement of hydropower features.	\$590,583,000	\$3,557,000
Pay (repayment not to exceed 50 years with interest) or contribute in kind, one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation or replacement of recreation features.	\$1,900,000	\$249,000
Total Non-Federal Costs	\$592,483,000	\$3,806,000

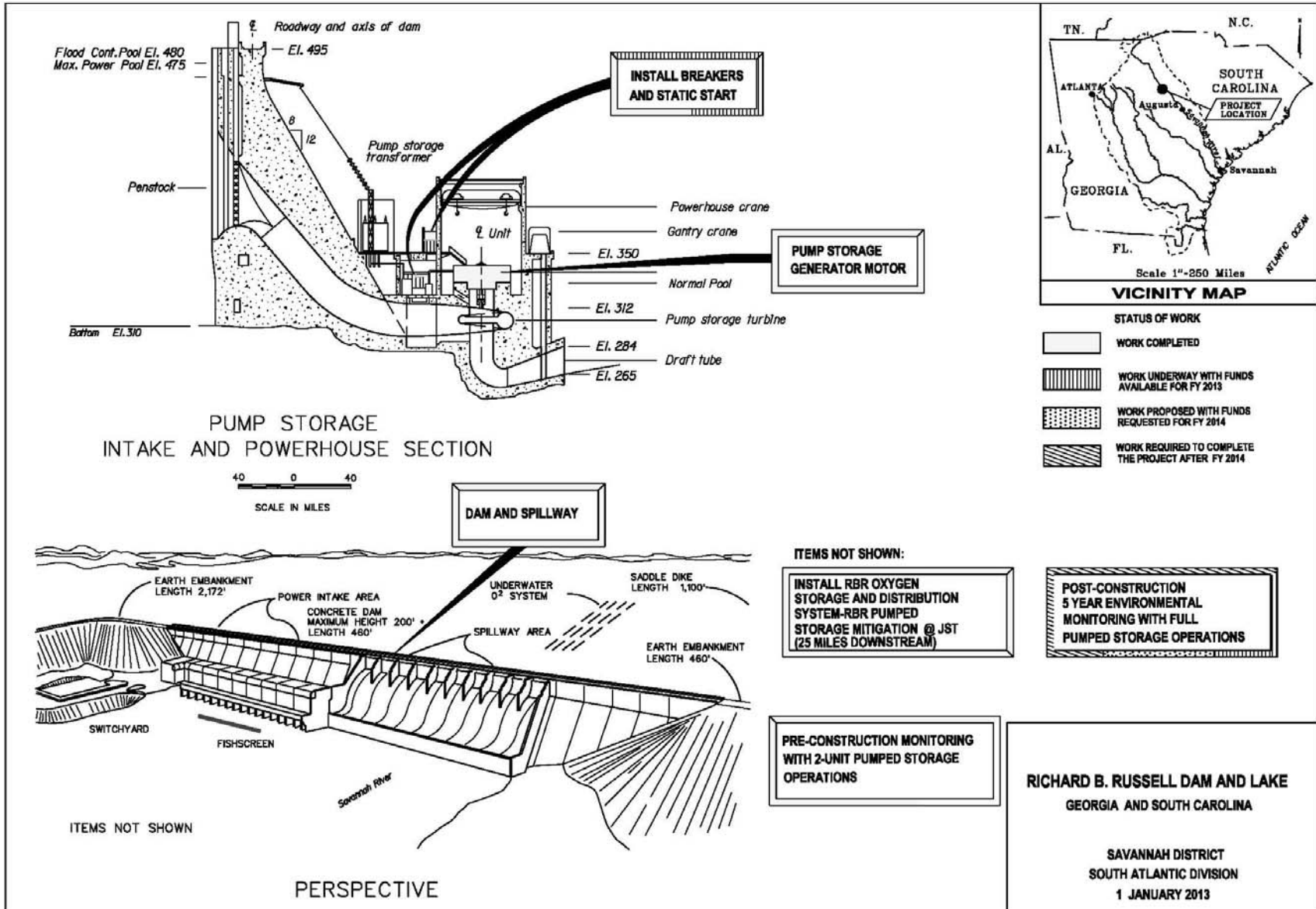
STATUS OF LOCAL COOPERATION: The State of Georgia began payments for recreation reimbursements in May 1985. The State of South Carolina began payments in August 1985. Responsibility for repayment of power costs rests with the Southeastern Power Administration (SEPA) pursuant to Federal Laws.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$649,086,000 is the same as the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) on conventional installation was submitted to the Council on Environmental Quality (CEQ) on 31 May 1974. A supplement on water quality to the final EIS was filed with CEQ in May 1976. The final EIS on pumped storage was filed with the Environmental Protection Agency (EPA) in October 1979. The supplement on fish and wildlife mitigation to the final EIS was filed with the EPA in December 1981. A supplement to the final EIS on pumped storage was filed in August 1991. The final National Environmental Policy Act (NEPA) document is an Environmental Assessment (EA) which requires 7 years of environmental testing. It embodies those technical items that the Corps of Engineers (COE) and South Carolina have reached agreement on, relating to operational measures, construction of an oxygenation (O2) system to improve fish habitat and continued environmental monitoring of a commercial operation. The EA for Pumped Storage was completed in FY 1999 and the Finding of No Significant Impact was signed in August 1999.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1968. Funds to initiate land acquisition were appropriated in FY 1971 and allocated in FY 1972. Initial construction funds were appropriated in FY 1975. Pumped Storage was declared commercially available on 1 September 2002 with a favorable decision from U.S. District Court granted 03 May 2002. In accordance with the NEPA Decision previously signed in August 1999, the District agreed to construct an O2 system in JST Lake to mitigate the environmental impacts, from the potential summer time temperature rise, to the striped bass habitat in the tail water regime below Richard B. Russell Dam. This mitigation feature has to be in place before there can be full use of the 4 Pump-Back units year round. The District agreed to limit pumping with two units from June to September prior to the completion of the O2 System and full pumped storage operations. The substantial completion of the O2 system allowed Richard B. Russell to generate power using three pump units during the summer of 2011. This saved SEPA approximately \$2,000,000 per month. With the completion of the O2 system in April 2012 and the installation of the MCB/SFC System, scheduled for the spring of 2013, SEPA will gain full benefits from the power generated at Richard B. Russell Power Plant using full pumped storage capability. As of the date of this J-sheet, the FY 2013 funding requirement reflects a refined scope of work which has been coordinated and finalized for the Post Construction Environmental Monitoring.

The 1999 NEPA document also requires that the COE continue environmental monitoring for seven years. Two years of monitoring were completed with 2 unit operations before the installation of the O2 System. Five years of environmental monitoring is required to be completed with full commercial pumped storage operations to commence in 2013.



APPROPRIATION TITLE: Construction – Channels and Harbors (Navigation)

PROJECT: Savannah Harbor Disposal Areas, Georgia and South Carolina (Continuing)

LOCATION: The Savannah Harbor Dredge Material Containment Areas (DMCA's) are located in Jasper County, South Carolina adjacent to the Savannah Harbor Federal Navigation Project. The DMCA's are integral to the continued operation and maintenance of the 42 foot Savannah Harbor Federal Navigation Project which includes the lower 21.3 miles of the Savannah River, the principal boundary between the states of Georgia and South Carolina.

DESCRIPTION: The DMCA project provides for incrementally raising each of the six DMCA's at a cycle of one disposal area per year to increase disposal capacity as required to support the Savannah Harbor 42 foot Federal Navigation Project authorized in WRDA 1992. The increase in DMCA capacity is cost-shared with the State of Georgia under the authority provided in the Water Resources Development Act of 1996. The Project Cooperation Agreement was executed with the Georgia Department of Transportation in January 2005 for project costs through FY 2026.

AUTHORIZATION: The DMCA's are included as a part of the Savannah Harbor Federal Navigation Project authorized in the Water Resources Development Act of 1992 (P.L. 102-580). Section 201 of the Water Resources Development Act of 1996 (P.L.104-303) addressed cost sharing for dredged material containment areas.

REMAINING BENEFIT-REMAINING COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized 42 foot deep navigation project.

TOTAL BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized 42 foot deep navigation project.

INITIAL BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized 42 foot deep navigation project.

BASIS OF BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized 42 foot deep navigation project.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$93,434,000		2A Dike Raising	100	July 1999
Estimated Non-Federal Cost	\$50,310,000		13B Dike Raising	100	April 2008
Cash Contributions	\$50,310,000		14B Dike Raising	66	TBD
Other Costs	0		14A Dike Raising	66	TBD
			12B Dike Raising	100	April 2011
Total Estimated Project Cost	\$143,744,000		Jones Oyster bed	50	TBD
			12A Dike Raising	50	TBD
Allocations to 30 September 2010	\$15,744,000		13A Dike Raising	33	TBD
Allocation for FY 2011	\$5,300,000				
Allocation for FY 2012	\$4,939,000		Entire Project	71	TBD
Conference Allowance for FY 2013	\$8,817,000	5/			
Allocations through FY 2013	\$34,800,000	1/ 2/ 3/ 6/			
Estimated Carry-In Funds	\$0	4/			
President's Budget for FY 2014	\$8,000,000				
Programmed Balance to Complete after FY 2014	\$50,634,000	7/			
Unprogrammed Balance to Complete after FY 2014	\$0				

1/ (\$3,316,000) reprogrammed from the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Savannah Harbor Disposal Area dikes will be raised to the following elevations in accordance with the 20 year Dredge Material Disposal Plan (DMMP), dated April 2003 and approved by the South Atlantic Division in September 2003.

12A Dike Raising to 74 feet Mean Lower Low Water (MLLW); 13A Dike Raising to 68 feet MLLW; 13B Dike Raising to 45 feet MLLW
14A Dike Raising to 29 feet MLLW; 14B Dike Raising to 45 Feet MLLW; Jones Oysterbed Dike Raising to 41 Feet MLLW

JUSTIFICATION: The Savannah Harbor has 61 piers and wharves that serve existing waterborne commerce. The Georgia Ports Authority is currently the as the 4th largest container port in the United States (U.S.) and the fastest growing container port in the Nation and the second largest container port on the U.S. East Coast, with over 2.74 million Twenty-foot Equivalent Units (TEUs) passing through the GPA Garden City port facility annually. The Long Term Management Strategy (LTMS) for the Savannah Harbor, dated August 1996, described the least cost plan to continue maintenance of the existing project. The sequential raising of dikes in each of the DMCA is critical to the ability of the U.S. Army Corps of Engineers to maintain the 42 foot Savannah Harbor Federal Navigation Project. The LTMS, supplemented by the annual DMMP, forecasts the dredge disposal requirements for a 20 year planning horizon. Major imports include retail consumer goods, machinery, appliances and electronics, major exports include kaolin clay, chemicals, fabrics, resins and rubber, forest and agricultural products and manufactured equipment with a 10 year average commercial tonnage of 29,458,000.

As of the date of this justification sheet, there is approximately 30,500,000 cubic yards of remaining disposal capacity in the six Savannah Harbor DMCA. Based on an estimated required disposal capacity need of up to 7,000,000 cubic yards per year, disposal capacity will become critical as early as through FY 2015 and meet environmental requirements. The six DMCAs are paired for utilization of disposal of operations and maintenance material as follows: DMCA 13A and DMCA 12A for Stations 103+000 to 50+000; DMCA 13B and DMCA 14A for material from Stations 50+000 to 30+000; and DMCA 14B and Jones-Oysterbed from Stations 30+000 to 0+000.

As of the date of this justification sheet, the following schedule of usage is anticipated: FY 2013 disposal actions are planned to occur in DMCAs 13A and 13B with ditching, drying and additional capacity being constructed in DMCAs 12A, 14A, 14B and Jones Oysterbed; FY 2014 disposal actions are planned to occur in DMCAs 12A, 14A and 14B with ditching and drying in DMCA 13A and additional capacity being constructed Jones Oysterbed; and, FY 2015 disposal actions are planned to occur in DMCAs 12A, 14A and Jones Oysterbed with ditching, drying and additional capacity being constructed in DMCAs 13A, 13B, and 14B. Based on these conditions and to meet the need for Federal operations and maintenance disposal capacity, it has been determined that the most efficient procurement strategy for the DMCAs is a construction contract that consists of a base and options. This acquisition strategy anticipates a duration of twelve to twenty four months to physically complete any single DMCA construction activity.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate and complete DMCA 14B plans and specifications to 39 feet MLLW	\$ 250,000
Initiate and complete the plans and specifications for DMCA 14A to 23 feet MLLW	\$ 250,000
Initiate and complete the plans and specifications for Jones Oysterbed Island Back Dike to 29 feet MLLW	\$ 250,000
Initiate DMCA 14B contract dike raising to 39 feet MLLW	\$3,500,000
Initiate and complete DMCA 14A Back Dike contract to 23 feet MLLW	\$2,570,000
Initiate Jones Oysterbed Island Back Dike contract raising to 29 feet MLLW	\$4,100,000
Construction Management on DMCAs 12A, 14A, 14B and Jones Oysterbed	\$ 817,000
Total	\$11,737,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Engineering and Design for Jones Oysterbed Dike Front Dike Raising to 29 feet MLLW and Weir Installation	\$500,000
Initiate Construction on Jones Oysterbed Dike Front Dike Raising contract to 29 feet MLLW and Weir Installation	\$6,700,000
Construction Management for Jones Oyster Bed Front Dike Raising to 29 feet MLLW and Weir Installation	\$800,000
Total	\$8,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing requirements of the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and excavated or dredged material disposal areas.	0	0
Pay 35 percent of the costs allocated to navigation during construction.	\$50,310,000	0
Total Non-Federal Costs	\$50,310,000	0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Georgia Department of Transportation (GDOT) is the non-Federal project sponsor. A Project Cooperation Agreement (PCA) was executed with the GDOT in January 2005 under the authority Water Resources Development Act of 1996. An amendment is being prepared to account for the total project cost increase of \$83,744,000 with a non-Federal share of \$29,310,000. The new project cost and sponsor share has been coordinated with and agreed upon by GDOT, the local sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$93,434,000 is an increase of \$54,434,000 from the latest estimate (\$39,000,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Authorized Modifications	\$ 54,434,000
Total	\$54,434,000

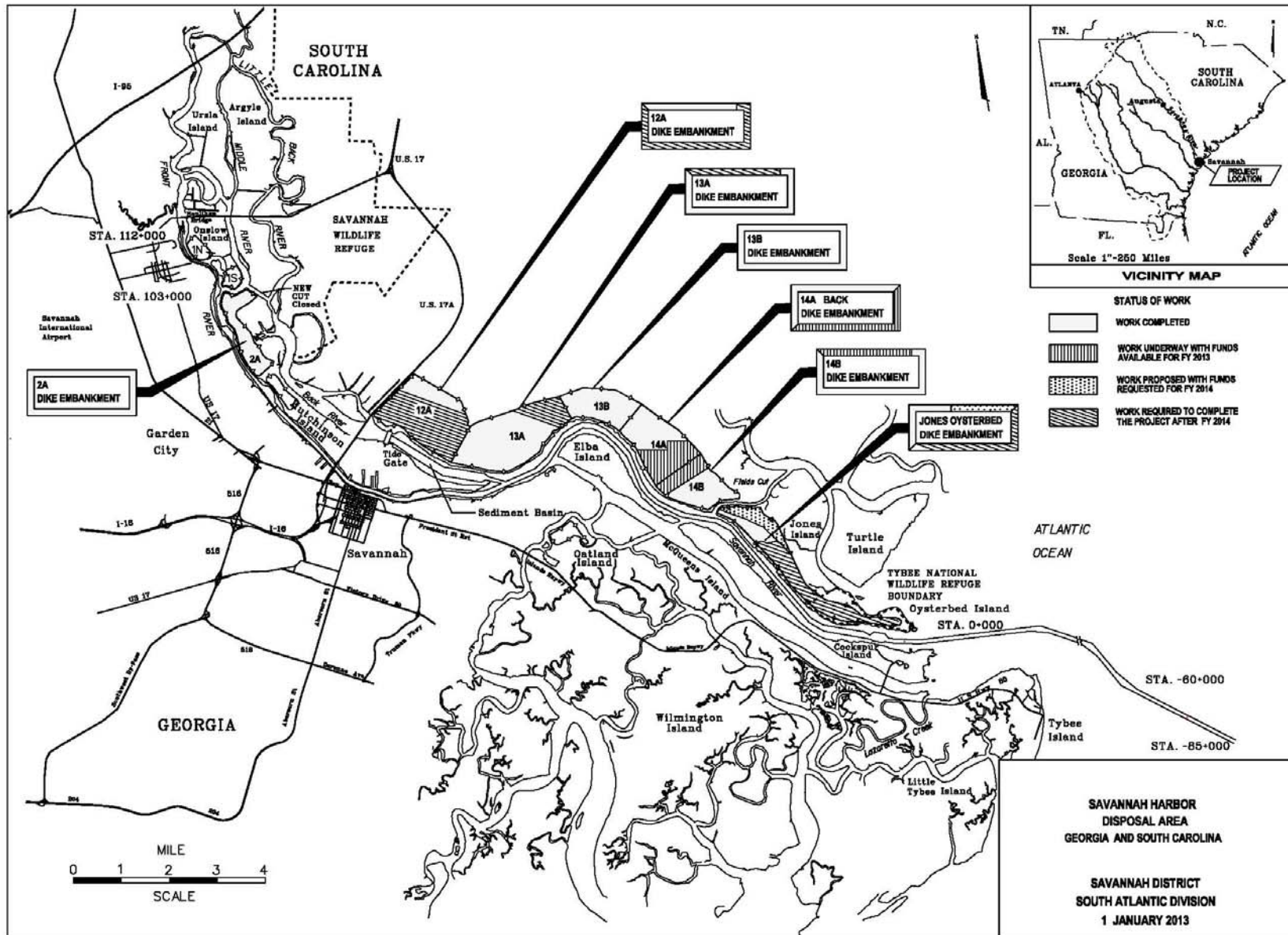
Division: South Atlantic

District: Savannah

Savannah Harbor Disposal Areas, GA & SC

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Savannah Harbor Long Term Management Strategy (LTMS) was completed in 1996. The Record of Decision (ROD) was signed February 3, 1997. A revised Dredge Material Management Plan approved in September 2003 recommends no changes to the LTMS Environmental recommendations.

OTHER INFORMATION: Initial Construction funds were received in FY 2005. The Dredge Material Disposal Plan (DMMP) for the Savannah Harbor 42 foot Federal Navigation Project, approved by SAD in December 2003, describes the least cost plan to continue maintenance of the existing project. The timely and sequential raising of dikes of the DMCA(s) is critical to the ability of the U.S. Army Corps of Engineers to maintain the existing Savannah Harbor Federal Navigation project for required O&M capacity. The total project cost increase is due to recent revisions to the disposal area rotational methodology to better accommodate channel maintenance operations and to comply with mitigation requirements. These actions necessitated the need for an additional 11 contracts to attain the same useable capacity as proposed in the 2003 DMMP. In addition, of the 19 total contracts, four will reflect higher costs because of incorporation of crucial erosion protection into the dike templates that is needed to protect the Federal investment. Also, the current DMMP did not account for increased costs associated with regaining lost capacity resulting from settlement and consolidation of the newly constructed dike templates in DMCAs 12A, 14A, 13B. Due to award of FY 2012 contracts for less than anticipated, initiation of plans and specifications on 14B dike raising were advanced into FY 2012 and reduced the funding need for this sub-element in FY 2013. The FY 2013 funds will be used to award an increased scope for the base bid on Jones Oysterbed Back Dikey. The FY 2013 funding for the 14A Dikey Raise has been adjusted to reflect the actual contract award which occurred in FY 2013 prior to date this j-sheet was prepared.



Division: South Atlantic

District: Savannah

Savannah Harbor Disposal Areas, GA & SC

1 May 2013

SAD - 127

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Tybee Island, Georgia - (Continuing)

LOCATION: The project is located in Chatham County, Georgia. Tybee Island is a 3.5-mile long barrier island located 18 miles east of the City of Savannah at the mouth of the Savannah River on the Atlantic Ocean. The mostly developed island is bordered on the north by the South Channel of the Savannah River, on the east by the Atlantic Ocean, and on the south and west by the Back River and other tidal creeks. Tybee Island has an average width of 0.5 miles and the ground elevation varies from 10 to 18 feet above mean low water (MLW) and slopes westward to the salt marshes.

DESCRIPTION: The plan of improvement for Tybee Island consists of nourishing 13,200 linear feet of beach between two terminal groins; construction of a groin field along 1,100 linear feet of shoreline from the southern terminal groin around the South Tip to the mouth of Tybee Creek, including planned periodic nourishment every seven years; and construction of a groin field and nourishment of 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier. The authorized improvement plan also includes the remaining shoreline from the fishing pier to the mouth of Horse Pen Creek which is relatively stable.

AUTHORIZATION: Project was authorized by Section 201 of Flood Control Act of 1965 (Public Law 89-298) and U.S. Senate Committee Resolution of 22 June 1971 authorized the project as contained in House Document 92-105. The project authorization was subsequently modified by: Section 156 of Water Resources Development Act (WRDA) 1976 (Public Law 94-587); Section 934 WRDA 1986 (Public Law 99-662) and Section 301(b)(4) and Section 506 of WRDA 1996 (Public Law 104-303).

REMAINING BENEFIT-REMAINING COST RATIO: 4.6 to 1 at 7 percent (2013 to 2024)

TOTAL BENEFIT-COST RATIO: 4.6 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.7 to 1 at 4.875 percent (FY 1970)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Tybee Island, Georgia Beach Erosion Control and Hurricane Protection Report, 1970 as revised in the Limited Re-evaluation Report (LRR) dated December 2005 and approved in April 2006. The benefits of \$8,615,000 remain unchanged. However, the RBRC and the total BCR values reflect the updated cost estimate for the 9-year equivalent renourishment action needed to fulfill the 50-year project life. The total cost is annualized over the remaining 12 year period of the life. The RBRC and BCR for the 7 percent discount rate are 4.6 to 1. The FY 2013 J-Sheet erroneously reflected an RBRC and BCR for the current discount rate of 5.6 to 1 instead of values calculated at 7 percent discount rate.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			\$30,073,000	Initial Construction	100	May 1976
Initial Construction	\$1,942,000			Periodic Nourishment	67	TBD
Periodic Nourishment	\$28,131,000			Entire Project	71	TBD
Estimated Non-Federal Cost			\$19,471,000			
Initial Construction	\$2,064,000					
Cash Contributions	\$1,989,000					
Other Costs	\$75,000					
Periodic Nourishment	\$17,407,000					
Cash Contributions	\$17,407,000					
Other Costs	0					
Total Estimated Project Cost			\$49,544,000			
Initial Construction	\$4,006,000					
Periodic Nourishment	\$45,538,000					
Allocations to 30 September 2010	\$16,146,000					
Allocation for FY 2011	(\$122,000)					
Allocation for FY 2012	\$42,000					
Conference Allowance for FY 2013	\$150,000	<u>5/</u>				
Allocations through FY2013	\$16,216,000	<u>1/ 2/ 3/ 6/</u>	53.9			
Estimated Carry-In Funds	\$0	<u>4/</u>				
President's Budget for FY 2014	\$300,000		55.0			
Programmed Balance to Complete after FY 2014	\$13,557,000	<u>7/</u>				
Unprogrammed Balance to Complete after FY 2014	\$0					

1/ \$923,200 reprogrammed to the project.

2/ (\$124,000) rescinded from the project.

3/ \$7,500 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of 0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed, pending a decision to construct these features.

Division: South Atlantic

District: Savannah

Tybee Island, GA

1 May 2013

SAD - 129

PHYSICAL DATA: The Tybee Island, Georgia Flood Risk Management project consists of the following features:

Groins

- Groin Field 1 – 1,100 linear feet
- Groin Field 2 – 1,800 linear feet

Beach Replenishment

- Initial Beach Fill - 2,262,000 cubic yards (cy)
- Periodic Nourishment – Six at 1,300,000 cy

JUSTIFICATION: The project area currently has an estimated erosion rate of 78,000 cy per year. However, hot spots that occur primarily at Second Street lose over 125,000 cy per year. The Tybee Island shore protection extends for 10,675 feet of shoreline, which directly benefits 7 businesses, 14 Condos, 42 streets/alleyways, and 117 residences, several of which are multifamily units. The initial nourishment was completed in 1976 with the placement of 2,262,100 cy on along front beach. The initial nourishment of the Back River was completed in 2000 with the placement of 94,178 cy of sand. Seven years of renourishment from the commencement of the initial construction is authorized for a 50 year period through the last year of renourishment in 2026. Four cycles have been completed to date in 1987 (1,357,000 cy), 1993 (918,000 cy), 2000 (1,386,392 cy), 2008 (1,227,148 cy). The project also results in economic benefits for improved recreation. The average annual benefits are:

Annual Benefits	Amount (\$)
Storm Damage Reduction	852,000
Recreation	7,763,000
Total	8,615,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate and complete the Limited Re-evaluation Report	\$176,000
Total	\$176,000

FISCAL YEAR 2014: The budget amount of \$300,000 plus carry-in funds will be applied as follows:

Initiate and complete the Engineering & Design for the last planned periodic renourishment requiring Federal Participation	\$300,000
Total	\$300,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in WRDA 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, and rights of way.	75,000	0
Pay 39.3 percent of all costs associated with the initial construction and periodic nourishment costs.	19,396,000	0
Total Non-Federal Costs	19,471,000	0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

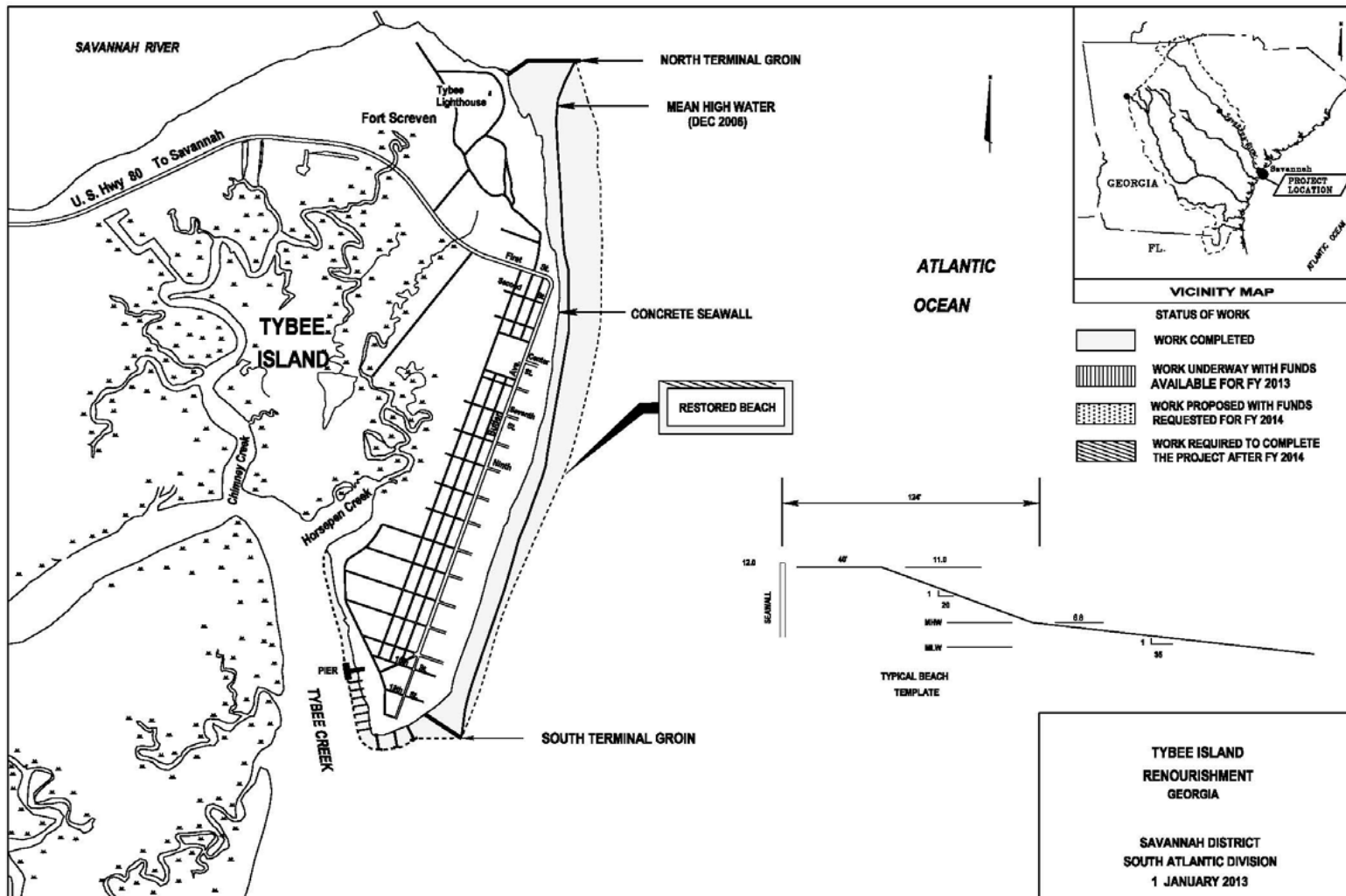
STATUS OF LOCAL COOPERATION: The non-Federal sponsor receives a large percentage of its share of funding from the State of Georgia. A Local Cooperation Agreement (LCA) was executed 3 April 1974. Supplemental Agreement 1 to the LCA was signed 28 June 1985. Supplement Agreement 2 to the LCA was signed 22 December 1986. A Project Cooperation Agreement was executed on 6 May 1999. The LRR dated 12 April 2006 revised the cost share to 60.7 percent Federal and 39.3 percent Non-Federal. The sponsor has indicated their willingness to fund the non-Federal share of the 2015/2016 renourishment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$30,073,000 is an increase of \$2,739,000 from the latest estimate (\$27,334,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation	\$2,739,000
Total	\$2,739,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The latest Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI) for Tybee Island was signed by the District Engineer on 4 August 2008.

OTHER INFORMATION: Congress appropriated funding in FY 1972 for preconstruction engineering and design for the north end terminal groin. Construction General funding was provided in FY 1974 with completion of initial construction in FY 1976. The last Periodic Renourishment of Tybee Island was completed in December 2008 (FY 2009). Operation and maintenance responsibilities have been assumed by the non-Federal sponsor. In accordance with the latest LRR dated 12 April 2006, the next economic and environmental update is scheduled to be conducted in FY 2013, followed by the development of Plans and Specifications in FY 2014, for a nine year equivalent renourishment in FY 2015 to complete the 50 year life of the project in FY 2024. This will entail placement of an additional 300,000 cubic yards of beach quality material over the normal 7-year quantity. It is anticipated that the non-Federal Sponsor will be requesting a re-evaluation be performed in the near future to determine if continued federal participation in this project is justified. Forty-one of fifty years of beach renourishments have been completed.



North Carolina

APPROPRIATION TITLE: Construction - Channel and Harbors (Navigation)

PROJECT: Wilmington Harbor 96 Act, North Carolina (Continuing)

LOCATION: The project is located at Wilmington on the southeastern coast of North Carolina in New Hanover and Brunswick Counties.

DESCRIPTION: The project consists of two separable elements, the portion for deepening of the existing project and the portion for raising the dikes on the Eagle Island dredged material disposal facility (DMDF) for maintenance of the project. Features constructed to date include deepening the ocean bar and entrance channels to the authorized depth of 44 feet; deepening the project to 42 feet up from Lower Swash Channel to and including the Between Channel; widening the existing 400-foot wide channel to 600 feet over a total length of 6.2 miles including Lower and Upper Midnight and Lower Lilliput reaches; widening five turns and bends by 100 to 200 feet providing a total average channel width of 500 to 675 feet; and widening the Fourth East Jetty Channel to 500 feet over a total length of 1.5 miles. Features yet to be completed include deepening the 32-foot channel between Castle Street and the Hilton Railroad Bridge, the 32-foot turning basin just above the mouth of the Northeast Cape Fear River on the west side, and the 25-foot channel from the Hilton Railroad Bridge to 750 feet upstream all to a depth of 38 feet; deepening the 25-foot channel from 750 feet upstream of the Hilton Railroad Bridge to the turning basin near the upstream limits of the project to 34 feet, along with widening of the channel from 200 to 250 feet; and widening the turning basin from 700 to 800 feet. Deepening features currently under construction include the anchorage basin immediately upriver from the North Carolina State Ports Authority dock from 38 feet to 42 feet and the extension of the anchorage basin northward by 300 feet. The contract was awarded in September 2012. Mitigation requirements are complete with the acquisition by fee title of 30 acres of upland areas and construction of an embayment. Acquisition of about 700 acres of existing marsh and upland areas for preservation of habitat to offset losses of wetlands and primary nursery areas has been completed. A Fish Passage at Cape Fear River Lock and Dam 1, a mitigation requirement for the deepening actions previously accomplished, was completed in November 2012. Improvement to the Eagle Island DMDF is ongoing as required by incrementally raising the dikes of three cells from the original elevation of 17 feet in 1996 to an ultimate elevation of 40 feet.

AUTHORIZATION: Public Law 104-303, 12 October 1996, Section 101 as modified to include the Eagle Island DMDF by the Public Law 105-62, 13 October 1997, and Public Law 99-662, 17 November 1986, Sections 101 and 202.

REMAINING BENEFIT- REMAINING COST RATIO: 1.9 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7 percent

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 7-5/8 percent (FY 1998)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation contained in the following three decision documents which were combined into the single Wilmington Harbor – 96 Act project authorization in the WRDA 1996. The feasibility report dated June 1996 at October 1995 price levels for the Cape Fear-Northeast Cape Fear River project, in the General Design Memorandum Supplement dated February 1994 at October 1993 price levels for the Wilmington Harbor-Northeast Cape Fear River project and in the feasibility report dated March 1994 at October 1992 price levels for the Wilmington Harbor Channel Widening project. The benefit to cost ratio is based on a Level 1 economic update dated July 2011.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)		\$ 364,255,000	Channels	88	TBD
Estimated Appropriation Requirement (OFA)		\$ 2,238,000	Passing Lanes	100	Jun 2006
Estimated Total Appropriation Requirement		\$ 366,493,000	Turns and Bends	100	Jan 2004
Future Non-Federal Reimbursement		\$ 44,705,000	Anchorage Basin	100	Jun 2006
Estimated Federal Cost (Ultimate)		\$ 321,788,000	Turning Basin 1&2	0	TBD
Estimated Non-Federal Cost		\$ 222,212,000	Mitigation	100	Nov 2012
Cash Contributions		\$ 123,234,000	Eagle Island DMDF	95	TBD
Other Costs		\$ 54,273,000			
Reimbursements	\$ 44,705,000				
Navigation	\$ 44,705,000				
Total Estimated Project Cost		\$ 544,000,000	Entire Project	86	TBD

SUMMARIZED FINANCIAL DATA (continued)		ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September 2010	\$ 259,403,000				
Allocation for FY 2011	\$ 14,612,000				
Allocation for FY 2012	\$ 22,117,000				
Conference Allowance for FY 2013	\$ 0	<u>5/</u>			
Allocations through FY 2013	\$296,132,000	<u>1/ 2/ 3/ 6/</u>	81.3		
Estimated Unobligated Carry-In Funds	\$ 7,000,000	<u>4/</u>			
Budget Amount for FY 2014	\$6,800,000		83.3		
Programmed Balance to Complete after FY 2014	\$ 61,323,000	<u>7/</u>			
Unprogrammed Balance to Complete after FY 2014	\$ 0				

1/ \$ 14,123,000 reprogrammed to the project.

2/ \$ (782,000) rescinded from the project.

3/ \$ (54,000) transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for the use on this study effort is \$7,000(x1000). This amount will be used to perform work on the study as follows: Initiate additional raising of cells at Eagle Island.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$ 4,068,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The project consists of channels, passing lane, widening turns and bends, turning basins, dredged material disposal facility and a mitigation element. There are a total of 36.9 miles of channels varying in depth from 34 to 44 feet. The passing lane is 6.2 miles long, 200 feet wide and 42 feet deep. There are a total of 5 turn and 5 bend wideners. For the turning basins, the Anchorage basin is 42 feet deep, turning basin 1 is 38 feet deep, and turning basin 2 is 34 feet deep. The mitigation elements consist of a fish passage at Cape Fear River lock and dam number 1, 700 acres of land acquisition, and 30 acres of embayment. The Eagle Island dredged material disposal facility consists of the raising of Cells 1, 2, and 3 from 25 to 40 feet.

JUSTIFICATION: Waterborne commerce on the existing Wilmington Harbor project was, 6.9, 6.7, and 7.1 million tons, respectively, for the period 2008-2010. The recommended project would result in substantial savings ranging from \$0.57 to \$13.00 per ton in transportation and handling costs on certain commodities. The largest savings would be \$13.00 per ton on liquefied gas followed by chrome ore at \$6.88. The major commodities imported through the port are salt, chrome ore, fertilizer materials, basic chemicals, asphalt, alcohols and cement with major exports being tobacco, wood pulp and dimethyl terephthalate fibers. The Port of Wilmington handled 194,608 loaded containers in 2009; 250,048 in 2010; and 290,666 in 2011. The 42-foot project can handle vessels in the 35,000 to 60,000 ton class. For the portion of the project already deepened, estimated efficiencies have come to fruition. The average tons per vessel call before deepening (1999-2003) was 4,739 while after deepening the average tons per vessel call is 8,788, which is an 85% increase in efficiency. The current 32-foot channel in the Northeast Cape Fear River can handle vessels in the 25,000 ton class while the recommended 38-foot channel will handle vessels in the 40,000 ton class. Recently completed investments in container facilities, regional highway improvements, airport facilities, and refrigerated warehouse storage will result in greater opportunities for growth. The Wilmington Harbor Ocean Dredged Material Disposal Site (ODMDS) is available for dredged material disposal for the lower reaches. An existing disposal site, the Eagle Island DMDF, is available for the middle reach and the upper reach of the project. The average annual benefits are \$39,292,000 for commercial navigation.

As of the date of this justification sheet, there is approximately 7,500,000 cubic yards of remaining disposal capacity in the three cells of the Eagle Island DMDF. Based on an estimated required disposal capacity of up to 1,500,000 cubic yards of operations and maintenance material per year and the one time new work material disposal of approximately 800,000 cubic yards, disposal capacity will become critical as early as FY 2015. The three cells within the Eagle Island DMDF are utilized for disposal of operations and maintenance material on the following cycle in any single fiscal year: one cell is being ditched and dried in preparation for the next dike raise on that cell; the second cell is being utilized to dispose of dredge material; and the third cell is undergoing construction to raise the dike to create capacity. Failure to raise a cell in accordance with this schedule will result in a shortage of DMDF disposal capacity. The secondary option for disposal is to carry the material offshore, which represents a substantial increase in operations and maintenance costs as compared to providing the required DMDF capacity to meet the need of the authorized Federal Navigation project. It has been determined that the most efficient procurement strategy for the DMDFs is a construction contract that consists of a base and options. This acquisition strategy anticipates a duration of twelve to twenty four months to physically complete any single DMDF construction activity.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate Planning, Engineering, and Design for FY 2014 Eagle Island contract	\$ 1,500,000
Complete Contract Award for FY 2013 Eagle Island Dike Raise	\$ 8,033,000
Continue Physical Monitoring Required to be in Compliance with EIS	\$ 1,200,000
Continue Construction Management for FY 12 Eagle Island Contract, Deepening of the Anchorage Basin, and Initial Work on FY 13 Eagle Island Contract	\$ 1,000,000
Total	\$11,733,000

Funds in the amount of \$7,000,000 are scheduled to be carried over unobligated into FY 2014.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate additional raising of Eagle Island	\$12,400,000
Continue physical monitoring required to be in compliance with EIS	\$ 800,000
Construction Management for Cell Raises	\$ 600,000
Total	\$13,800,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Separable Element (Navigation):		
Provide lands, easements, rights of way, and dredged material disposal area lands.	\$ 2,437,000	\$ 6,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	\$ 25,184,000	
Pay 25 percent of the costs allocated to deep draft navigation during construction.	\$ 104,604,000	
Pay 35 percent of costs allocated to Section 933 portion during construction.	\$ 5,380,000	
Provide and maintain, at its own expense, the local service facilities necessary to realize the benefits of the general navigation features. (berthing areas)	\$ 26,652,000	
Reimburse an additional 10 percent of the costs allocated to general navigation facilities within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations and dredged material disposal areas.	\$ 39,405,000	
Total Non-Federal Costs (Navigation)	\$ 203,662,000	\$ 6,000
Separable Element (Eagle Island D MDF):		
Pay 25 percent of the cost of construction of the facilities.	\$ 13,250,000	
Reimburse additional 10 percent of the costs of the facility within a period of 30 years following completion of construction	\$ 5,300,000	
Total Non-Federal Costs (Eagle Island D MDF)	\$ 18,550,000	\$6,000
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and, for general navigation, reimburse its share of construction costs within a period of 30 years following completion of construction.		

Division: South Atlantic

District: Wilmington

Wilmington Harbor 96 Act, NC

STATUS OF LOCAL COOPERATION: The state of North Carolina is the project sponsor. The PCA was executed on 26 March 1999. All work on the Eagle Island D MDF prior to FY 2000 was accomplished with advanced contributed funds under a memorandum of agreement executed in July 1997. The reimbursement of 10% of the general navigation features will be accomplished by the state by the year 2047, 30 years following the anticipated completion of the Eagle Island disposal facility work. The sponsor has provided its share of the estimated costs to date and continues to be willing to provide the non-Federal funds necessary to complete the project, including all reimbursement cost.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) costs estimate of \$364,255,000 is an increase of \$6,255,000 over the latest estimate (\$358,000,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount (\$)
Price Escalation on Construction Features	6,255,000
Total	6,255,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: The draft Environmental Impact Statement (EIS) for the deepening portion was filed with the EPA in February 1996. The final EIS was filed with the EPA in July 1996. 401 Certification was completed in October 1996. The final EIS for the D MDF portion was filed with the EPA in July 1996. A Record of Decision was signed in December 1996. A Finding of No Significant Impact for design changes was signed in June 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1987. Funds to initiate construction were appropriated in FY 1998. The Wilmington Harbor, NC - 96 Act, and Wilmington Harbor, NC (Dredged Material Disposal Facilities) projects were combined in October 1998 to form this project. Fish and Wildlife Mitigation was completed in November 2012 at an estimated cost of \$16,200,000. Funds were made available in FY 2012 Workplan that advanced the Planning, Engineering and Design for Deepening to Cape Fear Memorial Bridge by 12 months. The construction contract award for the Deepening to Cape Fear Memorial Bridge was advanced 24 months to September 2012 and the contract amount was significantly less than anticipated. This resulted in \$19,426,000 in unobligated FY 2013 carry-in. This resulted in a reallocation of activities to be accomplished in FY 2013 as reflected above.

Wilmington Harbor, NC - 96 Act - Deepening Portion

SUMMARIZED DATA FOR SEPARABLE ELEMENTS

Estimated Appropriation Requirement (CoE)			\$ 324,505,000
Estimated Appropriation Requirement (OFA)			\$ 2,238,000
Estimated Total Appropriation Requirement			\$ 326,743,000
Future Non-Federal Reimbursement			\$ 39,405,000
Estimated Federal Cost (Ultimate)			\$ 287,338,000
Estimated Non-Federal Cost			\$ 203,662,000
Cash Contributions		\$109,984,000	
Other Costs		\$ 54,273,000	
Reimbursements	\$ 39,405,000		
Navigation	\$ 39,405,000		
Total Estimated Separable Element Cost			\$ 491,000,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENT: 1.9 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENT: 1.4 to 1 at 7 percent

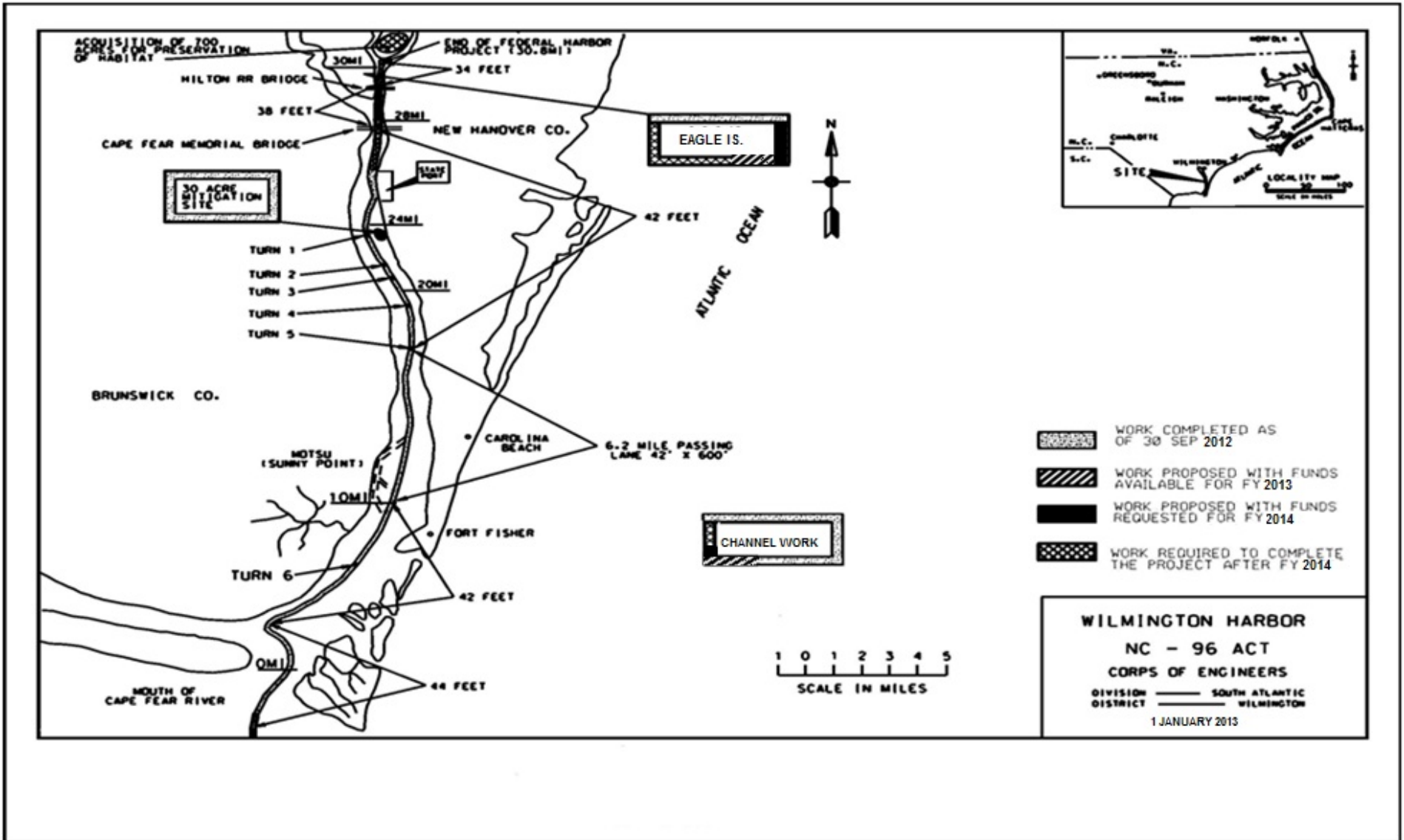
Wilmington Harbor, NC - 96 Act – Eagle Island DMDF

SUMMARIZED DATA FOR SEPARABLE ELEMENTS

Estimated Appropriation Requirement (CoE)			\$ 39,750,000
Estimated Appropriation Requirement (OFA)			\$ 0
Estimated Total Appropriation Requirement			\$ 39,750,000
Future Non-Federal Reimbursement			\$ 5,300,000
Estimated Federal Cost (Ultimate)			\$ 34,450,000
Estimated Non-Federal Cost			\$ 18,550,000
Cash Contributions		\$ 13,250,000	
Other Costs		\$ 5,300,000	
Reimbursements	\$ 5,300,000		
Navigation	\$ 5,300,000		
Total Estimated Separable Element Cost			\$ 53,000,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENT: Not required for DMDF portion

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENT: Not required for DMDF portion



APPROPRIATION TITLE: Construction - Flood Risk Management and Navigation

PROJECT: Wrightsville Beach, North Carolina (Continuing)

LOCATION: The project is located on a small island off the southeast coast of North Carolina, approximately 10 miles east of Wilmington in New Hanover County.

DESCRIPTION: The project provides for construction of a dune with a crown width of 25 feet at an elevation of 15 feet above mean low water and a berm with a crown width of 50 feet and a top elevation of 12 feet above mean low water for a distance of 14,000 feet with a periodic re-nourishment planned for every 4 years. Federal participation in future coastal storm damage reduction was reauthorized by the Water Resources Development Act of 1986. A Corps Section 111 study approved by Headquarters, U.S. Army Corps of Engineers in 1980 established that 46% of the coastal erosion/damage at Wrightsville Beach resulted from the Federal navigation improvements at Masonboro Inlet and is budgeted in the navigation business line as a mitigation requirement paid at 100 percent Federal cost. The remaining 54% of coastal erosion is due to coastal storms budgeted in the flood risk management business line and is cost shared at 65% Federal and 35% non-Federal. This results in an ultimate cost sharing of 81% Federal and 19% non-Federal.

AUTHORIZATION: Public Law 87-87, 23 October 1962, Section 203 and Public Law 99-662, 17 November 1986, Section 501.

REMAINING BENEFIT - REMAINING COST RATIO: 3.4 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 3.3 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 3.5 to 1 at 3.125 percent (1965).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in October 1989 at February 1989 price levels. Benefit cost ratio based on a level 1 economic update dated July 2011.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			\$ 29,943,000	Initial Construction	100	1965
Initial Construction		\$ 688,000		Periodic Nourishment	54	TBD
Periodic Nourishment		\$ 29,255,000				
Estimated Non-Federal Cost			\$ 7,720,000	Entire Project	55	TBD
Initial Construction		\$ 370,000				
Cash Contributions	\$ 370,000					
Other Costs	\$ 0					
Periodic Nourishment		\$ 7,350,000				
Cash Contributions	\$ 7,350,000					
Other Costs	0					
Total Estimated Project Cost			\$ 37,663,000			
Allocations to 30 September 2010	\$ 11,714,000					
Allocation for FY 2011	\$ (299,000)					
Allocation for FY 2012	\$ (1,165,000)					
Conference Allowance for FY 2013	\$ 0					
Allocations through FY 2013	\$ 10,250,000	1/ 2/ 3/ 5/	34			
Estimated Unobligated Carry-In Funds	\$ 0	4/				
Budget Amount for FY 2014	\$ 8,000,000	7/	61			
Programmed Balance to Complete after FY 2014	\$ 11,693,000	6/				
Unprogrammed Balance to Complete after FY 2014	\$ 0					

1/ \$ (38,900) reprogrammed from the project.

2/ \$ (9,000) rescinded from the project.

3/ \$ (1,136,000) transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried in Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

5/ PED costs of \$0 are included in this amount.

6/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

7/ Includes \$4,000,000 in the Flood Risk Management business line and \$4,000,000 in the Navigation business line for mitigation of identified navigation impacts.

PHYSICAL DATA: The project consists of a dune with a base generally bordering at or near the building line with a crown width of 25 feet at an elevation of 15 feet national geodetic vertical datum (NGVD), together with an integral shoreline berm with a crown width of 50 feet and a top elevation of 12 feet NGVD for a total distance of 14,000 feet.

JUSTIFICATION: The project provides coastal storm damage reduction from coastal wave erosion and hurricanes. The structures at Wrightsville Beach are primarily residential. Over \$84,000,000 in new home construction has taken place since 2003. The July 2011 Level 1 economic report reaffirmed that the 1989 evaluation report was valid and it also stated the benefits are most likely understated. Wrightsville Beach experienced heavy losses during the hurricanes of 1944, 1954, 1955, 1958, and 1960. It is estimated that recurrence of those hurricanes would cause damages of about \$56,837,000 at October 2012 price levels. The improvement reduces damages to the shoreline and property along the shoreline by providing coastal storm damage reduction from the hurricanes of equal or less intensity that that of Hurricanes Hazel, provides increased area for recreational use, and increased earning power for coastal-front and other property in the affected community. Based on the Chief's report, the project was authorized with an average annual quantity of 130,000 cubic yards on a 4 year nourishment cycle (520,000 cubic yards every 4 years). The project was constructed in 1965 requiring a total of about 2,993,000 cubic yards of sand from Banks Channel. Following the construction of the northern Masonboro Inlet jetty, the project suffered an unexpectedly high rate of erosion. This necessitated a placement of about 1,400,000 cubic yards of fill in the spring of 1970. After this placement the project was turned over to the sponsors. An emergency placement of 500,000 cubic yards occurred in April 1980, but the project still was not up to designed protection levels. In 1981, a complete restoration of the authorized project was performed by placing about 1,250,000 cubic yards. Subsequent nourishments occurred as follows: 900,000 cubic yards in 1986, 1,017,000 cubic yards in 1991, 619,000 cubic yards in 1994, 512,000 cubic yards in 1998, 423,000 cubic yards in 2002, 532,000 cubic yards in 2006, and the last nourishment occurred in 2010 using 451,000 cubic yards of sand. The nourishment in 1991 was significantly larger than the 520,000 amount estimated in the Chief's report due to higher than anticipated storm erosion and a 5 year period between periodic nourishment cycles. Since the 50-year authorization of the project in 1986, 7 periodic nourishment cycles have been completed out of an anticipated 13 cycles. The project is currently in year 27 of its 50 year project life. The project has proven to perform exceptionally well. For example, in 1996 when Hurricane Fran hit the southeastern coast of North Carolina hundreds of homes were destroyed in neighboring communities. At Wrightsville Beach not a single home or business was lost primarily due to the presence of the dune and berm. In addition to the homes and businesses present, the project also protects the main road. This road serves as the primary access to emergency services for the barrier island. If the project were compromised or not present both the ocean front and most other residences would be put in jeopardy in addition to the main access road for the island. With a warning time for most hurricanes being estimated at 48 hours, the life safety risks are minimal (LSHI). The average annual benefits are as follows at October 2012 levels.

Annual Benefits	Amount (\$)
Hurricane Damage Prevention	1,138,000
Recreation	771,000
Total	1,909,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Complete the Design Documentation Report	\$ 299,000
Total	\$299,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate and complete plans and specifications for the 8 th planned periodic re-nourishment	\$ 300,000
Initiate and complete construction for the 8 th planned periodic re-nourishment	
Renourishment budgeted in Flood Risk Management Business Line	\$ 3,000,000
Renourishment budgeted in Navigation Business Line	\$ 4,000,000
Construction management for the 8 th planned periodic re-nourishment	\$ 700,000
Total	\$ 8,000,000

NON-FEDERAL COST: The town of Wrightsville Beach, North Carolina, the local sponsor, is complying with the requirements of local cooperation for initial construction and the completed periodic nourishment as set forth in the initial authorizing legislation. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.		
Modify or relocate utilities, roads, and other facilities, where necessary for the construction of the project.		
Pay 35 percent of the cost allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities.	\$7,720,000	\$4,900
Total Non-Federal Costs	\$7,720,000	\$4,900

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

Division: South Atlantic

District: Wilmington

Wrightsville Beach, NC

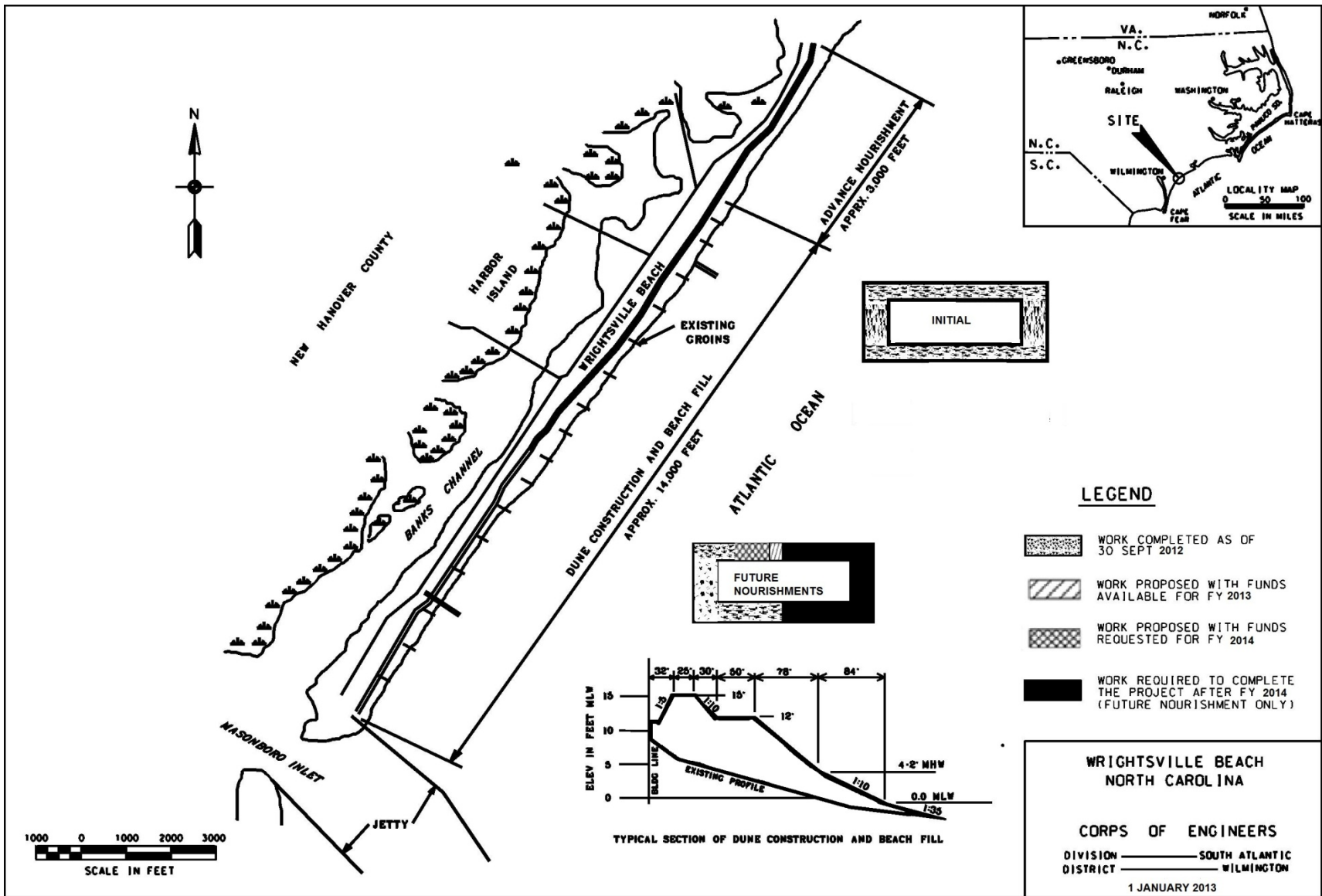
STATUS OF LOCAL COOPERATION: The town of Wrightsville Beach has complied with all the terms of local cooperation to date including initial construction and periodic nourishment through FY 2010. On 1 November 1983, a local occupancy tax went into effect in New Hanover County. Seventy-five percent of the revenues collected from this tax must be used for coastal storm damage reduction erosion control. A local cooperation agreement (LCA) was executed by the Assistant Secretary of the Army for Civil Works on 27 June 1990. All recent phone conversations with the sponsor indicate their continued support of the project and its estimated total local funding requirement of \$7,720,000 for the 50-year economic life of the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$29,943,000 is an increase of \$6,943,000 over the latest estimate (\$23,000,000) submitted to Congress (FY 2006). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 2,000,000
Authorized Modifications	4,943,000
Total	\$ 6,943,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Finding of No Significant Impact was signed in August 1989.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1964. In accordance with Section 156 of the Water Resources Development Act of 1976, Federal authorization for participation in the initial project was limited to work initiated before the end of calendar year 1980. The Water Resources Development Act of 1986 authorized future nourishment for 50 years. The change in Federal cost estimate reflected as an 'authorized modification' is a cost share adjustment due to the inclusion of the navigation mitigation component in this construction J-Sheet.



Puerto Rico

APPROPRIATION TITLE: Construction - (Flood Risk Management)

PROJECT: Rio Puerto Nuevo, Puerto Rico (Continuing)

LOCATION: The Rio Puerto Nuevo project is located within the San Juan Metropolitan Area along the north central coast of Puerto Rico. The Rio Puerto Nuevo basin joins the southeast side of San Juan Harbor and extends south and up into the foothills of the central mountains of Puerto Rico. The Rio Piedras, Rio Puerto Nuevo, Quebrada Margarita, Quebrada Josefina, Quebrada Dona Ana, Quebrada Buena Vista, and Quebrada Guaracanal traverse the basin. The Río Puerto Nuevo Basin drains 24 square miles.

DESCRIPTION: The plan of improvement provides flood damage protection by the construction in the Puerto Nuevo River and its tributaries of 1.7 miles of earth lined channel, 9.5 miles of concrete lined channels (of which 5.1 miles are high velocity), 2 debris basins and 2 stilling areas. The plan will also require the construction of 5 new bridges, the replacement of 17 bridges, and the modification of 8 existing bridges. Based on current estimates for Lands Easements Rights-of-way and Relocations, cost sharing for the flood control features of the project is 88.88% Federal and 11.12% non-Federal.

AUTHORIZATION: Section 401(a) of Water Resources Development Act of 1986 (P.L. 99-662 approved 17 November 1986) authorized the project for construction.

REMAINING BENEFIT - REMAINING COST RATIO: 5.4 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 1.4 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 1.2 to 1 at 8 percent (FY 1994).

BASIS OF BENEFIT - COST RATIO: Benefits are based on the latest economic update in the Level 2 Economic Update dated March 2012 at FY 2012 price levels. The economic update is based off the economic analysis in the revised General Design Memorandum dated June 1991 at October 1989 price levels. Initial Benefit-to-Cost Ratio reported in FY13 Justification Sheet was not in compliance with EC guidance and has been corrected on this submission.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$488,600,000		Relocations	40	TBD
Estimated Non-Federal Cost	\$172,700,000		Roads, Railroads, Bridges	50	TBD
Cash Contributions	\$ 61,673,000		Channels and Canals	65	TBD
Other Costs	\$111,027,000		Recreation	0	TBD
Total Estimated Project Cost	\$661,300,000		Entire Project	63	TBD
Allocations to 30 September 2010	\$256,079,000				
Allocation for FY 2011	\$ 20,689,000				
Allocation for FY 2012	\$ 6,860,000				
Conference Allowance for FY 2013	\$ 14,250,000	<u>5/</u>			
Allocations through FY 2013	\$297,878,000	<u>1/ 2/ 3/ 6/</u>	61.0		
Estimated Unobligated Carry-In Funds	\$ 0	<u>4/</u>			
President's Budget for FY 2014	\$ 17,250,000		64.5		
Programmed Balance to Complete after FY 2014	\$173,472,000	<u>7/</u>			
Un-programmed Balance to Complete after FY 2014	\$ 0				

1/ \$7,046,000 reprogrammed to the project.

2/ \$495,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$7,489,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The project includes 17 bridge replacements, 8 bridge modifications, 5 new bridge constructions, 1.7 miles of earth lined channel, 9.5 miles of rectangular concrete canals, 2 debris basins and 2 stilling areas.

Division: South Atlantic

District: Jacksonville

Rio Puerto Nuevo, PR

1 May 2013

SAD - 153

JUSTIFICATION: The primary purpose of the project is to provide flood risk management benefits for structures, contents, and transportation infrastructure in the Rio Puerto Nuevo Basin and the San Juan, Puerto Rico Metropolitan Area. A combined property value of over \$ 2,000,000,000 is subject to flooding, including: over 7,000 residential structures, 800 commercial establishments, the city's major transportation facilities, 1.5 square miles of major port facilities, recreation facilities, government offices, a major electrical power plant, and several wastewater/water treatment facilities. Therefore, flood waters from the Rio Puerto Nuevo represent a continuous threat to a significant portion of the population and the economic activity of the San Juan Metropolitan area. Intense development in the basin has altered the natural drainage patterns, significantly increased the runoff, and restricted the flow capacity of streams. More than thirty highway bridges have been identified as impeding flood flows and causing increased flooding. Development has progressed to the point where some of the tributary channels are not capable of carrying the two-year storm without causing flooding. In many areas, houses and other buildings are built adjacent to the banks of the channels and further restrict flood flows. The city of San Juan is always contained within the Presidential Disaster Declarations associated with Flooding in Puerto Rico. There have been 8 such events during the last 20 years. Tropical Storm Jeanne (in 2004) resulted in the Federal Emergency Management Agency expending over \$350,000,000 in damage relief over the island. The average annual damages for the without project condition are \$41,575,000. Average annual damages for the with project condition are \$5,024,000. The budget amount will complete the Upper Margarita concrete channel protecting a densely populated urban area. The budget amount will also complete plans and specifications for upstream channel work between Roosevelt Ave. Bridge and the De Diego Bridge. The average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	\$ 36,551,000
Total	\$ 36,551,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Complete Bechara Middle Section contract	\$ 9,309,000
Complete de Diego Bridge contract	3,113,000
Post Authorization Change Report	300,000
Planning, Engineering, and Design for Upper Margarita Channel	2,016,000
Construction Management	2,878,000
Total	\$ 17,616,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Complete the Upper Margarita Channel contract	\$ 13,226,000
Planning, Engineering, and Design for Upper Margarita Channel	\$ 1,138,000
Construction Management for Upper Margarita Channel	\$ 2,136,000
Initiate Plans & Specifications for contract completing 0.4 mile rectangular concrete channel between Roosevelt Avenue Bridge and completed De Diego Bridge segment	\$ 750,000
Total	\$ 17,250,000

Division: South Atlantic

District: Jacksonville

Rio Puerto Nuevo, PR

NON-FEDERAL COST: In accordance with the cost sharing and financing plan reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way.	\$ 41,616,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	\$ 69,411,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation features.	\$ 536,000	
Pay 11.12 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 25 percent as determined under Section 103 of the Water Resources Development Act, as amended, to reflect the non-Federal sponsor's ability to pay, but no less than 5 percent of the costs allocated to flood risk management, and bear all cost of operation, maintenance, repair, rehabilitation, and replacement of flood risk management features.	\$ 61,137,000	
Total Non-Federal Cost	\$ 172,700,000	

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

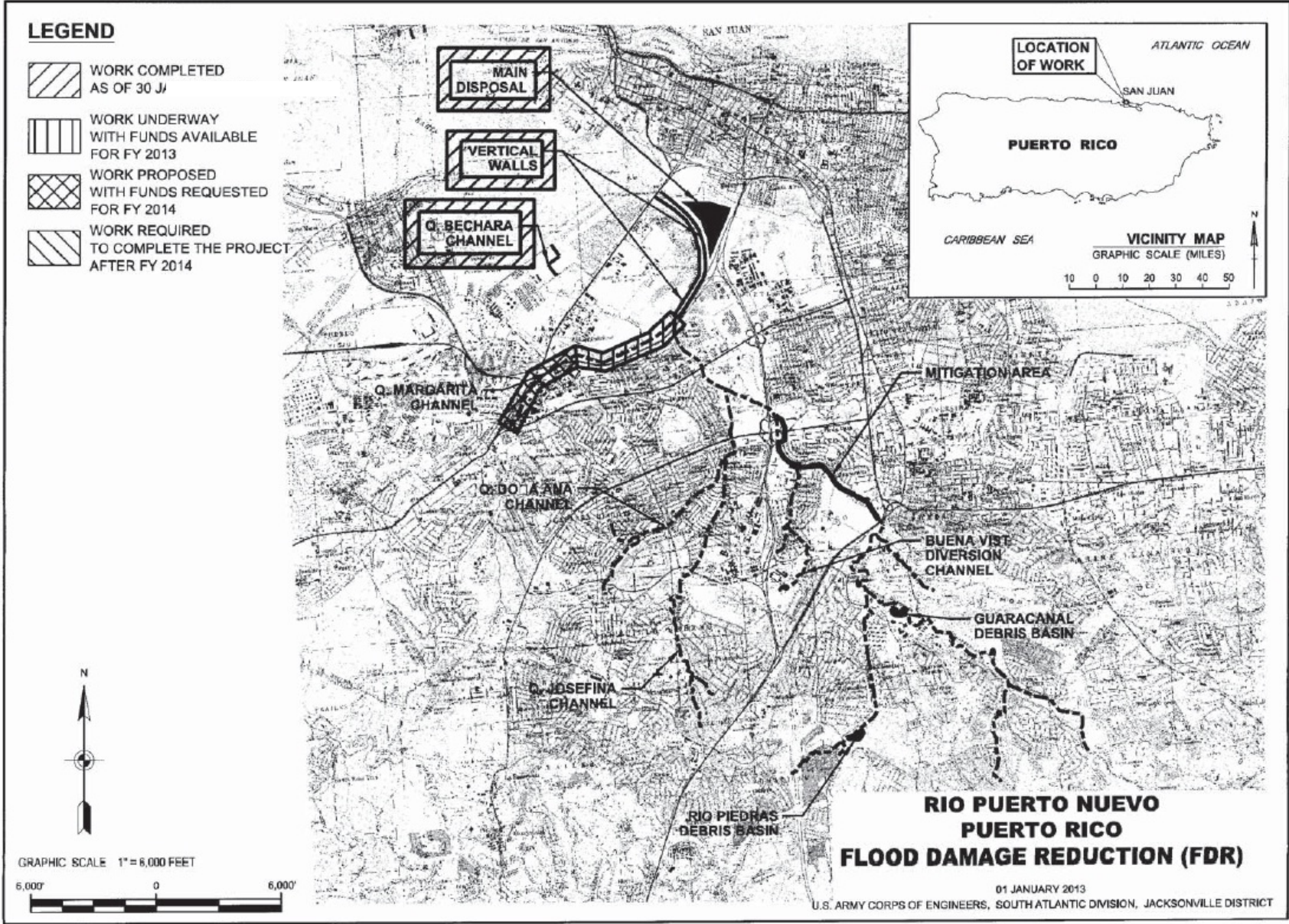
STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. A Project Cooperation Agreement for the project was executed in March 1994. The non-Federal sponsor's funds are derived from a combination of general revenue and sponsored funds budgeted by the Commonwealth of Puerto Rico. The non-Federal sponsor is willing and able to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$488,600,000 reflects an increase of \$39,200,000 from the latest estimate (\$449,400,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 3,395,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$ 28,187,000
Schedule Changes	\$ 7,618,000
Total	\$ 39,200,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement for the project was filed on 6 December 1985. The Finding of No Significant Impact was approved in July 1992. An Environmental Assessment (EA) was completed in May of 1993 with the associated General Design Memorandum, and another EA was completed in February of 2001 for the Bechera Lower Basin.

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in Fiscal Year 1987. Funds to initiate construction were appropriated in Fiscal Year 1994. FY 2013 carry-in funds in the amount of \$3,336,000 were made available as a result of delays in the DCAA audit completion for negotiating the contract modifications. The Post Authorization Change is needed as a result of updated cost estimates that reflect a significant increase in cost of lands for the remaining unconstructed features on the project. The 902 limit is not expected to be exceeded until after FY 2016.



PROJECT STATUS MAP (RCS CECW-8-13)

Division: South Atlantic

District: Jacksonville

Rio Puerto Nuevo, PR

1 May 2013

SAD - 157

South Carolina

APPROPRIATION TITLE: Construction – Navigation (Dredged Material Disposal Facility)

PROJECT: Charleston Harbor, South Carolina (Continuing)

LOCATION: The Charleston Harbor Clouter Creek Dredge Material Disposal Facility (DMDF) is located on the east bank of the Cooper River to the east of North Charleston, South Carolina. It is bounded on the north, west and south by the Cooper River and on the east by Clouter Creek and is approximately 1,475 acres in size and subdivided into four cells – North, South, Middle, and Highway.

DESCRIPTION: The Clouter Creek DMDF contains material from maintenance dredging of the completed project. A dike raising or capacity expansion to contain maintenance material is required periodically and budgeted as needed. A Project Partnership Agreement was executed with the South Carolina State Ports Authority in September 2010 for costs through FY 2018. The costs were documented in the Dredged Material Management Plan (DMMP) Preliminary Assessment for Charleston Harbor dated 23 June 2009 and approved by the South Atlantic Division Commander on 17 February 2010.

AUTHORIZATION: P.L. 104-303 dated 12 October 1996, Section 101

REMAINING BENEFIT - REMAINING COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

TOTAL BENEFIT - COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

INITIAL BENEFIT - COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

BASIS OF BENEFIT - COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement		\$ 8,670,000		North Cell Raising	0	TBD
Future Non-Federal Reimbursement	\$ 1,156,000			Middle Cell Raising	0	TBD
				South Cell Raising	50	TBD
				Highway Cell Raising	50	TBD
Estimated Federal Cost (Ultimate)		\$ 7,514,000				
Estimated Non-Federal Cost		\$ 4,046,000		Entire Project	25	TBD
Cash Contributions	\$ 2,890,000					
Other Costs	\$ 0					
Reimbursements	\$ 1,156,000					
Navigation	\$ 1,156,000					
Total Estimated Project Cost		\$ 11,560,000				
Allocations to 30 September 2010	\$ 3,350,000					
Allocation for FY 2011	\$ 300,000					
Allocation for FY 2012	\$ 0					
Conference Allowance for FY 2013	\$ 0	5/				
Allocations through FY 2013	\$ 3,650,000	1/ 2/ 3/ 6/	42			
Estimated Unobligated Carry-In Funds	\$ 72,000	4/				
President's Budget for FY 2014	\$ 226,000		45			
Programmed Balance to Complete after FY 2014	\$ 4,794,000	7/				
Un-programmed Balance to Complete after FY 2014	\$ 0					

1/ \$0 reprogrammed from the project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is \$72(x1000). This amount will be used to perform work on the project as follows: Initiate plans and specifications for the North Cell to raise dikes from elevation 20 ft to 31 ft.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED cost of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

Division: South Atlantic

District: Charleston

Charleston Harbor, SC

1 May 2013

SAD - 160

PHYSICAL DATA: The Clouter Creek DMDF is approximately 1,475 acres in size and subdivided into four cells – North (190 acres), South (415 acres), Middle (410 acres), and Highway (460 acres). The current average dike elevations are: North Cell - 20 ft, Highway Cell -14 ft, Middle Cell - 20 ft, and South Cell - 27 ft. The North Cell is scheduled to be raised to 31 ft in FY 2015/FY 2016. The Middle Cell is scheduled to be raised to 25 ft in FY 2018. The Charleston Harbor dikes, as a matter of practice, are raised 5 feet in each cycle as the minimum and will go higher if the usage demand warrants it.

JUSTIFICATION: Latest commercial tonnage as reported by the Waterborne Commerce Statistics Center for FY 2011 was 17.9 million tons of cargo. The major commodity imported and exported is manufactured equipment and machinery. Charleston Harbor is listed as one of 17 United States (US) strategic ports because of the presence of the Joint Base Charleston, Military Surface Deployment and Distribution Command, Defense Energy Support Center and Army Strategic Logistics Activity Charleston. International trade through South Carolina ports facilitates 280,600 jobs across the state in the maritime, transportation, distribution and manufacturing industries while providing an overall economic impact of \$45 billion each year. Per United States Department of Commerce (USDOC)/Bureau of the Census, the 2010 value of waterborne commerce through Charleston was \$50.19 billion. The Clouter Creek DMDF is broken into four cells. As of the date of this justification sheet, the Highway and South cells are available for the receipt of maintenance material. These cells have a combined capacity of 6,800,000 cubic yards which is adequate to accommodate up to five years of maintenance dredging at an annual anticipated rate of 1,360,000 cubic yards. The North and Middle cells are at full capacity and are undergoing ditching and drying in preparation for FY 2015 construction contract to increase capacity. The ditching and drying process typically requires twenty-four to thirty-six months to complete. The North cell dike construction is scheduled to commence in FY 2015 with construction being physically complete in FY 2016. This insures that the North Cell will be available for use when Highway Cell is scheduled to be taken out of service for ditching and drying. The sequential raising of dikes in the DMDF is critical to the ability of the U.S. Army Corps of Engineers to maintain the Charleston Harbor Federal Navigation project and FY 2014 funding of plans and specifications supports the stated schedule.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

No activity scheduled to occur in FY 2013	\$0
Total	\$ 0

Funds in the amount of \$72,000 are scheduled to be carried over unobligated into FY 2014.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate and complete plans and specifications for the North Cell to raise dikes from elevation 20 ft to 31 ft	\$298,000
Total	\$ 298,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	\$ 0	\$ 0
Pay 25 percent of the costs allocated to general navigation facilities during construction.	\$ 2,890,000	\$ 0
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as reduced by a credit allowed or the value of lands, easements, rights of way, and relocations provided for commercial navigation.	\$ 1,156,000	\$ 0
Total Non-Federal Costs	\$ 4,046,000	\$ 0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and, for general navigation, reimburse its share of construction costs within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: A Project Partnership Agreement was executed with the South Carolina State Ports Authority in September 2010. The non-Federal sponsor is financially capable and willing to contribute the non-Federal share.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$8,670,000 is the initial cost estimate presented to Congress under the construction appropriation. It was submitted in FY 2008 under the Operation and Maintenance appropriation justification sheet which did not require a detailed breakout or cost estimate of the entire project.

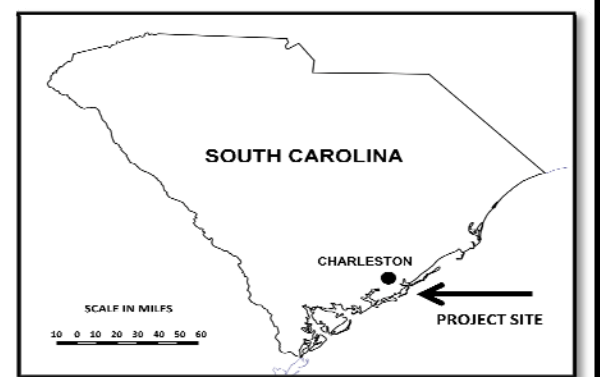
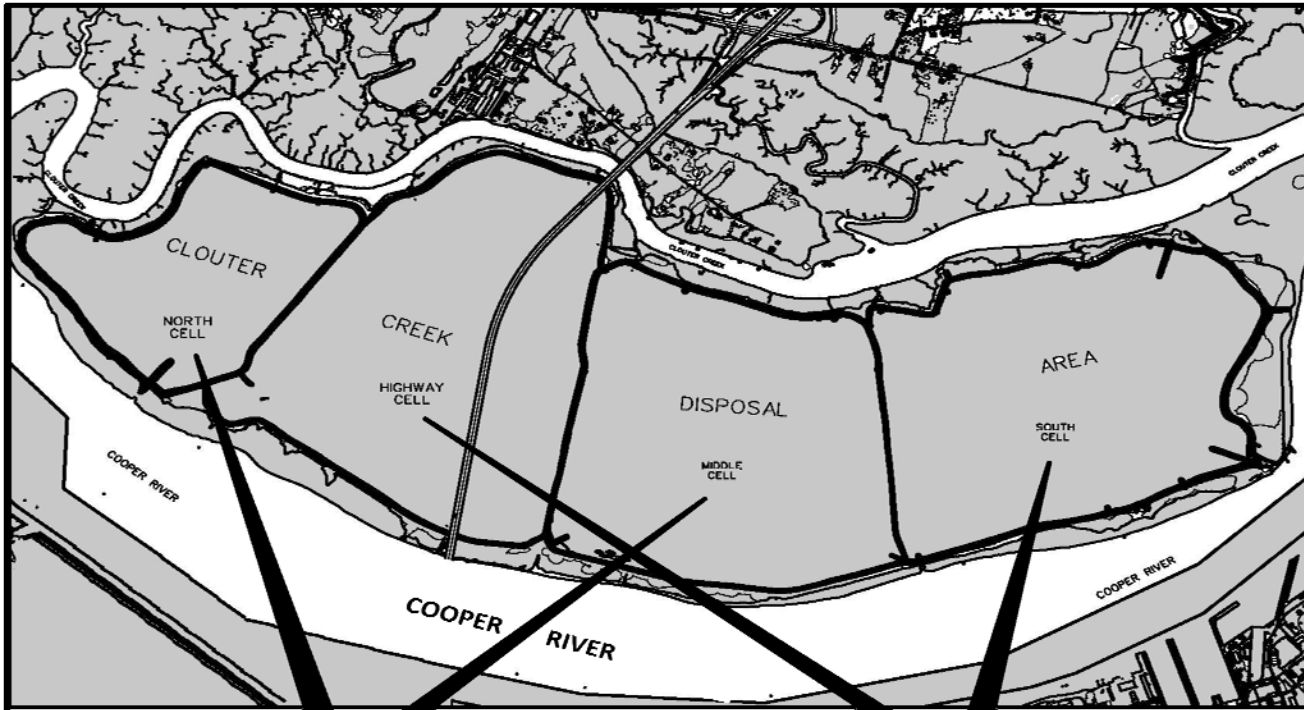
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Environmental Assessment was completed as part of preparation of the Dredged Material Management Plan Preliminary Assessment for Charleston Harbor, dated 23 June 2009 and approved by the South Atlantic Division Commander on 17 February 2010. The Finding of No Significant Impact (FONSI) was signed in September 2009.

OTHER INFORMATION: Funds to initiate engineering and design work were appropriated in FY 2007 under the Operation and Maintenance account. Funds to initiate construction were budgeted in FY 2008 under the Operation and Maintenance account, however; they were appropriated under the Construction appropriation. Per latest budget guidance a maintenance DMDF is cost shared as a General Navigation Feature and is budgeted as a line item in the Construction account.

Division: South Atlantic

District: Charleston

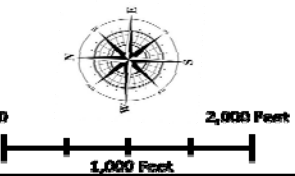
Charleston Harbor, SC



Engineering and Design Efforts

Dike Raising 0% Complete

Dike Raising 50% Complete



**CHARLESTON HARBOR, SOUTH CAROLINA
DREDGED MATERIAL DISPOSAL FACILITY**
Charleston District
South Atlantic Division

1 January 2013

Virginia

APPROPRIATION TITLE: Construction - Flood Risk Management

PROJECT: Roanoke River Upper Basin, Virginia, Headwaters Area (Continuing)

LOCATION: The project is located in south central Virginia on the Roanoke River in the city of Roanoke, Virginia.

DESCRIPTION: The project includes about 6.2 miles of channel widening along the 10 miles of river through the city of Roanoke, Virginia. Channel widening has been accomplished with the construction of a benched channel above the elevation of the average stream flow. Other flood risk management features include flood proofing at two locations, training walls to prevent floodwater intrusion into low areas along the river, and a flood warning system. Recreation facilities consist of a 9.5-mile recreation trail along the project reach and access and parking areas. The final 3 miles of the recreation trail will not be constructed and is an un-programmed portion of the project.

AUTHORIZATION: Public Law 99-662, 21 January 1986, Section 401, and amended by Public Law 101-640, 28 November 1990, Section 102.

REMAINING BENEFIT - REMAINING COST RATIO: N/A; The project is substantially complete. Funds are for required monitoring in accordance with the biological opinion.

TOTAL BENEFIT - COST RATIO: N/A; The project is substantially complete. Funds are for required monitoring in accordance with the biological opinion.

INITIAL BENEFIT - COST RATIO: N/A; The project is substantially complete. Funds are for required monitoring in accordance with the biological opinion.

BASIS OF BENEFIT - COST RATIO: N/A; The project is substantially complete. Funds are for required monitoring in accordance with the biological opinion.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 48,300,000				
Programmed Construction	\$ 44,561,000			Channel Excavation	100	Dec 2011
Un-programmed Construction	\$ 3,739,000			Training Walls	100	Jun 2009
Estimated Non-Federal Cost		\$ 24,200,000		Recreation Trail	70	TBD
Programmed Construction	\$ 20,461,000			Parking Areas	100	Mar 2005
Cash Contributions	\$ 9,113,000			Riprap	100	Jun 2011
Other Costs	\$ 11,348,000			Relocations	100	Jun 2011
Un-programmed Construction	\$ 3,739,000			Land Acquisitions	100	May 2010
Cash Contributions	\$ 3,739,000			Monitoring	20	TBD
Other Costs	\$ 0			Entire Project	96	TBD
Total Estimated Project Cost		\$ 72,500,000				
Allocations to 30 September 2010		\$ 41,004,000				
Allocation for FY 2011		\$ 1,103,000				
Allocation for FY 2012		\$ 1,554,000				
Conference Allowance for FY 2013		\$ 0	5/			
Allocations through FY 2013		\$ 43,661,000	1/ 2/ 3/ 6/	90.4		
Estimated Unobligated Carry-In Funds		\$ 92,000	4/			
Budget Amount for FY 2014		\$ 300,000		91.0		
Programmed Balance to Complete after FY 2014		\$ 600,000	7/			
Unprogrammed Balance to Complete after FY 2014		\$ 3,739,000				

1/ \$ 239,965 reprogrammed to the project.

2/ \$ (106,000) rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried in Fiscal Year 2014 from prior appropriations for use on this study effort is \$ 92 (x1000). This amount will be used to perform work on the study as follows: Continue required monitoring and associated project management activities.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

6/ PED costs of \$ 2,142,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: This flood risk reduction project includes the following features: 27,000 feet of channel excavation, 6,300 linear feet of training wall construction, a 50,160 linear foot paved recreation trail, one parking area, one access area, and 28,000 tons of riprap placement. In addition to these features relocations were required as follows: 3,880 linear feet of utilities, 2,000 linear feet of roadway, 6,350 linear feet of overhead lines, and 13 buildings. Real estate requirements included 195 total rights of way, 185 flood risk reduction rights of way, and 40 temporary disposal areas.

JUSTIFICATION: The project provides improvements for flood risk management and recreation. Most of the property that would receive flood damage reduction serve industrial and commercial uses with a value of \$1,393,000,000 at October 2012 price levels. The average annual damages in the project area are estimated at \$11,836,000 at October 2012 price levels and 2012 level of development over the next 50 years if no flood risk management facilities were provided. The project would reduce these damages by \$4,864,000. The maximum flood of record, November 1985, caused damages estimated at \$245,856,000 at 2012 price levels. Floodplain development is not promoted by the project. Return on investments by local businesses is adversely affected by the flooding problem. Industrial and commercial property owners have to use their resources to repair and attempt flood proofing that could be used for expansion and modernization. In this respect, return on investment is suppressed. The project has a beneficial effect on a variety of businesses and increases return on investment throughout the flood plain. The average annual benefits are as follows at October 2012 price levels:

Annual Benefits	Amount (\$)
Flood Damage Reduction	6,972,000
Recreation	2,520,000
Total	9,492,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Complete Interim Financial Closeout of Construction Activities	\$450,000
Continue Monitoring of Endangered Species and Associated Project Management Tasks	\$ 300,000
Total	\$ 750,000

Funds in the amount of \$92,000 are scheduled to be carried over unobligated into FY 2014.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue Monitoring of Endangered Species and Associated Project Management Tasks	\$ 300,000
Total	\$ 300,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way and dredged or excavated material disposal areas.	\$ 6,206,000	
Modify or relocate buildings, utilities, roads and other facilities except railroad bridges, where necessary for construction of the project.	\$ 5,142,000	
Pay 25 percent of the cost of the flood warning system (partially offset by a credit for lands, easements, rights of way, and relocations).	\$ 10,000	
Pay 5 percent of the total cost allocated to flood risk management in cash in addition to all lands, easements, rights of way and relocations, and bear all costs of operation, maintenance, and replacement of flood risk management facilities.	\$ 5,664,000	\$ 101,000
Pay one-half of the separable cost allocated to recreation (partially offset by a credit for land, easements, rights of way and relocations) and bear all costs of operation, maintenance and replacement of recreation facilities.	\$ 6,811,000	\$ 9,000
Pay 25 percent of the cost of the non-structural flood proofing (partially offset by a credit for lands, easements, rights of way and relocations).	\$ 367,000	
Total Non-Federal Costs	\$ 24,200,000	\$ 110,000

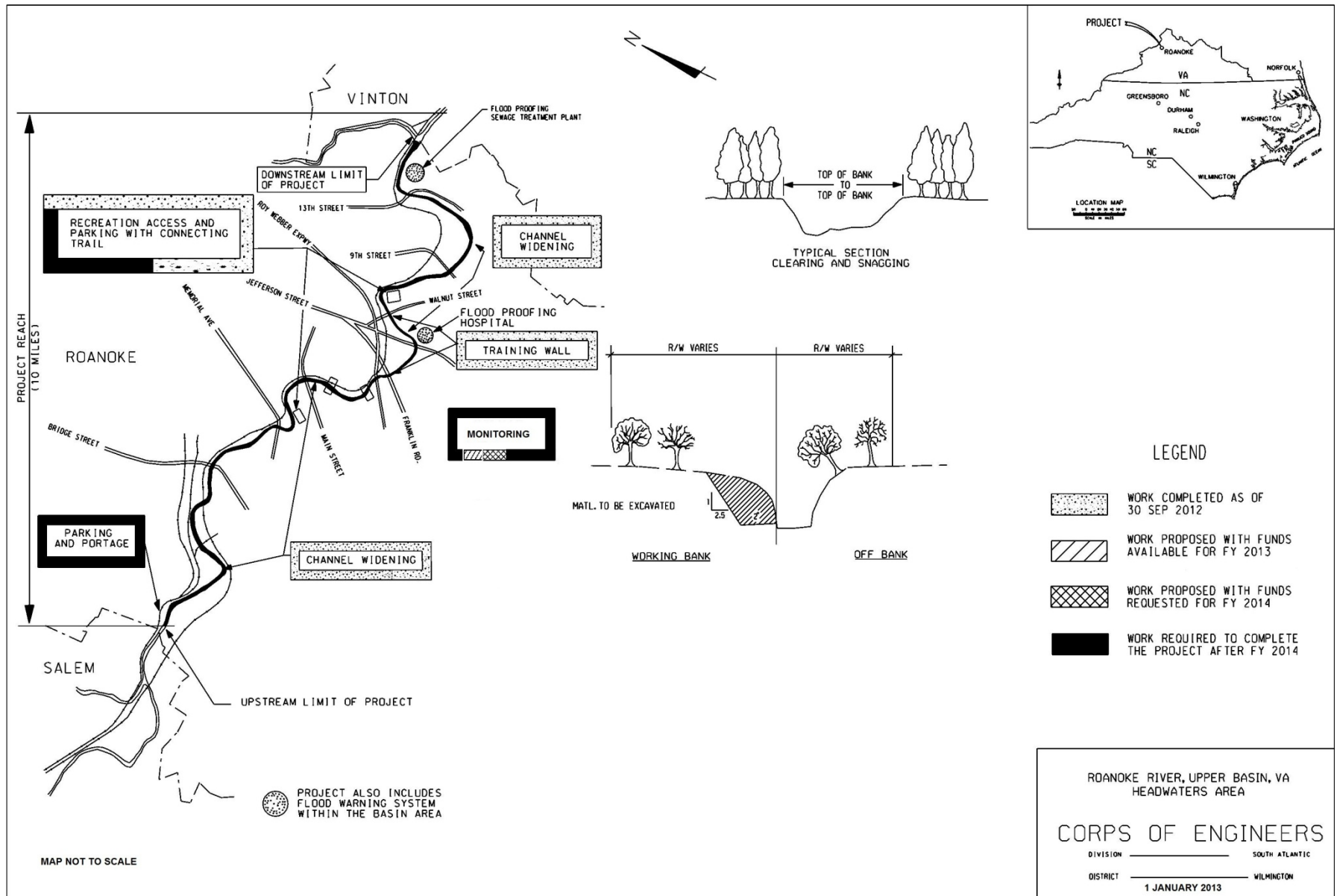
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The city of Roanoke is the project sponsor. On 11 April 1989, the voters of the city of Roanoke approved the sale of \$7,500,000 worth of bonds to pay Roanoke's required cash contribution, acquire lands that are not currently owned and pay for relocation of bridges and utilities. The sponsor has already provided the appropriate amount of non-Federal funds estimated to meet their funding requirements through FY 2015. The local cooperation agreement was executed on 25 June 1990. A supplement to the local cooperation agreement, executed in January 1993, addressed the reimbursement for the flood proofing of the Roanoke Hospital. Initiation of construction of flood risk management features was delayed for eight years due to concerns the sponsor had over assuming liability for potential hazardous, toxic, and radioactive waste issues that might arise during project construction. The city in conjunction with the Corps of Engineers, Environmental Protection Agency and the Virginia Department of Environmental Quality conducted an extensive investigation and review of the project right of way to alleviate these concerns. Hazardous material was found at two sites. The landowner has cleaned these sites. Soil contamination was found at 14 other sites. A project action plan for the screening and disposal of this material was prepared and approved by the sponsor and the Virginia Department of Environmental Quality. The non-Federal Sponsor has provided their share of the project cost for all project features constructed to date.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$48,300,000 is the same as the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final environmental impact statement was filed with the Environmental Protection Agency in February 1985. A finding of no significant impact for the design changes was signed on 30 June 1989.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 1990. There were two authorized project cost increases. The first was the Energy and Water Development Appropriations Act of 1990-Public Law 101-101, 29 September 1989, Section 110. The second was the Energy and Water Development Appropriations Act of 2004-Public Law 108-137, 1 December 2003, Section 148 which increased the total estimated project cost to \$61,700,000 at October 2004 price levels (\$83,451,000 at October 2012 price levels). The Roanoke Logperch, which is located in the project area, was listed as an endangered species effective 18 September 1989 and is being monitored. Monitoring could occur periodically up to 20 years, however the Corps is in negotiation with U.S. Fish and Wildlife Service to amend the monitoring requirement to a much shorter time frame based on observed performance of the project thus far. For each year that monitoring occurs, there is an associated \$300,000 cost. Reimbursement for the Federal share of the flood proofing of the Roanoke Hospital, as authorized by Section 102(cc) of the Water Resources Development Act of 1990, in the amount of \$501,000, was completed in February 1993. The sponsor has expressed that it has no intention of constructing the final 3 miles of the recreation trail, and plan to submit a formal letter to that affect. In FY 2012, final cost share balance activities were initiated and are scheduled to be completed within the FY 2013 available funds for in addition to the planned Monitoring of Endangered Species.



Division: South Atlantic

District: Wilmington

Roanoke River Upper Basin, VA

1 May 2013

SAD - 170

Operation and Maintenance

Alabama

O&M Justification Sheet

PROJECT NAME: Alabama-Coosa Comprehensive Water Study, AL

AUTHORIZATION: FY 1991 Energy and Water Development Appropriations Act

LOCATION AND DESCRIPTION: This project covers the Alabama-Coosa-Tallapoosa (ACT) and Apalachicola-Chattahoochee-Flint (ACF) drainage basins in Alabama, Georgia and Florida. The project was set up years ago to resolve issues related to water allocation issues on the ACT and ACF river basins. This project has been utilized to support the studies, reports, and other activities required to support the potential resolution of the ongoing disputes between the states of Alabama, Georgia and Florida. Numerous lawsuits have been filed and this project is required to support the Corps' litigation efforts.

CONFERENCE AMOUNT FOR FY 13: \$246,000 2/

BUDGETED AMOUNT FOR FY 14: M: \$0 O: \$250,000 T: \$250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: \$250,000 will be used for technical support for ongoing litigation issues on the Alabama-Coosa-Tallapoosa and Apalachicola-Chattahoochee-Flint River Systems. Activities include providing input to and review and commenting on briefs prepared by Department of Justice, reviewing and commenting on briefs filed by the Plaintiffs, responding to Freedom of Information Act requests, complying with the Endangered Species Act, consultations with Federal and State resource agencies and other correspondence.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Alabama River Lakes, AL

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: This multiple purpose project is part of the Alabama-Coosa-Tallapoosa (ACT) River System and includes a 9 X 300 foot navigation channel that extends from the mouth of the Alabama River, some 45 miles north of Mobile, Alabama, for 300 miles northeast to Montgomery, Alabama, where it connects with the Coosa River. The Coosa River extends northeast another 286 miles to a point near Rome, GA. This project includes O&M funding for three projects located on the Alabama River: Claiborne, Millers Ferry and Robert F. Henry Locks and Dams.

CONFERENCE AMOUNT FOR FY 2013: \$14,926,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$9,011,000 O: \$7,316,000 T: \$16,327,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,762,000 will provide caretaker operation for locks and spillway gate regulation to maintain pool at proper levels to prevent flooding and/or head limits at upstream dam.

FRM: \$403,000 will be used to provide maintenance of the structures and equipment associated with the controlled release and storage of water.

RC: \$2,940,000 will be used for operation and maintenance of recreation facilities on Alabama River Lakes including campgrounds, day use parks, fishing decks and boat ramp facilities. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities.

H: \$10,532,000 will be used for routine preventative maintenance to meet goals by limiting forced outages and maximizing peak unit availability, to collect water management data, and for dam safety.

EN: \$690,000 will be used to protect fee-owned lands and waters against encroachments, and loss due to fire, pests and timber theft; to monitor boundary lines; and to respond to real estate requests. Other activities include intensive land maintenance and enhancement for wildlife and cultural resources investigations.

WS: N/A

OTHER INFORMATION: Two hydropower plants on the project provide a critical contribution to our nation's power grid. Recreation areas and associated economic activity are major contributors to quality of life for the citizens in one of the most economically disadvantaged regions of the United States.

There is a legal obligation to complete the ACT Water Control Manual. Funding for the manual is also included in the overall budget for this project.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Black Warrior and Tombigbee Rivers (BWT), AL

AUTHORIZATION: The project was authorized by various River and Harbor Acts, 1884-1986. Replacement of obsolete structures was authorized by the 1909 River and Harbor Act.

LOCATION AND DESCRIPTION: The project includes a 9 X 200 foot navigation channel from Mobile Harbor, north for 426 miles, connecting the Port of Mobile with the industrial areas of Birmingham, Alabama, and serving as the corridor from the Tennessee-Tombigbee Waterway to the Gulf of Mexico and includes six locks, dams and reservoirs.

CONFERENCE AMOUNT FOR FY 2013: \$20,971,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$15,232,000 O: \$10,204,000 T: \$25,436,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$22,033,000 will be used for lock and dam operations and maintenance and maintenance dredging activities including channel surveys. This will improve navigation performance by increasing the availability of channel and reliability of the six locks and dams on this high use inland system.

FRM: N/A

RC: \$3,070,000 will be used for normal operation and maintenance of recreational facilities to accommodate visitation at campgrounds, day use parks, fishing areas and boat ramp facilities. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities.

H: N/A

EN: \$333,000 will be used for salaries, equipment, supplies and material necessary for stewardship at the projects. Funds will also be used for intensive wildlife management of the project lands, natural resources surveys and cultural resource activities.

WS: N/A

OTHER INFORMATION: This waterway is extremely important for the shipment of coal as an export and to support several coal-fired electric generating plants in the southeastern United States. The waterway also provides critical transportation of crude oil to an oil refinery and transportation of ore and steel for foundries. Visitation to recreation areas on the BWT provides economic growth in some of the most economically disadvantaged areas of the United States.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Gulf Intracoastal Waterway (GIWW), AL

AUTHORIZATION: River and Harbor Act of 1966, as amended and prior acts

LOCATION AND DESCRIPTION: The Mobile District portion of the GIWW extends from the Louisiana/Mississippi state line to Apalachee Bay, Florida, providing a 12 x 150-foot channel from Louisiana to Mobile Bay, Alabama and a 12 x 125-foot channel from Mobile Bay to Apalachee Bay, Florida. The project supports major barge traffic providing the east/west transit route along the northern Gulf Coast for coal, petroleum products, chemicals, wood products and heavy industrial components. This project also supports high-end recreational traffic and waterway tourism industry.

CONFERENCE AMOUNT FOR FY 2013: \$5,608,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$5,119,000 O: \$350,000 T: \$5,469,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,469,000 will be used for dredging, surveys and disposal area maintenance.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project is critical to the national defense due to the fact that Eglin, Hurlburt and Tyndall Air Force Bases all receive their jet fuel by way of this waterway. This waterway is critical to the southeast region of the United States in that all the fuel terminals and coal fired power plants along the Gulf Coast receive their shipments by barge.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Mobile Harbor, AL

AUTHORIZATION: Section 104 of the River and Harbor Act of 3 September 1954 and previous acts. The Theodore Ship Channel was authorized by Section 201 of the 1965 Flood Control Act and modified by Section 112 of WRDA 1976.

LOCATION AND DESCRIPTION: The project is located in Mobile, Alabama. The project provides a 47 x 600 foot channel from the Gulf of Mexico into Mobile Bay, a 45 x 400 foot channel in the Bay to the McDuffie Coal terminal, a 40 x 500 foot channel in the Mobile River to the Cochrane-Africatown Bridge, a 25 x 250-500 foot channel leading to and into Chickasaw Creek, and various smaller channels and turning basins for use by commercial, international and domestic marine traffic, including the Theodore Industrial Channel. The Port of Mobile supports a major coal import/export facility supplying coal for all the power plants across the northern Gulf Coast as well as petroleum products, wood products, containers, etc.

CONFERENCE AMOUNT FOR FY 2013: \$30,071,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$26,490,000 O: \$510,000 T: \$27,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$27,000,000 will be used for maintenance dredging of the bay channel, river channel, the turning basin, disposal area maintenance, surveys, water quality, and endangered species coordination. These funds are necessary to maintain and reestablish project depths that have decreased due to shoaling. This will improve navigation performance by increasing the availability of channel to project depth, thereby eliminating the need for light loading or delays awaiting tides to access a strategic terminal. These funds would ensure adequate disposal area capacity is available to contain the material dredged from the channels in the coming years.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Mobile Harbor is the 9th largest port in the U.S.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Tennessee-Tombigbee Waterway (TTWW) - Wildlife Mitigation, AL & MS

AUTHORIZATION: Water Resources Development Act 1986, 1992

LOCATION AND DESCRIPTION: The project consists of three major components: (1) acquisition and management of 88,000 acres of separable mitigation lands at specific locations in Alabama and Mississippi; (2) management of an additional 93,000 acres of existing Corps lands at specific locations in Alabama and Mississippi; and (3) implementation of an initial development program on 181,000 acres of lands comprising the Mitigation Program. Most of the mitigation lands are organized into contiguous management units distributed between 10 wildlife management areas (7 in Mississippi and 3 in Alabama). The State wildlife management agencies are responsible for the management of all but 50,000 acres that are managed by the Corps.

CONFERENCE AMOUNT FOR FY 2013: \$1,901,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$455,000 O: \$1,365,000 T: \$1,820,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: \$1,820,000 will be used to reimburse the states of Mississippi and Alabama for costs incurred for intensive wildlife management as mandated by the Water Resources Development Act 1986.

WS: N/A

OTHER INFORMATION: Funding will support oversight and management by state wildlife agencies in Mississippi and Alabama for a total of ten Wildlife Management Areas (WMAs) – seven WMAs in the state of Mississippi and three WMAs in the state of Alabama. These WMAs promote long-term public access, use, conservation and management of natural resources, particularly wildlife, consistent with the Corps mission mandate for natural resources management.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Tennessee-Tombigbee Waterway (TTWW), AL & MS

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: The project extends from Demopolis, AL to the Tennessee River at the common boundary of Alabama, Mississippi and Tennessee. The project includes a 234-mile navigation channel varying from 9-12 feet X 300 feet, 10 locks and dams, and numerous recreation areas.

CONFERENCE AMOUNT FOR FY 2013: \$22,852,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$11,407,000 O: \$12,024,000 T: \$23,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$17,896,000 will be used for lock and dam maintenance and operation and maintenance dredging. This will improve navigation performance by increasing the availability of channel and reliability of the 10 locks and dams on this important moderate use inland system.

FRM: N/A

RC: \$4,565,000 will be used for rehabilitation, repair and maintenance of recreation facilities including campgrounds, day use parks, fishing decks and boat ramp facilities. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities.

H: N/A

EN: \$970,000 will be used for intensive wildlife management on 34,671 acres (\$522,000); recurring annual herbicide treatment of invasive aquatic species threatening to seriously degrade operational, recreational, and wildlife habitats on over 23000 acres (\$423,000); and routine maintenance of the US Snagboat Montgomery to include cleaning and painting (\$25,000).

WS: N/A

OTHER INFORMATION: The project employs approximately 100 - 112 full time Federal personnel and 12 - 17 part time personnel. The project also helps support numerous district office personnel and an O&M contract consisting of approximately 85 employees. Funding is also required to support the operation and maintenance of a 234-mile navigation channel, 7 Class A campgrounds, 3 visitor centers, 1 historical landmark, 40 boat ramps, 9 large public-use areas, 72,500 acres of project wildlife mitigation land, 2 office buildings and 10 locks and dams. Visitation to the project exceeds two million annually. By connecting the Tennessee River to the Tombigbee River, the Waterway provides a shortcut of as much as 650 miles for vessels traveling from inland waterways in Middle America to the Gulf of Mexico.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Walter F. George Lock and Dam, AL & GA

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, as amended

LOCATION AND DESCRIPTION: The project is located at mile 75.2 on the Chattahoochee River, 1.5 miles north of Ft. Gaines, Georgia, in Clay County, Georgia and Henry County, Alabama. The project includes a hydroelectric powerhouse, 28 recreation areas, a navigation lock and a 45,000-acre reservoir with 640 miles of shoreline.

CONFERENCE AMOUNT FOR FY 2013: \$8,042,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,739,000 O: \$4,823,000 T: \$8,562,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,167,000 will be used for the critical annual maintenance of the structure and equipment associated with the controlled releases of water, dam safety activities and other caretaker status activities.

FRM: N/A

RC: \$2,433,000 will be used for the annual operation and maintenance of several recreational areas.

H: \$4,679,000 will be used for routine preventative maintenance to accomplish the project mission by limiting forced outages and maximizing peak unit availability. This is essential to meeting performance goals, customer satisfaction, and public health and safety requirements.

EN: \$283,000 will be used for the implementation of the shoreline management program, the forest management program, the wildlife habitat program, and the aquatic weed control program. Funds will also be used for cultural resource activities and the initiation of the update of the master plan.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Florida

O&M Justification Sheet

PROJECT NAME: Canaveral Harbor, FL

AUTHORIZATION: River and Harbor Act 2 March 1945 (PL 79-14) authorized the construction of an entrance channel, jetties, a turning basin enclosed by a dike, and a barge canal with a lock connecting the turning basin with the Intracoastal Waterway Jacksonville to Miami. River and Harbor Act, (PL 87-874) 23 Oct. 1962, as described in Senate Document No. 140, 87th Congress 2nd Session; "Maintenance by means of a sand transfer plant and conventional dredging of authorized channel depths of 37 feet in the existing entrance channel, 36 feet in the existing inner channel, and 35 feet in the existing turning basin."

LOCATION AND DESCRIPTION: Canaveral Harbor is located in Brevard County on the recurring shore of Cape Canaveral in an area known as the Canaveral Bight. The two nearest deep-water ports are Jacksonville, 155 miles north, and Ft. Pierce 40 miles south. Project consists of maintenance of an entrance channel 41 feet deep and 400 feet wide; an inner channel 40 feet deep and 400 feet wide; a 1,200 foot diameter turning basin 39 feet deep; a channel 39 feet deep and 400 feet wide for an 1,800 foot length; enlargement of barge channel to 12 feet deep and 125 feet wide to the Intracoastal Waterway; a channel extension 31 feet deep by 300 feet wide by 1,500 feet long dredged west of the turning basin; a barge lock 90 feet wide and 600 feet long west of the harbor dike; and two entrance jetties to the 12-foot contour. Length of the project is about 11.5 miles. The entrance channel and part of the inner channel have been deepened to 44 feet for the Navy's Trident Project.

CONFERENCE AMOUNT FOR FY 2013: \$4,700,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,050,000 O: \$1,348,000 T: \$4,398,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,398,000 will be used to advertise and award a contract for maintenance dredging in FY 2014. The contract will require dredging of the most critically shoaled areas with particular emphasis on Cut 1, Cut 1-B, Cut 2, Middle Turning Basin and Inner Channel; will also fund the required condition surveys of the channel. This will allow the channel to remain open for both Civilian and Naval traffic. Additionally, the operation funds will allow for the annual expenses of continued operation of the Canaveral Lock to include minimum funding for labor, facilities and security.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 3,437,000 tons of cargo passes through Canaveral Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Central & Southern Florida (C&SF), FL

AUTHORIZATION: Flood Control Acts of 1948, 1954, 1958, 1960, 1962, 1965, 1968, Water Resources Development Act (WRDA) of 1992, 1996, and 2000

LOCATION AND DESCRIPTION: The project, covering an area of approximately 16,000 square miles, lies within the southeasterly 18 counties of Florida, but does include the upper St. Johns River Basin, located in the northeastern section of the project; the Kissimmee River Basin, in the central section; the Lake Okeechobee-Everglades in the central and southwestern section; East Coast-Everglades in the southeastern section. The project provides for flood relief and water conservation and provides principally for: an East Coast Protective Levee extending from Homestead area north to eastern shore of Lake Okeechobee near St. Lucie Canal; three conservation areas for water impoundment in Everglades area west of East Coast Protective Levee, with control structures to effect transfer of water as necessary; local protection works along lower east coast; encirclement of Lake Okeechobee agricultural area by levees and canals; enlargement of portions of Miami, North New River, Hillsboro, and West Palm Beach canals; enlargement of existing Lake Okeechobee levees and construction of new levees on the northeast and northwest shores of the lake; increased outlet capacity for improved control of Lake Okeechobee; floodway channels in the Kissimmee River Basin, with suitable control structures to prevent over drainage; an interrelated system of canals, levees, pumping stations and structures in southwest Dade County to control water levels; and facilities for regulation of floods in the upper St. Johns River Basin.

CONFERENCE AMOUNT FOR FY 2013: \$14,444,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,993,000 O: \$ 7,798,000 T: \$14,791,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,122,000 provides for minimal operations and maintenance to support navigation suitable for commercial and recreational craft, consisting of two locks and the 155 mile long channel along the Okeechobee.

FRM: \$12,673,000 will provide water control and protection from the recurrence of devastating floodwaters from the Everglades and local sources, for the highway-developed urban area along the lower east coast of Florida, and for the productive agricultural areas around Lake Okeechobee (including the towns around the lake) and south Dade County. The project includes a total of 89 miles of levees, 954 miles of canals, 30 pumping plants, 192 floodway control and diversion structures, 26 navigation locks, and 57 railroad relocations (bridges).

RC: \$682,000 will provide operation and maintenance of visitor and recreation facilities serving over two million visitors, at W.P. Franklin Lock and along the waterway as associated with the C&SF project. Assets include campgrounds, visitor center, picnic sites, boat ramps, utilities and provision of ranger staff, volunteers, water safety, contract support for repairs, maintenance and mowing in order to promote safe visitor activities associated with the project.

H: N/A

EN: \$314,000 will provide management of threatened and endangered species, flora and fauna as appropriate, land use management activities, Ranger staff, biologists, volunteers and contract support for the eradication and control of invasive species.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: South Atlantic

District: Jacksonville

Central & Southern Florida, FL

O&M Justification Sheet

PROJECT NAME: Escambia and Conecuh Rivers, FL

AUTHORIZATION: River and Harbor Acts of 14 June 1880, 2 March 1907 and 3 July 1958

LOCATION AND DESCRIPTION: The Escambia-Conecuh Rivers are names applied to a single stream, a portion of which is located in Alabama known as the Conecuh River and a portion in Florida known as the Escambia River. This project consists of Bay and River channels that are 100 x 10 feet. The project serves barge transportation needs of the Ascend Performance Materials LLC and Gulf Power companies, major industries in this region. It has steady commercial traffic and requires little maintenance, making it a very cost-effective project to maintain.

**CONFERENCE AMOUNT FOR FY 2013: \$1,600,000 2/
BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$34,000 T: \$34,000 1/**

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$34,000 will be used to perform environmental monitoring related to the construction of Mackey Island disposal area. This site was constructed near the mouth of the river and is a beneficial use disposal area that requires annual monitoring and reports to be submitted to Florida Department of Environmental Protection in compliance with the Water Quality Control. These funds would ensure disposal area capacity is available in the following year's dredging cycle.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Gulf Power Crist Plant is critical to the regional power grid. Both Gulf Power and Ascend Performance Materials contend that their facilities can not survive without this project. The local railway systems and highway systems could not handle the volume (approximately 3.5 million tons) of traffic that would be required to furnish the coal, limestone, and other raw materials required by these companies and currently supplied by barges. Between these two companies they employ almost 3,000 employees.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Intracoastal Waterway (IWW) - Jacksonville to Miami, FL

AUTHORIZATION: River & Harbor Act of 1927 and the River & Harbor Act of 1945

LOCATION AND DESCRIPTION: The entire IWW lies within the Jacksonville District boundary. The project starts at the St. Johns River in Duval County and then runs the entire length of the state where it ends in Miami Dade County.

The IWW project authorizes a channel 12 feet deep by 125 feet wide from Jacksonville, Florida south to Fort Pierce, Florida, and is 10 feet deep by 125 feet wide from Ft. Pierce, Florida south to Miami, Florida. The length of the project is approximately 349 miles running from the St. Johns River in northeast Florida southward along the east coast to Miami, Florida.

A Memorandum of Agreement with the Florida Inland Navigation District (FIND) (sponsor) to contribute funds for the Operation and Maintenance (O&M) of the IWW was executed on September 3, 1997. Since that date, FIND has provided over \$50,000,000 for the O&M of the waterway.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$250,000 T: \$250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$250,000 provides funding required to perform hydrographic surveys and real estate activities along the IWW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 14,000 tons of cargo pass through the IWW on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Jacksonville Harbor, FL

AUTHORIZATION: River and Harbors Act of 1965, Section 101(a)(17) of the WRDA of 1999, and Section 129 of the Energy and Water Development Appropriation Act of 2006, PL 109-103

LOCATION AND DESCRIPTION: The project provides a channel 40 feet deep from ocean to Mile 20, via Dames Point-Fulton Cutoff, thence 34 feet to Commodore Point, and thence 30 feet deep to the Florida East Coast Railway Bridge at Dames Point Fulton Channel; maintenance of the existing 42- and 40-foot depth entrance channel; widening of channel by 100 feet near Mile 5, by 200 feet near Mile 7 and Chaseville Turn; maintenance of jetties at channel entrance; construction and maintenance of training walls and revetments; a navigation and floodway channel 26 feet by 200 feet along south side of Commodore Point; and approach and mooring basin 20 feet deep, 1,300 feet long at 20-foot depth contour and 600 feet long at pier head line near Naval Reserve Armory in South Jacksonville, a depth of 24 feet between that depth contour and the pier head line from Hogan Creek to the foot of Laura Street; and a depth of 28 feet to within 60 feet long at pier head line between the foot of Laura Street and St. Elmo W. Acosta (formerly upper state) Bridge. Length of project is about 26.8 miles.

CONFERENCE AMOUNT FOR FY 2013: \$6,063,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$8,651,000 O: \$363,000 T: \$9,014,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$9,014,000 provides routine operations and maintenance for navigation at this strategic port. These funds provide for project condition surveys, maintenance of critical shoals which would improve navigation performance by increasing the availability and reliability of the federal channel, maintenance of training walls and dredge material disposal facilities, and ongoing Dredge Material Management Plans and Ocean Dredge Material Disposal Site (ODMDS) studies. Funds would also be used to modify the Water Quality Certificate for nearshore placement.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Without maintenance of the federal channel, harbor pilots have indicated restrictions would be implemented, reducing two-way traffic and tide restricted movements. Nearshore placement would allow material that may go to the ODMDS to be kept in the littoral system and supports Regional Sediment Management. Over 17,597,000 tons of cargo pass through Jacksonville Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Jim Woodruff Lock and Dam, FL, AL & GA

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, as amended

LOCATION AND DESCRIPTION: The Jim Woodruff L & D project is located at Mile 107.3 on the Apalachicola River at the confluence of the Chattahoochee and Flint Rivers (ACF), about 45 miles northwest of Tallahassee, Florida. The project includes a dam, powerhouse, navigation lock, fixed and gated spillways, 39 recreational areas and a 37,500-acre reservoir (Lake Seminole) with 532 miles of shoreline. The project received over 1.3 million visitors last year. Effective and efficient operation of the project is contingent on efficient operation of the ACF Rivers Project and Walter F. George Lock & Dam.

CONFERENCE AMOUNT FOR FY 2013: \$6,936,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,033,000 O: \$4,084,000 T: \$8,117,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,694,000 will be used for critical caretaker operation and maintenance of the lock and spillway.

FRM: N/A

RC: \$1,388,000 will be used for operation and maintenance of recreational facilities including campgrounds, day use areas, and boat ramps, replacement, upgrade and renovation of recreational facilities to comply with state health codes and Americans with Disabilities Act requirements.

H: \$4,640,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water. Routine preventive maintenance is critical for meeting performance goals and providing peaking power with limited forced outages.

EN: \$395,000 will be used for operation, management and protection of existing soil, water, vegetation, forest, fish & wildlife, cultural resources, coordination for federally listed threatened and endangered species and implementation of invasive species management. Hydrilla currently covers 16,000 acres of project waters, degrading habitats and impairing navigation and operation of the powerhouse and recreation structures.

WS: N/A

OTHER INFORMATION: Lake Seminole is routinely listed as one of the top ten fishing lakes in outdoor magazines.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Manatee Harbor, FL

AUTHORIZATION: P.L.99-662, WRDA 1986, Sec. 202; PL 101-640, WRDA 1990, Florida; PL 108-137, Energy & Water, (section 157)

LOCATION AND DESCRIPTION: The project is located on the Gulf coast of Florida, just south of Tampa. The project provides for federal maintenance of an existing 40-foot deep by 400-foot wide entrance channel and basin, construction of wideners at the northwest end of the entrance channel, and enlarging the turning basin to 900 feet in diameter. The entrance channel extends approximately 3 miles in length from the turning basin to its intersection with the Tampa Harbor Main channel.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,165,000 O: \$200,000 T: \$3,365,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,365,000 provides funding for maintenance dredging associated with the critical shoaling that is occurring within the entrance channel to the port facility. It also provides for the required condition surveys that will communicate the issues to the harbor pilots.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 3,197,000 tons of cargo pass through Manatee Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Miami Harbor, FL

AUTHORIZATION: River and Harbor Act of 1960; Section 1001(17) of the Water Resources Development Act of 2007 (P.L. 110-114)

LOCATION AND DESCRIPTION: The project is located in Miami-Dade County on the lower east coast of Florida. The authorized project includes Cut-1 and Cut-2 depth of 52 feet plus one foot allowable overdepth, including a widener at the outer portion of Cut-1 of 800 feet in width; Cut-3 depth of 50 feet plus one foot allowable overdepth, including a turn widener at the intersection of Cut-3 and the Fisher Island Turning Basin; Fisher Island Turning Basin depth of 50 feet plus one foot allowable overdepth; Fisherman's Channel depth of 50 feet plus one foot allowable overdepth, channel width of 440 feet; Lummus Island Turning Basin depth of 50 feet plus one foot allowable overdepth; Cut 4 (Main Channel) and Main Turning Basin depth of 36 feet plus one foot allowable overdepth; and Dodge Island Channel depth of 34 feet plus one foot allowable overdepth.

CONFERENCE AMOUNT FOR FY 2013: \$4,334,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,355,000 O: \$0 T: \$4,355,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,355,000 - Work includes removal of shoaled material above existing channel depth in Cuts 1 and 2, Fisherman's Channel and Lummus Island Turning Basin. This maintenance dredging must be removed in conjunction with the Deepening and Widening Phase III construction contract.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 7,156,000 tons of cargo pass Miami Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Okeechobee Waterway (OWW), FL

AUTHORIZATION: 1945 River and Harbor Act, 1960 River and Harbor Act

LOCATION AND DESCRIPTION: The project provides a 155-mile long channel across the state from Fort Myers to Stuart. Maintained depth ranges from 8 feet to 10 feet. The waterway runs through Lake Okeechobee and consists of the Caloosahatchee River on the west side of the lake and the St. Lucie Canal on the east side. Included in the project are navigation locks at Ortona, Moore Haven, and St. Lucie. Additional locks at W. P. Franklin and Port Mayaca authorized under the Central and Southern Florida Project are also located within the waterway. Each lock also provides recreational facilities for public use year round. The waterway serves navigation, as well as flood control, since release of excess water from Lake Okeechobee can be made into the St. Lucie Canal and the Caloosahatchee River.

CONFERENCE AMOUNT FOR FY 2013: \$3,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$104,000 O: \$2,363,000 T: \$2,467,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,375,000 will provide for annual operation of St. Lucie, Moore Haven and Ortona locks, including minimal labor, facilities security and contract support. The Okeechobee Waterway is a heavily used waterway primarily used for recreation and commercial navigation, including tug/barge combinations and commercial fishing vessels. The average annual National Economic Development (NED) impact to navigation and recreation of the Okeechobee Waterway is over \$22,000,000.

FRM: N/A

RC: \$711,000 will provide for minimal operation and maintenance of visitor and recreation facilities. With an annual visitation estimated at approximately 6 million and NED value of over \$55,000,000 annually, the OWW is a valuable resource to the south Florida area and the nation. The Corps manages 10 recreation areas along the OWW, encompassing 394 acres and offering 122 campsites, 5 boat ramps, 3 visitor centers, one swim beach, 112 miles of trails, 6 reservable picnic shelters, playgrounds, fishing piers, and other amenities. Lake Okeechobee has an excellent reputation for fishing and hosts more than 500 fishing tournaments each year. Visitation in FY08 totaled 6.2 million with \$384,000 in user fee revenues and \$392,000 in volunteer services provided.

H: N/A

EN: \$381,000 will be used to manage habitat, fire, wildlife, fisheries, aquatic plants, endangered and protected species, control encroachments, provide shoreline management, boundary line surveillance, and cultural resources protection on OWW Project lands and waters. Priority work includes management of special status species, invasive species control, and shoreline/encroachment management.

WS: N/A

OTHER INFORMATION: There are currently six special status species with Fish and Wildlife Service Recovery Plans inhabiting project lands and waters. These include manatee, Everglades's snail kite, Okeechobee gourd, Eastern Indigo snake, crested caracara, and the wood stork. The waters and lands of the OWW project are infested with invasive species. Target species for removal include Brazilian pepper, Australian pine, air potato, Melaleuca, water hyacinth, water lettuce, alligator weed, cogon grass, sailfin catfish, fire ant, wild boar, and giant apple snail. The OWW and Central & South Florida projects contain 402 miles of shoreline and 654 miles of boundary. There are currently approximately 400 active permits.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Palm Beach Harbor, FL

AUTHORIZATION: River and Harbor Act of 1960

LOCATION AND DESCRIPTION: The project is located in Palm Beach County on the lower east coast of Florida. Palm Beach Harbor provides an entrance channel 35 feet deep, 400 feet wide, and 0.8 miles long, merging with an inner channel 33 feet deep, 300 feet wide, and 0.3 miles long, then flaring into a turning basin with a 1,200 foot turning diameter, and jetties on the north and south sides of the inlet. Length of project is about 1.6 miles.

CONFERENCE AMOUNT FOR FY 2013: \$2,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,300,000 O: \$200,000 T: \$2,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,500,000 - Maintenance dredging contract will be scoped to comply with Fiscal Year 2014 budget amount. The contract will require dredging of the most critically shoaled area of the 1.6 mile waterway, with particular emphasis on the entrance channel. Also design efforts for the FY 2015 event will be performed during FY 2014.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: With the first winter storm, the project will lose three feet or more of channel depth, resulting in significant light loading of foreign and domestic shipments of fresh produce and goods. Federal channel also provides access for fuel oil to South Florida power plants. Over 1,863,000 tons of cargo navigate the Palm Beach Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Panama City Harbor, FL

AUTHORIZATION: River and Harbor Act of 30 June 1948 and previous acts. Rehabilitation of the jetties was authorized by the Chief of Engineers 6 March 1971.

LOCATION AND DESCRIPTION: Panama City Harbor is located on the northwest coast of Florida. The project consists of 4 channels; an approach channel 450 x 38 feet, an entrance channel 300 x 36 feet, the Watson Bayou Channel 100 x 10 feet and the Grand Lagoon Channel 100 x 8 feet.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,033,000 O: \$37,000 T: \$2,070,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,070,000 will be used for dredging the outer channel reaches and dredging surveys. This will improve navigation performance by increasing the availability of channel and reducing the need for light loading or delays awaiting tides to access this moderate use port.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 50% of the tonnage entering this port requires the full project depth. The tonnage through this port has expanded dramatically since the project depth was increased in 2004 and has held steady in spite of the down turn in the economy.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Port Everglades Harbor, FL

AUTHORIZATION: River and Harbor Act of 1960

LOCATION AND DESCRIPTION: The Project is located in Broward County on the lower east coast of Florida. The outer part of the entrance channel is 45 feet deep by 500 feet wide and is 5,100 feet long including a 1,000-foot transition section inside the two jetties. The inner part of the entrance channel is 42 feet deep by 450 feet wide for a length of 4,800 feet through the main turning basin. The main turning basin is 42 feet deep over a rectangular area 1,700 feet by 2,300 feet. The 31-foot deep north turning basin extends 1,100 feet to the north, tapering from 800 to 500 feet at the northern extreme. The south turning basin extends approximately 1,100 feet to the south by 1,260 feet wide, with authorized depths of 31, 36, and 37 feet. The 42-foot deep by 400-foot wide south port channel extends 9,356 feet south from the entrance channel. The turning notch is 42 feet deep by 750 feet by 1,000 feet, adjoining the south port channel from the west approximately 6,500 feet south of the entrance channel. Length of project is approximately 3.5 miles.

CONFERENCE AMOUNT FOR FY 2013: \$3,084,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$300,000 O: \$0 T: \$300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$300,000 – Closeout of 2013 O&M event will be required, including project condition surveys for the channel and the Ocean Dredged Material Disposal Site, United States Geological Survey/United States Navy/Sponsor coordination, and permit required monitoring.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 20,878,000 tons of cargo navigate Port Everglades Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Removal of Aquatic Growth, FL

AUTHORIZATION: River and Harbor Act of 1899, as amended

LOCATION AND DESCRIPTION: This project provides annual mission essential prevention, control and removal of nuisance aquatic vegetation impacting, obstructing or threatening navigation in the Federal navigation channels of the St. Johns, Kissimmee, Withlatchoochee, Ocklawaha and Crystal Rivers in addition to the Okeechobee Waterway projects. This includes approximately 600 miles of channel with 650,000 surface acres. Operational priority is given to controlling floating nuisance vegetation in order to keep the principal navigable waterways and locks open for navigation. Additionally, this vegetation displaces native species, changing community structure and altering ecological functions potentially impacting threatened and endangered species including the Everglades Snail Kite, Okeechobee gourd and the wood stork. These invasive species also interfere with operations and maintenance to levees and canals and compromise the integrity of the navigation and flood control structures.

CONFERENCE AMOUNT FOR FY 2013: \$3,250,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,500,000 O: \$0 T: \$3,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,500,000 - The projects consist of maintenance control operations to control vegetation in the St. Johns, Kissimmee, Withlatchoochee, Crystal and Ocklawaha Rivers in addition to the Okeechobee Waterway and Lake Okeechobee. Maintenance control is defined as keeping target vegetation at the lowest feasible levels to protect navigation interests. Anticipate controlling approximately 15,000 – 17,000 acres of vegetation in FY 2014. In addition, the USACE will conduct educational outreach activities for our customers, conduct pre- and post-treatment surveys to ensure safety of our staff and the public and conduct an environmentally compatible program.

The primary purpose of these operations is to control floating nuisance vegetation in order to keep the principal navigable waterways and locks open for navigation in the listed Federal Navigation projects.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Coordination between the Corps and other Federal, state, and local agencies is conducted on a continual basis. The Florida Wildlife and Conservation Commission is the principal state agency involved in project coordination.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Scheduling of Reservoir Operations, FL

AUTHORIZATION: River and Harbor Act of 1960

LOCATION AND DESCRIPTION: The project provides required water management oversight and monitoring of water control plans located in Central & Southern Florida to achieve maximum benefits.

CONFERENCE AMOUNT FOR 2013: \$22,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$35,000 T: \$35,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$35,000 Funding is utilized to support labor needed to coordinate with Sponsor on water related management activities to achieve maximum benefits on monitoring of water control plans.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: South Florida Ecosystem Restoration (SFER), Florida

AUTHORIZATION: The SFER Operations & Maintenance (O&M) program is comprised of the Central & Southern Florida (C&SF) project, the US DOI Modified Water Deliveries to Everglades National Park, Florida (MWD) project and the Everglades & South Florida (E&SF) Seminole Big Cypress project.

-C&SF (includes the Comprehensive Everglades Restoration Plan – CERP) Authorization for O&M was contained in WRDA 2000 (Public Law 106-543), Section 601 (e) (4).

-MWD was authorized under Public Law (P.L.) 101-229 of the 1989 Everglades National Park Protection and Expansion Act. P.L. 108-7 was passed in 2003. P.L. 111-8 was passed in March 2009.

-E&SF: Seminole Big Cypress Reservation Water Conservation Plan (part of the Critical Projects, Florida) Authorization for O&M was contained in WRDA 2000 (Public Law 106-543), Section 601 (e) (4).

LOCATION AND DESCRIPTION: The South Florida Ecosystem Restoration Program stretches from the southern Orlando area southward across the Everglades, the Florida Keys, the contiguous and near-shore waters of South Florida, and across South Florida from east to west including portions of the drainage areas of the Indian River Lagoon and the Caloosahatchee River, as well as population centers along the southeast and southwest coasts. The project area is defined by the political boundaries of the Southwest Florida Water Management District, and includes all of the Everglades. It encompasses an area of approximately 18,000 square miles, which includes all or part of 18 counties in the southeast part of the State of Florida.

CONFERENCE AMOUNT FOR FY 2013: \$7,783,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$5,258,000 O: \$3,795,000 T: \$ 9,053,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: \$9,053,000 will provide annual water management operation of project features, critical management/maintenance of hydrological and meteorological operations, streamgaging oversight of the entire program for use in annual water management operations; O&M for Seminole Big Cypress; MWD; CERP: Melaleuca Eradication; CERP: Picayune Strand Restoration Merritt Pump Station; Manatee Pass Gates and the C&SF: C-111 South Dade County projects.

WS: N/A

OTHER INFORMATION: The budget requested for FY 2014 is \$1,270,000 more than the President's budget for FY 2013 due increased costs for reimbursement on the C&SF: C-111 South Dade project associated with the S-332 pump stations and the completion of the E&SF: Seminole Big Cypress Basin 4 feature, and the C&SF: CERP: Picayune Strand Restoration Merritt Pump Station.

1/ Estimated Unobligated "Carry-In" Funding: As of date this justification was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: South Atlantic

District: Jacksonville

Project Name: SFER, FL

O&M Justification Sheet

PROJECT NAME: Tampa Harbor, FL

AUTHORIZATION: HR 91-401 91 2; (Pages 10 & 11 of 88 Page Report); Energy and Water Act November 7, 2003, Report No. 108-357

LOCATION AND DESCRIPTION: The total project consists of a channel from the Gulf of Mexico to Port Tampa and Tampa. Project features include the entrance channel from the Gulf of Mexico to Hillsborough Bay. At Hillsborough Bay, the channel splits into two legs, with one continuing west to Port Tampa and the other east to Gadsden Point. The west channel continues to Port Tampa and ends in a turning basin. The west channel to Gadsden Point includes the Alafia River, Port Sutton, East Bay, and Seddon Channels. The project depth varies from 45 feet in the entrance channel at the Egmont Bar Channel to 30 feet in the Alafia River. Length of project is about 67 miles including 3.6 miles in the Alafia River. The Port of Tampa has more cargo tonnage than all other Florida ports combined.

CONFERENCE AMOUNT FOR FY 2013: \$8,150,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$9,750,000 O: \$650,000 T: \$10,400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$10,400,000 - The contract will require dredging of the most critically shoaled areas with particular emphasis on the Entrance Channel including Egmont Cut 1 & 2 and Mullet Key Cut. These funds would improve navigation performance by increasing the availability and reliability of the channel through maintenance dredging.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 32,390,000 tons of cargo enter Tampa Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Georgia

O&M Justification Sheet

PROJECT NAME: Allatoona Lake, GA

AUTHORIZATION: Flood Control Acts of 18 August 1941 and 22 December 1944. Recreation facilities were authorized by Section 4 of the Flood Control Act of 22 December 1944.

LOCATION AND DESCRIPTION: This 37,000 acre multi-purpose flood risk management project is located on the Etowah River, a segment of the Alabama-Coosa-Tallapoosa (ACT) Rivers System, 48 miles above Rome, Georgia. The project includes a dam, hydroelectric powerhouse, gated spillway, a reservoir, 23 Corps of Engineers recreation areas and 54 non-federal recreation areas. The lake supports over 6 million visitors per year with over 90 million visitor-hours of recreation annually and is an important source of storage for the Atlanta Metropolitan Area's water supply.

CONFERENCE AMOUNT FOR FY 2013: \$7,301,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,931,000 O: \$5,234,000 T: \$8,165,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$524,000 will be used for activities related to the controlled release and storage of water, including the collection of water management data and dam safety activities.

RC: \$3,205,000 will be used for the annual operation and maintenance of several recreational areas and rehabilitation or upgrade of various recreational facilities.

H: \$3,616,000 will be used for the annual maintenance of the structure and equipment associated with the controlled release and storage of water and includes funds for annual maintenance and repair of project security system. Funds will also be used for the collection of water management data and dam safety activities.

EN: \$820,000 will be used for natural resources management, shoreline management, water quality monitoring, and NEPA compliance surveys.

WS: N/A

OTHER INFORMATION: This project is located within the ACT Rivers System and 33 miles north of Atlanta, GA. This is one of Corps of Engineer's most highly visited recreational projects and provides hydropower marketed by the Southwestern Power Administration.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Apalachicola, Chattahoochee and Flint Rivers (ACF), GA, AL & FL

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, modified by WRDA 1986

LOCATION AND DESCRIPTION: The project is located in southeast Alabama, southwest Georgia and northwest Florida. The project includes a 9 X 100 foot navigation channel in the Apalachicola River in Florida, a 3 X 100 foot channel in the Flint River in Georgia to the City of Bainbridge, and a 9 X 100 foot navigation channel on the Chattahoochee River in Alabama and Georgia to Columbus, Georgia. The project includes George W. Andrews Lock on the Chattahoochee River in Early County, Georgia.

CONFERENCE AMOUNT FOR FY 2013: \$2,085,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$65,000 O: \$1,259,000 T: \$1,324,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$400,000 will be used for caretaker operation of water management structures including the operation of the spillway gates.

FRM: \$136,000 will be used for the mandated revision of the ACF Water Control Manuals.

RC: \$123,000 will be used for caretaker operation of the recreational facilities to accommodate visitation.

H: \$489,000 will be used for the mandated revision of the ACF Water Control Manuals.

EN: \$176,000 will be used for the ranger staff, management of forestry and wildlife activities, property line surveys, and other cultural and natural resources activities.

WS: N/A

OTHER INFORMATION: This project has been designated as a low-use navigation waterway. There are several threatened and endangered species in the lower part of the system.

There is a legal mandate to update the ACF water control manual which is funded under this project.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Atlantic Intracoastal Waterway, GA

AUTHORIZATION: Multiple Rivers and Harbors Acts, Beginning 1880, latest P.L. 14 dated March 2, 1945

LOCATION AND DESCRIPTION: The Savannah District's portion of the Atlantic Intracoastal Waterway (AIWW) consists of 161 miles of shallow draft channel from Port Royal Sound, SC to Cumberland Sound, FL. The authorized depth of the project is -12 feet below mean low water (MLW). The purpose of the project is to provide safe and economical movement of goods between major deep draft ports that cannot be moved via highway or rail. The current controlling depth of the project is -2 feet below MLW. The project was last dredged in FY 2009.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$164,000 T: \$164,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$164,000 will be used to perform condition surveys and other critical caretaker activities.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Lack of adequate confined upland disposal area capacity has limited dredging to only certain reaches. Current traffic relies on accurate surveys and the tides in order to utilize the AIWW. Changes to the Georgia Coastal Zone Management (CZM) plan may require changes to dredge material placement when dredged material is more than 88% sand. The District is updating the project's Environmental Impact Statement and Dredged Material Management Plan to be prepared when maintenance funds become available.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$80,000. This amount will be used to perform work on the FY2014 project as follows: to complete the planning reviews of the Dredged Material Management Plan and Environmental Impact Statement, and to process and route the Record of Decision.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Brunswick Harbor, GA

AUTHORIZATION: PL 108-07 WRDA 99

LOCATION AND DESCRIPTION: Brunswick Harbor is a deep-water port with project dimensions of 38 feet deep by 500 feet wide in the bar channel and 36 feet deep by 400 feet wide in the inner channels through St. Simon's Sound, Brunswick River and East River. The inner harbor is maintained through use of Andrews Island, the sole upland disposal area. The inner harbor has two turning basins, one in East River and the other in Turtle River. Terry Creek is an inactive dredged material containment area near Brunswick, Georgia contaminated by toxaphene, on which the Environmental Protection Agency (EPA), Hercules, Inc., and Savannah District are working to resolve concerns over possible environmental impacts. Monthly controlling depth surveys are performed along the entire length of the harbor to monitor harbor sedimentation.

CONFERENCE AMOUNT FOR FY 2013: \$3,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 5,121,000 O: \$ 190,000 T: \$5,311,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,311,000 provides for minimal operation and maintenance for dredging, environmental monitoring, water quality monitoring, condition surveys, dredge management containment areas and real estate activities. This results in maintenance dredging of only the most critical shoals in the shipping channel, yielding a 500 feet wide and 34 feet deep entrance channel and a 400 feet wide and 32 feet deep inner channel. The channel now only allows for one-way passage of ships, and requires vessels to light load.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Environmental constraints limit USACE's ability to fully maintain the harbor because of reduced time windows and higher dredging costs. Ocean-going hopper dredge operations are restricted to 15 December to 31 March by the presence of threatened and endangered sea turtles. In addition, the dredges' sailing speed is restricted when right whales are spotted within ten miles of the project. Monthly controlling depth surveys are conducted to provide timely and useful information to mariners concerning shoaling. Primary commodities transported through Brunswick Harbor are coal, petroleum and its products, chemicals and related products, crude materials, manufactured goods and equipment, and farm products, totaling about 2,500,000 tons annually. Brunswick Harbor is the 3rd largest roll on-roll off auto handling port in the nation. The port generates \$44,460,000 in port business with \$217,000,000 annually in duty taxes and supports 98,000 jobs.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: South Atlantic

District: Savannah

Brunswick Harbor, GA

O&M Justification Sheet

PROJECT NAME: Buford Dam and Lake Sidney Lanier, GA

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, as amended

LOCATION AND DESCRIPTION: The project is located approximately 40 miles north of Atlanta, GA on the Chattahoochee River in Gwinnett, Hall, Dawson, Lumpkin and Forsyth Counties. The project includes a hydroelectric powerhouse, a 39,000 acre flood risk management reservoir with 692 miles of shoreline, and 83 recreation facilities. The project is a three-time winner of the Corps "Project of the Year Award" and leads the nation in user fees. Local Chamber of Commerce data shows Lake Lanier has a \$5.5 billion annual economic impact. Last year the project totaled over 7.1 million in visitation.

CONFERENCE AMOUNT FOR FY 2013: \$8,611,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,984,000 O: \$5,987,000 T: \$8,971,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$59,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water.

FRM: \$593,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water and dam safety activities. Approximately \$2,000,000,000 plus worth of property is located in the floodplain between Buford and Peachtree Creek. The project is essential to the protection of property in the metropolitan Atlanta area.

RC: \$3,390,000 will be used for operation and maintenance of recreational facilities including campgrounds, day use areas, and boat ramps. This project is one of the most visited Corps of Engineers projects in the United States. Numerous local businesses and jobs depend on the recreational visitation to the lake for their livelihood.

H: \$3,797,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water. Routine preventive maintenance is critical for meeting performance goals and providing peaking power with limited forced outages. The capability and reliability is essential in maintaining frequency on the power grid.

EN: \$1,132,000 will be used for stewardship of fee owned acreage, natural resources management, water quality protection, and protection of federally listed threatened and endangered species. The Shoreline Management Program is one of the largest in the country with over 10,000 permits issued. Effective management of this program is essential in maintaining a balance between adjacent land owners, public use, and the natural riparian ecosystems around the lake.

WS: N/A

OTHER INFORMATION: This is one of the most highly visited Corps of Engineers projects in the United States, is currently the main source of drinking water for the Atlanta Metropolitan area and provides peak power marketed by the Southeastern Power Administration. This project has high visibility among the public and local, state and federal agencies.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: South Atlantic

District: Mobile

Buford Dam and Lake Sidney Lanier, GA

O&M Justification Sheet

PROJECT NAME: Carters Dam and Lake, GA

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, as amended

LOCATION AND DESCRIPTION: This 8,577 acre project is located on the Coosawattee River, a portion of the Alabama-Coosa-Tallapoosa (ACT) River System, 26.8 miles above the mouth of the river, near Chatsworth, Georgia. The project includes a dam, hydroelectric powerhouse (master plant that also controls Allatoona and Buford), a flood risk management reservoir and 10 recreational areas.

CONFERENCE AMOUNT FOR FY 2013: \$7,999,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,621,000 O: \$3,507,000 T: \$8,128,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$658,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water and for dam safety activities.

RC: \$1,375,000 will be used for operation and maintenance of recreational facilities including campgrounds, day use areas, swim beaches, boat launching ramps, and fishing areas.

H: \$5,907,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water. Routine preventive maintenance is critical for meeting performance goals and providing peak power with limited forced outages.

EN: \$188,000 will be used for stewardship of project natural resources, updating master plan, management of wildlife habitat, monitoring and managing forest resources, and monitoring and resolving encroachments.

WS: N/A

OTHER INFORMATION: The Carters project includes a main dam and a reregulation dam. Two of the four generators can be reversed and utilized as pumps. These two units are used to pump water back to the main reservoir during non peak generation hours for reuse during peaking hours.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hartwell Lake, GA and SC

AUTHORIZATION: Flood Control Act 1950 and 1958; Water Resources Development Act 1976

LOCATION AND DESCRIPTION: The Project is located midway between Atlanta, GA and Charlotte, NC. The dam is a concrete gravity type, 1900 feet long and 204 feet high with a 568-foot controlled spillway. The Project provides 2,800,000 acre feet of storage with 1,400,000 allocated to hydropower, 293,000 to flood control and 1,100,000 acre feet to inactive storage. The project also boasts 962 miles of shoreline, 56,000 acres of water, and 23,500 acres of land.

CONFERENCE AMOUNT FOR FY 2013: \$9,903,000 2/

BUDGETED AMOUNT FOR FY: M: \$2,907,000 O: \$7,821,000 T: \$10,728,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$18,000 provides routine operation and maintenance for joint costs, including water management, and USGS gaging, under the navigation business line.

FRM: \$492,000 provides routine O&M of the project flood risk management infrastructure; annual O&M of the Clemson Pumping Station, earthen and concrete dam, spillway and auxiliary equipment; and all Dam Safety instrumentation, engineering analysis and dam failure emergency planning.

RC: \$4,078,000 provides for minimal operation and maintenance of recreation areas with reduced levels of service, reduced recreation seasons and partial closures. Includes funding for O&M Ranger staff, administration, water safety, district recreation and real estate support. Recreation funding provides for contracts enabling operations, maintenance and law enforcement of 50 campgrounds, day use parks and access areas.

H: \$5,067,000 provides routine O&M of hydropower function, including funding for O&M powerplant staff, administration, field engineering, replacement parts and funding needed to comply with North American Electric Reliability Corporation's (NERC) reliability standards. O&M activities are critical to limiting forced outages to 2%, maximizing peak unit availability, and providing reliable energy to the Southeastern Power Administration's federal power customers.

EN: \$1,031,000 provides administration of the Corps' largest shoreline management program including 11,000 dock permits (these permits comprise over 25% of the permits in the nation), minimal O&M of the environmental stewardship aspects of the project to keep it healthy and sustainable, environmental compliance, and fishery and wildlife management.

WS: \$42,000 Manage three existing water supply agreements, including billing users; process requests for allocation increases in two of these existing contracts; negotiate two new water supply contracts to also include permitting of new intake/outfall lines.

OTHER INFORMATION: Hartwell is one of the most visited projects in the nation. The project served 9,353,000 visitors in FY 2012, resulting in \$273,295,000 in visitor spending within 30 miles of the project and \$946,000 in revenues returned to the treasury. The Hartwell Power Plant produced 291,000 MWH in FY 2012, with \$21,694,000 returned to the treasury. Total cumulative flood damages prevented is \$70,074,000.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: J. Strom Thurmond (JST) Dam and Lake, GA and SC

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The dam is located 22 miles north of Augusta, GA and consists of a 2,282-foot long, 200-foot high concrete section and a controlled spillway 1,096 feet long. It provides a total storage of 2,900,000 acre-feet, of which 390,000 acre-feet are for flow regulation to benefit navigation below Augusta and for hydropower. The multi-purpose project's 80,000 acres of land, 70,000 acres of water, and 1,200 miles of shoreline inhabit seven counties in Georgia and South Carolina. Thurmond is the largest Corps project constructed east of the Mississippi and is one of the ten most visited projects in the nation.

CONFERENCE AMOUNT FOR FY 2013: \$9,546,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,881,000 O: \$7,058,000 T: \$ 9,939,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$34,000 provides routine operation and maintenance for joint costs, including water management, and U.S. Geological Survey (USGS) gaging, under the navigation business line.

FRM: \$362,000 provides for instrumentation for Engineering Analysis (seismic, non-seismic, and structural), an Emergency Action Plan update and Dam Safety Assurance Studies, including updating inundation maps (\$331,000); and routine operation and maintenance for joint costs under the flood risk management business line (\$31,000). Average annual benefits are \$2,082,000 in flood damages prevented.

RC: \$3,295,000 provides minimal routine service levels and short seasons to 34 recreational areas, with potential for 2 major areas to be closed or out granted, Ranger staffing, administration, a small water safety campaign, and contracts for O&M services in Corps operated areas.

H: \$4,959,000 provides minimal routine O&M of the hydropower plant, staffing, field engineering, some replacement parts, and compliance with the North American Electric Reliability Corporation's reliability standards. O&M activities are critical to limiting forced outages to 2%, maximizing peak unit availability, and providing reliable energy to Southeastern Power Administration's power customers.

EN: \$1,246,000 will be used to manage 150,000 acres of natural resources in accordance with the National Environmental Policy Act and Engineering Regulations 1130-2-540 and 405-1-12, resolve 5 encroachments on Corps-owned property, conduct cultural resource clearances, monitor Best Management Practices and evaluate areas of possible erosion, manage 40% of the shoreline management program including 2803 shoreline permits along 1200 miles of shoreline, perform environmental inspections and endangered species clearances in outgrant areas, treat 70 acres of invasive aquatic vegetation, process outgrant requests, and maintain the project boundary line.

WS: \$43,000 provides for management of seven existing water supply agreements.

OTHER INFORMATION: Thurmond Power Plant has seven 52,000kw units (364,000kw installed capacity) and has one of the highest unit availability rates in the Corps. The project served 5,042,000 visitors in FY 2012, resulting in \$134,714,000 in visitor spending within 30 miles of the project and \$875,000 in revenues. The J. Strom Thurmond Power Plant produced 328,000 mega watt hours in FY 2012, returning \$10,530,000 in revenues to the General Treasury through the Southeastern Power Administration. J. Strom Thurmond prevented an estimated \$116,577,000 in cumulative flood damages.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: South Atlantic

District: Savannah

JST Dam and Lake, GA and SC

O&M Justification Sheet

PROJECT NAME: Richard B. Russell (RBR) Dam and Lake, GA & SC

AUTHORIZATION: Flood Control Act of 1950 and 1958; WRDA 1976

LOCATION AND DESCRIPTION: The dam is located on the Savannah River, near Calhoun Falls, SC, and is 59 miles north of Augusta, GA. The dam has a concrete section 1,884 feet long with a maximum height of 210 feet and a controlled spillway 590 feet long. It provides approximately 1,166,200 acre-feet of storage, of which 126,800 acre-feet are allocated for hydropower, 140,000 for flood control, and 899,400 for inactive storage. There are 542 miles of shoreline, 26,650 acres of water, and 26,500 acres of public land. The Richard B. Russell multi-purpose project is one of only two major hydropower projects in the Corps of Engineers with pump-back capability.

CONFERENCE AMOUNT FOR FY 2013: \$8,488,000 /2

BUDGETED AMOUNT FOR FY 2014: M: \$ 4,143,000 O: \$4,564,000 T: \$8,707,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$333,000 provides for ongoing maintenance and repair of 10 flood control gates, instrumentation for Engineering Analysis (seismic, non-seismic, and structural), a bi-annual exercise on Dam Failure Emergency Planning, an after Action Report and an Emergency Action Plan update.

RC: \$379,000 provides minimal O&M for partnership activities, water safety and coordination of recreation services with cost-share sponsors.

H: \$7,068,000 provides for minimal critical routine O&M of the hydropower plant, including funding for O&M staff, field engineering, and compliance with North American Electric Reliability Corporation's reliability standards. Funding also provides liquid oxygen supplies for the Russell and Thurmond dissolved oxygenation systems sufficient for average water flow years, and provides materials, supplies and O&M activities that are critical to limiting forced outages to 2%, maximizing peak unit availability, and providing reliable energy to the Southeastern Power Administration's federal power customers.

EN: \$885,000 will provide for 49,236 acres of mitigation authorized by WRDA 1986. \$324,000 is for mitigation collar lands around Russell; \$336,000 will provide mitigation payment to Georgia Department of Natural Resources (GADNR); \$83,000 supports mitigation payment to South Carolina Department of Natural Resources (SCDNR); and \$142,000 supports trout mitigation payment to SCDNR.

WS: \$42,000 will be utilized to manage ten existing water supply agreements and to bill users.

OTHER INFORMATION: The Thurmond Project Oxygen System was constructed and officially turned over for full operation in FY 2012 as an environmental feature of Russell Pump-Back operations, and annual oxygen supplies are a direct increase to annual operating costs. The Richard B. Russell Power Plant produced 639,000 mega watt hours (MWH) in FY 2012, also pumping 487,000 MWH, returning \$54,812,000 to the treasury. The project served 908,000 visitors in FY 2012, resulting in \$28,832,000 in visitor spending within 30 miles of the project. Richard B. Russell prevented an estimated \$23,917,000 in cumulative flood damages.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Savannah Harbor, GA

AUTHORIZATION: Water Resource Development Act (WRDA) 92, Sec.101 (10), Oct 31, 1992

LOCATION AND DESCRIPTION: The deep draft navigation project is the border between Georgia and South Carolina and consists of a bar channel 11.5 miles long, 44 feet deep and 600 feet wide, an inner harbor channel 21 miles long, 42 feet deep and 500 feet wide. The inner harbor has six turning basins and an inactivated tide gate structure adjacent to a sediment basin. Kings Island Turning Basin is the primary turning basin adjacent to the Georgia Port Authority docks. There are eight active, upland dredged material disposal facilities, and one off-shore dredged material disposal facility used for harbor maintenance.

CONFERENCE AMOUNT FOR FY 2013: \$22,039,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$22,615,000 O: \$1,450,000 T: \$24,065,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$24,065,000 provides for essential operational activities to support maintenance dredging of the bar channel, inner harbor channel and all turning basins to authorized project depths and widths. Work includes hydrographic surveys, O&M of dredged material disposal, environmental monitoring and real estate activities. These funded activities will result in a safe and reliable channel for shipping/port interests, meet navigation performance measures and associated environmental requirements.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The port is the 4th largest container port in the U.S. and the fastest growing container port in the Nation. Chatham County industries did \$1,740,000,000 in port business in 2011 and 37,319 jobs in Chatham County are tied to port activities. Savannah Harbor is the rapid deployment Port of Embarkation for the 3rd Infantry Division and other elements of the 18th Airborne Corps. Ocean-going hopper dredge operations are restricted to December through March due to threatened and endangered sea turtles with sailing speed restricted when right whales are spotted within ten miles of the project.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the President's budget amount for FY2013.

O&M Justification Sheet

PROJECT NAME: Savannah River below Augusta, GA

AUTHORIZATION: Public Law 70-101

LOCATION AND DESCRIPTION: The project begins upriver of Savannah Harbor (mile 21.31) and continues to river mile 202.6 at Augusta, GA. The New Savannah Bluff Lock and Dam is located 187 river miles above Savannah Harbor, Georgia and is approximately 13 miles downstream of Augusta, Georgia. The structure's original purpose was to provide for passage of commercial navigation on the Savannah River below Augusta Navigation Project. Commercial navigation through the lock ceased in the early 1980s and the lock is only used intermittently by recreational vessels. Since 1987, the City of Augusta, Georgia has operated the lock under a lease agreement with the Corps of Engineers.

CONFERENCE AMOUNT FOR FY 2013: \$90,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$ 202,000 T: \$ 202,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$55,000 will be used to operate the gates on the spillway portion of the Lock and Dam, which are remotely operated from the J. Strom Thurmond Dam, and to conduct a condition survey of the river.

FRM: \$147,000 will be used for instrumentation for Engineering Analysis (seismic, non-seismic and structural), to perform required condition surveys of the lock and dam structure and to perform required water management activities.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The New Savannah Bluff Lock and Dam provides a pool upstream in the Augusta, GA and North Augusta, SC areas for drinking water and industrial uses. The City of Augusta operates the recreation facilities and the navigation lock for recreational traffic and support of annual fish migration. The lock now typically accommodates 25 recreational lockages per year.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: West Point Dam and Lake, GA & AL

AUTHORIZATION: Flood Control Act of 23 October 1963

LOCATION AND DESCRIPTION: The project is located approximately 70 miles southwest of Atlanta, Georgia on the Chattahoochee River in Troup and Heard Counties, Georgia, and Chambers County, Alabama. The project includes a hydroelectric powerhouse, a 26,000-acre flood damage reduction reservoir with over 500 miles of shoreline and 37 recreation facilities.

CONFERENCE AMOUNT FOR FY 2013: \$7,613,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,975,000 O: \$4,543,000 T: \$7,518,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$30,000 will be used for the operation and maintenance of structures and equipment associated with the controlled release and storage of water.

FRM: \$373,000 will be used for the operation and maintenance of structures and equipment associated with the controlled release and storage of water and dam safety activities.

RC: \$3,077,000 will be used for the operation and maintenance of recreational facilities including campgrounds, day use areas, and boat ramps.

H: \$3,295,000 will be used for the operation and maintenance of structures and equipment associated with the controlled release and storage of water. Routine preventive maintenance is critical for meeting performance goals and providing peak power with limited forced outages.

EN: \$743,000 will be used for environmental stewardship of fee owned acreage, natural resources management, protection of wildlife, and cultural resources activities.

WS: N/A

OTHER INFORMATION: This project is part of the Apalachicola-Chattahoochee-Flint (ACF) river system and has received praise from the public for the recreational opportunities provided at the project and flood risk reduction realized during the heavy rains and floods of 2009.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi

O&M Justification Sheet

PROJECT NAME: East Fork, Tombigbee River, MS

AUTHORIZATION: Flood Control Acts of 22 June 1936, 28 June 1938 and 18 August 1941

LOCATION AND DESCRIPTION: This 53 mile long flood risk management project is located on the Tombigbee River and its tributaries between the junction of Browns and Mackey's Creeks in Itawamba County, Mississippi to the Monroe County line. This project provides for maintenance of the channel to ensure flood risk management benefits for Itawamba County, conveys water to meet requirements of the US Fish and Wildlife Service for protection of endangered mussels, and ensures the ability to provide water supply for the City of Tupelo, averaging 10 million gallons per day.

CONFERENCE AMOUNT FOR FY 2013: \$258,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$215,000 O: \$40,000 T: \$255,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$255,000 will be used to maintain the East Fork flood risk management project.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project includes overhead clearing and general debris removal from the East Fork of the Tombigbee River and Mackey's Creek in Itawamba County, Mississippi. The clearing and debris removal efforts result in benefits related to flood prevention, municipal water supply and environmental stewardship.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Gulfport Harbor, MS

AUTHORIZATION: The existing project was authorized by the River and Harbor Act of 1930 and modified by the River and Harbor Acts of 1948 and 1958, Supplemental Appropriations Act 1985 and Section 202 of WRDA 1986.

LOCATION AND DESCRIPTION: The navigation project is located in Gulfport, Mississippi, approximately equidistant between New Orleans, Louisiana and Mobile, Alabama. The project consists of a 38 x 300 feet Bar Channel from the Gulf of Mexico across Ship Island Bar into Mississippi Sound, a 36 x 220 feet Sound Channel leading to the Anchorage Basin proper, and an 8 x 100 feet Branch Channel leading to an adjacent small craft harbor. The project supports major import/exports of poultry products, fruit, wood products, metals and minerals for manufacturing processes.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,082,000 O: \$0 T\$3,082,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,082,000 will be used for partial maintenance dredging.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project was widened to full authorized dimensions in FY-10. The port has a major expansion in the planning phases.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Okatibbee Lake, MS

AUTHORIZATION: Flood Control Act of 23 October 1962 (H. Doc 549)

LOCATION AND DESCRIPTION: Okatibbee Lake is located seven miles northwest of Meridian, Mississippi, at mile 37.7 on the Okatibbee Creek. The project includes a dam, a flood risk management reservoir and several recreation areas.

CONFERENCE AMOUNT FOR FY 2013: \$1,568,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$425,000 O: \$1,225,000 T: \$1,650,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$881,000 will be used for operation of Okatibbee dam, reservoir, buildings, grounds, utilities, roads, bridges and other facilities and equipment.

RC: \$684,000 will be used for operation and maintenance of recreational facilities including campgrounds, day use areas, and fishing areas. Funds will also be used for renovations at some facilities.

H: N/A

EN: \$85,000 will be used for wildlife and forestry maintenance.

WS: N/A

OTHER INFORMATION: Okatibbee Lake Project provides flood damage reduction for areas in Lauderdale/Clark Counties to include the Cities of Meridian and Enterprise, Mississippi.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Pascagoula Harbor, MS

AUTHORIZATION: River and Harbor Act 1913, 1915, 1952, 1954, 1958, 1960, 1962 and the Water Resources Development Act of 1986

LOCATION AND DESCRIPTION: The Pascagoula Harbor navigation project is located in Jackson County, MS. The project provides for a 44 x 600 foot channel from the Gulf of Mexico across Ship Island Bar and into Mississippi Sound, a 42 x 350 foot channel in the Sound transitioning to 2 main channels, a 42 x 350 foot channel leading to Bayou Casotte and a 38 x 350 foot channel leading to the Pascagoula River.

CONFERENCE AMOUNT FOR FY 2013: \$8,785,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$7,194,000 O: \$100,000 T: \$7,294,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,294,000 will be used for maintenance dredging, surveys, and water quality and endangered species coordination. These funds are necessary to maintain and reestablish project depths that have decreased due to shoaling. This will improve navigation performance by increasing the availability of channel to project depth, thereby eliminating the need for light loading or delays awaiting tides to access a high use port.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports a major Gulf refinery (Chevron) and a liquefied natural gas (LNG) plant and numerous major shipbuilding industries. Project costs have escalated in recent years due to increased dredging costs.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

North Carolina

O&M Justification Sheet

PROJECT NAME: Atlantic Intracoastal Waterway, NC

AUTHORIZATION: River and Harbor Acts of 1912, 1927, and 1937, as amended

LOCATION AND DESCRIPTION: The project is located on the east coast of North Carolina and runs from the Commonwealth of Virginia line to Little River, SC, a distance of 308 statute miles. The authorized project provides for a waterway 12 feet deep, with widths varying from 90 feet in land cuts to 300 feet in open waters. The project also includes numerous side channels with varying project dimensions.

CONFERENCE AMOUNT FOR FY 2013: \$2,900,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,000,000 O: \$600,000 T: \$1,600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,600,000 provides for hydrographic condition surveys, environmental monitoring and dike improvements to ensure adequate disposal capacity within the high commercial use segment of the Atlantic Intracoastal Waterway (AIWW) in support of the Port of Morehead City (Newport River to the Commonwealth of VA line).

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Results of the January 2007 AIWW Report to the NC Sea Grant, NC Department of Environment and Natural Resources and NC Beach, Inlet and Waterway Association indicates that the project contributes to the state-wide economic output by at least \$109,000,000 per year; provides about 1,700 jobs per year with wages and salaries of about \$52,000,000 per year. The project also supports the following users: U.S. Coast Guard search and rescue operations, barge traffic supporting intermodal transportation to deep draft ports, military equipment and supply transportation barges and vessels, commercial and recreational vessels, National Oceanic and Atmospheric Administration vessels, and U.S. Army Corps of Engineers vessels. This waterway supports the North Carolina State Ports Authority (bulk-cargo ships) and NUCOR Steel and PCS Phosphate shipments through Morehead City Harbor, NC. This portion of the channel is classified as high use and represents 50 percent of the AIWW within the state of North Carolina.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: B. Everett Jordan Dam and Lake, NC

AUTHORIZATION: Flood Control Act of 1965

LOCATION AND DESCRIPTION: The project is located on the Haw River, in central North Carolina, 4.3 miles above its mouth, and 2.5 miles north of Moncure, NC and provides flood risk management, recreation and other purposes to the public. The project includes an earth dam 1,330 feet long with a maximum height of 112 feet above the streambed; an uncontrolled, unpaved chute spillway; a controlled 19-foot diameter outlet structure; and saddle dikes just beyond the spillway. The reservoir is operated as a unit of a coordinated system for flood risk management in the Cape Fear River basin.

CONFERENCE AMOUNT FOR FY 2013: \$1,679,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$112,000 O: \$1,535,000 T: \$1,647,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,077,000 provides for critical routine annual operation of dam and associated structures, project administration, vehicles, floating plant, heavy equipment rental, water control management, and yard support and supplies. Also provides for critical routine annual maintenance of dam and structures, required maintenance of intake control tower, electric and hydraulic systems, instrumentation, pumps and motors, and shop and maintenance area.

RC: \$387,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: N/A

EN: \$183,000 provides for compliance with natural resource mandates, in accordance with the project's operations management plan.

WS: N/A

OTHER INFORMATION: A non-Federal hydropower generating facility is currently operating at this project. Flood damages reduced during fiscal year 2011 were about \$22,000 for a cumulative total of about \$289,570,000 since the inception of the project in 1983. In fiscal year 2011, the annual visitation to the project was about 976,000 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Cape Fear River above Wilmington, NC

AUTHORIZATION: River and Harbor Acts of 1910, 1934, 1935, 1937, 1965; and Section 4, Flood Control Act of 1944

LOCATION AND DESCRIPTION: The Cape Fear River above Wilmington project is located in Bladen County in southeastern North Carolina and consists of three federally built and maintained locks and dams. Two of the locks and dams were constructed between 1915 and 1917, while the third was completed in 1935. Today, these locks and dams are in poor structural condition. The locks and dams were constructed to provide a navigable channel for commercial barges from Wilmington to Fayetteville, NC, a distance of about 111 river miles. This project currently has only minor commercial navigation traffic. The grounds at Lock & Dam #2 are being utilized on a quarterly basis by the U.S. Military. The U.S. Navy and the special forces of the U.S. Army utilize the locks and surrounding infrastructure as unique training opportunities. This facilitates necessary riverine training in an environment similar to those found in foreign countries.

CONFERENCE AMOUNT FOR FY 2013: \$489,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$41,000 O: \$444,000 T: \$485,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$300,000 provides for caretaker status activities including anadromous fish lockages and related activities to ensure lock operation, periodic inspections, data gathering and critical maintenance at all three locks.

FRM: N/A

RC: \$185,000 provides for operation and maintenance of existing recreation facilities to maintain a minimum level of service to the visiting public.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: An Initial Appraisal report, conducted under the authority of Section 216 of the Flood Control Act of 1970, was approved on 2 July 2009. Subsequent detailed studies under this authority would determine if modifications to this project were advisable due to significantly changed physical or economic conditions. Locks No. 1 and 2 are currently rated as dam safety action classification II structures. Also, a fish passage structure was completed in November 2012 at Lock No. 1 as an approved mitigation measure for deepening the Wilmington Harbor 96 Act Navigation channel project. American Recovery and Reinvestment Act construction funds and State of North Carolina required contributed funds were used to construct this feature in accordance with the Project Cooperation Agreement on the Wilmington Harbor 96 Act Project.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Falls Lake, NC

AUTHORIZATION: Flood Control Act of 1965

LOCATION AND DESCRIPTION: The project is located on the Neuse River about 10 miles north of Raleigh, NC and provides flood risk management, water supply, recreation and other purposes to the public. The project includes an earth dam which is 1,915 feet long with a maximum height of 95 feet above the streambed; an uncontrolled chute spillway 100 feet wide located in the east abutment, and a controlled 17.4-foot diameter outlet structure. This project is operated as part of a coordinated system for flood risk management in the Neuse River Basin.

CONFERENCE AMOUNT FOR FY 2013: \$1,782,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$163,000 O: \$1,604,000 T: \$1,767,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,055,000 provides for critical routine annual operation of dam and associated structures, project administration, vehicles, floating plant, heavy equipment rental, periodic assessment, water control management, and yard support and supplies. Also provides for critical routine annual maintenance of dam and structures, required maintenance of intake control tower, electric and hydraulic systems, instrumentation, pumps and motors, and shop and maintenance area.

RC: \$418,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: N/A

EN: \$272,000 provides for compliance with natural resource mandates, in accordance with the project's operations management plan.

WS: \$22,000 provides for coordination with the City of Raleigh and processing of water supply related revenues and billings.

OTHER INFORMATION: Preliminary permit issued to the City of Raleigh, NC for planning and development of a non-Federal hydropower structure. Dam is currently rated as a dam safety action classification III structure. The City of Raleigh has requested that the project's pool storage allocations be studied to determine if additional capacity could be allocated for the purpose of water supply. Flood damages reduced during fiscal year 2011 were about \$456,000 for a cumulative total of about \$612,559,000 since the inception of the project in 1983. In fiscal year 2011, the annual visitation to the project was about 1,567,000 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Manteo (Shallowbag) Bay, NC

AUTHORIZATION: River and Harbor Acts of 1910, 1940, 1950 and 1970; and Section 107 of the 1960 River and Harbor Act, as amended

LOCATION AND DESCRIPTION: The project is located along the outer banks portion of Dare County, North Carolina, between Oregon Inlet, Roanoke Island and Albemarle Sound. The project provides for a channel 14 feet deep and 400 feet wide from the Atlantic Ocean through Oregon Inlet with channels 12 feet deep by 100 feet wide to Pamlico Sound, Wanchese Harbor, Shallowbag Bay Harbor and Albemarle Sound. Length of all channels within the Manteo (Shallowbag) Bay project is approximately 25 miles.

CONFERENCE AMOUNT FOR FY 2013: \$1,365,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,200,000 O: \$0 T: \$1,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,200,000 provides for minimum critical channel maintenance dredging and increased hydrographic surveying of the Oregon Inlet, a critical harbor of refuge.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Council on Environmental Quality (CEQ), the National Oceanic and Atmospheric Administration (NOAA), and the Corps agreed in May 2003 that the proposed jetties on the Oregon Inlet portion of the project would not be constructed and that the channels would be maintained by dredging alone, along with extensive hydrographic surveys providing up-to-date navigation information. Maintenance dredging is essential to support the large commercial fishing fleet (\$12,000,000+ value of seafood landings at dockside) traversing to and from Wanchese, NC and the ~600,000 charter and recreational fishing passenger trips. The U. S. Coast Guard utilizes this portion of the project to access the Oregon Inlet Coast Guard Station in support of search and rescue (1,200 missions through Oregon Inlet since 2001) and homeland security. This project provides access to designated harbors of refuge, which is essential during adverse weather conditions since the nearest coastal inlets are Ocracoke Inlet, 90 miles to the south, and Norfolk, VA, 65 miles to the north. Minimal channel maintenance would be performed on a critical need basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Masonboro Inlet and Connecting Channels (CC), NC

AUTHORIZATION: River and Harbor Act of 1912, as amended; Section 111, River and Harbor Act of 1968

LOCATION AND DESCRIPTION: The project is located on the southeastern coast of North Carolina in New Hanover County. The authorized project consists of a 14 feet deep by 400 feet wide channel across the ocean bar at Masonboro Inlet, with north and south jetties at the entrance, transitioning to 12 feet deep and 90 feet wide to the Atlantic Intracoastal Waterway at Wrightsville Beach by way of Banks and Motte Channels; a turning basin, 15 feet deep, 300 feet wide, and 700 feet long on the east side of Banks Channel near Masonboro Inlet; and three 15-pile dolphins.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$150,000 T: \$150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$150,000 provides for hydrographic condition surveys for this critical harbor of refuge project.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports the following users: commercial fishing vessels, recreational vessels and the U.S. Coast Guard. The U.S. Coast Guard utilizes this project to perform search and rescue and homeland security missions. This inlet is a critical harbor of refuge providing access during severely adverse weather conditions as it is the only jettied inlet in NC.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Morehead City Harbor, NC

AUTHORIZATION: River and Harbor Acts of 1958 and 1970, and Section 101 of the Water Resources Development Act of 1992

LOCATION AND DESCRIPTION: The Morehead City Harbor project consists of approximately 5 miles of channels, which extend from the deep water in the Atlantic Ocean to the North Carolina State Port at Morehead City, in Carteret County, midway along the North Carolina coastline approximately 10 miles northwest of Cape Lookout. The project consists of a 47-foot deep by 450-foot wide entrance channel from the deep water in the Atlantic Ocean to the Beaufort Inlet Gorge; a channel 45 feet deep by 400 to 600 feet wide from the gorge of Beaufort Inlet to the east facing berthing facilities of the North Carolina State Ports; and a channel and basin 35 feet deep with varying widths to the south and west facing berthing facilities.

CONFERENCE AMOUNT FOR FY 2013: \$5,800,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,757,000 O: \$600,000 T: \$5,357,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,357,000 provides for project operations and monthly hydrographic surveying and maintenance dredging of the inner harbor portion of this critical harbor of refuge. This will improve navigation performance by increasing the availability, thereby reducing the need for light loading or delays awaiting tides to access a moderate use, strategic terminal.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Morehead City Harbor is a deep draft navigation project with 3,400,000 commercial tonnage valued at \$925,000,000 annually. Project is a designated strategic port providing military support to Camp LeJeune (Marine Corps) and provides U. S. Coast Guard vessels access to the Coast Guard base at Ft. Macon. This port supports the North Carolina State Ports Authority (bulk-cargo ships) and NUCOR Steel and PCS Phosphate through connecting channels of the Atlantic Intracoastal Waterway.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Rollinson Channel, NC

AUTHORIZATION: River and Harbor Act of 1935

LOCATION AND DESCRIPTION: The Rollinson Channel project is located in Dare County just inside Hatteras Inlet, NC. The project provides a 12-foot channel from Pamlico Sound to Hatteras Island and a 10-foot deep channel from Hatteras Island to Hatteras Inlet, both with 100-foot channel widths. This project is used by the North Carolina State Ferry System for ferry transportation to Ocracoke Island, which includes a subsistence harbor with no land-based connection. Ocracoke Island relies on ferry transportation for subsistence supplies.

CONFERENCE AMOUNT FOR FY 2013: \$50,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$300,000 O: \$0 T: \$300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$300,000 provides for maintenance dredging of sending terminal for Ocracoke Island ferry and provides access to a subsistence harbor at Ocracoke.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports the following users: North Carolina State Ferry System, commercial fishing vessels and recreational vessels; and the U.S. Coast Guard. The U.S. Coast Guard utilizes this project to perform search and rescue and homeland security missions. Minimal maintenance dredging of this subsistence channel will be performed during the fiscal year.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Silver Lake Harbor, NC

AUTHORIZATION: Rivers and Harbor Act of 1930

LOCATION AND DESCRIPTION: The Silver Lake Harbor project is located in Hyde County just inside of Ocracoke Inlet, NC. The project provides a 12-foot channel from deep water in Pamlico Sound to, and including, an anchorage basin of the same depth in Silver Lake Harbor at Ocracoke, with widths of 150 feet across the Big Foot Slough bar and 60 feet in the entrance channel. Silver Lake Harbor is classified as a subsistence harbor, where supplies and personnel can only be delivered to the island via ferry (i.e. there is no vehicle access).

CONFERENCE AMOUNT FOR FY 2013: \$300,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$300,000 O: \$0 T: \$300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$300,000 provides for critical maintenance dredging within the Silver Lake Harbor channel.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports the following users: North Carolina Ferry System, commercial fishing vessels and recreational vessels, and the U.S. Coast Guard. The U.S. Coast Guard utilizes this project to perform search and rescue and homeland security missions.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: W. Kerr Scott Dam and Reservoir, NC

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: The project is located on the Yadkin River about 6 miles upstream from Wilkesboro, NC and provides flood risk management, recreation, fish and wildlife conservation, water supply and other benefits to the public. The project includes a rolled earth-fill dam over 1,700 feet long with a maximum height of 148 feet above the streambed and a controlled 12.3-foot diameter outlet structure. An emergency spillway is located near the north abutment of the dam in a rock cut.

CONFERENCE AMOUNT FOR FY 2013: \$3,209,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$775,000 O: \$2,597,000 T: \$3,372,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,362,000 provides for critical routine annual operation of dam and associated structures, project administration, vehicles, floating plant, heavy equipment rental, water control management, and yard support and supplies. Also provides for critical routine annual maintenance of dam and structures, required maintenance of intake control tower, electric and hydraulic system, instrumentation, pumps and motors, and shop and maintenance area.

RC: \$1,891,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: N/A

EN: \$119,000 provides for compliance with natural resource mandates, in accordance with the project's operations management plan and administration of the project's shoreline management plan.

WS: N/A

OTHER INFORMATION: A non-Federal hydropower structure add-on license has been issued and the Corps is working with licensee on reviewing the preliminary plan. Wilkes County, one of the primary water supply customers, is continuing to pursue construction of a reservoir intake structure. An environmental assessment was completed with a finding of no significant impact. A real estate easement has been issued and Wilkes County continues to pursue local funding to move forward with construction. Flood damages reduced during fiscal year 2011 were about \$4,880,000 for a cumulative total of about \$208,151,000 since the inception of the project in 1962. In fiscal year 2011, the annual visitation to the project was about 769,000 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Wilmington Harbor, NC

AUTHORIZATION: River and Harbor Acts of 1930, 1945, 1950, 1962, 1964; Section 107 of the River and Harbor Act of 1960; WRDA 1986 and WRDA 1996

LOCATION AND DESCRIPTION: The project is located on the southeastern coast of North Carolina in Brunswick and New Hanover Counties and provides for a channel 44 feet deep through the Ocean Bar and 42 feet deep to the upper end of the Anchorage Basin at Wilmington. Upstream of this point, the project is 38 feet deep to the Highway 133 bridge; 32 feet deep to the Hilton Railroad Bridge over the Northeast Cape Fear River; and 25 feet deep from the Hilton Railroad Bridge to a point 1-2/3 miles above. The project also includes a northwestward connecting channel, 12 feet deep, from the Atlantic Intracoastal Waterway at Snow's Cut to the main river channel.

CONFERENCE AMOUNT FOR FY 2013: \$16,409,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$16,803,000 O: \$1,000,000 T: \$17,803,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$17,803,000 provides the following operation and maintenance activities: perform Anchorage Basin maintenance dredging with upland disposal to Eagle Island; perform critical Outer Ocean Bar, Inner Ocean Bar and 85% of the Mid-River channel reaches maintenance dredging; conduct project condition surveys; debris removal; mosquito control; and produce plans and specifications for the upcoming FY 2015 maintenance dredging contracts. This will improve navigation performance by increasing the availability of channel, thereby reducing the need for light loading or delays awaiting tides to access a moderate use, strategic terminal.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Waterborne commerce on the existing Wilmington Harbor project was 7.9, 6.9, 6.7 and 8.0 million tons, respectively, for the period 2007-2010. This tonnage does not include the tonnage moved in and out of the Military Ocean Terminal – Sunny Point (MOTSU). The Port of Wilmington handled 204,896 loaded containers in 2008, 194,608 in 2009, 250,048 in 2010, and 290,666 in 2011. Project users include the Transportation Command, MOTSU; North Carolina State Ports Authority; multiple tanker terminals; and the U.S. Coast Guard Cutter, DILIGENCE. A contract is underway to deepen the navigation channel, from the state ports to a point 800 feet below the Highway 17/76 bridge in downtown Wilmington, to the authorized 42 feet. Completion of the contract is anticipated in 2014.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

South Carolina

O&M Justification Sheet

PROJECT NAME: Charleston Harbor, SC

AUTHORIZATION: Multiple River and Harbor Acts. Latest authorization is WRDA 96, P.L. 104-303 Section 101.

LOCATION AND DESCRIPTION: Charleston Harbor is located about midway along South Carolina's Atlantic coastline. This project consists of maintenance of 38.6 miles of channel, three turning basins, and one anchorage basin. The lower harbor requires dredging every year, entrance channel every other year, and the upper harbor approximately every 16 - 18 months. The material removed from the upper harbor is placed in the Clouter Creek Disposal Area, which is approximately 1,475 acres in size.

CONFERENCE AMOUNT FOR FY 2013: \$15,883,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$14,311,000 O: \$514,000 T: \$14,825,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$14,825,000 provides for dredging of the entrance channel and upper harbor, disposal area maintenance, condition surveys of the channel, real estate needs to resolve encroachments, and environmental activities. These funds are necessary to maintain and reestablish project depths that have decreased due to shoaling. This will improve navigation performance by increasing the availability of channel to project depth, thereby eliminating the need for light loading or delays awaiting tides to access a high use, strategic terminal. These funds would ensure adequate disposal area capacity is available to contain the material dredged from the channels in the coming years.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Latest commercial tonnage as reported by the Waterborne Commerce Statistics Center for Fiscal Year 2011 was 17.9 million tons of cargo. The major commodity imported and exported is manufactured equipment and machinery. Per United States Department of Commerce/Bureau of the Census, the 2011 value of waterborne commerce through Charleston was \$58.9 billion. Charleston Harbor is listed as one of 17 US strategic ports because of the presence of the Naval Weapons Station, Military Surface Deployment and Distribution Command, Defense Energy Support Center and Army Strategic Logistics Activity Charleston. The harbor generates \$45.0 billion annually for the regional economy.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Cooper River, Charleston Harbor, SC

AUTHORIZATION: Section 101 of the River and Harbor Act of 1968 (P.L. 90-483), modified in the Energy and Water Development Appropriations Act, 1992 (P.L. 102-104) and further modified by Section 353, WRDA 99

LOCATION AND DESCRIPTION: The project is located in Charleston and Berkeley Counties. All improvements are in Berkeley County about 45 miles from Charleston. The project includes operation and maintenance of the powerhouse and associated structures and facilities in accordance with our agreement with the South Carolina Public Service Authority (SCPSA). The purpose of the rediversion project was to reduce shoaling in Charleston Harbor by diverting most of the Santee River waters above Pinopolis Dam back into the lower Santee River. Also included in the project authorization was the design and construction of a fish lift as a mitigation feature intended to maintain the number of blueback herring entering the Santee-Cooper Lakes.

CONFERENCE AMOUNT FOR FY 2013: \$4,590,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,800,000 O: \$3,800,000 T: \$5,600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,600,000 provides for operation of the powerhouse, natural resource management, condition and operation studies/activities, water quality control, powerhouse maintenance, and maintenance of non-recreation building, grounds and utilities. These funds would improve navigation performance by decreasing shoaling in Charleston Harbor, which is downstream of the project.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project is, in essence, an extension of the Charleston Harbor project. The project was authorized, constructed, and is operated with one purpose - the reduction of siltation in Charleston Harbor. Prior to rediversion, costs for the O&M of Charleston Harbor were threatening the continued viability of the port. That purpose can only be satisfied with the continued operations of the project. Charleston Harbor is listed as one of 17 US strategic ports and the harbor generates \$45.0 billion annually for the regional economy. Latest commercial tonnage as reported by the Waterborne Commerce Statistics Center for Fiscal Year 2011 was 17.9 million tons of cargo. The major commodity imported and exported is manufactured equipment and machinery. Per United States Department of Commerce/Bureau of the Census, the 2011 value of waterborne commerce through Charleston was \$58.9 billion.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: South Atlantic

District: Charleston

Cooper River, Charleston Harbor, SC

Virginia

O&M Justification Sheet

PROJECT NAME: John H. Kerr Lake, VA & NC

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on the Roanoke River, about 180 river miles above its mouth, in Mecklenburg County, VA and Vance County, NC and provides flood risk management, recreation, hydropower, water supply and other benefits to the public. The project includes a concrete gravity dam with wing and saddle dikes on the right and left banks, with a total length of over 4 miles. The reservoir is operated as a unit of a coordinated system of reservoirs in the Roanoke River basin. The project has installed hydroelectric generating capacity of 268,000 kilowatts.

CONFERENCE AMOUNT FOR FY 2013: \$10,174,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$5,414,000 O: \$5,481,000 T: \$10,895,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,941,000 provides for critical routine maintenance of the flood risk management features of the project to include water management in conformance to water control plans, dam safety activities, critical routine operations of the dam, Island Creek Dam, and wing dike operations within the reservoir, project maintenance, surveillance of wing dikes and piezometer monitoring, rip-rap maintenance, annual maintenance of the structure, equipment and facilities associated with the storage and release of water.

RC: \$2,444,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: \$5,723,000 provides critical routine operations and maintenance to limit forced outages and maximize peak unit availability, to ensure compliance with the North American Electric Reliability Corporation reliability standards, and provides testing activities and equipment and documentation support.

EN: \$762,000 provides for operation, management, and conservation of natural resources through implementation of the environmental operating principles, advance natural resource management programs and shoreline management.

WS: \$25,000 provides for coordination with NC and VA officials on water supply withdrawals and processing of water supply related revenues and billings.

OTHER INFORMATION: Island Creek Dam and pumping station is part of this project and is rated as a dam safety action classification III structure. Occurrences of observed seepage at the Island Creek Dam have resulted in implementation of interim measures to minimize the impacts of seepage to this structure. A more permanent measure requiring the installation of a toe drain or grouting curtain is under evaluation. Flood damages reduced during fiscal year 2011 were about \$1,232,000 for a cumulative total of about \$440,951,000 since the inception of the project in 1952. In fiscal year 2011, the annual visitation to the project was about 1,672,700 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: South Atlantic

District: Wilmington

John H. Kerr Lake, VA & NC

O&M Justification Sheet

PROJECT NAME: Philpott Lake, VA

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on the Smith River about 45 miles above its junction with the Dan River in Franklin and Henry Counties, VA and provides flood risk management, recreation, hydropower and other benefits to the public. The project includes a concrete gravity dam about 900 feet long with a maximum height of 220 feet above the streambed. The reservoir is operated as a unit of a coordinated system of reservoirs in the Roanoke River Basin. The project has an installed hydroelectric generating capacity of 14,000 kilowatts.

CONFERENCE AMOUNT FOR FY 2013: \$4,834,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,110,000 O: \$3,080,000 T: \$5,190,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,105,000 provides for critical routine operations and maintenance for water management in conformance to water control plans and dam safety activities, and equipment and facilities associated with storage and release of water.

RC: \$1,534,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: \$2,383,000 provides for critical operations and maintenance to maximize peak unit availability while limiting forced outages to ensure compliance with the North American Electric Reliability Corporation reliability standards.

EN: \$168,000 provides for operation, management and conservation of existing vegetation, forests, fish and wildlife and shoreline management.

WS: N/A

OTHER INFORMATION: Dam is currently rated as a dam safety classification III structure. Flood damages reduced during fiscal year 2011 were about \$4,824,000 for a cumulative total of about \$733,806,000 since the inception of the project in 1952. In fiscal year 2011, the annual visitation to the project was about 703,000 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

South Pacific Division

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Justification of Estimate

Investigations

California

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
California Coastal Sediment Master Plan	7,300,000	3,224,000	868,000	861,000	900,000 <u>2/</u>	800,000 <u>1/</u>	647,000

Los Angeles District

The study area encompasses the entire California coastline, including the nearshore ocean environment and coastal watersheds. California has approximately 1,100 miles of coastline, of which 86% is actively eroding due to natural and human induced alteration in sediment cycles. Navigation and shoreline structures, along with water control projects, have significantly modified total yield and movement of sediments to and along the coast. The purpose of this study is to develop a comprehensive plan to manage, restore, protect, and preserve sediment resources along the coast of California. The study will evaluate regional alternatives for reducing coastal storm damages; increasing natural sediment supply to the coast through dam removal and other means; restoring aquatic ecosystems; and identifying such potential sediment sources as dredged material from ports and harbors. The Master Plan will provide Federal and non-Federal entities with an adaptive, programmatic road map to plan and program potential future coastal resources projects. The Master Plan will allow these entities to develop water resources projects within a system-oriented context wherein data can be easily shared and technical expertise and tools can be efficiently directed to solve coastal resources problems on a regional basis. A Geographic Information System (GIS)-based decision support system for economic optimization will be developed to assist Federal, State, and local decision makers in identifying, ranking, and selecting projects for program investment that would yield significant regional benefits, relative to costs. Ultimately, the Master Plan will, for significant savings, reduce the number of discrete water resources projects by regionalizing solutions that holistically address individual problem areas. Regionalized projects recommended in the Master Plan will be considered in collaboration with other Federal and non-Federal agencies, including the United States Environmental Protection Agency (EPA), California State Resources Agency, National Oceanic and Atmospheric Association (NOAA), regional/local governments and the United States Geological Survey. The California Department of Boating and Waterways, the local sponsor, signed the Feasibility Cost Sharing Agreement in September 2005.

Fiscal Year 2013 funds are being used to complete Regional Sediment Management plans in Orange and Los Angeles Counties, Santa Cruz, San Francisco and San Francisco Bay. Funds will also be used to initiate Regional Sediment Management plans for San Luis Obispo and complete review of the biological impact assessment, beneficial use guidelines and continue work on GIS and Webmapper application. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to complete the programmatic Environmental Impact Statement/Environmental Impact Report for regions including the Eureka Littoral Cell, San Francisco Coastline and North Monterey Bay. The estimated cost of the feasibility phase is \$14,000,000. \$13,800,000 will to be shared on a 50-50 percent basis by Federal and non-Federal interests plus \$200,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$14,200,000
Reconnaissance Phase (Federal)	200,000
Feasibility Phase (Federal)	7,100,000
Feasibility Phase (Non-Federal)	6,900,000

Study Authority: House Committee on Transportation and Infrastructure Resolution 2672, dated May 22, 2002 and Section 227 of WRDA 1996.

The reconnaissance phase was completed in September 2005. The feasibility study completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

\$2,000 rescinded from the study in FY 2011.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2013 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
SURVEYS – NEW – (Ecosystem Restoration)					
Coyote Valley Dam Restoration, CA	100,000	0	0	100,000	0

San Francisco District

The study area is located in northern California on the east fork of the Russian River at Coyote Valley, near the city of Ukiah, about 115 miles northeast of San Francisco, California. The Russian River drains an area of 1,485 square miles. Approximately two-thirds of this area is in Sonoma County, with the remainder in Mendocino County. The existing Corps project, Coyote Dam, was completed in 1957. It consists of an earth-filled dam 160 feet high and 3,560 feet long, with a reservoir storage capacity of 122,000 acre feet. The authorized project included sediment management, flood control, and domestic and agricultural water supply pools with a storage capacity of 199,000 acre feet. A September 24, 2008 Biological Opinion (BO), issued by the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA/NMFS), mandates that USACE perform various actions to save threatened salmonid species. The BO calls for 15 actions that are directly related to the Corps, but the Corps only has authority to address seven actions. This study—which is a new start—will look at non-structural measures and studies required under the BO to keep the dam operational and to mitigate for impacts. Delay in completion of the study could potentially result in the extinction of a local genetic strain of threatened salmonids, and affect future operability of the Dam, which protects thousands from flood risks. The sponsor, the Sonoma County Water Agency, understands the two-phase planning process, and is willing to participate in 50-50 cost sharing of feasibility phase studies. The funds requested for Fiscal Year 2014 will be used to initiate and complete the reconnaissance phase of the study and negotiate the Feasibility Cost Sharing Agreement (FCSA) at full Federal expense. The reconnaissance phase is scheduled to be completed in September 2014, when the FCSA is executed, which is expected to be 12 months after initiating the study.

This study parallels the Dry Creek (Warm Springs) Restoration, CA study, also a new start in FY 2014. NOAA/NMFS issued a biological opinion that requires the Corps to correct water quality that inhibits the passage and breeding potential for threatened and endangered species on the Russian River. Though both studies address one BO on the Russian River, they will be carried out separately due to the fact that operations are pursuant to two separate dams with individual separate authorizations. Technically, the Dams’ hydraulic operations are distinct and separate.

Study Authority: Section 204 of Public Law 81-516, the Flood Control Act of 1950.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2013 \$	Allocation FY 2013 \$	Budget Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
SURVEYS – NEW – (Ecosystem Restoration)					
Dry Creek (Warm Springs) Restoration, CA	100,000	0	0	100,000	0

San Francisco District

The study area is located in northern California along the Russian River at Lake Sonoma and Warm Springs Dam, near the cities of Geyserville and Cloverdale, about 75 miles northeast of San Francisco, California. The Russian River drains an area of 1,485 square miles. Approximately two-thirds of this area is in Sonoma County, with the remainder in Mendocino County. The existing Corps project, Warm Springs Dam, is an earthen dam 319 ft high and 3,000 ft long, completed in 1983. The project authorization was amended by section 95 of the Water Resources Development Act of 1974 to compensate for fish losses on the Russian River which may be attributed to the operation of the Coyote Dam component of the watershed through measures such as possible expansion of the capacity of the fish hatchery. A September 24, 2008 Biological Opinion (BO), issued by the National Oceanic Atmospheric Administration's National Marine Fisheries Service (NOAA/NMFS) on Dry Creek at Warm Springs Dam, mandated that USACE perform various actions to save threatened salmonid species. The BO calls for 15 actions that are directly related to the Corps, but the Corps only has authority to address seven of these actions. This study—which is a new start—will look at non-structural measures and studies, as required by the BO, to keep the dam operating and to mitigate for associated impacts. Delay in study completion could potentially result in the extinction of a local genetic strain of threatened salmonids, and affect future operability of the dam, which protects thousands from flood risks. The sponsor, the Sonoma County Water Agency, understands the two-phase planning process, and is willing to participate in 50-50 cost sharing of feasibility phase studies. The funds requested for Fiscal Year 2014 will be used to initiate and complete the reconnaissance phase of the study and negotiate the Feasibility Cost Sharing Agreement (FCSA) at full Federal expense. The reconnaissance phase is scheduled to be completed in September 2014, when the FCSA is executed, which is 12 months after initiating the study.

This study parallels the Coyote Valley Dam Restoration, CA study, also a new start in FY 2014. NOAA/NMFS issued a biological opinion that requires the Corps to correct water quality that inhibits the passage and breeding potential for threatened and endangered species on the Russian River. Though both studies address the same BiOp on the Russian River, they will be carried out separately due to the fact that operations are pursuant to two separate dams with individual separate authorizations.

Study Authority: Section 203 of Public Law 87-874, the Flood Control Act of 1962.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Los Angeles River Ecosystem Restoration, CA	4,261,000	3,406,000	5,000	350,000	100,000 <u>2/</u>	400,000 <u>1/</u>	0

Los Angeles District

The study area is located within the City of Los Angeles, California, along the Los Angeles River, and extends from downtown Los Angeles to Canoga Park, a distance of approximately 32 miles. This study investigates opportunities for ecosystem restoration following the degradation of the Los Angeles River ecosystem due to past flood control activities. In the 1930's and 1940's, the Corps, in conjunction with the Los Angeles County Flood Control District, channelized the Los Angeles River to alleviate devastating floods to Los Angeles, Long Beach, and other cities. Subsequent urbanization nearly eliminated natural riparian ecosystems and wetlands in the floodplain, leaving less than less than 1% of remnant habitats with little functional capacity. Through its reconnaissance study, the Corps identified remaining open space along the river corridor with potential for the river's restoration and reconnection to habitats in the adjacent Santa Monica Mountains. The study area is home to numerous special status species—including the Southwestern Pond Turtle, Southwestern Willow Flycatcher and Least Bell's Vireo—that could benefit from ecosystem restoration activities, as could local frogs, lizards, raptors and other water fowl. The City of Los Angeles views this study as part of a larger revitalization program for the City. The City of Los Angeles, the non-Federal sponsor, signed a Feasibility Cost Sharing Agreement in April 2006.

Recent in-progress reviews have identified that some work elements will require additional research and coordination. These in-progress reviews will require funding in FY 2014 in order to identify and address any unforeseen issues.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study and complete the report in August 2013. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to complete the feasibility phase, which includes the Chief of Engineer's Report. The estimated cost of the feasibility phase is \$9,910,000 which includes \$200,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$10,095,000
Reconnaissance Phase (Federal)	185,000
Feasibility Phase (Federal)	4,076,000
Feasibility Phase (Non-Federal)	5,834,000 <u>3/</u>

Study Authority: House Public Works and Transportation Committee Resolution dated 11 June 1969 (Los Angeles County Drainage Area).

The reconnaissance phase was completed in December 2005. The feasibility study is scheduled to complete in Fiscal Year 2014.

1/ Estimated Unobligated Carry-in Funding: As of the date of this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013..

3/ Includes contributed funds from the local sponsor.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Redwood City Harbor, CA	2,604,000	580,000	70,000	400,000	0	800,000 1/	754,000

San Francisco District

Redwood City Harbor is a deep draft moderate use (<10M tons/yr) port located in San Mateo County, California, on the south west side of San Francisco Bay, about 20 miles south of San Francisco. An existing deep draft navigation project was completed in 1965 and is maintained at a depth of 30 feet by the Corps of Engineers. It consists of inner and outer turning basins and three channels, all used extensively for deep draft commercial vessel traffic, including petroleum, chemical, scrap metal, and construction material tonnage. Tonnage at the Port grew approximately 700% between the 1990s and mid 2000s. Tonnage at the Port was on the order of 2 million and 1.8 million tons, respectively, for the Port's FY 2005 and 2006. Due to the current economic downturn, tonnage has dropped to an estimated 1,000,000 tons in the latest fiscal year. Tonnage figures are rebounding with the economy and this trend is expected to continue. The Port is very diversified in its operations and the goods it imports and exports. During the housing boom in the bay area in the late 1990's to mid 2000's, over a million tons of construction materials a year were being brought in to fuel rapid development in the San Francisco South Bay. Currently one of the biggest enterprises at the Port is the collection and processing of scrap metal which is being shipped to China in record tonnage amounts. The Port Deepening study will address deepening the project up to 35 feet and will ameliorate continued navigation hazards as well as loss of revenues and commerce. New larger vessels, which currently call on the port, require more than the authorized depth. These vessels are forced to light load and top off at other ports, significantly adding to the cost of calling on the port and reducing the amount of materials that can be imported and exported from the Port. It was recently estimated by the Port that the average vessel visiting the Port loses approximately \$275,000 a visit in dead freight and demurrage fees (extra fees needed to time the tides when riding into the Port) due to limited depths at the Port. As a result of rescoping the study, the costs to complete have increased from what was last presented to Congress (FY 2001). A deepening project would improve transportation efficiency and eliminate wasted time. The Port of Redwood City, the local sponsor, signed the Feasibility Cost Sharing Agreement in July 2008.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$4,762,000. \$4,612,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus \$150,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,910,000
Reconnaissance Phase (Federal)	148,000
Feasibility Phase (Federal)	2,456,000
Feasibility Phase (Non-Federal)	2,306,000

Division: South Pacific

District: San Francisco

Redwood City Harbor, CA

1 May 2013

SPD-14

Study Authority: House Committee on Transportation and Infrastructure Resolution Docket 2511, adopted May 7, 1997.

The reconnaissance phase was completed in July 2008. The feasibility study completion date is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Sacramento and San Joaquin Comprehensive Basin/ Central Valley Integrated Flood Management Study, CA	2,666,000	1,270,000	(149,000)	287,000	300,000 2/	466,000 1/	492,000

Sacramento District

The study area includes the entire Sacramento River Basin in central California with a large watershed which covers 27,000 square miles, not including the Sacramento-San Joaquin Delta. The study is within the Central Valley with impacts to the Sacramento-San Joaquin Delta, an ecosystem of national significance, and is a part of the Interim Federal Action Plan. This Central Valley Integrated Flood Management Study is the strategic link between the State of California's Central Valley Flood Protection Plan and other ongoing site-specific projects under development by the Corps. The State of California has identified its priorities for flood risk management in the Central Valley at a basin-wide scale. The study will identify the appropriate level of Federal interest in the State's Central Valley Flood Protection Plan at a regional scale. It is anticipated that the Central Valley Integrated Flood Management Study will make recommendations leading to potential authorization for Federal participation in future flood damage reduction projects. The study area includes a population in the watershed of about 2.2 million, of which over 25% is at risk of flooding; approximately \$69 billion in assets at risk of flooding (structural, content value, estimated annual crop production); 378 special status plant and animal species; and a water supply delivery system (that overlays much of the existing flood risk management system) which provides drinking water to over 2/3 of Californians (Sacramento and San Joaquin River Basins Comprehensive Study, Interim Report, December 2002; State of California 2012 Central Valley Flood Protection Plan). The study area includes the only river system in the nation where all five species of salmon can be found. In addition to being home for numerous endangered species, it is part of an international flyway for migratory birds (Pacific Flyway). The Central Valley encompasses 10% of the nation's gross agricultural production.

Local, state, and federal water resource agencies support a coordinated multi-objective investigation to balance flood risk management, environmental restoration, and other water resource purposes within the Central Valley. The Central Valley Integrated Flood Management Study is building on and will incorporate existing studies (including the Central Valley Flood Protection Plan), as well as tools and data sets, in the development of a comprehensive, watershed-oriented plan. The study will require an extensive public outreach program and coordination with Federal, State, Local and Tribal agencies to develop a plan that is supported by the various interest groups. As a result of rescoping the study, the costs to complete are reduced from what was last presented to Congress (FY 2013). The study will produce a watershed management plan. The State of California Department of Water Resources and Central Valley Flood Protection Board, the local sponsors, signed the Feasibility Cost Sharing Agreement in July 2010, and an amendment increasing the study cost is scheduled to be signed in March 2013.

Division: South Pacific

District: Sacramento

Sacramento and San Joaquin Comprehensive Basin/Central Valley Integrated Flood Management Study, CA

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$4,932,000. \$4,532,000 is to be shared on a 50-50 percent basis by Federal and non-Federal interests plus \$400,000 for Independent External Peer Review at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 4,932,000
Feasibility Phase (Federal)	2,666,000
Feasibility Phase (Non-Federal)	2,266,000

Study Authority: Flood Control Act of 1962, Pub. L. 87-874, § 209, 76 Stat. 1180, 1197 (1962); House Resolution dated May 8, 1964.

The watershed study completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$250,000. This amount will be used to perform work on the study as follows: Generate a draft feasibility report based upon the results of the Tentatively Selected Plan and Agency Decision Milestones.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013..

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Sacramento River Bank Protection Project (GRR), CA	1,500,000	0	0	0	0	500,000 1/	1,000,000

Sacramento District

The Sacramento River Flood Control Project consists of 977 miles of levees plus overflow weirs, pumping plants and bypass channels along the Sacramento River from River Mile (RM) 0 near Collinsville to RM 194 near Chico, including several sloughs and the lower reaches of major tributaries. The Sacramento River levee system was initiated as a purely local project and in many cases the levees were constructed close to the riverbanks without a protective berm. The levee system, which was adopted as the Sacramento River Flood Control Project in 1917, has been modified and expanded several times since that date but no major change in the basic levee alignment has been made since the original conception of the project. Bank protection is necessary to preserve the Sacramento River Flood Control Project and ensure that it will continue to furnish the designed degree of protection. The levees are continuously threatened by erosion, and unless corrective measures are taken, levee failures may occur with resultant catastrophic damage and possible loss of many lives. Flood events that occurred in February 1986 and January 1997 greatly emphasized these problems. Several levees located along the Sacramento River were subjected to an extensive amount of erosion due to the extremely high river flows. High flows in January and March 1995 caused flooding and erosion in the Butte Basin area along the Sacramento River, RM 188 at Glenn County Road 29. If levee repairs had not been made, additional flooding would have caused extensive loss of agricultural land and endangered residents in nearby communities of Butte City, Princeton and Colusa. In addition, during moderately high flows in February 1996, a 500 foot portion of berm on the American River failed, threatening the levee protecting the city of Sacramento. A contract was awarded in August 1996 to repair this section and provide bank protection for a total of 1,200 lineal feet. The 1997 flood event and the high flows experienced in 1998 again put additional stress on the levee system (approximately 1,100 river miles) within the Sacramento River Bank Protection Project. The sustained high water in January/February 2006 caused great concern and instigated an emergency declaration from the Governor of California relative to levee repair. The area protected by the levees comprises over one million acres in which about 50 communities are located; value of improvements (October 2003 prices) to be protected is about \$38 billion and about 2.3 million people live within the flood plain. The levee system enables the use of the flood plain for the benefit of the state and nation. The extremely fertile flood plain lands produce about 6.6 percent of the total agricultural production of the state and over 88 percent of the state's rice production. The Sacramento River Bank Protection Project provides a long-range program of bank protection to protect the levees where serious erosion is occurring and to prevent erosion from undermining additional levee sections in the future. In addition to assuring urgently needed flood protection, the project provides recreation facilities consisting of boat launching facilities, campgrounds and picnic areas needed along the river to meet a rapidly increasing public demand. Since the initial bank protection contract was let in June 1963, about 837,462 lineal feet of bank protection has been provided. Approximately 83,491 lineal feet of bank protection, including 80,000 authorized by WRDA 2007, remains to be placed on the second phase of this project. The local sponsor supports the addition of a third phase, which will require Congressional authorization. A General Reevaluation Report (GRR) is being conducted to address remaining and potential future sites.

Division: South Pacific

Sacramento District

Sacramento River Bank Protection Project (GRR), CA

1 May 2013

SPD-18

The State of California has expressed support for the study, understands the two phase planning process, and is willing to participate in 50-50 cost-sharing of feasibility phase studies. The Feasibility Cost Sharing Agreement is scheduled to be signed in October 2013.

The funds requested for FY 2014, plus any carry-in funds, will be used to initiate the GRR to address changes in conditions, policy and guidance that have occurred since project authorizations in 1960 and 1974 for a potential new/revised authorization and to move forward into Phase 3. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to 100 percent of the non-Federal costs may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,000,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

Study Authority: Flood Control Act of 1950, Pub .L. 81-516, § 205; Flood Control Act of 1960, Pub. L. 86-645, § 203, 74 Stat. 488, 498 (1960); River Basin Monetary Authorization Act, Pub. L. 93-252, § 202, 88 Stat. 49 (1974); Water Resources Development Act of 2007, Pub. L. 110-114, § 3031, 121 Stat. 1041, 1113.

The GRR completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Sacramento-San Joaquin Delta, Delta Islands and Levees, CA (Completion)	5,721,000	3,049,000	239,000	971,000	1,015,000 2/	447,000 1/	0

Sacramento District

The study area is within the California Bay Delta, an ecosystem of national significance, and is a part of the Interim Federal Action Plan. The study area is located in Sacramento, San Joaquin, Solano, Contra Costa, Alameda, and Yolo counties, California and extends from Sacramento south to the cities of Stockton and Tracy, and west to and including Suisun Bay. The Sacramento-San Joaquin Delta consists of about 740,000 acres of land segregated into some 80 tracts and islands and 1,100 miles of levees. Delta levees are key infrastructure that conveys significant municipal and industrial water supply deliveries for 25,000,000 Californians; that conveys irrigation water supply for millions of acres of high value agriculture; that is part of a delicate ecosystem that supports 750 species of wildlife including 55 listed endangered species; and that protects 500,000 inhabitants. The Delta Islands and Levees Study will identify Federal (USACE) interest in flood risk management and ecosystem restoration opportunities that are being identified in key State of California plans for the California Bay-Delta. The report will identify synergies with these State plans with an emphasis on improving resiliency and safety of key infrastructure.

The state of California, the local sponsor, signed the Feasibility Cost Sharing Agreement in May 2006.

Fiscal Year 2013 funds are being used to develop and evaluate an array of alternatives and work toward a tentatively selected plan. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to complete the feasibility phase of the study. The total estimated cost of the feasibility phase is \$10,912,000. \$10,662,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus \$250,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind contributions. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$11,052,000
Reconnaissance Phase (Federal)	140,000
Feasibility Phase (Federal)	5,581,000
Feasibility Phase (Non-Federal)	5,331,000

Study Authority: Senate Resolution dated 1 June 1948 and the Flood Control Act of 1950, Pub. L. 81-516, § 205, 64 Stat. 163 (1950).

The reconnaissance phase was completed in May 2006. The feasibility study is scheduled for completion in Fiscal Year 2014.

Division: South Pacific

District: Sacramento

Sacramento-San Joaquin Delta, Delta Islands and Levees, CA

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013..

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2013 \$	Allocation FY 2013 \$	Budget Amount FY 2014 \$	Additional to Complete After FY 2014 \$
SURVEYS – NEW – (Ecosystem Restoration)					
Salton Sea, CA	200,000 1/	0	0	200,000	0

Los Angeles District

The Salton Sea project area is located in the southeastern corner of California and spans across Riverside and Imperial counties. The Salton Sea is faced with eroding water quality and diminishing water supplies. Water sources from the Colorado River have been lost due to natural and human actions. Degrading water quality has caused periodic fish and bird kills. As the lake shrinks, exposed lakebed sediments release wind-blown contaminants increasing risks to human health in the Coachella and Imperial Valleys in California and Mexico. The Salton Sea is the main feature of the Sonny Bono National Wildlife refuge. This high salinity lake plays a vital role in the connectivity of bird migratory routes to and from breeding grounds as far as Alaska and Peru. It is a critical stop for migrating birds along the Pacific Flyway, an important lake fishery in the arid southwest, and provides habitat for over 400 different species. Among them are Federally listed species such as the Yuma clapper rail and the desert pupfish. The sea also provides roosting, breeding, and foraging areas for migratory birds including but not limited to brown pelicans, white pelicans, and eared grebes. Previous studies completed by the Bureau of Reclamation, the State of California and the Salton Sea Authority have identified potential long term solutions for partial and full restoration of the Salton Sea.

In accordance with Section 3032 (b) (1) (A) of the Water Resources Development Act of 2007, “The Secretary shall review the plan approved by the State, entitled the “Salton Sea Ecosystem Restoration Program Preferred Alternative Report and Funding Plan”, and dated May 2007 to determine whether the pilot projects described in the plan are feasible.” The funds requested for Fiscal Year 2014 will be used to review and evaluate the State of California Plan and identify preliminary pilot projects that are feasible for construction. This effort will include meeting with State staff, site visits, and review of the existing plan and accompanying Environmental Impact Statement/Environmental Impact Report by technical and environmental specialists.

Study/Construction Authority: Section 3032, Water Resources Development Act of 2007. This provision authorized this program to be appropriated up to \$30 million (\$5 million per project). 1/ The \$200,000 Investigations funding will be part of the \$30 million program limit.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
San Francisco Bay to Stockton, CA	6,388,000	3,338,000 3/	0	800,000 2/	0	700,000 1/	1,550,000

San Francisco District

The project includes the John F. Baldwin (JFB) Ship Channel (consisting of the San Francisco Bar, Richmond Outer Harbor, West Richmond, Pinole Shoal, and Suisun Bay Channels) and the Stockton Ship Channel. Portions of the channel have already been deepened to the authorized depth. Phase I of the JFB resulted in the construction of the San Francisco Bar Channel in 1974. The project created the Pacific Ocean offshore approach channel to the San Francisco Bar Channel Entrance. This shipping channel (55 ft deep—mean lower low water (MLLW) and 2000 ft wide) serves as the exclusive deep water ocean entrance to the San Francisco Bay. Completed in 1986, Phase II of the project deepened the central San Francisco Bay channel to -45 ft MLLW. Phase IV consisted of deepening the Stockton Deep Water Ship Channel to -35 ft MLLW in 1988. The proposed project includes deepening of the West Richmond, Pinole Shoal, Suisun Bay, and Stockton Ship Channels, which are currently maintained at -35 feet, and provide access to oil terminals, industry in the city of Pittsburg, and the Port of Stockton. A General Reevaluation Report (GRR) is being prepared to determine the feasibility of modifying the current channel dimensions and determine if the deepening of the project is environmentally and economically justified to a depth of approximately -40 feet. The depth of deepening is dependent on the environmental and economic outputs to be derived for the GRR. The study has been nominated for the President’s Improving and Expediting the Review and Permitting Process Program initiative. Dimensions of the deep-draft navigation channels extending from the San Francisco Bay to the Port of Stockton are currently inefficient and unsafe for many of the commercial vessels using these channels. Unsafe conditions could arise from loaded vessels running aground on unknown or undocumented high spots in the channel. On August 11, 2010, U.S. Transportation Secretary Ray LaHood designated the Stockton Ship Channel, San Joaquin River, as part of “America’s Marine Highway Program” for its significant contribution to the Nation’s Economy. This designation of the 75-mile stretch of the San Joaquin River that runs from the San Francisco Bay to the Stockton Deep Water Ship Channel as a Marine Highway Corridor, officially connects the Port of Oakland (the 4th busiest port in the Nation), to the Port of Stockton and facilitates a bypass of the congested surface transportation system by providing a 100% water route to and from the Port of Stockton. The Port of Stockton, the local sponsor, signed the design agreement in 2002.

The funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to continue the GRR to include completing alternative analysis and prepare a draft report. The total estimated cost for the GRR is \$8,517,000 which is to be cost-shared on a 75-25 percent basis by Federal and non-Federal interests.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$8,517,000
GRR (Federal)	6,388,000
GRR (Non-Federal)	2,129,000

The project is authorized for construction in the River and Harbor Act of 1965.

The GRR completion date is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ Funds provided under the Construction appropriation.

3/ Represents the GRR only funded under the Construction appropriation (FY 2002 through FY2010).

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
San Joaquin River, California Lower San Joaquin River	3,930,000	1,605,000	520,000	300,000	24,000 2/	751,000 1/	730,000

Sacramento District

The study is within the California Bay Delta, an ecosystem of national significance, and is part of the Interim Federal Action Plan. The study area is located along the lower (northern) portion of the San Joaquin River system in the Central Valley of California. The San Joaquin River originates on the western slope of the Sierra Nevada and emerges from the foothills at Friant Dam. The river flows west to the Central Valley, where it is joined by the Fresno, Chowchilla, Merced, Tuolumne, Stanislaus and Calaveras Rivers, and other smaller tributaries, as it flows north to the Sacramento-San Joaquin Delta. The Lower San Joaquin River study area includes the mainstem of the San Joaquin River from the Mariposa Bypass downstream to and including the city of Stockton. The study area also includes the distributary channels of the San Joaquin River in the southern most reaches of the Delta. The Interim Report for the Sacramento and San Joaquin River Basins Comprehensive Study (2002) identified a need for projects to be developed on system-wide, regional and local scales. The Interim Report identified seven regions that share common characteristics including the Lower San Joaquin River region. The current study area encompasses the communities of Stockton, Lathrop, and Manteca, California. The population at risk in the metro area is approximately 685,306 with a damageable property value of \$11.7 billion and preliminary estimates of expected annual damages exceeding \$20 billion (2012 values). Critical infrastructure in the study area includes Interstate 5, Highway 99, Highway 4 (major statewide connectors), three hospitals, agricultural processing facilities and the Stockton Metropolitan Airport. The project would provide improved flood risk management and environmental restoration to the Central Valley of California, and is a key means of contributing to the attainment of the State of California's goals in their Central Valley Flood Protection Plan for the greater Stockton metropolitan area. The Feasibility Cost Sharing Agreement (FCSA) was executed with the San Joaquin Area Flood Control Agency, the local sponsor, in February 2009 and amended in June 2010 adding the state of California as a sponsor. A second amendment to the FCSA allowing the sponsors to accelerate the non-Federal cost share for the study was executed in August 2012.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2014 plus any carry-in funds, will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$7,190,000. \$6,940,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus \$250,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$7,400,000
Reconnaissance Phase (Federal)	210,000
Feasibility Phase (Federal)	3,720,000
Feasibility Phase (Non-Federal)	3,470,000

Division: South Pacific

District: Sacramento

San Joaquin River, Lower San Joaquin River,
California

Study Authority: Flood Control Act of 19628, Public Law 874, § 203; HR 8 May 1964; House Report 108-357, Energy and Water Development Appropriations Act, 2004, (Conference Report).

The feasibility study completion is to be determined.

1/ Estimated Unobligated Carry-In funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ Reflects \$24,000 reprogrammed to the study.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
South San Francisco Bay Shoreline, CA (Completion)	10,233,000	8,843,000	2,000	353,000	0	1,035,000 1/	0

San Francisco District

The overall study area is located along the shoreline of South San Francisco Bay, California, extending from the city of Palo Alto to the city of San Leandro and includes 15,100 acres of salt ponds. A substantial portion of the study area is protected by non-engineered berms that provide precarious protection from tidal flooding for extensive infrastructure, including residential, commercial and industrial developments, including the heart of Silicon Valley. The last estimated value of the urban development in low-lying areas along the Bay shoreline was approximately \$5.5 billion at the September 1998 price level. The study will examine tidal flooding problems, solutions and environmental restoration opportunities that would restore wetland habitat along the bay shoreline. This habitat would support threatened and endangered species including the salt marsh harvest mouse and the California clapper rail. Due to the high cost estimate of \$500 million to construct the entire project area it was necessary to break up the study area into 4 geographical subunits, each of which would have its own interim feasibility study. The Feasibility Scoping Milestone has been completed and the re-scoped study is focusing on the Alviso Pond Complex Area as the first interim study. Of particular interest is the provision of tidal flood protection for the study area, enabling environmental and habitat restoration of the former Cargill South Bay Salt Ponds by the State of California and U.S. Department of Interior. As a result of rescoping the study, the costs to complete have increased from what was last presented to Congress (FY 2006). The California Coastal Conservancy and the Santa Clara Valley Water District, co-sponsors for the first interim study of the Alviso Pond complex and Santa Clara County area, signed the Feasibility Cost Sharing Agreement in September 2005.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to complete the feasibility phase for the Alviso Pond Complex Area, the first interim study. Future interim feasibility studies will be conducted via separate Project Management Plans and Feasibility Cost Sharing Agreements, subject to availability of funds and a local sponsor. The estimated cost of this feasibility phase is \$19,594,000. \$19,394,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus \$200,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$19,930,000
Reconnaissance Phase (Federal)	336,000
Feasibility Phase (Federal)	9,897,000
Feasibility Phase (Non-Federal)	9,697,000

Division: South Pacific

District: San Francisco

South San Francisco Bay Shoreline, California

Study Authority: Section 142 of the Water Resources Development Act of 1976, P.L. 94-94-587, *amended by* Water Resources Development Act of 1986, P.L. 99-662; House Committee on Transportation and Infrastructure Resolution Docket No. 2697, July 24, 2002; and Section 4027 of the Water Resources Development Act of 2007, P.L. 110-114.

The reconnaissance phase was completed in September 2005. The feasibility study is scheduled for completion in Fiscal Year 2014.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2013 \$	Allocation in FY 2013 \$	Budgeted Amount for FY 2014 \$	Additional to Complete After FY 2014 \$
SURVEYS – NEW					
Yuba River Ecosystem Restoration, CA	100,000	0	0	100,000 1/	0

Sacramento District

The study area is the lower Yuba River channel downstream from Englebright Dam (approximately 11 miles upstream from the city of Marysville, Yuba County, California) downstream to the Feather River and the adjacent groundwater basin. The purpose of the study is to determine if there is a Federal interest in undertaking project modifications for implementing fish habitat restoration, fish passage improvements and related flood risk management for Daguerre Point Dam and downstream of Englebright Dam. The goal is to improve fish passage for native anadromous fish species to avoid jeopardizing listed species or adversely modifying critical habitat and to contribute to overall population recovery. The Yuba River includes a natural spawning run of spring-run Chinook salmon and steelhead, both of which are listed as threatened under the Endangered Species Act. The existing fish ladders do not work efficiently at Daguerre Point Dam. Englebright Dam is a complete barrier to fish passage. The fish ladders at Daguerre Point Dam are relatively small compared to standard specifications for ladder design, and tend to clog with woody debris that can block passage or substantially reduce attraction flows, although grates recently installed over the fish ladder bays should reduce the occurrence of blockages by woody debris. The flow in the Yuba River significantly exceeds the fish ladder capacities, hydraulically masks the fish ladder entrances, and renders the ladders ineffective for the greater part of all migration periods. The goal is to improve passage for threatened species at Daguerre Point Dam while preserving its numerous benefits to the region, which include flood risk management for downstream communities including Marysville and Yuba City, and agricultural water supply for six irrigation entities: the Hallwood Irrigation Company, the Cordua Irrigation District, the Ramirez Water District, the Browns Valley Irrigation District, the Brophy Water District, and the South Yuba Water District. The National Marine Fisheries Service recently issued a jeopardy biological opinion for the projects and considers the area key to species recovery. An Initial Appraisal Report (July 2005) indicates that an economically justifiable solution can be formulated to repair the fish ladders, preserve water supply interests, and address related downstream flood protection. The proposed local sponsor, the California Department of Water Resources, expressed support for the study, understands the two-phase planning process, and is willing to participate in 50-50 cost-sharing of feasibility phase studies. The funds requested for Fiscal Year 2014 will be used to initiate and complete the reconnaissance phase of the study and negotiate the Feasibility Cost Sharing Agreement (FCSA) at full Federal expense. The reconnaissance phase is scheduled to be completed in Fiscal Year 2014, when the FCSA is executed, which is expected to be 12 months after initiating the study.

Study Authority: Flood Control Act of 1970, Pub. L. 91-611, § 216, 84 Stat. 1824, 1830 (1970).

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Division: South Pacific

District: Sacramento
1 May 2013

Yuba River Ecosystem Restoration, CA
SPD-29

New Mexico

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Espanola Valley, Rio Grande and Tributaries, NM	3,422,000	2,600,000	119,000	50,000 3/	30,000 2/	300,000 1/	323,000

Albuquerque District

The Española Valley lies at the confluence of the Rio Grande, Rio Chama, Santa Cruz River, and several lesser streams in north-central New Mexico. Española, the largest community in the valley, is located 85 miles south of the New Mexico-Colorado border and 25 miles north of Santa Fe. Three tribal nations (Pueblos) are located within the study area. The Rio Grande is the 4th largest watershed in North America and has been designated by the World Wildlife Fund as one of the world's Top 10 rivers at risk. The bosque (forest) along the Rio Grande functions as critical habitat within the Española Valley. Wetlands in the area also play a critical role in the larger ecosystem through maintaining water quality by filtering out sediments, harmful toxins and excess nutrients along the Rio Grande. The basin has suffered significant ecosystem and environmental degradation due to disruption of these riparian areas by urbanization, exotic species introduction, livestock grazing, flood control or water management. In addition, the basin has been subject to numerous severe floods since 1865; the most recent in 1958, 1969, 1970, 1978, 1987, and 1991. These floods were caused by summer rainfall or spring snowmelt. Corps of Engineers surveys after the floods in 1969 and 1970 estimated damages of \$2,755,000 and \$1,425,000 (October 2012 price levels), respectively. Flood damages occurred in Española, numerous small towns and villages, and at the pueblos, causing both residential and commercial damages including urban and rural bridges, crops, orchards, and irrigation facilities. More recent flooding has occurred in 2011 and 2012, following devastating fires in the upper watershed, resulting in damages to the Pueblos and loss of drinking water supplies in the cities of Santa Fe and Albuquerque. The feasibility study will determine the potential to provide ecosystem restoration, flood damage reduction measures, water quality improvements and recreation enhancements from the Ohkay Owingeh Pueblo to the San Ildefonso Pueblo along the Rio Grande including the city of Española, New Mexico. Proposed restoration features will improve and increase habitat (cottonwood, riparian gallery forest, wetlands type) in the study area, including habitat of the endangered Rio Grande Silvery Minnow and the Southwestern Willow Flycatcher. These features will make a significant connection between existing habitat areas in the Middle Rio Grande and provide a significant contribution to key life requisites for the silvery minnow and flycatcher. As a result of rescoping the study, the costs to complete have increased from what was last presented to Congress (FY 2006). This feasibility study is a unique effort with three tribal nations, the Pueblos of Santa Clara, San Ildefonso and Ohkay Owingeh, who signed a Feasibility Cost Sharing Agreement in December 2005.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2014 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility study is \$5,750,000. \$5,700,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus \$50,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind services.

Division: South Pacific

District: Albuquerque

Espanola Valley, Rio Grande and Tributaries, NM

A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,272,000
Reconnaissance Phase (Federal)	522,000
Feasibility Phase (Federal)	2,900,000
Feasibility Phase (Non-Federal)	2,850,000

Study Authority: Flood Control Act of 1941 (P.L.77-228) as amended by Resolution of the Senate Committee on Environment and Public Works dated December 10, 2009.

The reconnaissance phase was completed in December 2005. The feasibility study completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ \$30,000 funded under the Continuing Resolution Act – reconciliation.

3/ Reflects reprogramming of \$50,000 to the study.

\$0 rescinded from the study.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost \$	Allocations Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budgeted Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Rio Grande Basin, NM, CO, and TX	5,410,000	2,593,000	499,000	237,000 3/	300,000 2/	300,000 1/	1,481,000

Albuquerque District

The Rio Grande Basin is located in the states of New Mexico, Colorado, and Texas, and encompasses an area over 160,000 square miles including 439 acres (78, 184, 177 acres, respectively), from the headwaters of the Rio Grande in central Colorado to its mouth at the Gulf of Mexico near Brownsville, Texas. The river forms the international boundary between the United States and Mexico starting near El Paso, Texas.

Flooding, ecosystem restoration, water quality and interstate/international water deliveries are major issues in the basin. River flow regulation by nine major Corps of Engineers and Bureau of Reclamation dams on the main stem and tributaries for flood risk management and water delivery has changed the historical flow regime in the Rio Grande. Water is diverted for irrigation, industrial and residential uses, and for water deliveries in accordance with Interstate Compact Compliance and International Treaty Compliance. Changes in hydrology, channel configuration, land use activities, and the spread of exotic vegetation have adversely impacted the native riverine ecosystem to the extent that indicator species such as the Rio Grande Silvery Minnow and the Southwestern Willow Flycatcher are now listed as endangered under the Endangered Species Act. This listing, in turn, is impacting existing flood risk management and water delivery operations. Another critical issue involves water supply storage at Elephant Butte Reservoir and Lake Amistad. Unless these losses are addressed, the Rio Grande Basin may lose at least one full year of its drought contingency potential by the year 2050. Many border cities in Texas and Mexico also depend on the Rio Grande for water supply, and under international agreements, 60 percent of the Rio Grande water rights below Fort Quitman, Texas belong to Mexico. Some border cities have rudimentary or non-existent water and wastewater treatment system, which further exacerbates environmental degradation.

The watershed assessment will provide interagency collaboration to develop ecosystem restoration, watershed analysis and adaptive management strategies needed to improve degraded ecosystems in New Mexico, Colorado and Texas and develop and evaluate potential salinity control management strategies. The states of New Mexico, Colorado and Texas (Texas Water Development Board) fully support this study and have signed three Feasibility Cost Sharing Agreements since 2001. Phase 1 was signed in December 2001 with the state of New Mexico; this phase was completed in June 2004. The Feasibility Cost Sharing Agreement for Phase 2 was signed in July 2005 with the state of Texas was completed in January 2008. The Feasibility Cost Sharing Agreement for Phase 3 was signed in September 2008 with the state of New Mexico and was amended in March 2012 to include the state of Texas.

Fiscal Year 2013 funds are being used to continue the watershed assessment and execute a second amendment to the Phase 3 Feasibility Cost Sharing Agreement. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to continue the watershed assessment. The estimated cost of the assessment is \$6,300,000 which is to be shared on a 75-25 percent basis by Federal and non-Federal interests, in accordance with Section 202 of the Water Resources Development Act of 2000, Section 2010 of the Water Resources Development Act of 2007 (modified non-Federal cost-sharing from 50% to 25%) and Section 108 of the 2008 Energy and Water Development Appropriations Act (allows the entire non-Federal share to be work-in-kind).

Division: South Pacific

District: Albuquerque

Rio Grande Basin, NM, CO and TX

A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,985,000
Reconnaissance Phase (Federal)	685,000
Feasibility Phase (Federal)	4,725,000
Feasibility Phase (Non-Federal)	1,575,000

Study Authority: Section 729 of the Water Resources Development Act of 1986, amended by Section 202 of the Water Resources Development Act of 2000 and Section 2010 of the Water Resources Development Act of 2007; Section 108 of the Consolidated Appropriations Act, 2008 (P.L. 110-161).

The watershed assessment completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013..

3/ \$50,000 reprogrammed from the study.

\$1,000 rescinded from the study in FY 2011.

\$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Construction

California

APPROPRIATION TITLE: Construction – Local Protection, Flood Risk Management

PROJECT: American River Watershed (Common Features), California (Continuing)

LOCATION: The project is located in Placer, El Dorado and Sacramento Counties, California and includes three principal streams, the North, Middle and South Forks of the American River that flow westward into Folsom Lake. The outflow of the lake through Folsom Dam then flows through the city of Sacramento and into the Sacramento River. The system includes the Folsom Dam and Reservoir, located on the American River, about 29 miles upstream of the city of Sacramento, California. The American River watershed drains about 2,100 square miles northeast of Sacramento.

DESCRIPTION: The Water Resources Development Act (WRDA) of 1996 authorized the installation of 24 miles of slurry wall along the north and south banks of the American River. This work was completed in early 2001. During construction, sections of levee obstructed by large utilities, highways, etc, were bypassed creating 30 gaps in the seepage/stability remediation. WRDA 1999 authorized remediation of additional sites such as Natomas East Main Drainage Canal (NEMDC), Jacob Lane, Howe Avenue, and the Mayhew Levee Raise and Closure Structure. The objective of the program is to close the remaining gaps in the levees using cutoff walls or other methods. There are four sites left to construct under WRDA 1996, with two contracts planned in FY 2013. One WRDA 1999 site is being constructed in FY 2014 (contract planned for FY 2013). Completion of this remaining WRDA 1996 and 1999 work will lead to the complete realization of the benefits of the currently authorized work.

Under this Project we completed the Natomas Post Authorization Change Report (PACR), Chief's Report dated 30 December 2010. This is a separable element pending authorization. We are also completing a General Re-evaluation Report (GRR) by 2014, which will require additional authorization to construct additional elements.

AUTHORIZATION: Water Resources Development Act of 1996, Pub .L. 104-303, § 101(1) (A), 110 Stat. 3658, 3362 (1996); Water Resources Development Act of 1999, Pub. L. 108-132, § 366 (a), 113 Stat. 269, 319 (1999); Energy and Water Development Appropriations Act of 2004, Pub .L. 108-137, § 129, 117 Stat. 1827, 1839 (2004); Energy and Water Development Appropriations Act of 2008, Pub .L. 110-161, § 130, 121 Stat. 1937, 1947 (2008).

REMAINING BENEFIT-REMAINING COST RATIO: 6.7 to 1 at 7 percent (authorized WRDA 96/99 sites)

TOTAL BENEFIT-COST RATIO: 3.00 to 1 at 7 percent (authorized WRDA 96/99 sites)

INITIAL BENEFIT-COST RATIO: 4.4 to 1 at 7-5/8 percent

BASIS OF BENEFIT-COST RATIO: Initial benefits are from the Supplemental Information Report (SIR) approved June 1996 at 1995 price levels for work authorized in WRDA 1996. Benefits and costs are originally from the Second Addendum to the SIR approved October 2002 at October 2001 price levels. Current benefits and costs were updated in the American River Watershed Economic updated dated June 2011.

Division: South Pacific

District: Sacramento

American River (Common Features), CA

1 May 2013

SPD-37

SUMMARIZED FINANCIAL DATA			STATUS (1 JAN 2013)	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$217,360,000	WRDA 1996 Features	90	TBD
Estimated Non-Federal Cost		72,216,000	WRDA 1999 Features	90	TBD
Cash Contribution	\$57,825,000		WRDA 1996/1999 and		
Other Costs	14,391,000		Natomas PACR	100	Dec 2010
Total		\$289,576,000	Entire Project	92 *	Unsched

			ACCUM PCT OF EST FED COST	PHYSICAL DATA
Allocations to 30 September 2010		\$167,440,000		Streamflow Gages – Install 3 new
Allocation for FY 2011		14,595,000		telemetered gages upstream of
Allocation for FY 2012		21,925,000		Folsom Lake (WRDA 1996)
Conference Allowance for FY 2013		6,400,000	<u>5/</u>	
Allocations through FY 2013		210,360,000	<u>1/ 2/ 3/ 6</u>	97
Estimated Unobligated Carry-In Funds		0	<u>4/</u>	98
President's Budget for FY 2014		2,500,000		
Programmed Balance to Complete after FY 2014		4,500,000	<u>7/</u>	
Un-programmed Balance to Complete after FY 2014		0		

Levees:
 -Construct slurry and jet grout cutoff wall on 19.7 miles of lower American River levees (WRDA 1996)

* Assumes new authorization occurs as a result of the submission of the Natomas Post Authorization Change (PAC) Report to Congress (see OTHER INFORMATION).

1/ \$7,022,000 reprogrammed to the project.

2/ \$276,000 rescinded from the project.

3/ \$143,900 transferred to the Flood Control and Coastal Emergencies account.

Division: South Pacific

District: Sacramento

American River (Common Features), CA

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

6/ PED costs of \$5,338,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

SUMMARIZED FINANCIAL DATA (Continued)

PHYSICAL DATA (Continued)

- Modify 4.4 miles of American River levees (WRDA 1999)
- Modify 12.1 miles of Sacramento River levees (WRDA 1996)
- Modify 10 miles of Natomas Cross Canal levees (WRDA 1999)

JUSTIFICATION: This flood risk management project warrants a high funding priority because it addresses significant risk to human safety in accordance with the U.S. Army Corps of Engineers performance-based guidelines for the construction account. Folsom Dam and Reservoir are key features for flood risk management for Sacramento. Folsom Dam and Reservoir has a capacity of 975,000 acre-feet, which includes a minimum of 400,000 acre-feet of space seasonally dedicated to the mitigation of flood risk. Significant rainfall in recent years has filled Folsom Lake and necessitated record releases in excess of design flow downstream. The levees along the American River are designed to accommodate releases from Folsom Dam of up to 115,000 cfs. Downstream levees would likely fail with sustained flows above this level. Levee failure along the lower American River and Sacramento River could result in flooding of more than 100,000 acres, affecting approximately 900,000 residents, with damages of up to \$58 billion, depending on the magnitude of the event.

The Common Features project, consisting of levee improvements along the American and Sacramento Rivers and Natomas Cross Canal, installation of new and telemetering existing streamflow gages and implementing a new flood warning system on the lower American River as authorized in WRDA 1996 and WRDA 1999, would decrease the probability of flood damage to about a 1 in 86 chance in any given year. Until the remaining WRDA 96/99 features and the Federal plan as yet to be recommended in the GRR are constructed, the Folsom Dam Modifications (aka Joint Federal Project or JFP) releases must not exceed current channel capacity of 115,000 cubic feet per second, which is much less than the 160,000 cubic feet per second design release of the Folsom Dam JFP. The Population At Risk and Population Affected are both 900,000 and the risk depth varies between 3 and 10 to 30 feet with a risk warning time of 12 hours. Risk Based Terms for the 96/99= 49% for the 1% and the Life Safety Hazard Index is 370.

If Fiscal Year 2014 funds are not received, design and construction of the final remaining WRDA 96 and 99 sites will not be accomplished and monetary damages and potential loss of life may result due to a flood event.

Division: South Pacific

District: Sacramento

American River (Common Features), CA

1 May 2013

SPD-39

The Average annual benefits (October 2010 price levels) are as follows:

Annual Benefits	Amount
Flood risk management	\$54,328,000
Other (de-watering, debris removal, levee repair costs)	6,437,000
Total	\$60,765,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Continue design of levee remediation on the WRDA 96/99 portion	\$2,000,000
Continue risk management levee construction on the WRDA 96/99 portion	4,000,000
Continue design levee stability and seepage remediation to WRDA 96/99 portion	400,000
Continue GRR	111,000
Total	\$6,511,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continuation of risk management levee construction, E&D during construction and S&A on the American River as authorized under WRDA 96/99	\$2,500,000
Total	\$2,500,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$14,391,000	

Division: South Pacific

District: Sacramento

American River (Common Features), CA

Pay 20 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 25 percent, as determined under Section 103 (m) of the WRDA 1996, as amended, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood risk management facilities.	57,825,000	\$54,000
Total Non-Federal Costs	\$72,216,000	\$54,000

STATUS OF LOCAL COOPERATION: The Central Valley Flood Protection Board (CVFPB) is the non-Federal sponsor. The Project Cooperation Agreement (PCA) was executed in July 1998 for implementation of features authorized by WRDA 1996.

Amendment 1 to the PCA was executed in June 2003 which increased the project cost and extended the completion date due to the addition of WRDA 1999 levee work. Amendment 2 was executed in September 2006 and increased the total project cost and project completion date in accordance with EWDAA 2004. Amendment 3 was executed in July 2006 and authorized the non-Federal sponsor to accelerate the cash contribution. Amendment 4 was executed in July 2007 and amended the project scope in accordance with WRDA 1999 to add Mayhew, Howe Avenue, Jacob Lane and Natomas East Main Drainage Canal levees to the project scope. The total project cost was increased. The current non-Federal cost estimate of \$72,216,000, which includes a cash contribution of \$57,825,000, is an increase of \$21,182,000 from the non-Federal cost estimate of \$51,034,000 noted in the Project Cooperation Agreement, which includes a cash contribution of \$47,800,000. The sponsor agrees with current costs and continues to be financially able to support the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$217,360,000 is an increase of \$4,260,000 from the latest estimate \$213,100,000 presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$1,168,000
Post Contract Award and Other Estimating Adjustments	3,092,000
Total	\$4,260,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Supplemental Environmental Impact Statement/Environmental Impact Report (SEIS/EIR) was filed with the Environmental Protection Agency on March 8, 1996.

OTHER INFORMATION: Funds used to initiate preconstruction engineering and design of the common elements were allocated in FY 1996. Construction of the first contract on the lower American River levees was initiated in July 1998. WRDA 1996 remaining sites construction started in summer 2009 and is scheduled to be completed in FY 2015. WRDA 1999 remaining sites design will be completed in FY 2013, and construction is scheduled to be completed in FY 2015. Fish and wildlife mitigation costs are currently estimated at \$3,773,000. To date seepage and stability remediation have been constructed on approximately 22 miles on the American River and 1 mile on the Sacramento River. Despite work completed and currently on-going, the city of Sacramento remains one of the communities most at risk for flooding nationwide.

Division: South Pacific

District: Sacramento

American River (Common Features), CA

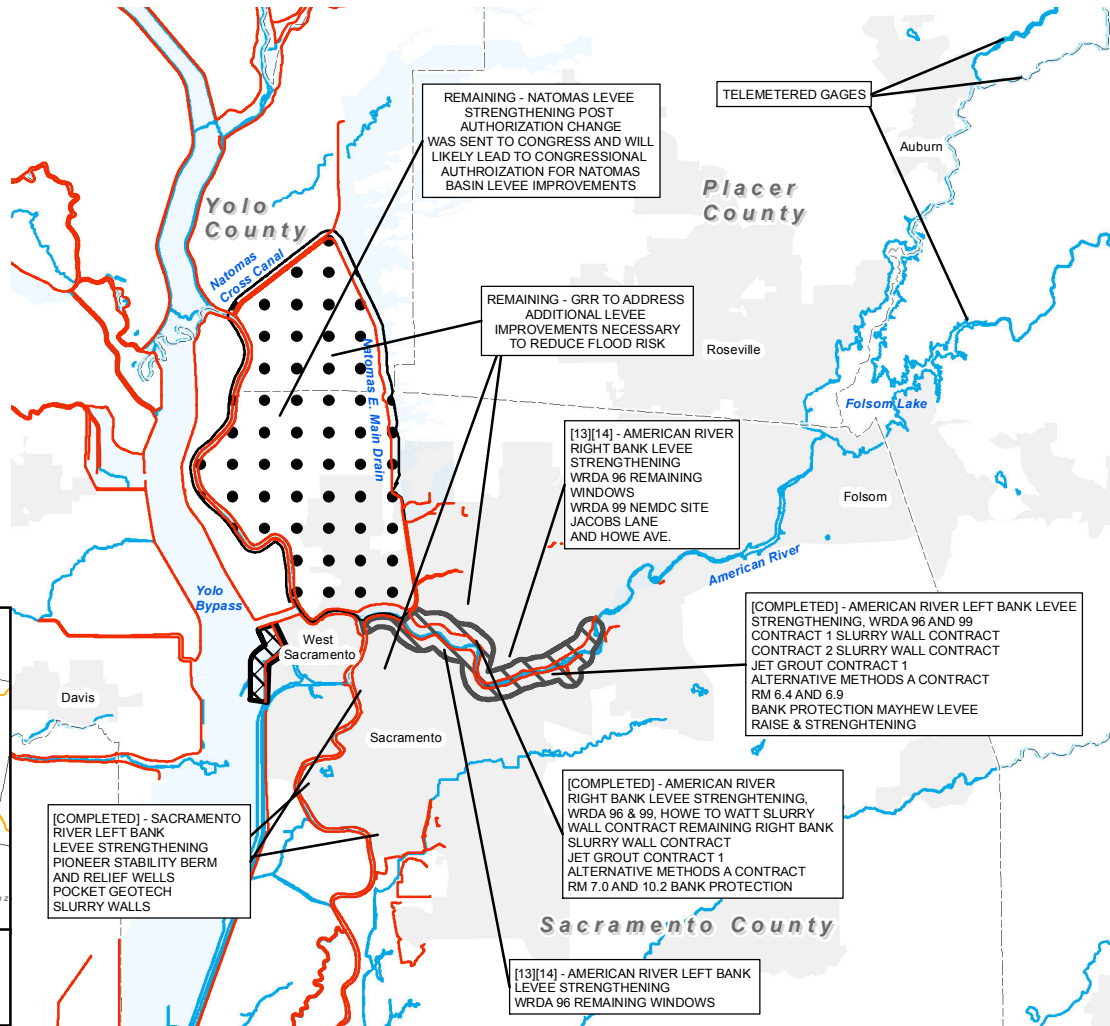
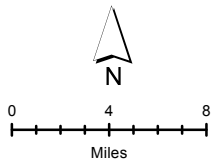
The American River Watershed Feasibility Report was completed in December 1991 and the Supplemental Information Report (SIR) was completed in March 1996. The SIR identified three candidate plans which would help reduce the flood risk facing Sacramento: modifying Folsom Dam and increasing the dedicated flood space; modifying Folsom Dam and the downstream system to allow increased objective releases; and constructing a detention dam upstream of Folsom Dam. In June 1996, the Chief of Engineers deferred a decision on a comprehensive flood risk management plan, but recommended that features common to all three plans be authorized as the first component of a comprehensive plan. WRDA 1996 authorized construction of the Common Features. Funds were appropriated in FY 1998 to initiate construction. Additional flood risk management improvements along the lower American River and Natomas Cross Canal were authorized by Section 366 of WRDA 1999 as part of the overall project. The cost of slurry wall construction authorized by WRDA 1996 has increased significantly due to increased slurry wall quantities, the technical requirement for the more costly jet grout construction method for slurry wall construction around bridges and deep utilities, and several high-cost contract modifications due to slurry leaks during construction. The cost of planning, engineering and design has also increased. Project reauthorization was required to increase the project cost estimate to complete most of the remaining WRDA 1996 and WRDA 1999 features.

OTHER INFORMATION (Continued)

The Second Addendum to the SIR, dated March 2002 and revised July 2002, serves as the decision document/PAC report. Based on this report, Section 129 of EWDAA, 2004 increased the authorized first cost to \$205,000,000. A separate Natomas PAC Report decision document was prepared to address previously unknown levee under-seepage problems and levee deficiencies along the Sacramento River and in the Natomas Basin including the Natomas Cross Canal. The Natomas PAC Report was completed December 2010. Implementation of these features will require a new authorization for approximately \$1,100,000,000 worth of levee improvements in the Natomas Basin portion of the city of Sacramento. The General Reevaluation Report (GRR) is addressing additional levee improvements and seepage and stability remediation on the Sacramento River below the American River, including the Pocket Area, and will likely result in the need for additional design and construction requiring new authorization.

Addressing this risk, GRR continues to evaluate additional levee improvement, along flooding sources adjacent to the city of Sacramento. Upon completion of the GRR, scheduled for FY 2014, and subsequent reauthorization, design and construction efforts will begin on these additional levee improvements to significantly reduce the flood risk for the city of Sacramento.

The 60% design M-CACES construction cost estimates for four construction contracts, prepared subsequent to the FY13 President's budget submission, are significantly higher than preliminary estimates, resulting in an additional requirement of \$7.2M in Federal funding. These contracts are scheduled for award in the 4th quarter of FY13. The non-federal sponsors have committed to provide real estate certifications for all by Spring 2013. Delay in construction of these vital levee improvements will result in the Sacramento area being at continued flood risk. An updated cost estimate reflecting these increases has been prepared and is undergoing review prior to final approval.



Legend

- Levees
- Natomas Levee Improvement Construction Area
- American River Common Features WRDA 1999 Construction Area
- West Sacramento Project Construction Area
- County Lines

Work Status

- Completed - Work completed as of 30 September 2012
- [13] Work proposed with funds available for FY 2013
- [14] Work proposed with funds available for FY 2014
- Remaining - Work required to complete the project after FY 2014

Local Protection Projects - Flood Control

American River Watershed California (Common Features)

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers, South Pacific Division, Sacramento District

1 January 2013

APPROPRIATION TITLE: Construction – Local Protection, Flood Risk Management

PROJECT: American River Watershed (Folsom Dam Modifications), California (Continuing)

LOCATION: The project is located in Placer, El Dorado and Sacramento Counties, California and includes the North, Middle and South Forks of the American River that flow westward into Folsom Lake. The outflow of the lake through Folsom Dam then flows through the city of Sacramento and into the Sacramento River. The system includes the Folsom Dam and Reservoir, located on the American River, about 29 miles upstream of the city of Sacramento, California. The American River watershed drains about 2,100 square miles northeast of Sacramento.

DESCRIPTION: Engineering evaluations indicated that the level of flood protection along much of the American River provides a level less than a 1% chance of exceedence annually. Several flood control projects have been authorized for construction for the American River to reduce the risk of flooding to Sacramento. Currently, Folsom Dam is designed to release up to 115,000 cubic feet per second (cfs) during flood operations, however the existing outlets limit releases to 36,000 cfs until approximately one half of the reservoir's flood control space is filled. Additional work is scheduled for Folsom Dam and related facilities to mitigate flood risk. Authorized work for Folsom Dam Modifications (aka Joint Federal Project - JFP), which will allow releases much earlier, consists of construction of a new auxiliary spillway and modifying the flood control storage space in Folsom Reservoir to a variable space ranging from 400,000 to 600,000 acre-feet. The Joint Federal Project is a joint effort between the US Bureau of Reclamation (USBR) and the US Army Corps of Engineers (USACE). The USBR completed their 20% of the work under their Dam Safety program in January 2011. USACE will complete the remaining 80%. Details of the plan are described in the Post Authorization Change (PAC) Report – American River Watershed Project, Folsom Dam Modifications and Folsom Dam Raise Projects.

AUTHORIZATION: Water Resources Development Act, Pub. L. 106-53, § 101(a)(6), 113 Stat. 269 (1999); Water Resources Development Act, Pub. L. 110-114, § 3029(b), 121 Stat. 1041 (2007).

REMAINING BENEFIT-REMAINING COST RATIO: 2.5 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 2.2 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 4.4 to 1 at 7-5/8 percent.

BASIS OF BENEFIT-COST RATIO: Folsom Dam Modifications – Benefits and costs were updated in the Post Authorization Change Report (PAC) dated March 2007 and finalized in the Economic Reevaluation Report (ERR) dated February 2009. Benefits and costs were updated in the American River Watershed Economic Update dated June 2011.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
<u>Folsom Dam Modifications</u>						
Estimated Federal Cost		\$513,369,000		Entire Project	12	TBD
Estimated Non-Federal Cost		251,631,000				
Cash Contribution	\$267,750,000					
Other Costs	(16,119,000) <u>8/</u>					
Total		\$765,000,000				

			ACCUM PCT OF EST FED COST	PHYSICAL DATA
Allocations to 30 September 2010		\$119,075,468		Authorized -
Allocation for FY 2011		58,029,472		Construct auxiliary spillway
Allocation for FY 2012		31,000,000		
Conference Allowance for FY 2013		86,700,000 <u>5/</u>		
Allocations through FY 2013		294,804,940 <u>1/ 2/ 3/ 6/</u>	57	
Estimated Unobligated Carry-In Funds		0 <u>4/</u>		
President's Budget for FY 2014		66,400,000	70	
Programmed Balance to Complete after FY 2014		152,164,060 <u>7/ 8/</u>		
Un-programmed Balance to Complete after FY 2014		\$ 0		

1/ \$6,285,000 reprogrammed to the project.

2/ \$320,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

6/ PED costs of \$6,657,868 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construction these features.

8/ Sponsor credit approved on February 22, 2010 by ASA(CW) for \$16,119,000.

JUSTIFICATION: This flood risk management project addresses significant risk to human safety in accordance with the U.S. Army Corps of Engineers performance-based guidelines for the construction account. Folsom Dam and Reservoir are key features for flood risk management for Sacramento. Folsom Dam and Reservoir has a capacity of 975,000 acre-feet, which includes a minimum of 400,000 acre-feet of space seasonally dedicated to the mitigation of flood risk. Significant rainfall in recent years has filled Folsom Lake and necessitated record releases in excess of design flow downstream. The levees along the American River are designed to accommodate releases from Folsom Dam of up to 115,000 cfs. Downstream levees would likely fail with sustained flows above this level. Levee failure along the lower American River and Sacramento River could result in flooding of more than 100,000 acres, affecting approximately 900,000 residents, 110,000 structures, with damages of up to \$58 billion, depending on the magnitude of the event. The authorized Folsom Dam Modifications project would construct an auxiliary spillway. This would further reduce the risk of flood damage to about a 1 in 156 chance in any given year.

The auxiliary spillway also addresses dam safety issues. The JFP construction satisfies the USBR's significant dam safety issues at Folsom Dam. This is the USBR's top dam safety issue in the nation. Without the JFP, the USBR has determined a probable maximum flood would cause catastrophic failure of the Folsom Dam and many lives would be lost. Emergency response and regional/national economic disruption costs associated with flooding in Sacramento are enormous. There is limited egress and ingress across Sacramento and American Rivers and there would be a disruption of statewide drinking water supplies. The Life Safety Hazard Index is 370.

If Fiscal Year 2014 funds are not received: schedule commitments cannot be met, with adverse impact to USBR's dam safety mission and USACE Flood Risk Management mission associated with completion of the Joint Federal Project; Phase III (Control Structure) and Phase IV (Approach Channel and Chute & Stilling Basin) contracts would have to be terminated for convenience; and Control Structure contract would be terminated putting Sacramento area at further risk of catastrophic flooding and increasing risk of potential failure of Folsom Dam from Probable Maximum Flood storm.

Average annual benefits (October 2010 price levels) are as follows:

Annual Benefits	Amount
Flood risk management	\$120,829,000
Other (de-watering, debris removal, levee repair costs)	12,310,000
Total	\$133,139,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Continue construction of the control structure	\$6,034,000
Design adjustments and schedule acceleration on the control structure	6,610,000
Continue design of approach channel and chute and stilling basin	2,200,000
Continue the Water Control Manual (formerly Permanent Operations Study)	3,055,000
Award contract to construct the chute and stilling basin and approach channel to spillway	68,835,000
Total	\$86,734,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue construction of approach channel and chute and stilling basin	\$51,400,000
S&A to support control structure continuing construction contract	3,600,000
Mod to Phase III contract	6,000,000
Bulkhead Gate Installation	2,400,000
Continue Permanent Operations Study	3,000,000
Total	\$66,400,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
<u>Folsom Dam Modifications</u>		
Pay 35 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	\$267,750,000 9/	\$800,000 10/
Total Non-Federal Costs	\$267,750,000	\$800,000 10/

9/ Includes \$16,119,000 sponsor credit approved February 22, 2010 by ASA.

10/ The operation and maintenance (O&M) would continue to be performed by the USBR. An initial cost-sharing agreement has been negotiated between the Sacramento Area Flood Control Agency (SAFCA) and USBR to pay the portion of O&M costs related to the new flood control features. Subsequent agreements are to be negotiated as project information is further defined.

STATUS OF LOCAL COOPERATION: The Central Valley Flood Protection Board (CVFPB) and Sacramento Area Flood Control Agency (SAFCA) are the non-Federal sponsors for the Folsom Dam Modifications. The PCA for the Folsom Dam Modifications was executed March 30, 2004 and amended August 24, 2009 to incorporate Section 3029 of WRDA 2007. A second amendment to the Folsom Dam Modifications PCA addressing the allocation of sponsor credits was approved February 22, 2010. A third amendment to the PCA, was signed March 4, 2012 and allows non-Federal sponsor to accelerate funds.

The current non-Federal cost estimate of \$251,631,000, which includes a cash contribution of \$267,750,000 and credit of \$16,119,000, is a decrease of \$41,269,150,000 from the non-Federal cost estimate of \$292,900,000 noted in the Project Cooperation Agreement, which includes a cash contribution of \$292,900,000. The sponsor agrees with current costs and continues to be financially able to support the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$513,369,000 is a decrease of \$28,031,000 from the latest estimate \$541,400,000 presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Post Contract Award and other Estimating Adjustments (contingencies reduced based on Cost Schedule Risk Analysis)	(\$28,031,000)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: Folsom Dam Modifications/Folsom Dam Raise (Joint Federal Project) – The USBR, with cooperation from the Corps, prepared an EIS/EIR, which was finalized in March 2007. USBR and the Corps signed a joint Record of Decision (ROD) on May 3, 2007. A second EIS/EIR document that is supplemental to the original EIS/EIR, is currently underway. This supplemental EIS/EIR will address the proposed construction actions associated with the cutoff wall, approach channel and spur dike stages of Phase 4 of the project. A ROD is anticipated in 2013.

OTHER INFORMATION: Funds used to initiate preconstruction engineering and design on the Folsom Dam Modifications were allocated in FY 2000. Funds to initiate construction were appropriated in FY 2001. Fish and wildlife mitigation costs are currently not expected to be significant.

The American River Watershed Feasibility Report was completed in December 1991 and the Supplemental Information Report (SIR) was completed in March 1996. The SIR identified three candidate plans which would help reduce the flood risk facing Sacramento: modifying Folsom Dam and increasing the dedicated flood space; modifying Folsom Dam and the downstream system to allow increased objective releases; and constructing a detention dam upstream of Folsom Dam. In June 1996, the Chief of Engineers deferred a decision on a comprehensive flood control plan, but recommended that features common to all three plans be authorized as the first component of a comprehensive plan.

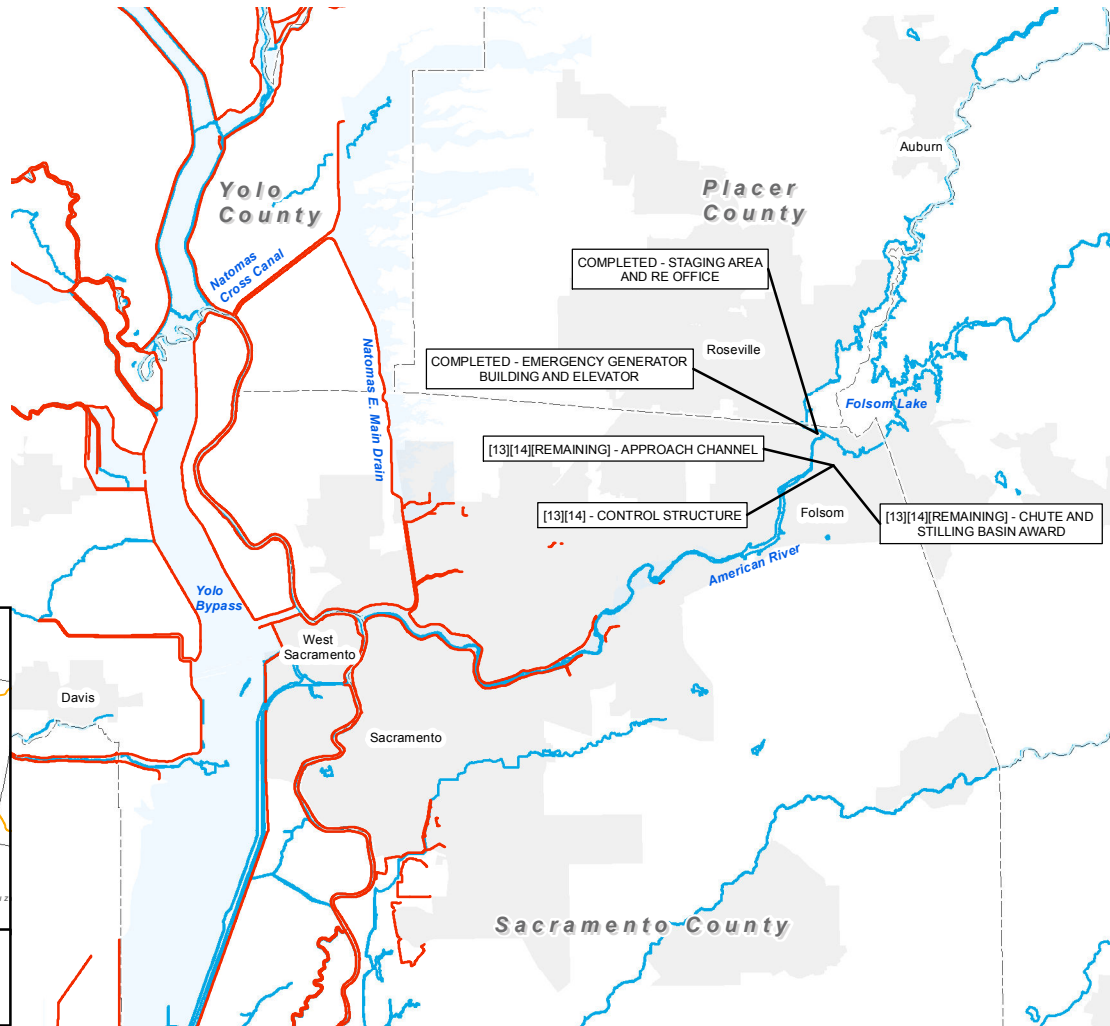
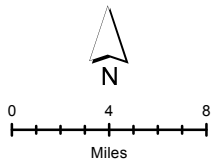
SAFCA prepared the Folsom Dam Modification Report New Outlets Plan dated March 1998 (SAFCA Outlet Report), which identified some proposed changes to the Folsom Dam Modification Plan described in the 1996 SIR. The 1996 SIR as modified by SAFCA Outlet Report was the basis for the project authorized under WRDA 1999. The Limited Reevaluation Report, dated November 2003, documents the 1996 SIR plan as modified by the SAFCA Outlet Report. Information in FY 2007 budget submittal indicated that the project, as originally designed, would exceed the maximum authorized cost per Section 902 of WRDA 1986. Action was taken to conduct engineering evaluations and to develop a Post Authorization Change and Engineering Documentation Report (PAC/EDR) document recommending a functionally equivalent performance project that involves a new gated auxiliary spillway on the left embankment of Folsom Dam. USACE PAC Report and U.S. Bureau of Reclamation Mod Report recommended a Joint Federal Project, which addresses both the Dam Safety and the Flood Risk Management issues. During PAC and Mod approval process, both ASA(CW) and ASI(WS) made strong commitments to each other to make the JFP a top priority and expeditiously design and construct the project, because of the significant property and loss of life risks and the efficiencies of both agencies working together.

OTHER INFORMATION (Continued)

Further, both agencies recognized that neither agency could or should move forward without a strong commitment to build the project together. Both the PAC and Mod Reports were approved by OMB September 2007. WRDA 2007 authorized construction in accordance with the PAC at a total cost of \$683,000,000 (USACE portion) and Congress encouraged USACE and USBR to move forward expeditiously.

Engineering and design effort on the Folsom Dam Modifications portion of the JFP will continue through FY 2013. Completion of the auxiliary spillway is slated for year 2017. USBR started construction of the JFP on January 11, 2008 and completed their portion of the project in January 2011.

Additional funds of \$12,300,000 are required in FY 2013 to award a control structure recovery modification. This modification does not increase overall project cost nor is it driven by a schedule delay. The modification realigns funding stream enabling early accomplishment of planned work which will allow meeting the committed completion date.



Legend

— Levees

Work Status

[Completed] - Work completed as of 30 September 2012

[13] - Work proposed with funds available for FY 2013

[14] - Work proposed with funds available for FY 2014

[Remaining] - Work required to complete the project after FY 2014

Local Protection Projects - Flood Control American River Watershed California (Folsom Dam Modifications)

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District



1 January 2013

APPROPRIATION TITLE: Construction – Local Protection, Flood Risk Management

PROJECT: American River Watershed, Folsom Dam Raise – Bridge, California (Continuing)

LOCATION: The project is located in Placer, El Dorado and Sacramento Counties and is comprised of the North, Middle and South Forks of the American River that flow westward into Folsom Lake. The outflow of the lake through Folsom Dam then flows through the city of Sacramento and into the Sacramento River. The system includes the Folsom Dam and Reservoir, located on the American River, about 29 miles upstream of the city of Sacramento, California. The American River watershed drains about 2,100 square miles northeast of Sacramento.

DESCRIPTION: Engineering evaluations indicated that the level of flood protection along much of the American River provides a level less than a 1% chance of exceedence annually. Several flood control projects have been authorized for construction for the American River to reduce the risk of flooding to Sacramento. Currently, Folsom Dam is designed to release up to 115,000 cubic feet per second (cfs) during flood operations, however the existing outlets limit releases to 36,000 cfs until approximately one half of the reservoir's flood control space is filled. Additional work is scheduled for Folsom Dam and related facilities to mitigate flood risk. The authorized project to raise Folsom Dam 3.5 feet includes raising related dikes, right and left dams, Morman Island Auxiliary Dam, replacement/modification of 3 emergency spillway tainter gates, construction of a permanent bridge downstream of Folsom Dam, and three ecosystem restoration projects, including the temperature control shutters project and two downstream sites. The Joint Federal Project is a joint effort between the US Bureau of Reclamation (USBR) and the US Army Corps of Engineers (USACE). USBR will complete 20% of the work under their Dam Safety program with the USACE completing the remaining 80%. Details of the plan are described in the Post Authorization Change (PAC) Report – American River Watershed Project, Folsom Dam Modifications and Folsom Dam Raise Projects.

AUTHORIZATION: Energy and Water Development Appropriations Act, Pub. L. 108-137, §§ 128, 134, 117 Stat. 1827 (2004); Energy and Water Development Appropriations Act, Pub. L. 109-103, 119 Stat. 2247 (2006); Energy and Water Development Appropriations Act, Pub. L. 110-161, § 130, 121 Stat. 1937, 1947 (2008); Omnibus Appropriations Act 2009, Pub. L. 111-8, § 109, 123 Stat. 524 (2009)

REMAINING BENEFIT-REMAINING COST RATIO: 2.4 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 3.4 to 1 at 6-7/8 percent (2001)

BASIS OF BENEFIT-COST RATIO: Folsom Dam Raise – Benefits and costs were updated in the American River Watershed Common Features Project (WRDA 1996/1999) Economic Update dated June 2011. The Folsom Dam Modifications must be completed to realize full benefits. The Dam Raise is the basis for future benefits and the basis of the BCR the bridge was needed to mitigate traffic impacts from construction.

Division: South Pacific

District: Sacramento

American River Watershed, Folsom Dam Raise–Bridge, CA

1 May 2013

SPD-51

SUMMARIZED FINANCIAL DATA				STATUS (1 JAN 2013)	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
<u>Folsom Dam Raise</u>						
Estimated Federal Costs		\$118,482,000		Folsom Dam Raise	34 8/	TBD
Estimated Non-Federal Costs		63,578,000				
Cash Contribution	\$62,083,000					
Other Costs	1,495,000					
Total Folsom Dam Raise		\$182,060,000				
<u>Folsom Bridge</u>						
Estimated Federal Costs		\$ 89,717,000	9/	Folsom Dam Bridge	95	Jun 2009
Estimated Non-Federal Costs		46,330,000		Mitigation		TBD
Cash Contribution	\$33,263,000					
Other Costs	13,067,000					
Total Folsom Bridge		\$136,047,000				
<u>Project Summary</u>						
Estimated Federal Costs		\$208,199,000				
Estimated Non-Federal Costs		109,908,000				
Cash Contribution	\$95,346,000					
Other Costs	14,562,000					
Total Estimated Project Costs		\$318,107,000		ACCUM PCT OF EST FED COST		
					PHYSICAL DATA	
Allocations to 30 September 2010		\$117,557,286				
Allocation for FY 2011		328,963				Authorized FOLSOM DAM RAISE -
Allocation for FY 2012		1,700,000				Raise Folsom Dam 3.5 feet, wing walls & dikes
Conference Allowance for FY 2013		5,100,000	5/			Construct Bridge
Allocations through FY 2013		124,686,249	1/ 2/ 3/ 6/ 60			Accomplish ecosystem restoration
Estimated Unobligated Carry-In Funds		0	4/			
President's Budget for FY 2014		3,150,000		61		
Programmed Balance to Complete after FY 2014		80,362,751	7/			
Un-programmed Balance to Complete after FY 2014		\$ 0				

Division: South Pacific

District: Sacramento

American River Watershed, Folsom Dam Raise-Bridge, CA

1 May 2013

SPD-52

SUMMARIZED FINANCIAL DATA (Continued)

1/ \$860,000 reprogrammed to the project.

2/ \$241,000 rescinded from the project.

3/ \$170,000 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013. however only \$2,100,000 can be used (see OTHER INFORMATION).

6/ PED costs of \$16,095,636 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ Reflects physical completion for Folsom Dam Raise portion only.

9/ Temporary bridge is now reflected under Folsom Bridge cost only. Funds of \$48,300,000 are authorized to be appropriated for the permanent bridge and not subject to cost sharing requirements with non-Federal interests (see OTHER INFORMATION).

JUSTIFICATION: This flood risk management project addresses significant risk to human safety in accordance with the USACE performance-based guidelines for the construction account. Folsom Dam and Reservoir are key features for flood risk management for Sacramento. Folsom Dam and Reservoir has a capacity of 975,000 acre-feet, which includes a minimum of 400,000 acre-feet of space seasonally dedicated to the mitigation of flood risk. Significant rainfall in recent years has filled Folsom Lake and necessitated record releases in excess of design flow downstream. The levees along the American River are designed to accommodate releases from Folsom Dam of up to 115,000 cfs. Downstream levees would likely fail with sustained flows above this level. Levee failure along the lower American River and Sacramento River could result in flooding of more than 100,000 acres, affecting approximately 900,000 residents, with damages of up to \$58 billion, depending on the magnitude of the event. The Folsom Dam Raise Project would further reduce the risk of flood damage to about a 1 in 185 chance in any given year. The Population at Risk is 900,000, the depth of flooding is 10 feet and the risk warning time is 12 hours. Emergency response and regional/national economic disruption costs associated with flooding in Sacramento are enormous. Limited egress and ingress across the Sacramento and American rivers and disruption of statewide drinking water supplies. The Life Safety Hazard Index is 370.

If Fiscal Year 2014 funds are not received, the following will not be accomplished: Folsom Dam Raise design and National Environmental Policy Act coordination of Environmental Statement/Environmental Assessment; construction contract award in FY 2015 providing additional flood protection to the city with the No. 1 flood risk in the nation; advance design of follow-on dam raise elements; and mitigation monitoring for the bridge, potentially resulting in jeopardy biological opinions from environmental resource agencies.

Average annual benefits (October 2010 price levels) are as follows:

Annual Benefits	Amount
Flood risk management	\$28,800,000
Other (de-watering, debris removal levee repair costs)	2,158,000
Total	\$30,958,000

Division: South Pacific

District: Sacramento

American River Watershed, Folsom Dam Raise–Bridge, CA

1 May 2013

SPD-53

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Continue design on project features for the Folsom Dam Raise	\$1,812,000
Continue ecosystem mitigation monitoring	462,000
Total	\$2,274,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Folsom Dam Raise	
Continue design on project features (Dam Raise)	\$3,000,000
Folsom Dam Bridge	
Mitigation and monitoring	150,000
Total	\$3,150,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
<u>Folsom Dam Raise – Raise Component</u> Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 1,495,000	
Pay 35 percent of the costs allocated to flood control to bring non-Federal share to 35 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	42,255,000	<u>10/</u>
Pay 33 percent of the costs allocated to ecosystem restoration to bring non-Federal share to 35 percent.	19,828,000	
Total Folsom Dam Raise Component	\$63,578,000	

Division: South Pacific

District: Sacramento

American River Watershed, Folsom Dam Raise–Bridge, CA

1 May 2013

SPD-54

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
<u>Raise – Bridge Component</u>		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas (City of Folsom).	\$ 7,931,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project (City of Folsom).	5,136,000	
City of Folsom's share of costs associated with bridge construction.	22,941,000	
Pay 35 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities (refers to temporary portion of the bridge).	10,322,000	
Total Folsom Bridge Component	\$ 46,330,000	
Total Folsom Dam Raise (including Bridge) Non-Federal Costs	\$109,908,000	

10/ The operation and maintenance (O&M) would continue to be performed by USBR. An initial cost-sharing agreement would be negotiated between SAFCA and USBR to pay the portion of O&M costs related to the new flood control features. Amount is for both Folsom Dam Modifications (JFP) and Folsom Dam Raise.

STATUS OF LOCAL COOPERATION: The Central Valley Flood Protection Board (CVFPB) and the Sacramento Area Flood Control Agency (SAFCA) are the non-Federal sponsors for the Folsom Dam Raise. The Project Partnership Agreement (PPA) for the Dam Raise is scheduled for execution in FY 2013. The non-Federal sponsors are financially capable and willing to contribute the non-Federal share. The non-Federal sponsors have also agreed to make all required payments concurrently with project construction.

The city of Folsom is the non-Federal sponsor for the Folsom Bridge Project. The PCA was executed November 22, 2006.

Division: South Pacific

District: Sacramento

American River Watershed, Folsom Dam Raise–Bridge, CA

1 May 2013

SPD-55

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$208,199,000 is a decrease of \$14,898,000 from the latest estimate \$223,097,000 presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Cost Schedule Risk Analysis Contingency	\$26,370,000
Post Contract Award and Other Estimating Adjustments (Folsom Bridge)	(41,268,000) <u>11/</u>
Total	(\$14,898,000)

11/ Cost for temporary bridge had previously inadvertently been included under both Folsom Dam Raise and Folsom Bridge components.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Folsom Dam Modifications/Folsom Dam Raise (Joint Federal Project) – The USBR, with cooperation from the Corps, prepared an EIS/EIR, which was finalized in March 2007. USBR and the Corps signed a joint Record of Decision (ROD) on May 3, 2007.

OTHER INFORMATION: Funds used to initiate preconstruction engineering and design for the American River Watershed project were allocated in FY 1992. The Long Term Study (Feasibility Report) for the entire American River Watershed was completed in February 2002. The Chief's Report, dated 5 November 2002, was followed by the Division Engineer's Public Notice issued on 22 March 2003. Funds to initiate construction were appropriated in FY 2004. The Post Authorization Change (PAC) Report was submitted to OMB on 7 May 2007, recommending the Raise design be refined from 7-foot raise to a 3.5-foot raise. Fish and wildlife mitigation costs are currently not expected to be significant.

The American River Watershed Feasibility Report was completed in December 1991 and the Supplemental Information Report (SIR) was completed in March 1996. The SIR identified three candidate plans which would help reduce the flood risk facing Sacramento: modifying Folsom Dam and increasing the dedicated flood space; modifying Folsom Dam and the downstream system to allow increased objective releases; and constructing a detention dam upstream of Folsom Dam. In June 1996, the Chief of Engineers deferred a decision on a comprehensive flood control plan, but recommended that features common to all three plans be authorized as the first component of a comprehensive plan.

Folsom Bridge – Total project cost (including only the temporary bridge component) was authorized at \$257,300,000 in EWDA, 2004, P.L. 108-137, Section 128, for both Folsom Dam Raise and Folsom Bridge. Section 128 also modified the cost sharing of the permanent bridge feature and required status reports to Congress. Sec. 128(b) of EWDA, 2006, P.L. 109-103 amended Sec. 134 of P.L. 108-137 by authorizing "to be appropriated to the Secretary of the Army \$30,000,000 for the construction of the permanent bridge described in section 128(a) of P.L. 109-103, above the \$36,000,000 provided for in the recommended plan for bridge construction. The \$30,000,000 shall not be subject to cost sharing requirements with non-Federal interests." Sec. 109 of the Omnibus Appropriations Act, 2009, P.L. 111-8 further amended Sec. 134 of P.L. 108-137, as amended by section 128(b) of P.L. 109-103, by striking "\$30,000,000" wherever it appears and inserting "\$48,300,000" in lieu thereof. The requirement for FY 2013 for ongoing mitigation is \$450,000.

The PAC Report recommended the Raise design be refined from 7-foot raise to a 3.5-foot raise. The construction contract for the temperature control shutters was shelved in order to focus on the flood risk management portion of this project, thereby reducing the FY 2013 requirement by \$20,700,000 from the last report. Additionally, due to ensuring this project does not conflict with the Joint Federal Project's schedule for completion and incorporating design changes to the Raise (modifying the existing emergency gates rather than replacing them), the requirement for FY 2013 was decreased from \$5,100,000 to \$2,100,000.

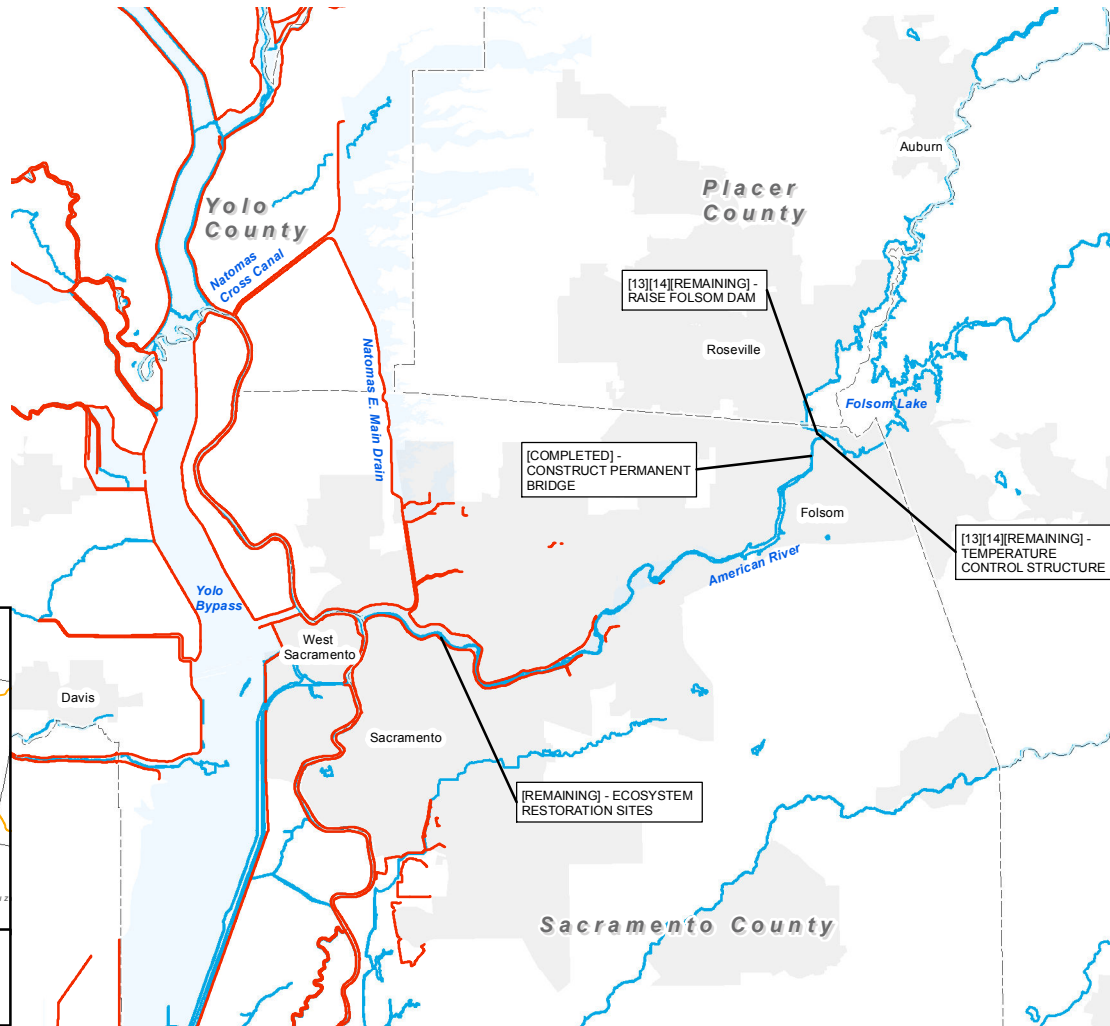
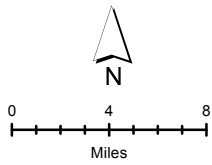
Division: South Pacific

District: Sacramento

American River Watershed, Folsom Dam Raise–Bridge, CA

1 May 2013

SPD-56



Legend

— Levees

Work Status

[Completed] - Work completed as of 30 September 2012

[13] - Work proposed with funds available for FY 2013

[14] - Work proposed with funds available for FY 2014

[Remaining] - Work required to complete the project after FY 2014

Local Protection Projects - Flood Control American River Watershed California (Folsom Dam Raise and Bridge)

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District



1 January 2013

APPROPRIATION TITLE: Construction - Local Protection (Ecosystem Restoration)

PROJECT: Hamilton City, California (New Start)

LOCATION: Hamilton City is located along the west bank of the Sacramento River in Glenn County, California about 85 miles north of the City of Sacramento. The project area and town are bounded on the east by the Sacramento River, and to the west by the Glenn Colusa Canal. The area lies north of existing Sacramento River levees, and therefore, is unprotected by the same. The project boundaries extend about two miles north and six miles south of Hamilton City.

DESCRIPTION: The Hamilton City feasibility study was accomplished as part of the Central Valley Integrated Flood Management Study (formerly Sacramento and San Joaquin River Basins Comprehensive Study) with the State of California as the non-Federal sponsor. This project provides an example of an integrated, multiple-purpose project developed in accordance with existing USACE policy, which can serve as a model for other projects. The project will construct a setback levee about 6.8 miles long and degrade an existing private levee, actively restoring 1,145 acres of riparian woodland, 261 acres of riparian shrub, and 70 acres of floodplain meadow now cut off by that levee. To accomplish ecosystem restoration, most of the existing levee will be removed to reconnect the river to the floodplain and allow for overbank flooding. In areas where the existing levee reduces velocities of the Sacramento River, the levee will remain in place. The new setback levee will begin 2 miles north of Hamilton City. It will tie into high ground near the end of the existing levee to prevent flows greater than 250 year event from wrapping around the setback levee and over County Road 203 and into populated areas. The setback levee will run SE along County Road 203 then turn easterly and run parallel to the Sacramento River for about 1,300 feet. A seepage berm will be constructed on the landside of the setback levee at Dunning Slough. The levee will have a 90 percent reliability of passing the 75 year event. At Highway 32, the levee will turn east and run parallel to the highway until tying into the approach at Gianella Bridge. The highway will not need to be raised, but rock riprap will be placed to protect the levee embankment and bridge from floodwaters. South of Highway 32, the alignment follows the existing levee adjacent to Irvine Finch River Access. South of this access, the levee will be aligned away from the river to open up the floodplain. The alignment will cut across a portion of Dunning Slough and provide protection to the Hamilton City wastewater treatment plant. South of Dunning Slough, the alignment will follow the western edge of the habitat restoration area before turning east and merging with the southern end of the existing levee at Road 23. As the levee turns east, the levee height will gradually decrease from 9 feet to approximately 6 feet. At this point the new setback levee will transition into a "training dike". This height reduction will avoid negative hydraulic effects to downstream property owners. The training dike continues a mile south of Road 23, running west of the USFWS boundary. This project will manage flood risk for the town of Hamilton City and adjacent agricultural lands while providing significant habitat acreage in the floodplain.

AUTHORIZATION: Water Resources Development Act of 2007, Pub. L. 110-114, § 100(8), 121 Stat. 1049, 1050 (2007)

REMAINING BENEFIT-REMAINING COST RATIO: N/A

TOTAL BENEFIT-COST RATIO: Hamilton City is a multiple-purpose flood risk management and ecosystem restoration project. The project was formulated to maximize use of integrated "joint" features (features that produce both flood risk management and ecosystem restoration benefits). During formulation a separable cost-remaining benefit analysis was performed to separate out costs associated with features that produce separable or joint benefits. The project will provide restoration benefits of 888 average annual habitat units (AAHUs) and average annual flood risk management benefits of \$521,000 (2012 prices). This project reasonably maximizes total ecosystem restoration and flood risk management benefits compared to costs. (See Other Information)

BASIS OF BENEFIT-COST RATIO: Project justification was based on flood risk management and ecosystem restoration, as described in the Final Feasibility Report for Hamilton City Flood Damage Reduction and Ecosystem Restoration, California, Project dated July 2004 at October 2003 price levels, and Chief's Report dated 22 December 2004.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$34,100,000		Entire Project	0	TBD
Estimated Non-Federal Cost		18,300,000				
Cash Contributions	\$ 1,180,000					
Other Costs	17,120,000					
Total Estimated Project Cost		\$52,400,000				
Allocations to 30 September 2010		\$ 2,822,000				
Allocation for FY 2011		0				
Allocation for FY 2012		0				
Conference Allowance for FY2013		0				
Allocations through FY 2013		2,822,000	<u>1/</u> <u>2/</u> <u>3/</u> <u>5/</u>	19		
Estimated Unobligated Carry-In Funds		0	<u>4/</u>			
President's Budget for FY 2014		15,000,000		52		
Programmed Balance to Complete after FY 2014		23,778,000				
Un-programmed Balance to Complete after FY 2014		\$ 0				

1/ \$140,000 reprogrammed to the project.

2/ \$2,000 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

5/ PED costs of \$2,822,000 are included in this amount.

PHYSICAL DATA: The project will construct a setback levee about 6.8 miles long and degrade an existing private levee, actively restoring 1,145 acres of riparian woodland, 261 acres of riparian shrub, and 70 acres of floodplain meadow now cut off by that levee. A seepage berm will be constructed on the landside of the setback levee at Dunning Slough.

JUSTIFICATION: Project justification was based on both flood risk management and ecosystem restoration. The project was formulated to maximize use of integrated “joint” features (features that produce both flood risk management and ecosystem restoration benefits). A separable cost-remaining benefit analysis was performed to separate out costs associated with features that produce separable and joint benefits. For the ecosystem component (\$47.2 million) over 95% of the Sacramento River’s floodplains (riparian and wetland habitats) have been lost due to development and agriculture. This project will restore approximately 1,480 acres of floodplain habitat with all the land between an existing levee and the new setback levee restored to a natural floodplain. A variety of habitat types will be restored to include riparian forest and scrub, oak savannah, and grassland communities. Restoration of this flood plain will benefit the recovery of eight federally listed or proposed species in the area. This includes winter-run Chinook salmon, steelhead trout, Valley elderberry longhorn beetle, and Swainson’s hawk. The restoration will provide vital habitat (nesting, foraging, and shelter) to these species and increase biodiversity to more natural levels. The project plans collaboration with other federal, state, local, and non-profit agencies, as part of a system wide initiative to establish a continuous riparian corridor along the Sacramento River. The Hamilton City project is a key component of this effort because it will connect four already restored areas to provide a continuous habitat corridor far larger than the project’s restoration footprint. Benefits will be incremental starting immediately after planting and full benefits realized by approximately year ten. The value of connecting multiple restoration areas and establishing a larger corridor has synergistic benefits that are not accounted for in the project analysis. The cost for this restoration, including the land costs, are estimated at approximately \$31,000 per acre. For Flood Risk Management (\$5.2 million) the record flood flow occurred in 1974 when a privately constructed levee failed. Extensive flood fighting and evacuation also took place in 1983, 1986, 1995, 1997, and 1998. The project consists of constructing a setback levee about 6.8 miles long that will have varying heights and varying levels of performance for flood risk management, removal of an existing private levee, and restoration of 1,480 acres of native floodplain habitat. The flood risk management Average Annual Benefits are estimated at \$521,000 at October 2012 price levels. Failure to receive funds in FY2014 means the construction of the project cannot begin as planned.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate and complete removal of existing levee and construct setback levee. This will reconnect the natural river flows to the restoration area which is required for restoration. This includes removal of existing orchards in the restoration area.	\$ 7,000,000
Continue acquisition and propagation of plants; installation and establishment monitoring for restoration area to include engineering, design and construction management.	8,000,000
Total	\$15,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction And Reimbursements	Annual Operation Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas, which are partially offset by a credit allowed.	\$16,400,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	720,000	
Pay 2 percent of the costs allocated to ecosystem restoration to bring the total non-Federal share of ecosystem restoration costs to 35 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control and ecosystem restoration facilities.	1,180,000	
Total Non-Federal Costs	\$18,300,000	

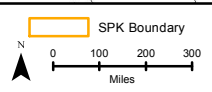
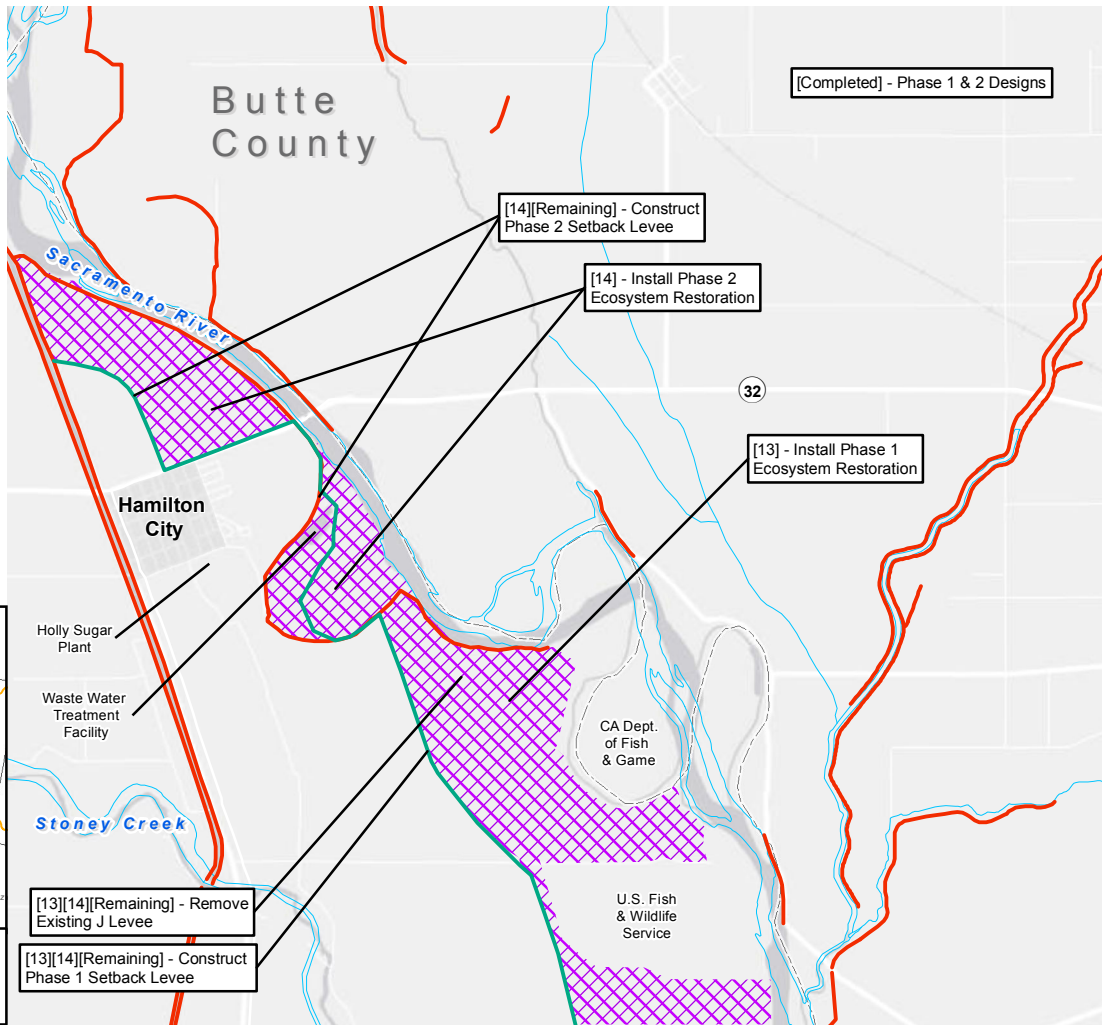
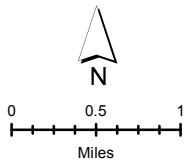
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The PED cost-sharing agreement was executed with the local sponsor, the State of California Reclamation Board, now the Central Valley Flood Protection Board, on December 13, 2005. The Project Partnership Agreement (PPA) is scheduled to be signed in September 2013. The project is authorized for construction by the Water Resources Development Act (WRDA) of 2007 at a total first cost of \$52,400,000. The cost sharing for construction of the project will be 65 percent Federal and 35 percent non-Federal in accordance with WRDA 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal first cost estimate of \$34,100,000 is the same as the latest estimate presented to Congress (FY 2012).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A combined Environmental Impact Statement/Environmental Impact Report (EIS/EIR), along with the Final Feasibility Report, was completed in July 2004.

OTHER INFORMATION: PED funds were received in 2005. Design was completed in 2010. A Limited Reevaluation Report (LRR) is required primarily to address revised cost allocation for the wastewater treatment plant levee as required by the ASA(CW) in 2006. The LRR will also address design refinements and updated economic costs and benefits. There is a cost escalation on the training dyke that has driven the benefit-to-cost ratio to 0.92. The LRR will evaluate either a redesign or elimination of the training dyke to evaluate the Federal interest in the flood risk management feature.



Legend

- Levees
- Setback Levee
- ▨ Restoration Area

Work Status

[Completed] - Work completed as of 30 September 2012

[13] - Work proposed with funds available for FY 2013

[14] - Work proposed with funds available for FY 2014

[Remaining] - Work required to complete the project after FY 2014

Construction Hamilton City, California

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District



1 January 2013

APPROPRIATION TITLE: Construction – Dam Safety

PROJECT: Isabella Dam, California - Dam Safety Seismic Remediation (Dam Safety Assurance) (Continuing)

LOCATION: The Isabella Dam is located approximately 40 miles northeast of Bakersfield, near the confluence of the north and south forks of the Kern River, in Kern County, California. The existing project is comprised of a 185 foot high earthfill main dam, an ungated ogee concrete spillway, and a 100 foot high earthfill Auxiliary Dam located approximately ½ mile east of the Main Dam. The reservoir has a gross storage capacity of 568,075 acre feet.

DESCRIPTION: The Isabella Lake project dams are currently classified as being at a high risk of failure with significant consequences downstream. There are three primary deficiencies (hydrologic, seismic, and seepage/piping) at the project which could lead to significant life loss in the event of a dam failure. Work to be performed includes continuing preconstruction engineering and design (PED) of the Dam Safety Modification (DSM) project and start of construction. The recommended risk management plan consists of the following: 1) A new Emergency Spillway which will be a 900-foot wide Labyrinth Spillway with a 16-foot dam raise to pass the probable maximum flood (PMF); 2) buttress and foundation treatments at the Auxiliary dam to increase seismic stability and remediate seepage concerns; 3) a filter and drain system in the downstream slope of the Main dam to increase stability; 4) modifying the existing spillway to raise the spillway walls, anchor the walls and ogee crest for the additional head during operation, and line the chute with concrete to mitigate for plucking and erosion; and 5) relocation or realignment of the Borel canal to reduce seepage and piping risks. Caltrans Highways 155 and 178 must be relocated to accommodate the 16-foot dam raise. PED efforts will cover the design of the Borel Tunnel realignment highway relocations, Main and Auxiliary Dam embankment modifications, and an emergency spillway. Construction efforts will include all the real estate actions except efforts associated with the US Forest Service facilities and possibly Highways 155 and 178. The relocation related subjects include demolition and relocation of existing Corps facilities; US Forest Service relocation of its offices and maintenance areas; and the relocation of private residences. Several interim risk reduction measures (IRRM) are in use to reduce the risk until long term risk reduction measures are implemented. An emergency reservoir pool restriction is presently in place to reduce the seepage-piping and seismic risk.

AUTHORIZATION: Flood Control Act of 1944, P.L. 78-534, Chapter 665, Sec. 10

REMAINING BENEFIT - REMAINING COST RATIO: Construction has not initiated.

TOTAL BENEFIT - COST RATIO: 0.63 at 7 percent.

BASIS OF BENEFIT - COST RATIO: The Total Benefit – Cost Ratio represents a comparison to the Baseline Condition and is the annualized risk reduction cost divided by the annualized implementation cost (including Operations & Maintenance costs) per the Final Dam Safety Modification Report December 2012. This does include monetized life loss figures, but does not include the benefits the project already receives.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$ 537,800,000		DSM Report	100	Dec 2012
Future Non-Federal Reimbursement	\$ 17,505,390				
Estimate Federal Cost (Ultimate)	\$ 520,294,610	<u>8/</u>			
Estimated Non-Federal Cost	\$ 17,505,390				
Cash Contributions	0				
Other Costs	0				
Reimbursements	17,505,390				
Total Estimated Project Cost	\$537,800,000				
Allocations to 30 September 2010	0				
Allocation for FY 2011	0				
Allocation for FY 2012	0				
Conference Allowance for FY 2013	0	<u>5/</u>			
Allocations through FY 2013	7,444,000	<u>1/ 2/ 3/ 6/</u>			
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	28,200,000				
Programmed Balance to Complete after FY 2014	502,156,000	<u>7/</u>			
Un-programmed Balance to Complete after FY 2014	\$ 0				

1/ \$ 0 reprogrammed to (from) the project.

2/ \$ 0 rescinded from the project.

3/ \$ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013. Funds will be provided through the Wedge funds. Study phase Allocations prior to FY2013 are \$35,929,300.00. FY 2013 first quarter wedge amount of \$700,000 was received as a customer order for study phase and the remaining three quarters \$7,444,000 will be funded from the Wedge for PED phase.

Division: South Pacific

District: Sacramento

Isabella Dam, (Dam Safety), CA

1 May 2013

SPD-64

6/ PED costs of \$7,444,000 are included in this amount.

SUMMARIZED FINANCIAL DATA: (Continued)

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ The current estimate is for Dam Safety Modification PED efforts (Phase 2) and construction costs (Phase 3). Previous total project cost was for (Phase 1), dam safety investigation and studies and site characterization efforts to accomplish the project decision document (DSM Report).

PHYSICAL DATA: FY 2014 appropriations will be used to collect and analyze geophysical conditions at the Isabella project. This data will be used in the development of the Highway Relocation Contract, the Spillway and Buttress Contract, and the preliminary work on the Borel Relocation Contract

JUSTIFICATION: Isabella Dam has been classified as a Dam Safety Action Class Level I Dam (Urgent and Compelling, where the dam is critically near failure and there is an extremely high risk to life and property, primarily in Lake Isabella and Bakersfield, CA. The spillway capacity is inadequate, and there are known seismic and seepage hazards that could cause deformation of the structures. A screening Portfolio Risk Assessment was completed by HQ. An external peer review panel found that urgent and compelling classification by USACE was appropriate. Reservoir restriction will be extended until construction of the modifications is completed. The interim reservoir restriction results in economic loss to the water users. Remediation of the dam safety deficiencies is necessary. The population at risk (PAR) is approximately 350,000 people in the city of Bakersfield and the town of Lake Isabella. In the event of a dam failure there could be loss to Interstate 5, Highways 99 and 58; major railroads lines; and the California state water project (supplies water to the Los Angeles metropolitan area). The average annual benefits are \$15,520,000.

Failure to receive funds in FY2014 will delay remediation of this DSAC 1 dam, which poses an extremely high risk to life and property. Additionally, reservoir restriction will be extended which results in economic loss to the water users.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate PED	\$7,444,000
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FISCAL YEAR 2014: The budget amount plus carry-in amount will be applied as follows:

Complete Phase 2, PED	\$10,000,000
Relocation Costs for Private Residences	15,700,000
Relocate Corps Project Office	2,500,000
Total	\$28,200,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the

Division: South Pacific

District: Sacramento

Isabella Dam, (Dam Safety), CA

1 May 2013

SPD-65

non-Federal sponsor must comply with the requirements listed below

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Reimburse 15 percent of the original costs share percentage of 21.7 of modification allocated to irrigation water supply (15% x 21.7%) or 3.255% of total project cost) within a period of 30 years following completion of construction.	\$17,505,390	
Total Non-Federal Costs	\$17,505,390	

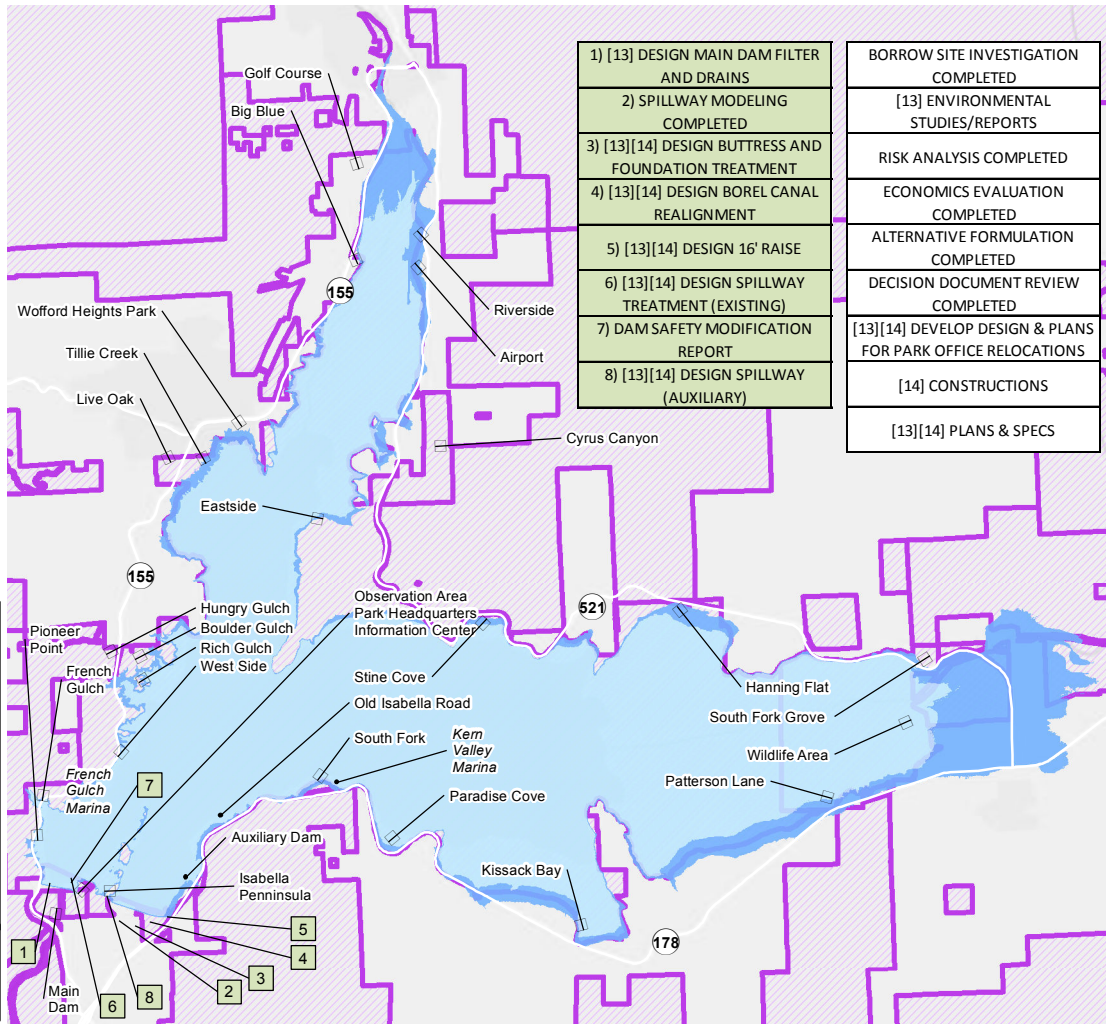
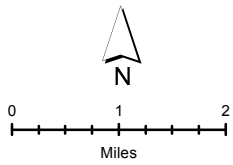
STATUS OF LOCAL COOPERATION: There is an existing contract for local reimbursement of project costs (dated 23 October 1964) between the United States (Department of the Interior) and North Kern Water Storage District, Buena Vista Water Storage District, Tulare Lake Basin Water Storage District, and Hacienda Water District (hereinafter collectively known as the "Districts"). The total obligation payable by the Districts to the United States was \$4,573,000 for the total cost of the project allocated to irrigation, which amounted to 21.7% of the construction cost of the dam, at the time was \$22,000,000. North Kern Water Storage District was responsible for \$3,109,640 and Buena Vista Water Storage District for \$1,463,360.

In accordance with ER 1110-2-1156 dated 28 Oct 2011 and given the original agreement, the proposed non-Federal cost share for the Isabella Dam Safety Modification Project (PED and construction) be cost-shared at 15% of the original cost share percentage (15% x 21.7%) at 3.255%. It is anticipated that there will be a repayment contract for the remediation cost between the United States (Department of Interior) and the Districts. Distribution of the 21% may remain the same as the original contract between the following two contractors, North Kern Water Storage District and Buena Vista Water Storage. The tentative date to have this draft repayment plan is prior to construction.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$537,800,000, outlined in the Dam Safety Modification Report December 2012, is the first Construction estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: An Environmental Impact Statement (EIS) was included in the decision document; the EIS and ROD were signed in December 2012 following public review. The final DSM Report was signed in December 2012. Additional National Environmental Policy Act documents will be provided during the design efforts to address real estate actions, and recreation and fisheries.

OTHER INFORMATION: This project was funded under the O&M appropriation prior to FY2007. Isabella Dam was placed in operation and became fully operational in 1953. The Dam Safety Modification Report was signed in December 2012 and Phase 2 of the Dam Safety Program or the PED phase will initiate in FY 2013.



- 1) [13] DESIGN MAIN DAM FILTER AND DRAINS
- 2) SPILLWAY MODELING COMPLETED
- 3) [13][14] DESIGN BUTTRESS AND FOUNDATION TREATMENT
- 4) [13][14] DESIGN BOREL CANAL REALIGNMENT
- 5) [13][14] DESIGN 16' RAISE
- 6) [13][14] DESIGN SPILLWAY TREATMENT (EXISTING)
- 7) DAM SAFETY MODIFICATION REPORT
- 8) [13][14] DESIGN SPILLWAY (AUXILIARY)

- BORROW SITE INVESTIGATION COMPLETED
- [13] ENVIRONMENTAL STUDIES/REPORTS
- RISK ANALYSIS COMPLETED
- ECONOMICS EVALUATION COMPLETED
- ALTERNATIVE FORMULATION COMPLETED
- DECISION DOCUMENT REVIEW COMPLETED
- [13][14] DEVELOP DESIGN & PLANS FOR PARK OFFICE RELOCATIONS
- [14] CONSTRUCTIONS
- [13][14] PLANS & SPECS

Legend

- Current Spillway Design Capacity
- Gross Pool
- Parks and Open Space

Work Status

- [Completed] - Work completed as of 30 September 2012
- [13] - Work proposed with funds available for FY 2013
- [14] - Work proposed with funds requested for FY 2014
- [Remaining] - Work required to complete the project after FY 2014

**Construction
Isabella Lake DSAP
California**

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District



1 January 2013

APPROPRIATION TITLE: Construction - Environmental Restoration

PROJECT: Napa River Salt Marsh Restoration, CA (Continuing)

LOCATION: Project is located along the north side of San Francisco Bay, approximately 45 miles north of San Francisco, California, adjacent to the lower reach of the Napa River in the counties of Napa, Solano, and Sonoma.

DESCRIPTION: The Napa River Salt Marsh Wetlands once encompassed 25,000 acres. Agricultural use and salt production reduced them to approximately 30% of their former extent. In 1994 the Cargill Salt Company ceased salt production and sold over 9,800 acres of lands in the study area to the State of California. The land is now managed by the California Department of Fish and Game (DFG).

The final Chiefs Report dated 22 December 2004, recommended restoration of seven salt production ponds as salt marsh wetlands in the Napa-Sonoma Marshes Wildlife Area. The recommended plan began with salinity reduction via discharges to the Napa River and Slough in Ponds numbered 4, 5, 6, 6A, 7, 7A and 8. Dilution would be accomplished using water control structures and a breach of the Pond 4 levee. A mix of tidal and pond habitats would be created by restoring ponds 4 and 5 to tidal action, and adaptive management of ponds 6 through 8 for future opening by the California Department of Fish and Game (DFG). Design and construction of Ponds 1, 1A, 2, 2A, 3, 4, and 5 have been completed separately by the sponsor, along with 90% designs for Ponds 6, 6A, 7, 7A and 8.

The Project will restore 4,534 acres of high quality pond and tidal marsh habitat. It is anticipated that Ponds 4 and 5 will be restored to tidal action within two to five years, depending on the rate of habitat evolution in Pond 3, already opened by DFG. The recommended plan will rely on natural sedimentation for the majority of the restoration area and natural colonization by marsh vegetation. Pond 4 is expected to become tidal marsh within approximately 40 years. Habitat evolution in Pond 5 will take longer because it is farther removed from the sediment supply. After initial construction is complete, monitoring will be required to identify specific requirements for and timing of adaptive management actions. It is planned, specifically, for five years after construction of the managed ponds (Ponds 1, 1A, 2, 6, 6A, 7A and 8), ten years for ponds opened to tidal action (Ponds 3, 4, 5) and ten years for Pond 7. The estimated cost for adaptive management and monitoring activities to occur after FY 2014 is \$3,155,000.

Recreation opportunities would be significant with restoration of the ponds and tidal areas. Recreational features in the recommended plan include facility upgrades to enhance educational activities, including interpretive signage, a comfort station, footpaths, and fishing platforms.

AUTHORIZATION: Water Resources Development Act 2007 (WRDA 2007), Section 1001

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Ecosystem Restoration - Both Cost Effectiveness and an Incremental Cost Analysis (CE/ICA) were performed to evaluate the efficiency of restoration alternatives, and to identify of the National Ecosystem Restoration Plan (NER). Once habitat goals were identified for each pond, based on cost-effectiveness analysis, recycled water benefits, and other considerations, the respective habitat benefits (based on managed pond or tidal marsh status) were calculated for each pond and entered into the final incremental cost analysis.

Recreation – 10.6 to 1.

Division: South Pacific

District: San Francisco

Napa River Salt Marsh Restoration, CA

INITIAL BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms. The benefits were determined using a modified Habitat Evaluation Procedure (HEP) analysis and are presented in non-monetary terms (Habitat Units, or HUs).

BASIS OF BENEFIT - COST RATIO: Project justification is based on nonmonetary benefits of wetland habitat restoration in the Final Napa Salt Marsh Restoration Project Feasibility Study report, dated August 2004.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF FED COST	STATUS (1 Jan 2013)	PCT CMPL	COMPLETION SCHEDULE
<u>Ecosystem Restoration</u>			Authorized Environmental	10	TBD
Estimated Federal Cost		\$ 26,175,000			
Estimated Non-Federal Cost		\$ 14,094,000			
Cash Contribution	\$ 1,299,000				
Other Costs	\$ 12,795,000				
Total Ecosystem Restoration		\$ 40,269,000			
<u>Recreation</u>					
Estimated Federal Cost		\$ 575,000			
Estimated Non-Federal Cost		\$ 575,000			
Cash Contribution	\$ 531,000				
Other Costs	\$ 44,000				
Total Recreation		\$ 1,150,000			
Project Summary					
Estimated Federal Cost		\$ 26,750,000			
Estimated Non-Federal Cost		\$ 14,669,000			
Cash Contribution	\$ 1,830,000				
Other Costs	\$ 12,839,000				
Total Estimated Project Cost		\$ 41,419,000			

PHYSICAL DATA

Restoration of seven salt marsh wetlands Total Estimated breach existing berms; construct water control features

SUMMARIZED FINANCIAL DATA (Continued)

			ACCUM PCT OF FED COST	STATUS OF (1 Jan 2013)
Allocations to 30 September 2010	\$	285,000		
Allocation for FY 2011		10,610,000		
Allocation for FY 2012		7,000,000		
Conference Allowance for FY 2013		2,500,000	<u>5/</u>	
Allocations through FY 2013		20,395,000	<u>1/ 2/ 3/ 6/</u>	76
Estimated Unobligated Carry-In Funds		700,000	<u>4/</u>	
President's Budget for FY 2014		3,200,000		88
Programmed Balance to Complete after FY 2014	\$	3,155,000	<u>7/</u>	
Un-programmed Balance to Complete after FY 2014		0		

1/ \$0 reprogrammed to/from the project.

2/ \$35,754 rescinded from the project.

3/ \$6,604,522 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$700,000. This amount will be used to perform work on the project as follows: perform necessary engineering during construction and supervision and administration of the construction contract.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only.

JUSTIFICATION: The San Francisco Estuary (San Francisco, San Pablo, and Suisun Bays) is a nationally significant estuary and the largest estuary on the Pacific Coast of the contiguous 48 states. This restoration project represents a unique opportunity for large-scale ecosystem restoration, because the Estuary once had the largest area of contiguous tidal marsh habitat on the Pacific Coast, prior to reclamation. It is a critical stop for migratory waterfowl and has one of the largest concentration of shorebirds on the Pacific Flyway wintering there than in any other location in California; and provides habitat for a large number of Threatened and Endangered Species, including the California clapper rail, California black rail, San Pablo song sparrow, Western burrowing owl, salt marsh harvest mouse, Chinook salmon, steelhead trout, Delta smelt, Long-fin smelt, and splittail. According to the U.S. Environmental Protection Agency (EPA), more ducks winter in the Estuary than in the much larger Chesapeake Bay.

Due to human impacts, approximately 90% of historic wetlands in San Francisco Bay area have been lost since the early 1900's. The degradation of fish and wildlife resources associated with these losses has resulted in federal listing of several species as being threatened or endangered (delta smelt, spittail, steelhead trout, and chinook salmon). To prevent permanent loss of listed species in the San Francisco Bay, it is critical to restore the wetlands now. In addition, salinity in the ponds fringing the Bay is increasing, resulting in significant decline of ecological values. Several ponds are considered a potential threat to the ecology of the North Bay region because of the presence of larger quantities and high concentration of residual salts. The project involves restoration and enhancement of 4,534 acres of tidal marsh, sloughs, and open-water ponds to include substantial water quality and habitat improvements in former commercial salt ponds. Among federally listed species benefiting from the project are steelhead trout, Chinook salmon, delta smelt, green sturgeon, salt marsh harvest mouse, and clapper rail, among other species. Benefits expected within two years after construction for Ponds 6, 6A and 7 is 1,437 acres. Benefits to be realized in eight to ten years after Pond 7 improvements include 302 acres. Pond 7A (291 acres) benefits will not be realized until eight years from implementation and no benefits are included from Pond 8.

If FY 2014 funding is not provided, the construction management of FY 2013 contracts (Ponds 6, 6a, 7 and 7a) cannot continue thereby creating a potential termination for convenience of the government to be invoked. FY 2013 contract termination would not only result in contractor payments from Government funds, but also increase any future re-contract actions post FY 2014.

Average annual benefits for recreation of about \$1,100,000 result in a benefit-to-cost ratio of 10.6 for the recreational features of the project.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being used as follows:

Award construction contracts for Ponds 6, 6a, 7 and 7a.	\$2,500,000
Total	\$2,500,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Award construction contract for Pond 8	\$2,900,000
Monitoring of Ponds 6, 6a, 7 and 7a	300,000
Carry-in for Engineering during Construction	700,000
Total	\$3,900,000

Division: South Pacific

District: San Francisco

Napa River Salt Marsh Restoration, CA

1 May 2013

SPD-71

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 and the Water Resources Development Act of 2007, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repairs, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	\$ 7,426,000	N/A
Pay 46.2 percent of the separable costs allocated to recreation to bring the total non-Federal share of recreation costs to 50 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation features.	\$ 531,000	
Creditable in-kind contributions (Section 221 of the Flood Control Act of 1970, as amended)	\$ 5,413,000	N/A
Pay 3.2 percent of the costs allocated to ecosystem restoration to bring the total non-Federal share of ecosystem restoration costs to 35 percent as reduced for credit allowed for work in kind and bear all costs of operation, maintenance, repair, rehabilitation and replacement of ecosystem restoration features.	\$ 1,299,000	
Total Non-Federal Costs	\$14,669,000	N/A

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

Division: South Pacific

District: San Francisco

Napa River Salt Marsh Restoration, CA

STATUS OF LOCAL COOPERATION: The California Department of Fish and Game (DFG), the local sponsor for the construction phase, has agreed to comply with all project requirements. The California State Coastal Conservancy (SCC) was the non-federal sponsor during the development of the Feasibility Report. SCC requested a PED cost-share agreement deviation that would limit the total cost of PED. The Assistant Secretary of the Army for Civil Works (ASA (CW)) denied the request and the PED Agreement was never signed. The Project Partnership Agreement (PPA) would apply to design and was executed on 15 June 2012.

The current non-Federal cost estimate is \$14,669,000. In a letter dated 11 May 2010, the non-Federal sponsor has indicated it is financially capable and willing to contribute the non-Federal share. Our analysis of the non-federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$26,750,000 is the same as the last estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Environmental Impact Statement/Environmental Impact Report completed in 2004 and the Record of Decision signed 17 November 2005.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design (PED) were never appropriated and no PED agreement was executed. Funds to initiate construction were appropriated in 2010. The final Feasibility Report, completed in June 2004, recommended seven of the twelve salt ponds be restored to salt marsh wetlands, Ponds 4, 5, 6, 6A, 7, 7A and 8. The Chief's report was signed in December 2004. OMB clearance was provided in November 2005. Design and construction of Ponds 1, 1A, 2, 2A, 3, 4, and 5 is complete. The non-Federal sponsor constructed Ponds 4 and 5 and completed 90% design drawings, specification, and estimate for Ponds 6-8. Water Resource Development Act (WRDA) 2007 authorized crediting the non-Federal sponsor for work completed on the approved project before a PPA is signed.

The total project authorization in WRDA 2007 is for \$134,500,000 with an estimated Federal cost of \$87,500,000 and an estimate non-Federal cost of \$47,000,000. Although included in the authorization, non-policy compliant components to restore or enhance Salt Ponds 1, 1A, 2 and 3, and construction of a recycled water pipeline extending from the pumping station managed by Sonoma Valley County Sanitation District to the project are limited to preliminary survey and design costs in this justification document. The Corps will construct these features when specifically appropriated construction funding is provided by Congress.

In accordance with In-Kind contribution provisions of Section 221 of Flood Control Act of 1970, as amended by Section 2003 of the Water Resources Development Act of 2007 and as documented by the 28 July 2010 ASA(CW) approval of the Integral Determination Report: The San Francisco District has provided supporting documentation for the in-kind work performed by the non-Federal sponsor. The cost for the performed in-kind design and construction work totals \$5,720,000 which is lower than the estimated cost for the work items as contained in the Feasibility Report and is within the estimated \$12,883,000 total non-Federal additional cash requirement for the project. Of the total in-kind work, SCC is responsible for \$1,870,000 of the credit and DFG is responsible for \$3,850,000. The final credit afforded for the in-kind work is subject to audit by the government. The actual value of the in-kind contributions will be determined in accordance with the limitations and conditions of the PPA.

The Project Partnership Agreement provides updated total project costs per the Project Cost Engineering Memorandum, dated 9 November 2011.

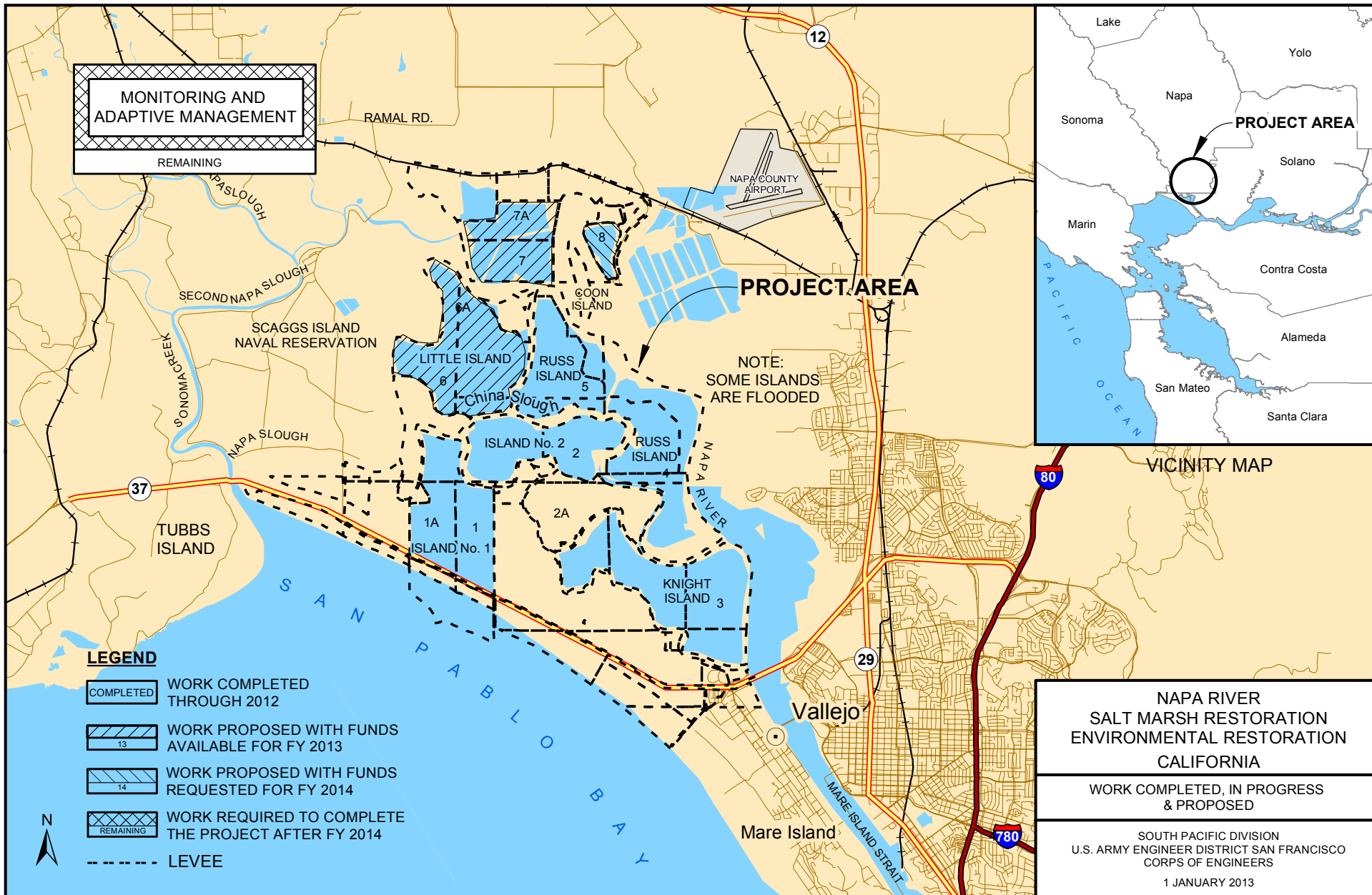
Division: South Pacific

District: San Francisco

Napa River Salt Marsh Restoration, CA

1 May 2013

SPD-73



APPROPRIATION TITLE: Construction - Channels and Harbors (Navigation)

PROJECT: Oakland Harbor (-50 ft), California (Continuing)

LOCATION: Oakland Harbor is located in the city of Oakland, California, on the eastern shore of central San Francisco Bay immediately south of the San Francisco-Oakland Bay Bridge, near the 77th terminal.

DESCRIPTION: Previously authorized deepening of the 4 mile Inner Harbor and 3.4 mile Outer Harbor to 42 feet deep was completed in July 1998. The project was deepened to 50 feet deep in 2010 and included the deepening of the 4 mile Inner Harbor and 3.4 mile Outer Harbor channels, including the respective turning basins, to 50 feet; widening of channels at various locations; and widening of the Inner and Outer Harbor turning basins. Approximately 12.8 million cubic yards of excavated dredged material was disposed.

The Middle Harbor Enhancement Area (MHEA) will use about 7 million cubic yards to create 190 acres of shallow water and sub-tidal habitat in an area no longer needed for navigation purposes; approximately 2.6 million cubic yards would be placed at the former Hamilton Army Airfield in Novato, California, as part of a separately authorized tidal wetlands restoration project; approximately 2.9 million cubic yards would be disposed at the existing Montezuma Wetlands Restoration Project (MWRP) in the northeast portion of Suisun Bay, and approximately 0.3 million cubic yards would be transported to the Vision 2000 upland site in the Inner Harbor. Remaining work includes grading/shaping and planting of eelgrass at the MHEA. Once completed, the site will be monitored and adaptively managed for an additional five years.

AUTHORIZATION: Water Resources Development Act of 1999, § 101(a)(7), Pub. L. No. 106-53, 113 Stat 269, 275.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable since all project economic benefits are being realized. The project navigation features are completed and only mitigation components remain.

TOTAL BENEFIT - COST RATIO: 4.0 to 1.0 @ 7 percent.

INITIAL BENEFIT - COST RATIO: 8.1 to 1.0 @ 7 percent.

BASIS OF BENEFIT - COST RATIO: The initial BCR is from the Chief of Engineer's report approved in April 1999. A 2005 economic reevaluation updated the benefit projections based on updated fleet forecast and construction schedule. The update found that the average annual benefits had remained essentially the same as forecasted in the Chief's report. Using these benefits, the increased cost of the project and the longer duration of project construction has decreased the total BCR to 4.0. Equivalent annual benefits at 7% are estimated to be \$160,000,000, while the annualized total project cost (\$540,000,000 when including interest during construction) is calculated to be \$39,000,000. As part of the Limited Reevaluation Report (LRR), the district is completing a level 1 economic reaffirmation report with methodology approved through the Agency Technical Review process in the first quarter of FY 2013.

Division: South Pacific

District: San Francisco

Oakland Harbor (-50 foot), CA

1 May 2013

SPD-75

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (COE)	\$248,206,000		Entire Project	95	TBD
Estimated Federal Cost (USCG)	300,000				
Estimated Total Federal Cost	248,506,000				
Estimated Non-Federal Cost	\$165,252,000				
Cash Contribution	\$ 79,206,000				
Other Costs	86,046,000				
Total Estimated Project Cost	\$413,758,000	<u>9/</u>			
Allocations to 30 September 2010	238,318,000				
Allocation for FY 2011	3,781,000				
Allocation for FY 2012	1,211,000				
Conference Allowance for FY 2013	500,000	<u>5/</u>			
Allocations through FY 2013	243,810,000	<u>1/ 2/ 3/ 6/</u>	98		
Estimated Unobligated Carry-In Funds	0	<u>4/</u>			
President's Budget for FY 2014	100,000		98		
Programmed Balance to Complete after FY 2014	4,296,000	<u>7/</u>			
Un-programmed Balance to Complete after FY 2014	9,000,000	<u>8/</u>			

PHYSICAL DATA
Channels: Deepen the 4 mile Inner Harbor and 3.4 mile Outer Harbor channels to 50 feet; Widen various locations.
Turning Basins: Widen Inner and Outer Harbor Turning Basins and deepen to 50 feet.
Habitat: Create 190 acres of shallow water and sub-tidal habitat.

1/ \$540,000 reprogrammed from the project.

2/ \$8,975 rescinded from the project.

3/ \$896 PED funds transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

6/ PED costs of \$3,185,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

Division: South Pacific

District: San Francisco

Oakland Harbor (-50 foot), CA

1 May 2013

SPD-76

SUMMARIZED FINANCIAL DATA: (Continued)

8/ This unprogrammed amount reflects the preliminary costs to complete the MHEA. This unprogrammed cost is not included in the Total Estimated Project Cost shown above. The current total project cost to complete the MHEA is over the 902 cost limit of \$412,384,000 and a Limited Evaluation Report (LRR) is being prepared to address this 902 bust. As of the date this justification sheet was prepared, total allocations to date are \$408,561,308.68.

9/ Total Estimated Project Cost does not include feasibility costs of \$13,926,000 that are creditable pursuant to the Water Resources Development Act of 1986, Section 203, and the Project Cooperation Agreement (PCA). These costs are not included in the 902 limit calculation discussed under "Other Information."

JUSTIFICATION: The Port of Oakland services about 85 percent of all general cargo moving through the Golden Gate, 95 percent of which is containerized. Major Imports include any cargo which can be shipped via container, including electronics, mercantile, raw cotton, animal feed, meat, coffee, tea and spices, iron and steel, wood, lumber, sundries, etc. Basically all cargo, excluding bulk elements such as grain, oil, and other bulk materials, can be shipped in container boxes and will be shipped from Asia to the Midwest and beyond, through the Port of Oakland. Major exports include agricultural produce and beverages from California, meat, electronics, automobile parts, pulp and waste paper, specialized industrial machinery, and synthetic resins and plastic chemicals, and are shipped to Asia through the Port of Oakland.

The existing Federal navigation channel serving Oakland Harbor is now adequate for efficient shipping operations and vessel safety as a result of increased vessel traffic and deployment of the next generation of containerships. Annual tonnage handled by the Port is 30 million tons per year. Average annual benefits, all commercial navigation, are estimated at \$165,000,000. Savings per ton of cargo (Average Annual Benefits/Average Annual tonnage) is \$5.5/ton.

The Port terminals are considered to be state-of-the-art. The plan of improvement will provide for further development of the harbors to accommodate the new generation of containerships, improve safety of vessel traffic and provide maximum efficiency of Port operations. The majority of ships presently using the Port have design drafts greater than 35 feet. Sixth generation vessels are now coming on line with drafts of 46 feet or greater (up to 48 feet at the present time). The deep draft fifth and sixth generation container ships experience tidal delays, with the result being that many of the shipping lines either bring those ships into Oakland only partially loaded or choose to bypass Oakland altogether. Limited deepening of the Inner Harbor portion of the project to -38 feet was completed in December 1992 and deepening of the Inner and Outer Harbors to -42 feet was completed in July 1998. Vessels may now depart the Port with some additional cargo, but must still arrive light-loaded. The remainder of the project is needed to allow safe and efficient utilization of the Port. Depths of 50 feet are required for users to efficiently call at the Port of Oakland presently and in the future. Recent economic events have resulted in a downturn in worldwide shipping which has caused a reevaluation of shipping routes and new port developments for the near future. Current information indicates that the current 5200 and 6000 TEU ships will be operating as the standard vessel for at least 6 to 7 more years. Average annual benefits, all navigation, are \$160,000,000.

If FY 2014 funding is not provided, project management and FY 2013 and prior contracts will not be done. Overall impacts should FY14 funding not be provided are considered marginally adverse.

Division: South Pacific

District: San Francisco

Oakland Harbor (-50 foot), CA

1 May 2013

SPD-77

FISCAL YEAR 2013: The TOTAL unobligated dollars are being used as follows:

Continue construction management for the initial grading contract at the Middle Harbor Enhancement Area	\$500,000
Total	\$500,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Construction oversight of FY 2013 and prior year contracts & project management	\$100,000
Total	\$100,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	\$ 9,120,000	N/A
Modify or relocate utilities, roads, bridges (except railroad bridges) and other facilities, where necessary for the construction of the project.	10,000,000	N/A
In-Kind Credit for 50% of Section 203 expenditures for Project Coordination Team (PCT) to be reimbursed during construction as detailed in Water Resources Development Act of 1986.	6,329,000	N/A

Division: South Pacific

District: San Francisco

Oakland Harbor (-50 foot), CA

1 May 2013

SPD-78

NON-FEDERAL COST: (Continued)

Pay 25 percent of the costs allocated to general navigation features for deepening to 45 feet, and 50 percent of the costs allocated to general navigation features for deepening greater than 45 feet during construction, and pay 50 percent of the costs of incremental maintenance below 45 feet mean low water.	46,618,000	\$694,000
Pay 25 percent of the costs for beneficial use of dredged material in accordance with Section 204 of the Water Resources Development Act of 1992.	32,588,000	N/A
Pay 100% of the costs for local service facilities.	53,897,000	N/A
Pay 100% of the costs for berthing facilities.	6,700,000	N/A
Total Non-Federal Costs	\$165,252,000	\$694,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor, the Port of Oakland, contributed full funding for the feasibility study of the 50 foot deepening of the Inner and Outer Harbor, under the authority of Section 203 of the Water Resources Development Act of 1986. The design agreement was executed on 24 March 1999. The Project Cooperation Agreement was executed on 24 July 2001.

The current non-Federal cost estimate of \$165,252,000 which includes a cash contribution of \$79,206,000 is approximately \$10,296,000 more than the amount of \$154,956,000 reflected in Amendment 1 of the Project Cooperation Agreement. The non-Federal sponsor has indicated it is financially capable and willing to contribute to the non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$248,206,000 is the same as the last estimate presented to Congress (FY 2013). This represents the fully funded cost of the estimate provided in the Chief's report and is consistent with the Federal cost in the 1999 WRDA.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with EPA in May 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design (PED) were appropriated in Fiscal Year 1999. Funds to initiate construction were appropriated in Fiscal Year 2001. The initial construction contract was awarded on 27 September 2001. The Oakland Harbor PCA amendment package for acceptance of additional local funds was executed February 2005. The local sponsor has contributed additional funds to the project in FY 2006 to maintain the schedule.

Division: South Pacific

District: San Francisco

Oakland Harbor (-50 foot), CA

1 May 2013

SPD-79

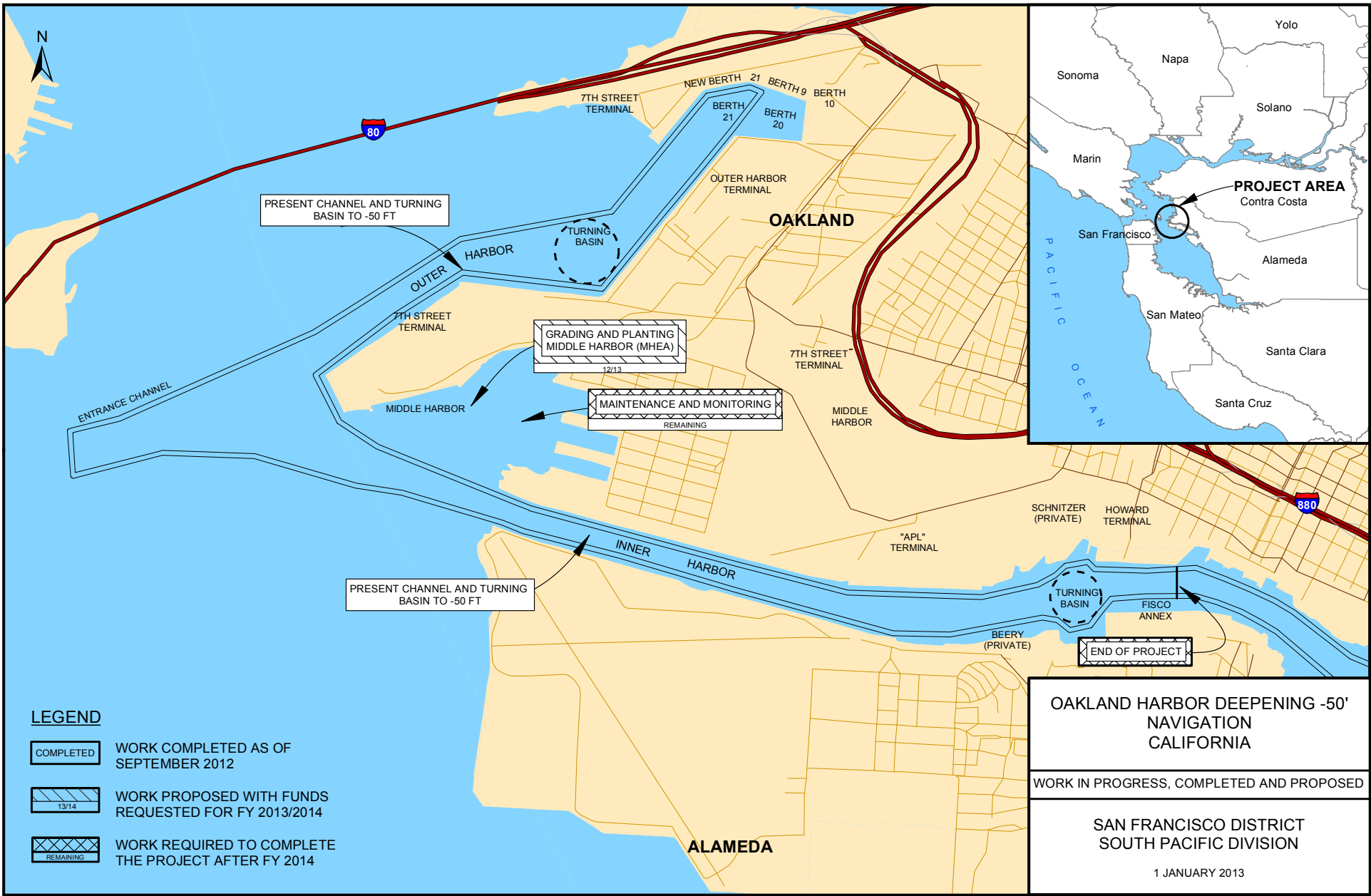
The Chief's Report was signed on 21 April 1999, and a. The PED phase was initiated in April 1999. The first phase of the Inner Harbor Turning Basin construction was completed in September 2003. The dredging of both the Inner and Outer Harbors to a depth of 46 feet was completed in October 2005. The Outer Harbor OTHER INFORMATION: (Continued)

deepening to 50 feet was completed in November 2008. The Inner Harbor deepening to 50 feet was completed in January 2010. Dredged material was placed at the Hamilton Wetlands Restoration Project site, the Montezuma Wetlands Restoration Project Site, the Middle Harbor Enhancement Area (MHEA) and the San Francisco Deep Ocean Disposal Site (SF-DODS). Remaining work includes grading/shaping and planting of eelgrass at the MHEA. Once completed, the site will be monitored and adaptively managed for an additional five years.

The FY 2013 amount of \$500,000 and FY 2014 amount of \$100,000 were originally planned to be used for adaptive management and environmental monitoring contracts. Because the cost estimate for the grading and eelgrass planting scheduled for completion in FY 2011 has increased to approximately \$14,300,000, FY 2011 through the FY 2014 budgeted amounts are insufficient to accomplish this work.

A 902 limit calculation was performed in July 2011. The resulting 902 limit was calculated to be \$412,384,000. The current project cost including inflation through construction is \$413,458,000. A 902 Project Increase Fact Sheet was prepared in August 2011. The District received approval to award the current increment of work, initial grading at MHEA for approximately \$4,000,000. Future increments of work are contingent upon preparation of a Post Authorization Review Fact Sheet (PAR) and Limited Reevaluation Report (LRR), scheduled to be completed in January 2013.

Feasibility costs of \$13,926,000 are not included in the current project cost because they were not included in the original authorized amount of \$252,290,000 found in the Chief's Report of 21 April 1999 and the authorizing legislation. These costs are creditable to the Non-Federal Sponsor in accordance with the Water Resources Development Act of 1986, Section 203, and the PCA. These Feasibility Study costs shall be considered in the LRR.



LEGEND

- COMPLETED WORK COMPLETED AS OF SEPTEMBER 2012
- 13/14 WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2013/2014
- REMAINING WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014

**OAKLAND HARBOR DEEPENING -50'
NAVIGATION
CALIFORNIA**

WORK IN PROGRESS, COMPLETED AND PROPOSED

SAN FRANCISCO DISTRICT
SOUTH PACIFIC DIVISION

1 JANUARY 2013

APPROPRIATION TITLE: Construction – Local Protection (Flood Risk Management)

PROJECT: Sacramento River Bank Protection Project, California (Continuing)

LOCATION: The project is located in north-central California, along the Sacramento River and its principal tributaries approximately from Sacramento River, River Miles (RM) M 0.0 at Collinsville to Chico Landing at RM 194 including Deer Creek and Elder Creek. It is within the limits of the existing Sacramento River Flood Control Project levees and includes Butte Basin, Cache Slough, and a portion of the Sacramento-San Joaquin Delta slough. The project meanders through eight counties including Tehama, Glenn, Butte, Colusa, Sutter, Yolo, Solano, and Sacramento.

DESCRIPTION: The project provides a long-range program of bank protection to preserve the integrity of the Sacramento River Flood Control Project from erosion. It prevents undermining of levee sections and includes fish and wildlife mitigation features. Some recreational facilities have been provided along the river. The Sacramento River Flood Control Project consists of 1125 miles of levees plus overflow weirs, pumping plants, and bypass channels along the Sacramento River approximately from RM 0 near Collinsville to RM 194 near Chico, including several sloughs and the lower reaches of major tributaries. The Sacramento River levee system was initiated as a purely local project, however it was quickly discovered that a system-wide approach was needed. For most of the system the levees were constructed close to the riverbanks without a protective berm to help move the sediment from the hydraulic mining through the system. The levee system, which was adopted as the Sacramento River Flood Control Project in 1917, has been modified and expanded several times since that date but no major change in the basic levee alignment has been made since the original conception of the project.

Of forty-five system elements, to date, improvements in 7 basins have been found to be feasible. The 7 basins are known as Butte Basin, Natomas, Sacramento, Southport, Sutter Island, West Sacramento, and Yolo. Butte Basin is located in the northern part of the Central Valley. The basin is bordered on the west side by the Sacramento River, from RM 142 to 200; on the north side by Mud and Chico Creek; on the east side by the Butte Sink and Sutter Buttes; and on the south side by the Butte Slough levee. The basin is primarily agriculture (rice, orchards, and field crops) with a few small towns and the City of Chico (population 86,000). The Natomas Basin is located in the middle of the northern Central Valley, just north of downtown Sacramento. The basin is bordered on the west side by the Sacramento River, from RM 61 to 81; on the north side by the Natomas Cross Canal; on the east side by the Natomas East Main Drainage Canal and the Pleasant Grove Canal; and on the south by the American River, RM 0 to 2. The basin is a mix of urban and agriculture; it contains a portion of the population of Sacramento (including the Sacramento International Airport). The Sacramento Basin is located in the middle of the northern Central Valley. The basin is bordered on the west side by the Sacramento River, from RM 46 to 60; on the north side by the American River, RM 0 to 11; on the east side by high ground; and on the south side by the Morrison Creek levees. The basin is primarily urban with the city of Sacramento (population 470,000) and the rural urban areas of Sacramento County (total urban area population of 1.4 million). The Southport Basin is located in the middle of the northern Central Valley. The basin is bordered on the north and west side by the Sacramento Deep Water Ship Channel; on the east by the Sacramento River, RM 51 to 57; and on the south side by the South Cross levee. The basin is a mix of urban and agriculture; the urban area consists of a large portion of the City of West Sacramento (population 48,700). The Sutter Island Basin is located in the middle of the Central Valley at the north end of the Delta. The basin is an island bordered entirely by levees, it is bordered on the north and west by Sutter Slough, RM 22 to 28; on the east by the Sacramento River, RM 32 to 34; and on the south by Steamboat Slough, RM 22 to 26. The basin is entirely agricultural, with the majority of the land occupied by Vineyards and Orchards (Cherry and Pear Trees). The West Sacramento Basin is located in the middle of the northern Central Valley. The basin is bordered on the north and east side by the Sacramento River, RM 57 to 63; on the north by the Sacramento Bypass; on the south by the Sacramento Deep Water Ship Channel; and on the east by the Yolo Bypass. The basin is primarily urban with a large portion of the City of West Sacramento (population 48,700) occupying almost the entire basin.

Division: South Pacific

District: Sacramento

Sacramento River Bank Protection, CA

1 May 2013

SPD-82

The Yolo Basin is located in the middle of the northern Central Valley. The basin is bordered north and west side by high ground; on the north and east side by the Knights Landing Ridge Cut; on the southwest side by the Yolo Bypass; and on the south side by Cache Creek. The basin is primarily agriculture (Field crops, grain, nursery, and berry crops) and includes the small town of Yolo (population 450).

AUTHORIZATION: Flood Control Act of 1960, Pub. L. 86-645, § 203, 74 Stat. 488, 498 (1960); River Basin Monetary Authorization Act, Pub. L. 93-252, §202, 88 Stat. 49 (1974); Further Continuing Appropriations Act, Pub. L. 97-377, §140, 96 Stat. 1916 (1983); Water Resources Development Act (WRDA) of 1986, Sec. 601 (a); Water Resources Development Act of 2007, Pub. L. 110-114, § 3031, 121 Stat. 1041, 1113 (2007)

REMAINING BENEFIT-REMAINING COST RATIO: 44.6 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 44.6 to 1 at 7 percent (7 Basins)

INITIAL BENEFIT-COST RATIO: N/A (see OTHER INFORMATION)

BASIS OF BENEFIT-COST RATIO: Benefits are from the 2011 Economic Update and addendum, dated 31 October 2011 at October 2010 price levels. Only 21 out of the 45 basins were looked at; only seven of the 21 impact areas are economically justified at an interest rate of 7% (Butte, Sutter Island, Natomas, West Sacramento, Southport, Yolo and Sacramento). Justification for the additional impact areas will be updated in future economic analyses.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Phase I (1963-1978)				Bank Protection	100	1975
Estimated Federal Cost			\$ 35,607,000	Recreation	100	1975
Estimated Non-Federal Cost			\$ 12,022,000			
Cash Contribution			\$8,221,000			
Other Costs			3,801,000			
Total Phase 1			\$ 47,629,000			
Phase I Mitigation				Bank Protection	100	2001
Estimated Federal Cost			\$ 1,314,000	First Ph, 430,000 linear feet	100	1975
Estimated Non-Federal Cost			\$ 806,000	Pine Creek Unit	100	2001
Cash Contribution			\$ 106,000	Shaw Unit	100	1999
				River Unit	100	1994
Division: South Pacific				District: Sacramento		
				Sacramento River Bank Protection, CA		

SUMMARIZED FINANCIAL DATA (Continued)			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Other Costs	700,000			Sam Slough	100	1999
Total Phase I Mitigation		\$ 2,120,000		Lohman	100	1997
				Princeton Ferry	100	1996
Phase II (LCA Executed Aug 88 and Dec 88)						
Estimated Federal Cost		\$ 65,806,000		Bank Protection	90	TBD
				Sep. Element 38B	100	1987
Estimated Non-Federal Cost		\$ 21,935,000		Sep Element 40	100	2002
				Sep Element 42	100	2006
Cash Contribution	\$ 20,919,000			GRR for 80K LF	60	2013
Other Costs	1,016,000					
Total Phase II		\$ 87,741,000				
Phase II Continuing						
				Bank Protection	91	TBD
				Entire Project	91	unsched.
Estimated Federal Cost		\$ 181,243,000				
Estimated Non-Federal Cost		\$ 84,787,000				
Cash Contribution	\$ 65,919,000					
Other Costs	\$ 18,868,000					
Total Phase II		\$ 266,030,000				
Project Summary						
Estimated Federal Cost		\$283,970,000				
Estimated Non-Federal Cost		\$119,550,000				
Cash Contribution	\$95,165,000					
Other Costs	24,385,000					
Total Estimated Project Cost		\$403,520,000				

Division: South Pacific

District: Sacramento

Sacramento River Bank Protection, CA

SUMMARIZED FINANCIAL DATA: (Continued)

Allocations to 30 September 2010	\$227,045,000				
Allocation for FY 2011	8,878,522				
Allocation for FY 2012	9,800,000				
Conference Allowance for FY 2013	3,000,000	<u>5/</u>			
Allocations through FY 2013	248,723,522	<u>1/</u>	<u>2/</u>	<u>3/</u>	<u>6/</u> 88
Estimated Unobligated Carry-In Funds	2,500,000	<u>4/</u>			
President's Budget Amount for FY 2014	3,000,000				89
Programmed Balance to Complete after FY 2014	32,246,478	<u>7/</u>			
Un-programmed Balance to Complete after FY 2014	0				

1/ \$28,619,500 reprogrammed to (from) the project.

2/ \$131,727 rescinded from the project.

3/ \$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$2,500,000. This amount will be used to perform work on the project as follows: Project Delivery Team (PDT) support, design, contract awards, Military Interdepartmental Purchase Requests (MIPRS), construction and documentation of repair sites for environmental commitments required by National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA).

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

6/ PED costs of \$0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Bank Protection consists of 915,000 lineal feet, First Phase is 430,000 lineal feet and Second Phase is 485,000 lineal feet.

JUSTIFICATION: The Sacramento River Flood Control Project consists of 1125 miles of levees plus overflow weirs, pumping plants, and bypass channels along the Sacramento River approximately from RM 0 near Collinsville to RM 194 near Chico, including several sloughs and the lower reaches of major tributaries. The Sacramento River levee system was initiated as a purely local project, however it was quickly discovered that a system-wide approach was needed. For most of the system the levees were constructed close to the riverbanks without a protective berm to help move the sediment from the hydraulic mining through the system. The levee system, which was adopted as the Sacramento River Flood Control Project in 1917, has been modified and expanded several times since that date but no major change in the basic levee alignment has been made since the original conception of the project. Bank protection is necessary to preserve the Sacramento River Flood Control Project and ensure that it will continue to furnish the desired levels of flood risk reduction. Since the remains of hydraulic mining have moved through, the system is now sediment starved and the levees are continuously threatened by erosion. Unless corrective measures are taken, levee breaches may occur with resultant catastrophic damage and possible loss of many lives. Flood events throughout recent history have greatly emphasized these problems. Several levees located along the Sacramento River were subjected to an extensive amount of erosion due to the extremely high river flows. For

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Sacramento River Bank Protection, CA

instance in 1986, there was a catastrophic failure of the Yuba River levee, flooding the towns of Linda and Olivehurst resulting in two deaths and 4,000 homes and businesses damaged or destroyed. The cost was more than \$95,000,000 in damages. High flows in January and March 1995 caused flooding and erosion in the Butte Basin area along the Sacramento River, River Mile (RM) 188 at Glenn County Road 29. If levee repairs had not been made, additional flooding would have caused extensive loss of agricultural land and endangered residents in nearby communities of Butte City, Princeton and Colusa. In addition, during moderately high flows in February 1996, a 500 foot portion of berm on the American River failed, threatening the levee protecting the city of Sacramento. A contract was awarded in August 1996 to repair this section and provide bank protection for a total of 1,200 lineal feet. In 1997 another catastrophic failure occurred on the Feather River and resulted in three deaths and 800 homes and businesses damaged or destroyed. The sustained high water in January/February 2006 caused great concern and instigated an emergency declaration from the Governor of California relative to levee repair. The area protected by the levees comprises over one million acres in which about 50 communities are located; value of improvements (October 2003 prices) to be protected is about \$38 billion and about 2.3 million people live within the flood plain. The levee system enables the use of the flood plain for the benefit of the state and nation. The extremely fertile flood plain lands produce about 6.6 percent of the total agricultural production of the state. The Sacramento River Bank Protection Project (SRBPP) provides a long-range program of bank protection to protect the levees where serious erosion is occurring and to prevent erosion from undermining additional levee sections in the future. Approximately 83,000 lineal feet of bank protection, including 80,000 authorized by WRDA 2007, remains to be placed on the second phase of this project. The local sponsor supports the addition of a third phase, which will require Congressional authorization. A General Reevaluation Report (GRR) will be conducted to address remaining and potential future implementation of the bank protection project once funds are received. The Life Safety Hazard Index is 229. The Average Annual Benefits are all related to flood risk management and are \$90,042,000. Failure to receive funding in FY2014 will result in a shutdown of the project and jeopardize our ability to meet compliance under the Biological Opinion for fish monitoring and other critical work. Additionally, no construction or design activities will occur, leaving critical levees at risk.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Support ongoing construction, design, H&H modeling and Biological Opinion (BO) compliance for Phase 2; award construction contracts	\$3,000,000
Continue work on the Post Authorization Change Report (PACR)	850,000
Total	\$3,850,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Phase II authorization; PDT support, design, contract awards, MIPRS, construction and documentation of repair sites for all environmental commitments required by NEPA/CEQA, and satisfy requirements for BOs issued by United States Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries to mitigate for adverse effects to listed species.	\$3,000,000
Total	\$3,000,000

Payments During Construction and Reimbursements	Maintenance, Repair, Rehabilitation, and Replacement Costs
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Division: South Pacific

District: Sacramento

Sacramento River Bank Protection, CA

Requirements of Local Cooperation

Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 18,346,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	6,039,000
Pay 25 percent of the total cost of Phase I (1963-1978) to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation and maintenance repair, rehabilitation and replacement of flood control facilities.	8,221,000

NON-FEDERAL COSTS: (Continued)

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 4 percent of the total cost of Phase I Mitigation to bring the total non-Federal share of costs of Phase I Mitigation to 37 percent for work performed, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of this functional portion of the project.	106,000	
Pay 25 percent of the total cost of Phase II (Local Cooperation Agreement (LCA) Executed Aug 88 and Dec 88) to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation and maintenance repair, rehabilitation and replacement of flood control facilities.	20,919,000	205,000
Pay 30 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to one-third for Phase II Continuing work and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	65,919,000	\$1,174,000
Total non-Federal Costs	\$119,550,000	\$1,379,000

Division: South Pacific

District: Sacramento

Sacramento River Bank Protection, CA

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Chapter 2188, Statutes of the State of California, approved by the Governor on July 21, 1961, established the State Reclamation Board as the agency to meet the requirements of local cooperation for the project. Assurances of local cooperation were accepted from the Board February 5, 1963. The Reclamation Board signed a Local Cooperation Agreement (LCA) satisfying the requirements of Section 221, Flood Control Act of 1970 (Public Law 91-611) for the remaining Second Phase work in May 1984. In accordance with provisions of the Water Resources Development Act (WRDA) of 1986 for separable project elements initiated after April 30, 1986, new LCAs were executed for separable element 41 on August 15, 1988 and for separable elements 38B, 40, and 42 on December 7, 1988. The LCA for the First Phase Mitigation was signed on June 5, 1990. The Project Partnership Agreement date for the additional authorized 80,000 linear feet is scheduled for April 2014.

The current non-Federal cost estimate of \$119,550,000 is a decrease of \$52,090,000 from the latest estimate presented to Congress (FY2013).

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$283,970,000 is a decrease of \$82,630,000 from the latest estimate, \$366,600,000, presented to Congress (FY 2013). This change includes the following:

Item	Amount
Price De-escalation on Construction Features	(\$ 2,708,000)
Post contract Award and Other Estimating Adjustments	(79,922,000)
Total	(\$82,630,000)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (EIS) was filed on June 15, 1973. A Supplemental Environmental Impact Statement (SEIS) for the Second Phase was filed in February 1989. A final EIS for additional work in Butte Basin, and an update submitted as Supplement 4, were signed in June 1988. An Environmental Assessment/Site Specific Report (EA/SSR) was prepared for Contract 42A and a Finding of No Significant Impacts (FONSI) was signed on February 15, 1994. An EA/SSR was prepared for contracts Lower American River site 3 and 40D and FONSI were signed July 2, 1996 and September 3, 1997, respectively. A Supplemental Design Memorandum No. 8 was prepared for sites along the lower American River and the SEIS was completed in April 1998. Currently, an EA/SSR to meet both Federal and State of California requirements is approved prior to construction of each bank protection contract. The EA for sites to be constructed in 2011 was approved June 2009. An EIS/EIR (Environmental Impact Report) is being prepared in support of the PACR for the WRDA 2007 80,000 linear foot additional authorization.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1962, and for construction in FY 1963. Construction of the first phase was completed in November 1974. Authority to proceed with additional bank protection work, second phase, was provided by Section 202, River Basin Monetary Authorization Act of 1974, Public Law 93-251. The Further Continuing Appropriations Act of 1983, Public Law 97-377, extended the limits of the project to include bank protection along the Sacramento River to the upstream ends of the project levees to Chico Landing (Butte Basin area). WRDA of 1986 modified the first phase of the project to include acquisition of lands for establishment and maintenance of wildlife habitat at a total cost of \$1,410,000 (\$2,120,000 inflated through construction). The last parcel was acquired in FY1997. Monitoring of fish and wildlife habitat and engineering features continues at each site.

Division: South Pacific

District: Sacramento

Sacramento River Bank Protection, CA

1 May 2013

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The USFWS, by letter dated November 7, 1985, issued a BO stating that the bank protection work along the Sacramento River from Chico Landing to Red Bluff and in the Butte Basin area would endanger the threatened valley elderberry longhorn beetle. The Service issued a revised opinion on May 19, 1987 that permitted limited rock revetment bank protection to be constructed in the Butte Basin. The potential impact to winter-run salmon has also been a significant concern as the winter-run salmon have experienced an alarming decline since 1969. The National Marine Fisheries Service (NMFS) listed winter-run salmon as a threatened species in November 1990. The winter-run salmon biological data report was completed January 1991. NMFS Biological Opinion dated October 28, 1991 for the winter-run salmon was non-jeopardy but lists recommended conservation measures. Winter-run salmon, along with bank swallows and Swainson's Hawk, are also State listed species. A Biological Opinion was received from California Department of Fish and Game on November 18, 1991 which also recommends conservation measures.

On August 23, 2001, the U.S. Fish and Wildlife Service issued its final Biological Opinion on the SRBPP. The NMFS released their opinion on September 27, 2001. Both opinions were virtually identical in terms of identifying the SRBPP's effects as jeopardizing the existence of five fish species (Delta smelt, Sacramento splittail, winter-run Chinook salmon, spring-run Chinook salmon, and Central Valley steelhead) listed under the Endangered Species Act in the Sacramento River. With recent collaborative efforts, most repair sites have been self-mitigating.

OTHER INFORMATION (continued):

After the February 1986 flood, the Sacramento River System experienced below normal precipitation and flood flows. This led to a lower rate of erosion and a lowered need for expedited bank protection work. However, the storms of 1995 and 1997, plus the sustained high water in 2006, have caused substantial erosion damage and the urgency for bank protection still exists.

The 2005 and 2006 Erosion Inventory Reconnaissance Report identified 57 Critical Erosion Sites which resulted in an emergency declaration by Governor Schwarzenegger. The Department of Water Resources (DWR) and the Corps repaired 33 sites beginning in fiscal year 2006 and completing in fiscal year 2007. During the first quarter of FY 2008, 24 sites (10 DWR led and 14 Corps led) were repaired. Eight sites were constructed in 2008. The state of California has provided accelerated funds with the aid of a LCA amendment, executed May 5, 2006, allowing the project to accept funds ahead of the cost share balance, so that work on the sites may proceed unimpeded. Ten new sites were constructed in 2009 totaling 8,200 lineal feet. Construction contract was awarded in FY 2010 for a setback levee on RM 57.2 in West Sacramento. O&M manuals have been started in FY 2010 for turnover. Additional designs were done in FY 2010 for a construction award on 4 new sites in FY 2011. Annual erosion inventory was completed in FY 2010 and FY 2011. Designs for several new sites were started in FY 2011 and scheduled for completion in FY 2012. Construction of 4 new erosion sites was completed in FY 2012. These sites are currently under plant establishment. A new contract is scheduled for award in August 2012 for years 2 and 3. O&M manuals for 7 sites are current in the process to be turned over to the non-federal sponsor in FY 2012. A Value Engineering study was completed in FY 2012 for 7 new sites. Final plans and specs are to be completed for 7 sites in 2012.

The Flood Control Act of 1960 included no quantitative language concerning the benefits or costs but authorized the rehabilitation of 430,000 lineal feet of levee. In 1974 language was added to increase the lineal feet by an additional 405,000 feet. WRDA 2007 authorized an additional 80,000 lineal feet for a total of 915,000 lineal feet.

A new cost estimate was approved in October 2011 as part of the PACR to address the latest WRDA 2007 authorization of an additional 80,000 linear feet of river bank protection work. The PACR (including an EIR/EIS) is expected to be completed Dec 2013. The Project Management Plan (PMP) for phase III and a Feasibility Cost Share Agreement (FCSA) will be complete in FY13. The GRR will be initiated in FY2014 with investigations funds for 500,000 LF of bank

Division: South Pacific

District: Sacramento

Sacramento River Bank Protection, CA

1 May 2013

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protection and it will be completed in three years, per the 3X3X3 smart planning guidance. Benefits are from the 2011 Economic Update and addendum, dated 31 October 2011 at October 2010 price levels. Only 21 out of the 45 basins were looked at; only seven of the 21 impact areas are economically justified at an interest rate of 7% (Butte, Sutter Island, Natomas, West Sacramento, Southport, Yolo and Sacramento). Justification for the additional impact areas will be updated in future economic analyses.

The fish and wildlife mitigation cost is estimated at \$31 million.

Carry-in funds of \$850,000 are being used to continue work on the Post Authorization Change Report.

COMPLETED WORK	COMPLETED WORK (CONT.)	COMPLETED WORK (CONT)
FIRST PHASE, BANK PROTECTION CONTRACTS 1 THRU 26 (430,000LF)	SECOND PHASE PART 2, BANK PROTECTION (CONT.) SEPARABLE ELEMENT 42 (17,362 LF)	WORK PROPOSED WITH FY13 FUNDS
SECOND PHASE, PART 1 BANK CONTRACTS 27 THRU 36 (182,000 LF)	42A (RM 60-145) 42A-M (RM 60-145) 42A-M1 (RM 60-145) 42C (RM 90.4 & 90.9) FISH CURT. 42C-M (RD 108-COLUSA BASIN) 42D (RD 108-COLUSA BASIN) 42D-M (RD 108-COLUSA BASIN) LAR 1A2 (RM 4.4, SITE 3 RIVER PARK) LAR 1A2-M (RM 4.4, SITE 3 RIVER PARK) LAR 1A3-M (RM 4.4, SITE 3 RIVER PARK) LAR 1B (RM 2-9, SITE 1,2 & 4) LAR 1B (RM 2-9, SITE 1,2 & 4) LAR 2 (SITE 5, PHASE 1) LAR 2 (SITE 5, PHASE 2) LAR 2-M (SITE 5, PHASE 3) LAR 10.0L LAR 10.6L	SACRIVER MILE: 71.3R 157.7R
SECON T PHASE PART 2, BANK PROTECTION: PRE-SEPARABLE ELEMENT (46,744 LF) 37 (RM0-62) 38A (RM 60-145) 39 (RM 177-194)	SACRAMENTO RIVER MILE – CACHE SLOUGH	WORK PROPOSED WITH FY14 FUNDS
SEPARABLE ELEMENT 38B (14,436) 38B (RM 60-120)	49.6L 53.5R 21.8R 49.7L 56.7L STEAMBOAT SLOUGH 49.9L 26.9L 16.6R 50.2L 34.5R 50.4L 72.2R FEATHER RIVER RM 3.6L 50.8L 99.3R 7.0L 51.5L 123.5L 52.3L 177.8R SUTTER BYPASS 0.4 53.1L 87.0R 93.7L 42.7R AMERICAN RIVER 136.7L 73.5R 0.3L 136.9L 114.5R 2.8L 42.7R 42.7R 77.2L	130.0 L 41.9 R 26.0 L 55.2 L 16.8 L
SEPERABNLE ELEMENT 40 (40,794 LF) EMERGENCY COUNTY ROAD 29 (RM 186-188) 40A (RM 132-1800) 40B-1 (RM 187-192) 40B-M (RM 145-194) 40C (RM 15-25) STEAMBOAT, MINER & SUTTER 40C-M (RM 15-25) 40D (RM 16, 1R) STEAMBOAT SL. 40D-M (RM SL16.1) 40E (RM 149)		
SEPARABLE ELEMENT 41 (29,475 LF) 41A (RM 20-60) 41A-M1 (RM 20-60) 41A-M2 (RM 20-60) 41A-M3 (RM 20-60) 41A-M4 (RM 20-60) 41A-M5 (RM 20-60) 41B (FEATHER RIVER) 41B-M (FEATHER RIVER)		

Local Protection Projects - Flood Control

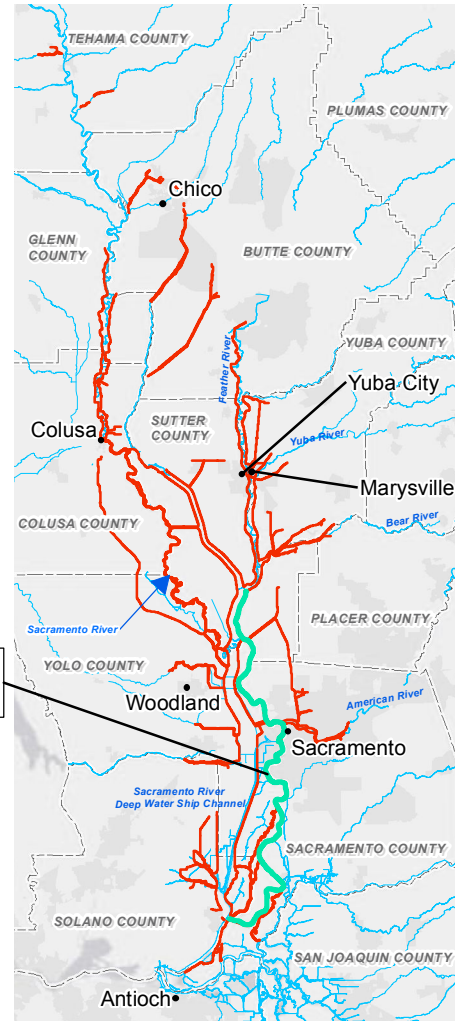
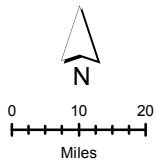
**Sacramento River Bank
Protection Project
California**

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District



1 January 2013



BANK PROTECTION SITES ACCOMPLISHED UNDER THE FIRST PHASE OF THE SACRAMENTO RIVER BANK PROTECTION PROJECT

[FY 13] 3500 LINEAL FEET
[FY 14] 3505 LINEAL FEET



Legend

- Levees
- Bank Protection Sites

Work Status

Completed - Work completed as of 30 September 2012

[13] Work proposed with funds available for FY 2013

[14] Work proposed with funds available for FY 2014

Remaining - Work required to complete the project after FY 2014

Local Protection Projects - Flood Control

Sacramento River Bank Protection Project California

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District



1 January 2013

APPROPRIATION TITLE: Construction - Local Protection (Flood Risk Management)

PROJECT: Santa Ana River Mainstem, California (Continuing)

LOCATION: The project is located along a 75-mile reach of the Santa Ana River in Orange, Riverside, and San Bernardino Counties, southeast and adjacent to metropolitan Los Angeles, California.

DESCRIPTION: The plan of improvement provides for construction of the Seven Oaks Dam about 35 miles upstream of the existing Prado Dam, with a gross reservoir storage of 145,600 acre feet; flood plain management of the flood overflow area on the Santa Ana River between Seven Oaks Dam and the existing Prado Reservoir; enlargement of Prado Dam to increase the reservoir storage capacity from 217,000 acre-feet to 362,000 acre-feet; construction of 3.3 miles of channel modifications along Oak Street Drain in Corona; enlargement of the existing 2.4 miles of Mill Creek levee; construction of a detention basin and 2.0 miles of channel modifications along the Santiago Creek; and various means of flood control, including flood plain management, levees, and vertical walled concrete channels along the 30.5 miles of the Santa Ana River from Prado Dam to the Pacific Ocean. In addition, the plan includes flood protection improvements along San Timoteo Creek, which was added to the project by the Energy and Water Development Appropriation Act of 1988. The project was then modified by the Water Resources Development Act of 1990, which authorized the Secretary to develop recreational trails and facilities on lands between Seven Oaks Dam and Prado Dam, including flood plain management areas.

AUTHORIZATION: Water Resources Development Act of 1986, Energy and Water Development Appropriation Act, 1988, Water Resources Development Act of 1990, Water Resources Development Act of 1996, and Water Resources Development Act of 2007.

REMAINING BENEFIT-REMAINING COST RATIO: 4.5 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8 5/8 percent (FY 1988)

BASIS OF BENEFIT-COST RATIO: The benefit-cost ratio is based on a Level I Interim Economic Update Report dated June 2011. The Level III Economic Re-evaluation Report will be available in 2013.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$1,317,000,000	Seven Oaks Dam	100	November 1999
Programmed Construction	1,247,000,000		Prado Dam	60	TBD
Unprogrammed Reimbursement	70,000,000		Santiago Creek	10	TBD
LERRD	34,000,000 <u>7/</u>		Mill Creek	100	April 1992
Judgment Fund	36,000,000 <u>8/</u>		Oak Street Drain	100	January 1996
			Lwr SAR Rch 9 & SARI Line	75	TBD
Estimated Non-Federal Cost		\$804,000,000	Lower Santa Ana Rch 1-8,10	100	July 2011
Programmed Construction	\$804,000,000		Marsh	100	March 2013
Cash Contributions	\$107,000,000		San Timoteo	100	November 2007
Other Costs	\$731,000,000				
LERRD Reimbursement	(\$34,000,000)		Total Project	84	TBD
Total Estimated Programmed Construction Costs		\$2,051,000,000			
Total Estimated Project Cost		\$2,121,000,000			

Allocations to 30 September 2010	\$990,604,000			
Allocation for FY 2011	\$22,934,000			
Allocation for FY 2012	\$23,090,000			
Conference Allowance for FY 2013	\$7,200,000			
Allocations through FY 2013	\$1,043,828,000 <u>1/2/3/5/</u>	84		
Estimated Unobligated Carry-In Funds	\$0 <u>4/</u>			
President's Budget for FY 2014	\$42,000,000	87		
Programmed Balance to Complete after FY 2014	\$161,172,000 <u>6/</u>			
Un-programmed Balance to Complete after FY 2014	\$70,000,000 <u>7/8/</u>			

1/ \$0 estimated reprogrammed to (from) project.

2/ \$0 rescinded from the project.

3/ \$0 transferred to the Flood Control & Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

5/ PED Costs of \$25,200,000 are included in this amount.

6/ For programmed work only, remaining items are un-programmed pending specified funding for reimbursement.

7/ Estimated reimbursement to sponsor for LERRD over 45% on the Prado Dam separable element.

8/ Federal portion of reimbursement for a total of \$38,500,000 owed to Treasury Judgment fund for a contract claim on the Seven Oaks Dam feature.

Division: South Pacific

District: Los Angeles

Santa Ana River Mainstem, CA

PHYSICAL DATA:

SEVEN OAKS DAM:

Dam: Type - Impervious core
Height - 550 feet
Length - Crest Length 2,980 feet
Outlet Works: Gated conduit, 8,000 cfs maximum discharge
Basin Capacity: 145,600 acre-feet
Spillway: Type - Detached overflow, 500 ft wide, unlined
Embankment: Earth and Rock fill
Lands & Damages: Acres - 2,736 existing streambed and undeveloped (mountainous)
Water Quality Study

MILL CREEK:

Levee repair: Type - Grouted riprap
Height - 10 feet maximum
Length - 12,500 feet (2.4 miles) of existing
13,600 feet (2.6 miles)
Lands & Damages: Acres – 1661 grazing, wildlife
Floodwall (Top of levee): Type – Concrete
Height - 7.5 feet maximum
Length - 12,600 feet (2.4 miles)

OAK STREET DRAIN:

Channel: Rectangular concrete 3.0 mile
Trapezoidal riprap 0.3 miles
Lands & Damages: 34 acres for rights-of-way

SAN TIMOTEO CREEK:

Channel: 5.4 miles trapezoidal concrete
Basins: 18 in-channel and transition chute
Lands & Damages: 60.3 acres for rights-of-way

SANTIAGO CREEK:

Channel: Rectangular concrete 500 feet Trapezoidal riprap 2.0 miles
Reservoir: Buttressed Basin
Capacity: Flood control 4,620 acre-feet (el. 274 to 298)
Lands and Damages: 281.5 acres, reservoir and channel

PRADO DAM:

Dam: Type - Impervious core
Height - 134 feet
Length - 3,050 crest length
Outlet Works: Gated conduits
30,000 cfs maximum discharge
Embankment: Rolled earth fill
Spillway: Type - Detached, overflow concrete, 1,000 feet wide,
578,000 cfs maximum design discharge.
Basin Capacity: 362,000 acre-feet
Interior Basin Dikes: 8

LOWER SANTA ANA RIVER:

Channel: - 200-450 feet wide,
34 bridges replaced or modified
Relocate sewage and brine line (SARI) Santa Ana River Interceptor Line
- 5.0 miles trapezoidal concrete
- 2.4 miles rectangular concrete
- 15.5 miles trapezoidal grouted riprap
- 0.8 miles rectangular concrete/soft bottom
Lands & Damages: Acres - 2,429.5 for channel (7.4 miles floodway)
Mitigation Lands: Acres – 8 marshland
Enhancement Lands: Acres - 84 marshland enhancement

JUSTIFICATION: The project will provide protection for surrounding areas stretching over three major metropolitan areas Orange, San Bernardino and Riverside counties, however, protection benefits are primarily to lands and improvements within Orange County, downstream of Prado Reservoir. A severe flood threat exists in this area, which could threaten the population of approximately 2,000,000 residents and cause damage to nearly 300,000 structures with an estimated value of \$112 Billion. Damages upstream of Prado Reservoir could exceed \$450,000,000. The overflow area comprises 160 square miles of primarily urban development in 15 cities including San Bernardino, Riverside, Anaheim, Orange, Santa Ana, Fountain Valley, Costa Mesa, Huntington and Newport Beach. The flood of 1938 is the largest that has been recorded since accurate stream gages were placed in the Prado basin. With a peak flow at Riverside Narrows of approximately 100,000 cubic feet per second, the flood covered thousands of acres of then predominantly rural Orange County. Although the area was largely agricultural at the time, the flood caused \$4,000,000 in damages (\$141,000,000 at 2009 prices). Following this storm, Prado Dam was constructed at the head of the Santa Ana Canyon, providing effective control of floods for much of the downstream basin. In 1969, when communities upstream of Prado Dam suffered \$85,000,000 in damages, Prado Dam prevented an estimated \$525,000,000 in damages to downstream communities. Without the project, the level of protection downstream of Prado, primarily in Orange County, is approximately 70 years. With the project, the level of protection downstream of Prado would be increased to 190 years.

While many parts of the lower river have been completed, the remaining Reach 9 feature is essential toward protecting the highly urbanized lower Santa Ana River basin. Additional areas of the Reach 9 channel known as the Burlington Northern Santa Fe (BNSF) Railway bridge, Phase 4 (Reinforce embankment Coal Canyon) and Phase 5 (Reinforce embankment Yorba Linda) have recently been identified as requiring scour protection from the designed Prado dam releases of 30,000 cubic feet per second (cfs). Operation of Prado dam at the design level is contingent upon completing the Reach 9 channel improvements, including additional scour areas and the Santa Ana River Interceptor (SARI) line relocation. A scour study was completed in 2011 as an engineering investigation in relocating the SARI Line in the Orange County portion of the Santa Ana River. This study was more detailed than previous studies due to the need to determine more accurate scour elevations for the SARI Line beneath the Santa Ana River. The new analysis indicates a more aggressive scour and river channel degradation rate than previous studies calculated when the General Design Memorandum for the Reach 9 features was completed (1988). A review of Reach 9 flood and scour protection measures was undertaken to ensure infrastructure adjacent to Reach 9 would not be damaged by flood waters when the design flood event (30,000 cfs) is released from Prado Dam. The recent analysis indicated that the existing embankment protection and toe depth elevations at the locations identified as Phases 4 and 5 would not be sufficient and would need additional embankment reinforcement. Once completed, the designed releases will reduce flow over the spillway, preventing a probable maximum flood from eroding the side walls and causing major damage to the surrounding communities. The lower Santa Ana River 500 year floodplain is centered over the most densely populated and urbanized portion of Orange County that has the 10th largest industrial office and warehouse market in the United States with over 271 million square feet of space and a less than 4 percent vacancy rate. The gross county product was estimated at \$184 Billion in 2011.

A key component of the Reach 9 feature is scour protection of the Burlington Northern Santa Fe (BNSF) Railway bridge situated in the river. Damage would result in shutting down the movement of goods through a high traffic rail corridor, impacting segments of the economy along this route from California to Florida. This rail line handles 2/3 of freight shipped from Port of Long Beach & railed out to the continental United States, widely known as the Alameda Corridor. Potential damages to the bridge from a project flood event would cripple operations at the Port with an estimated 4,700,000 containers & tonnage of 75,000,000 handled yearly, causing a major economic impact to the entire Southern California area.

Over 1,500 private & public sector jobs are associated with ongoing construction activities in Reach 9. A halt in work would have a considerable impact on Riverside County and the inland area that has an unemployment rate 50% higher than the National average.

Division: South Pacific

District: Los Angeles

Santa Ana River Mainstem, CA

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JUSTIFICATION: (Continued)

Local and State agencies have created a joint powers authority, the Santa Ana Watershed Project Authority that have developed a prioritized list of State and locally funded projects for the watershed. In developing the watershed pilot budget, many of the stakeholders have indicated that completion of Reach 9 is required prior to the initiation of a majority of the non-Federally funded projects in the watershed.

If requested funding for fiscal year 2014 is not received, there will be major delays in the Reach 9 construction schedule, impacting the operation of the Prado Dam. If a major storm event were to occur requiring large releases from the dam, this could cause major damages along the unprotected areas of Reach 9 and ultimately require additional study and design for future protection efforts, further delaying the completion of the Reach 9 feature and the ability of Prado Dam to operate at the design level of 30,000 (cfs)

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention	\$ 231,801,000
Recreation	282,000
Total	\$ 232,083,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being used as follows:

Award construction contract for Reach 9 Phase 3	\$6,660,000
Complete Seven Oaks Dam Water Quality Study	1,600,000
Construction Management, Supervision & Administration of Marsh dredging contract	400,000
Total	\$8,660,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Construction Management, Supervision & Administration, Engineering & Design and mitigation efforts for the ongoing Reach 9 contracts	\$ 7,600,000
Award BNSF Railroad Bridge Protection construction contract for Reach 9 Phase 2A	22,000,000
Award Reach 9 Phase 4 construction contract	12,000,000
Continue Seven Oaks Dam mitigation efforts	400,000
Total	\$42,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsors must comply with the following requirements listed below.

Requirements of Local Cooperation and Project Cooperation	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Santa Ana River Mainstem:		
Provide lands, easements, rights-of-way, and borrow, excavated or dredged material disposal areas.	\$ 158,000,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	185,000,000	
Pay 5 percent cash of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 31 percent, and bear all cost of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	68,000,000	\$ 2,194,000
Reimburse 100 percent of the Federal funds, loaned to the sponsor for work on San Timoteo Creek, within a period of 30 years following the completion of the project, in accordance with section 103 (k) of the Water Resources Development Act of 1986.	6,000,000	
Prado Dam (Separable Element):		
Provide lands, easements, rights-of-way, and borrow, excavated or dredged material disposal areas.	350,000,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	32,000,000	
Pay 5 percent cash of the costs allocated to flood control to bring the total non-Federal Share of flood control costs to 50 percent, and bear all costs of operation, maintenance, Repair, rehabilitation and replacement of flood control facilities.	39,000,000	200,000
Estimated reimbursement to local sponsor for LERRDS in excess of 45 percent of total project costs for flood control, subject to availability of funds.	(34,000,000)	
Total Non-Federal Costs	\$ 804,000,000	\$ 2,394,000
Division: South Pacific	District: Los Angeles	Santa Ana River Mainstem, CA

The non-Federal sponsors have also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Orange, San Bernardino, and Riverside Counties are the local sponsors. On 14 December 1989, the Local Cooperation Agreement was executed in compliance with the requirements of the Water Resources Development Act of 1986. A supplemental Local Cooperation Agreement was executed on 1 July 1994 for San Timoteo Creek. On 30 June 1997, the Assistant Secretary of the Army (Civil Works) approved Prado Dam as a separable element and direction was given by the Assistant Secretary of the Army (Civil Works) to proceed in accordance with Section 309 (Water Resources Development Act of 1996) to modify the existing Local Cost Sharing Agreement to reflect this determination and the non-Federal cost-sharing be modified in accordance with section 103(a) (3) of Water Resources Development Act of 1996. A Project Cooperation Agreement for Prado Dam was executed in February 2003.

The current non-Federal cost estimate of \$804,000,000, which includes a cash contribution of \$107,000,000, is an increase of \$276,000,000 from the non-Federal cost estimate of \$528,000,000 noted in the current amended Local Cooperation Agreement dated February 2003, which included a cash contribution of \$59,306,000. Analysis of the non-Federal sponsors' financial capability to participate in the project affirms that Riverside and San Bernardino Counties still have a reasonable plan for meeting their financial commitments. Orange County has recently identified a possible funding shortfall that may impact the schedule for acquiring lands in Prado basin.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$1,317,000,000 is an increase of \$42,000,000 from the latest estimate \$1,275,000,000 presented to Congress (FY 2012). This change includes the following items.

Item	Amount
Price leveling, inflation and other adjustments (including contingency adjustments) (Prado Spillway & Santiago Creek)	\$14,000,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments) (Reach 9/Prado Dikes)	23,000,000
Schedule Changes (Prado Spillway/Santiago Creek/Seven Oaks mitigation)	5,000,000
Total	\$42,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency in June 1989. The Records of Decision (ROD) for Prado Dam and San Timoteo Creek Reach 3B were executed in January 2002. Additional supplement environmental documents have been prepared prior to construction of each feature.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1979. Funds to initiate construction were appropriated in 1990, and the project has consistently been in the President's Budget every year since.

An agreement with Fish and Wildlife Service on Section 7 consultations for endangered species (including Santa Ana wooly star and spineflower below Seven Oaks and Least Bell's vireo at Prado Dam) was reached on the number of acres for types of mitigation. The final biological opinion (BO) necessary for formal

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District: Los Angeles

Santa Ana River Mainstem, CA

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conclusion of the consultation was received from Fish and Wildlife Service 22 June 1989. Subsequently, San Bernardino Kangaroo Rat was emergency listed and Seven Oaks Dam construction was stopped in January 1998. Through formal consultation, the Fish and Wildlife Service issued two Biological Opinions in February 1998 and December 2002 which allowed dam construction to continue and included future dam operation. Newly listed species, Santa Ana Sucker and designated critical habitat for the Least Bell vireo at Prado dam required additional consultation, which was completed in December 2001.

OTHER INFORMATION: (Continued)

Coordination with the U.S. Fish and Wildlife Service and the California Department of Fish and Game was initiated early in the planning of alternatives and completed 30 March 1989, which produced a Fish and Wildlife Service Coordination Act Report that was included in the Environmental Impact Statement. These agencies had a role in the determination of project associated impacts as well as mitigation needs and opportunities. The estimated fish and wildlife mitigation cost for Seven Oaks Dam is \$10,000,000, for San Timoteo is \$4,100,000, for Lower Santa Ana is \$15,000,000 and for Prado Dam is \$18,000,000.

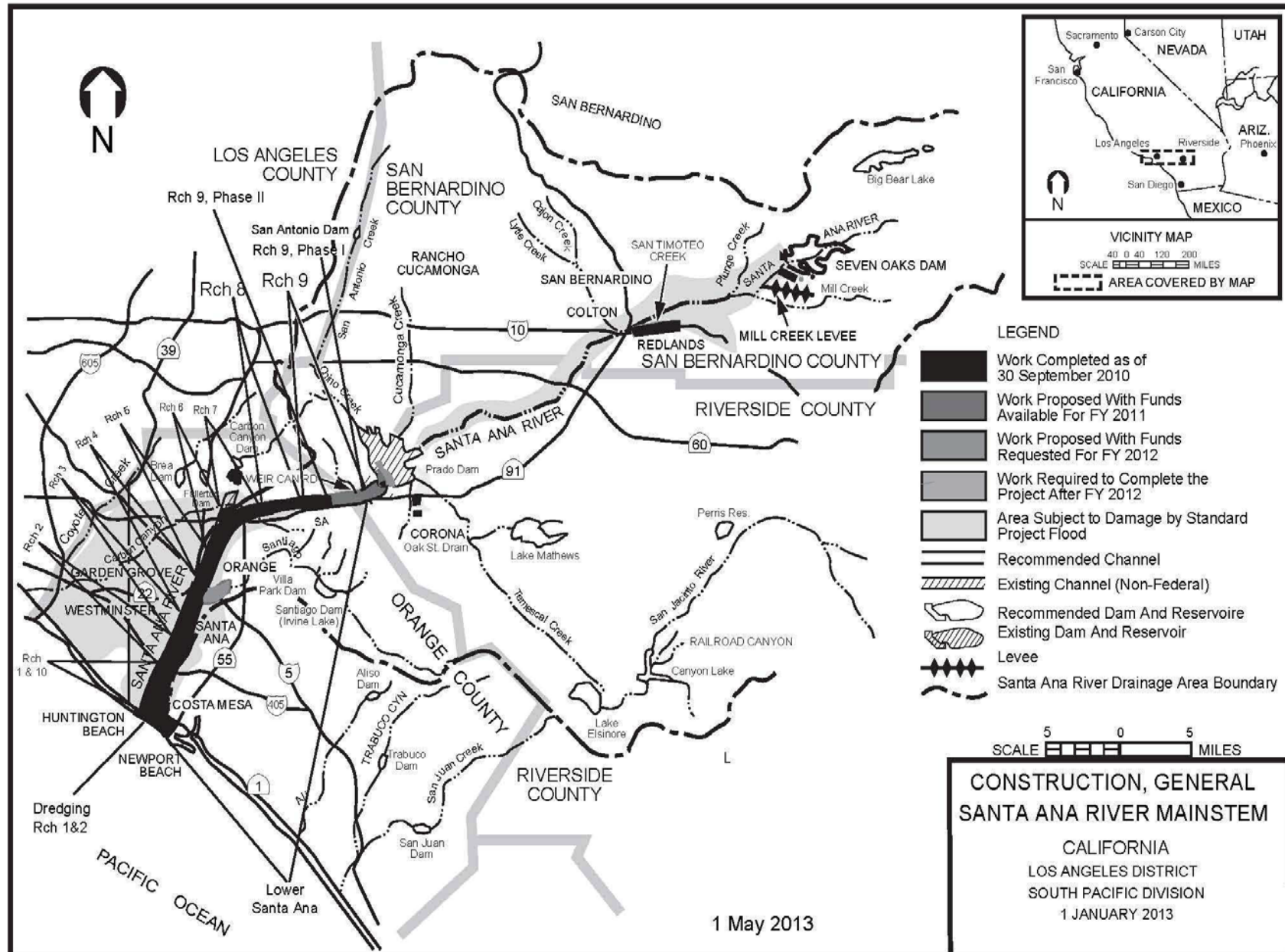
The project was modified by Section 104 of the Energy and Water Development Appropriation Act of 1988, which authorized the construction of San Timoteo Creek in the vicinity of Loma Linda as part of the Santa Ana River Mainstem Project and the total costs for the Santa Ana Mainstem, including Santiago Creek, was raised by \$25,000,000. Construction was initiated in August 1994 and completed in November 2007 with funds specifically identified in Act Language for a total of \$76,650,000.

The project was modified by the Water Resources Development Act of 1990, which authorized the Secretary to develop recreational trails and facilities on lands between Seven Oaks Dam and Prado Dam, including flood plain management areas. These features are not included in the current estimate pending development of plans, determination of costs and support from local sponsors.

The project was modified by the Water Resources Development Act of 1996, which authorized the Secretary in coordination with the State of California, to provide technical assistance to Orange County, California, in developing appropriate public safety and access improvements associated with a portion of California State Route 71, which has been relocated for the Prado Dam project.

Congressional language in the Water Resources Development Act of 2007 increased the project cost to \$1,800,000,000 and included the Santa Ana River Interceptor line (SARI) as an authorized element of the project. This authority sufficiently increased the 902 maximum authorized total project cost to cover the added SARI line relocation, which is a 100% non-federal cost.

Total Lands, Easements, Rights of Ways, Relocations and Disposals (LERRD) for the Prado Dam project is being estimated above 45 percent of the total project cost for flood control. Upon completion of the project and final accounting, the government, subject to availability of funds, shall reimburse the Non-Federal sponsor for any such value in excess of 45 percent of total project costs to bring the ultimate cost sharing to 50 percent Federal and 50 percent Non-Federal for the Prado Dam Project.



APPROPRIATION TITLE: Construction - Local Protection (Flood Risk Management)

PROJECT: Yuba River Basin, California (Continuing)

LOCATION: The project is located on the left bank of the Feather River in northern California in Yuba County approximately 50 miles north of Sacramento.

DESCRIPTION: The project, as authorized, includes constructing or deepening of slurry walls, deepening toe drains, constructing or modifying berms to strengthen existing levees on the Yuba and Feather Rivers and Jack Slough to provide increased flood risk management benefits to three reaches: Reach 1 (Linda/Olivehurst), Reach 2 (Lower Reclamation District (RD) 784), and Reach 3 (Marysville). Project sponsors have completed improvements to all of the existing levees in Reach 1 and Reach 2 and have requested credit to be applied towards the non-Federal cost share of the of the Marysville (Reach 3) element, the only element of the authorized Yuba River Basin being constructed by the Government. The Reach 3 (Marysville) element is under construction. To facilitate construction, the project has been broken up into geotechnical sections based on factors of safety due to seepage and other items in order to streamline the contracting approach. These geotechnical sections are conveyed herein as phases 2A, 2B, 2C, 3 and 4. PHASE 2A - The project is situated on the levee in the southwestern part of the city of Marysville with Riverfront Park. The project consists of a 2,600 foot long seepage control cutoff wall constructed parallel with the levee using a slurry trench method to produce an impermeable barrier of a mixture of native soil and bentonite clay, commonly referred to as soil- bentonite (SB). The depth of the cutoff varies from 30 to 60 feet deep and the width is 3 feet. PHASE 2B - The project is situated on the levee in the southeastern part of the city of Marysville near the historic downtown area. The project consists of a 4,000 foot long seepage control cutoff wall constructed parallel with the levee using a slurry trench method to produce an impermeable barrier of a mixture of native soil and bentonite clay, commonly referred to as soil- bentonite (SB). The depth of the cutoff varies from 30 to 60 feet deep and the width is 3 feet. PHASE 4 - The project is situated on the levee in the northwestern part of the city of Marysville near State Highway 70 and crossing of two UPRR railroad tracks. The project consists of a 600 foot long, 15 foot wide by 7 foot tall stability berm constructed parallel with the levee abutting the landside of the levee. The project would use unsuitable levee material recycled from other MRL phases to construct the berm. This phase also includes a small portion of levee crest reconstruction. PHASE 2C - The project is situated on the levee in the southern part of the city of Marysville. The project consists of a three seepage control cutoff walls constructed parallel with the levee using a slurry trench method to produce an impermeable barrier of a mixture of native soil and bentonite clay, commonly referred to as soil- bentonite (SB). Deep Soil Mixing (DSM) methods may be utilized from STA 208+00 to STA 210+00 to construct the cutoff wall in the vicinity of the bridge abutments. The depth of the cutoff varies from 30 to 60 feet deep and the width is 3 feet. PHASE 3 - The project phase may be subdividing into 4 subphases depending on funding and design refinements. The project is situated on the levee in the southeastern part of the city of Marysville near the historic downtown area. The project consists of a 4,000 foot long seepage control cutoff wall constructed parallel with the levee using a slurry trench method to produce an impermeable barrier of a mixture of native soil and bentonite clay, commonly referred to as soil- bentonite (SB). The depth of the cutoff varies from 30 to 60 feet deep and the width is 3 feet.

The programmed portion of this project includes the Reach 3, Marysville Ring Levee (MRL). The unprogrammed portion of the project includes the study in progress to confirm the Federal interest in the authorized project improvements in Reach 1 and Reach 2; and to evaluate the completed work by the project sponsors in these reaches for credit eligibility (see OTHER INFORMATION).

AUTHORIZATION: Water Resources Development Act, Pub. L. 110-114, § 3041, 121 Stat. 1041, 1116 (2007); Water Resources Development Act, Pub. L. 106-53, § 101(a)(10), 112 Stat. 269,275 (1999)

Division: South Pacific

District: Sacramento

Yuba River Basin, California

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Separable Element 1 – Reach 3 (Marysville Ring Levee)

REMAINING BENEFIT-REMAINING COST RATIO: 2.2 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.7 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 2.3 to 1 at 4 1/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the evaluation contained in the Yuba River Basin Investigation, California, Economic Reevaluation Report (ERR) dated August 2011 at October 2011 price level. The ERR for the MRL was approved by Division on October 31, 2011.

Separable Element 2 – Reaches 1 and 2

REMAINING BENEFIT-REMAINING COST RATIO: TBD (see OTHER INFORMATION).

TOTAL BENEFIT-COST RATIO: TBD (See OTHER INFORMATION).

INITIAL BENEFIT-COST RATIO: 3.4 to 1 at 6-1/8 percent (see OTHER INFORMATION).

BASIS OF BENEFIT-COST RATIO: RD 784 has two separable elements from the Yuba River Basin Investigation, California, Final Feasibility Report and Appendixes, April 1998. An economic analysis (October 2012 price level) was performed in support of the Reach1 (Linda/Olivehurst) Post Authorization Documentation Report dated June 2012. The upper Reach 1 was economically feasible in this report with net benefits of \$2.1 million and a total benefit-cost ratio of 1.44 to 1. The evaluation of Reach 2 (Lower RD 784) has not been completed, but preliminary studies indicate that the completed local improvements are economically feasible. However no Federal decision is considered necessary for Reach 2 at this time since there is no additional Federal action to be supported..

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$110,567,500				
Programmed Construction	70,000,000					
Unprogrammed Construction	40,567,500					
Estimated Non-Federal Cost		\$ 37,700,000				
Programmed Construction	37,700,000					
Cash Contributions	33,584,000					
Other Costs	4,116,000					
Estimated Non-Federal Cost		\$ 21,836,500				
Unprogrammed Construction	21,836,500					
Cash Contributions	19,315,500					
Other Costs	2,521,000					
Total Estimated Programmed Construction cost		\$107,700,000				
Total Estimated Unprogrammed Construction Cost		\$ 62,404,000				
Total Estimated Project Cost		\$170,104,000				
Separable Element 1 – Reach 3 (Marysville Ring Levee, MRL)						
Estimated Federal Cost		\$ 65,461,500		Reach 3	8	TBD
				Reaches 1 & 2	1	Unsched.
Estimated Non-Federal Cost		35,248,500				
Cash Contribution	\$31,132,500					
Other Costs	4,116,000					
Total Separable Element 1 Cost		\$100,710,000				
Separable Element 2 – Reaches 1 and 2						
Estimated Federal Cost		\$ 45,106,000				
Estimated Non-Federal Cost		24,288,000				
Cash Contribution	\$21,767,000					
Other Costs	2,521,000					
Total Separable Element 2 Cost		\$ 69,394,000				
Division: South Pacific			District: Sacramento			Yuba River Basin, California

SUMMARIZED FINANCIAL DATA (Continued)	ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Total Project Estimated Federal Cost	\$110,567,500			
Estimated Non-Federal Cost	59,536,500			
Cash Contribution	\$52,899,500			
Other Costs	6,637,000			
Total Project Cost	\$170,104,000			

				PHYSICAL DATA
Allocations to 30 September 2010	\$ 23,478,282			Levee Improvements:
Allocation for FY 2011	2,619,196			Slurry Walls (Reaches 1 and 2) – 6.7 miles
Allocation for FY 2012	3,459,973			Toe Drains (Reaches 1 and 2) - 9.0 miles
Conference Allowance for FY 2013	0 1/			Berms (Reaches 1 and 2) - 9.5 miles
Allocation for FY 2013	1,710,000 2/			Slurry walls and berms along ring
Allocations through FY 2013	33,067,451 3/	30		levee (Reach 3) – 5 miles
Estimated unobligated Carry-In Funds	0 4/			
Budget amount for FY 2014	1,800,000	32		
Programmed Balance to Complete after FY 2014	35,132,549			
Unprogrammed Balance to Complete after FY 2014	\$ 40,567,500 5/			

- 1/
- 2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.. T
- 3/ Includes American Recovery and Reinvestment Act (ARRA) funding of \$13,491,494.
- 4/ Estimated unobligated "Carry-In" Funds: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the program year from prior appropriations for use on this project effort is \$0. This amount, together with the Budget Amount shown above, will be used to perform the FY 2014 project activities.
- 5/ The Unprogrammed Balance to Complete after FY 2014 is associated with the remaining portion of the authorized project currently being re-evaluated in the General Reevaluation Report. The current total project estimate of \$110,567,500 used to develop this justification sheet was based on the currently authorized project, not the one potentially proposed in the not-yet-completed GRR.

JUSTIFICATION: The principal urban centers within the project area include Marysville and Yuba City with current populations (2010 Census) of 12,800 and

Division: South Pacific

District: Sacramento

Yuba River Basin, California

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63,600, respectively. The Marysville and Yuba City areas have experienced at least six major floods which include the floods of November 1950, December 1955, December 1964, January 1965, February 1986 and January 1997, which were very widespread and destructive. Record floodflows occurred with the 1955 flood and resulted in the loss of 37 lives when a levee on the Feather River south of Yuba City failed. Modifications to flood protection facilities in the intervening 10 years, including partial completion of the State's Oroville Dam project, helped prevent damage during the 1964-65 flood that may have exceeded floodflows of the 1955 event. Approximately 100,000 acres of land were inundated during the 1955 event. Despite existing flood protection to the area, it is still vulnerable to catastrophic flooding as demonstrated by the February 1986 event. During the 1986 flood, the south levee on the Yuba River failed, inundating the towns of Linda and Olivehurst to depths of approximately 10 feet. More than 24,000 people were evacuated and damages to property were estimated at \$95 million. The floods of January 1997 caused a levee break on the Feather River that was stabilized using emergency construction authority. However, over twenty square miles of land were inundated which included the Yuba City airport, roughly 800 homes, and two major highways (65 and 70). Approximately 15,000 people were evacuated and three lives were lost. Total damage of the 1997 event was estimated at \$82.4 million. Flood risk management is being mitigated for Marysville Reach 3 by construction of a separable element that consists of about 5 miles of slurry walls and berms along the ring levee surrounding the city of Marysville. Following the flood in 1997, the project sponsor, using funding from the State of California Early Implementation Program, have constructed improvements to strengthen all of the levees providing FRM benefits to the Reclamation District 784 area, and have requested credit to be applied toward the non-Federal cost share for construction of the Marysville separable element; therefore, there will be no Federal construction of improvements other than the on-going Marysville separable element. The only remaining Federal action under consideration is the evaluation and affording of potential credit towards the Marysville project. The Average Annual Benefits for the Reach 3 Marysville Ring Levee are all for Flood Risk Management and are \$11,856,000.

FISCAL YEAR 2013: The current amount is being used to complete design of phase 2A and Phase 4A, and initiate design of Phase 2B. Anticipate construction of Phase 4A.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate design of Reach 3, Phases 2C and 3 and continue in-house labor	\$ 1,800,000
Total	\$ 1,800,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended by Section 202 (a) of the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 6,637,000	
Pay 31 percent of the costs allocated to flood risk management to bring the total Non-Federal share of flood control costs to 35 percent, as determined under Section 103(m) of the Water Resources Development Act of 1986 as amended by Section 202(a) of the Water Resources Development Act of 1996 to reflect the non-federal sponsor's ability to pay and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood risk management facilities.	52,899,500	\$8,000
Total non-Federal Costs	\$59,536,500 6/	\$8,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

6/ After approval by the Assistant Secretary of the Army (Civil Works), local credit based on ability to pay (Section 103 (m) of the Water Resources Development Act Of 1986, as amended), or general credit for prior work (Section 104 of the Water Resources Development Act of 1986, as amended, or Section 215 of the Flood Control Act of 1968) must be reflected in the requirements of STATUS OF LOCAL COOPERATION as an offset to required cash contributions or, if necessary, Lands, Easements, Rights of Ways, Relocations and Disposals (LERRD) contributions. However, any credit provided under Section 104 of the Water Resources Development Act Of 1986, as amended, or Section 215 of the Flood Control Act of 1968 may not be used to offset the required 5 percent cash contribution.

STATUS OF LOCAL COOPERATION: The state of California Central Valley Flood Protection Board (CVFPB) is the non-Federal sponsor for the project. The current non-Federal cost estimate of \$59,536,500 includes a cash contribution of \$52,899,500. A firm commitment for a cash contribution has been made by the sponsor. In a letter dated April 3, 2009, the ASA (CW) approved the sponsor's request to exercise Section 103 (L) of the WRDA 1986, deferring the sponsor's cash contribution of the MRL separable element for up to one year. This deferral expired August 3, 2011 and was not renewed. The CVFPB provided their required cash contribution for the deferred amount. The current non-Federal cost estimate reflects credits of \$2,700,000 for deepening the slurry wall of Reaches 1 and 2 for prior work pursuant to Section 104 of the Water Resources Development Act of 1986. The Project Partnership Agreement was signed for the Marysville Ring Levee (Separable Element 1) on July 21, 2010.

The current non-Federal cost estimate for Separable Element 1, Reach 3, of \$35,248,500, which includes a cash contribution of \$31,132,500, is an increase of \$2,973,500 from the non-Federal cost estimate of \$32,275,000 noted in the Project Partnership Agreement, which included a cash contribution of \$28,942,000. The non-Federal sponsor is aware of the cost increase and has indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$110,567,500 is an increase of \$5,336,500 from the latest estimate (\$105,231,000) presented to congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation of Construction Features	\$ 375,000
Post-Contract Award and Other Estimating Adjustments	4,961,500
Total	\$5,336,500

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) was filed with the Environmental Protection Agency in April 1998. Record of Decision (ROD) was signed June 28, 2000. An Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) was completed and executed for the MRL in April 2010. The local sponsor prepared a supplement to the 1998 EIS/ROD as part of the Section 408 process.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design (PED) were appropriated in Fiscal Year 1998 and construction in FY 2003. Mitigation requirements for impacts to the environment from construction include 2.98 acres of woodland habitat. In accordance with the Yuba River Basin Investigation, California Feasibility Report dated April 1998, the mitigation requirement could be met by using credit from the existing mitigation site for Phase II of the System Evaluation, Marysville/Yuba City Levee Reconstruction Project. This credit resulted from excess mitigation acreage developed for Phase II of the System Evaluation. Mitigation costs are yet to be determined until a footprint is established for the un-designed area.

Reach 3. Approval to proceed with construction of the Marysville Ring Levee (MRL) Separable Element was given by the SPD Commander, February 12, 2008. All MRL design and cost changes have been reported and economic benefits updated in the Engineering Documentation Report (EDR) dated April 12, 2010 and the Economic Reevaluation Report dated August 2011. An EA was completed and resulted in a FONSI signed in April 2010. The benefit cost ratio for the Marysville Ring Levee as reported in the Economic Reevaluation Report (ERR) dated August 2011 is 2.3 to 1 at 4 1/8%. The benefit cost ratio at 7% is 1.7 to 1.

Division: South Pacific

District: Sacramento

Yuba River Basin, California

1 May 2013

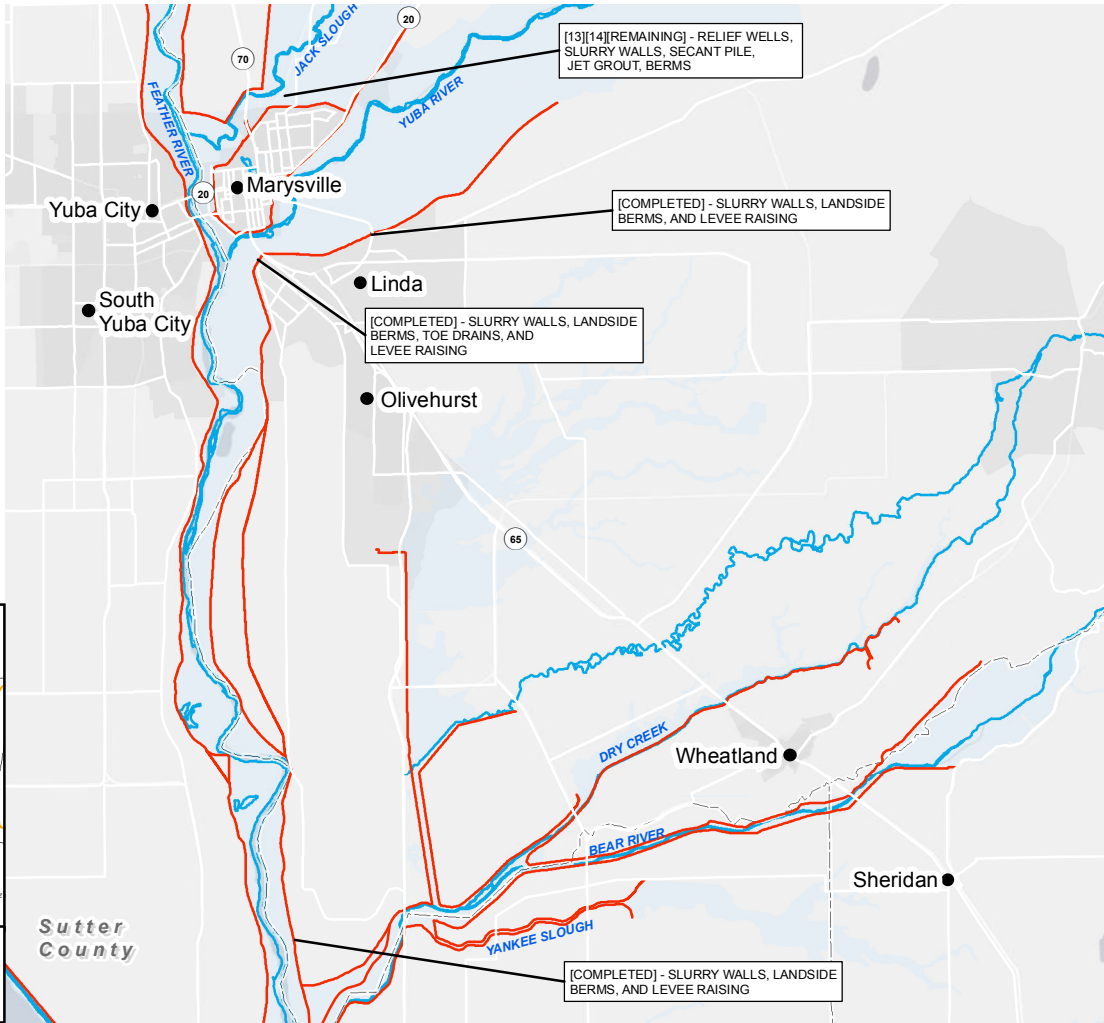
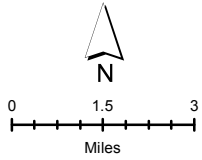
SPD-108

The ERR for the MRL was approved by Division on October 31, 2011. The flood rate and depth based on a levee failure during a 60-year event could reach 10 feet in 4 hours. The risk to life stems from extreme cold water. In 49 degree water, a person reaches unconsciousness in 30 to 60 minutes with an expected OTHER INFORMATION (Continued)

time of survival of 1 to 3 hours. American Recovery and Reinvestment Act funding of \$13,491,494 is being used for the first phase construction of the Marysville Ring Levee separable element of the Yuba River Basin Project.

Reaches 1 and 2. The project sponsors have constructed improvements to strengthen the existing levees in Reach 1 and Reach 2 and have requested credit to be applied towards the non-Federal cost of construction of the Marysville element of the authorized Yuba River Basin project. Deeper slurry walls and other measures to control seepage not anticipated during feasibility are required in Reach 1; these design changes appear to be within the Chief's delegated approval authority. However, reauthorization will be required due to scope changes located in Reach 2 and increased costs as a result of under seepage issues identified at initiation of preconstruction engineering and design (PED). A Post Authorization Documentation Report (PADR) dated June 2012 has been submitted to CESP for approval. The PADR determined continued Federal interest in Reach 1 (Linda-Olivehurst element) of the 1999 authorized project. An Integral Determination Report (IDR) is being prepared to determine if the local construction of improvements to the Reach 1 levees meets the requirements for credit under either Section 104 of WRDA 1986 or Section 3041 of WRDA 3041. Preliminary indications are that the sponsor's improvements to the Reach 1 levees will support the affording of sufficient credit to offset all of the required non-federal additional cash requirement for construction of the Marysville element.

All required modifications to levees in Reach 2 to address under seepage and fragility issues identified at initiation of preconstruction engineering and design (PED) have been rectified by the locals; therefore completion of a General Reevaluation Report recommending a Chief's report for additional authorization is unnecessary, since no Federal construction would be recommended and with approval of the IDR there would be no opportunity for the application of additional credit toward the required cash contribution for the construction of the MRL element of the authorized Yuba River Basin project.



Legend

— Levees

Work Status

[Completed] - Work completed as of 30 September 2012

[13] - Work proposed with funds available for FY 2013*

[14] - Work proposed with funds available for FY 2014

[Remaining] - Work required to complete the project after FY 2014

*Includes American Recovery and Reinvestment Act Funds

Local Protection Projects - Flood Control

Yuba River Basin California

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District



1 January 2013

Operation and Maintenance

Key to Abbreviations:

N=Navigation

FRM=Flood Risk Management

RC=Recreation H=Hydropower

EN=Environmental Stewardship

WS=Water Supply

Arizona

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Alamo Lake Dam, AZ

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: Located 25 miles North of Wenden, AZ and 120 miles NW of Phoenix, AZ; consists of an earthen filled dam (283-feet-high; 975 feet-long), Outlet Works Spillway Service Roads Reservoir (1,045,300 acre-foot cap spillway crest – 1977) and a Recreation Area.

CONFERENCE AMOUNT FOR FY 2013: \$1,621,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$521,000 O: \$582,000 T: \$1,103,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$997,000 provides for operation and maintenance of dam and appurtenant structures, facilities, and dam operator compounds.

REC: \$50,000 provides oversight of out-granted areas located within the Alamo Dam flood control basin.

HYD: N/A

ES: \$56,000 provides for ESA consultation with US Fish and Wildlife Service and other agency stakeholders on Alamo Dam and Bill Williams River for 3 listed species (eagle, willow flycatcher, and razorback sucker) and update of the 40 year old project master plan.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0

2./At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Painted Rock Dam, AZ

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: Located about 20 miles NW of Gila Bend, AZ and 120 miles SW of Phoenix, AZ; Consists of an earthen-fill dam (181-feet high: 4,780 feet long), Saddle Dike Outlet Works (circular conduit), Spillway (detached), Pilot Channel Reservoir (2,491,493 acre-foot cap spillway crest – 1977), One recreation area (downstream at borrow pit area). The Recreation area has been closed by the State of Arizona due to contaminated water.

CONFERENCE AMOUNT FOR FY 2013: \$1,236,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$379,000 O: \$528,000 T: \$907,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$882,000 provides for operation of the dam, service facilities and grounds, specify reservoir operations, provide hydrographic instrumentation as well as maintenance of the dam and appurtenant structures.

RC: N/A

H: N/A

EN: \$25,000 funding provides for coordination with local, State and Federal agencies on degradation of natural resources and listed species (Gila monster) and stewardship of cultural resources.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Whitlow Ranch Dam, AZ

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: Located 50 miles SE of Phoenix, in Pima County, AZ; consists of an earthen-fill dam (25-feet-high; 978-feet-long), Outlet Works (circular conduit) un-gated, Service Roads Reservoir (35,593 acre-foot cap spillway crest - 1976).

CONFERENCE AMOUNT FOR FY 2013: \$297,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$232,000 O: \$87,000 T: \$319,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$296,000 provides for operation and maintenance of the dam and appurtenant structures, grounds, utilities and service facilities as well as hydrographic instrumentation maintenance and monitoring.

RC: N/A

H: N/A

EN: \$23,000 provides for coordination with local, State, and Federal agencies and stakeholders on degradation/loss of natural resources and downstream habitat and stewardship of cultural resources.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

California

O&M Justification Sheet

PROJECT NAME: Black Butte Lake, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on Stony Creek, a tributary of the Sacramento River, about nine miles west of the town of Orland, California in Glenn and Tehama counties. The project comprises an earth fill dam, maximum height of 140 feet, six dikes, and an ungated spillway, creating a reservoir with a gross storage capacity of 160,000 acre-feet. Project was initially placed in operation and became fully operational in 1962.

CONFERENCE AMOUNT FOR FY 2013: \$2,259,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$586,000 O: \$1,978,000 T: \$2,564,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,596,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications. Funding also provides for piezometer remediation.

RC: \$809,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$159,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: The Black Butte Lake Archeological District is comprised of 52 sites eligible for inclusion in the National Register of Historic Places.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

Black Butte Lake, California

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Buchanan Dam, H.V. Eastman Lake, California

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: The project consists of an earthfill dam on the Chowchilla River, about 16 miles northeast of the City of Chowchilla, California, creating a reservoir with gross storage capacity of 150,000-acre-feet for flood control, irrigation, recreation, and other purposes. The project also includes about two miles of channel improvement work and levee construction on Ash and Berenda Sloughs, tributary channels of the river. The project is located in Madera and Mariposa Counties. Initially placed in operation in 1976 and became fully operational in 1982.

CONFERENCE AMOUNT FOR FY 2013: \$1,919,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$405,000 O: \$1,647,000 T: \$2,052,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,145,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, bridge inspection, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: \$714,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$193,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2./At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento Buchanan Dam, H.V. Eastman Lake, CA

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Coyote Valley Dam, Lake Mendocino, California

AUTHORIZATION: Flood Control Act of 1950; Pub. L. No. 81-516, § 204, 64 Stat. 163

LOCATION AND DESCRIPTION: Lake Mendocino is on the Russian River about five miles northeast of Ukiah in Mendocino County. The dam is an earthfill structure 160 feet high, 3,560 feet long, with a 122,500 acre feet capacity. A study to raise the dam is in progress. The original purpose was flood risk management and water supply, but recreation was added after the original authorization. The project also provides environmental outputs.

CONFERENCE AMOUNT FOR FY 2013: \$3,624,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$839,000 O: \$2,438,000 T: \$3,277,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,496,000 Funding provides for routine operation and maintenance for flood risk management; perform water management analysis (control and quality); environmental compliance; and water management of water control data systems. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$1,373,000 Funding provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; real estate management; and environmental compliance.

H: N/A

EN: \$372,000 Funding provides for routine operation and maintenance of egg collection facility and fish hatchery to support required environmental mitigation and stewardship; monitoring and management of endangered species; specialized habitat management; ensuring historical, archeological and cultural resources are protected; and compliance with the Biological Opinion on endangered Coho Salmon and threatened Steelhead Trout.

WS: \$36,000 Funding provides for routine operation of the service gates and to accomplish operations and maintenance of authorized water supply mission.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: San Francisco

Coyote Valley Dam,
Lake Mendocino, CA

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Dry Creek (Warm Springs) Lake and Channel, California

AUTHORIZATION: Flood Control Act of 1962, Pub. L. No. 87-874, § 203, 76 Stat. 1173; Water Resources Control Act of 1974, Pub. L. No. 93-251, § 95, 88 Stat. 12

LOCATION AND DESCRIPTION: The project is located on Dry Creek, a tributary of the Russian River about 75 miles north of San Francisco, California. It consists of a 319 foot high earth and rockfill dam and reservoir with gross storage capacity of 381,000 acre feet. The primary authorized purposes are flood risk management, recreation and water supply, but also provide environmental outputs.

CONFERENCE AMOUNT FOR FY 2013: \$6,697,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,021,000 O: \$4,130,000 T: \$5,151,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,291,000 Funding provides for routine operation and maintenance for flood risk management; perform water management analysis (control and quality); environmental compliance; and water management of water control data systems. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$1,815,000 Funding provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; real estate management; and environmental compliance.

H: N/A

EN: \$1,007,000 Funding provides for routine operation and maintenance for congressionally authorized environmental mitigation and stewardship; monitoring and management of endangered species; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: \$38,000 Funding provides for routine operation of the service gates and to accomplish operations and maintenance of authorized water supply mission.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: San Francisco

Dry Creek (Warm Springs)
Lake and Channel, CA

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Farmington Dam, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on Littlejohn Creek about 3½ miles upstream from Farmington and about 18 miles east of Stockton, and consists of a 56-foot-high earth-fill dam and an ungated saddle spillway, creating a reservoir with a gross storage capacity of 52,000 acre-feet. The project is located in San Joaquin and Stanislaus counties. Project initially placed in operation and became fully operational in 1951.

CONFERENCE AMOUNT FOR FY 2013: \$450,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$178,000 O: \$312,000 T: \$490,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$490,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Hidden Dam, Hensley Lake, California

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: The project consists of a 163 feet-high earth-fill dam on the Fresno River about 15 miles northeast of Madera, with a reservoir with gross storage capacity of 90,500 acre-feet. The project is located in Madera County.

CONFERENCE AMOUNT FOR FY 2013: \$2,018,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$381,000 O: \$1,686,000 T: \$2,067,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,270,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: \$729,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$68,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Humboldt Harbor and Bay, California

AUTHORIZATION: River and Harbor Act of 1910, Pub. L. No. 61-264, 36 Stat. 630, 661; River and Harbor Act of 1930, Pub. L. No. 71-520, 46 Stat. 918, 932; River and Harbor Act of 1935, Pub. L. No. 74-409, 49 Stat. 1028, 1038; River and Harbor Act of 1937, 75 P.L. 392, 50 Stat. 844, 849; River and Harbor Act of 1968, Pub. L. No. 90-483, § 101, 82 Stat. 731, 732.

LOCATION AND DESCRIPTION: This project is located at Eureka, California, about 280 miles north of San Francisco. Project operation and maintenance provides for annual inspection and periodic repair of the North and South jetties, and annual maintenance dredging of the Bar and Entrance Channels; the North Bay Channel, the Samoa Channel, including the Turning Basin; the Eureka Channel; and the Fields Landing Channel. The permanently designated Humboldt Open Ocean Disposal Site is utilized for disposal of all dredged materials.

CONFERENCE AMOUNT FOR FY 2013: \$1,905,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,730,000 O: \$0 T: \$2,730,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,730,000 Funding provides for annual maintenance dredging of the Bar and Entrance Channel by Government Dredge ESSAYONS. Humboldt Harbor is the only Deep Draft harbor in California north of San Francisco. Authorized depth of the Bar and Entrance Channel is -48 feet MLLW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Storm activity and wave action cause sediment to shoal in the Entrance Channel and create extremely hazardous navigation conditions. Annual dredging of the Harbor entrance is therefore critical to eliminate this hazard as Humboldt is the only deep draft Harbor of Refuge between San Francisco Bay and Coos Bay, Oregon.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Isabella Lake, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The dam is located about 50 miles northeast of Bakersfield, near the confluence of the north and south forks of the Kern River; the auxiliary dam is about ½ mile east of the main dam. Project comprises a 185-foot-high earth fill dam, an ungated concrete spillway, and a 100 foot-high earth fill auxiliary dam, creating a reservoir with a gross storage capacity of 570,000 acre-feet. The project is located in Kern County. Initially placed in operation and became fully operational in 1953.

CONFERENCE AMOUNT FOR FY 2013: \$1,080,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$393,000 O: \$889,000 T: \$1,282,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,157,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: N/A

H: N/A

EN: \$125,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS) in particular for the Southwest Willow Flycatcher and implementing control measures for the Cow Bird; monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS and Level One inventories.

WS: N/A

OTHER INFORMATION: Isabella Lake is considered a DSAC I rated dam due to seismic issues and seepage problems. The project is currently not fully able to provide the benefits for which it was designed and constructed. A Dam Safety Modification Study was conducted and the Record of Decision (ROD) signed in December 2012.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Los Angeles County Drainage Area (LACDA), CA

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: Project consists of the following:

- a. HANSEN DAM: Located 4 miles E of the city of San Fernando
Project Elements: Dam and Appurtenances (97- feet-high; 10,475-feet-long; 51,000-acre-feet cap at spillway crest-1983), 1 Recreation Area (number of visitors to Recreation Area in FY2010: 2,000,000), Initially Operational/ Fully Operational FY1940/FY 1949,
- b. LOPEZ DAM: Located 2.2 miles NE of the city of San Fernando, California.
Project Elements: Dam and Appurtenances (50 feet-high; 1,330-feet-long; 1,248-acre-feet cap at spillway crest-1979), Initially Operational/ Fully Operational: FY1954/FY1955.
- c. SANTA FE DAM: Located 15 miles NE of the City of Los Angeles.
Project elements: Dam and Appurtenances (92 feet-high; 23,800 feet-long;32,109 acre-feet cap at spillway crest 1983), 1 Recreation Area (number of visitors to Recreation Area in FY2010: 446,360), Initially & Fully Operational: Y1949/FY1949.
- d. SEPULVEDA DAM: Located 25 miles NW of the City of Los Angeles.
Project elements: Dam & Appurtenances (57 feet-high; 15,444 ft-long;17,425 acre-ft cap at spillway crest 1982), 1 Recreation Area (number of visitors to Recreation Area in FY 2010: 3,080,000), Initially Operational/Fully Operational: FY1949/FY1949.
- e. WHITTIER NARROWS DAM: Located 10 miles E of the City of Los Angeles.
Project elements: Dam and Appurtenances (56 feet-high; 19,960 ft-long; 49,143 acre-feet cap at spillway crest 1982), 1 Recreation Area (number of visitors to Recreation Area in FY 2010: 2,043,561), Initially Operational/Fully Operational FY1957/FY1957
- f. LOS ANGELES COUNTY DRAINAGE AREA CHANNELS: Consists of 517 miles of channel, of which 38 miles are maintained by the Corps with the remainder maintained by Los Angeles County Department of Public Works.

CONFERENCE AMOUNT FOR FY 2013: \$5,053,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,276,000 O: \$3,164,000 T: \$6,440,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$6,171,000 provides for operation and maintenance of 6 flood risk management projects, including dams and appurtenant structures, flood control channels, service facilities and grounds, utilities, permanent operating equipment, reservoir operations, water control management, asset management, and dam safety.

RC: \$120,000 provides for oversight of out-granted areas in LACDA basins and management of watersheds.

H: N/A

EN: \$149,000 provides for coordination with local, State, and Federal agencies and stakeholders on the listed species (Santa Ana sucker, vireo, flycatcher, gnatcatcher) and degradation/loss of natural resources; invasive plant control, sediment management and stewardship of cultural resources.

Division: South Pacific

District: Los Angeles

Los Angeles County Drainage Area (LACDA), CA

WS: N/A

OTHER INFORMATION: None

1 / Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Los Angeles – Long Beach Harbors, CA

AUTHORIZATION: River and Harbor Act of 1871 (amended WRDA 1976)

LOCATION AND DESCRIPTION: The project is located in the cities of Los Angeles and Long Beach, consisting of maintaining the breakwaters and performing maintenance dredging within the harbors to include the Los Angeles River Estuary.

CONFERENCE AMOUNT FOR FY 2013: \$265,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,809,000 O: \$0 T: \$4,809,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 4,809,000 provides for maintenance dredging in the Federal channels within the Los Angeles-Long Beach Harbors. The harbors support two major ports in the country, Port of Los Angeles and Port of Long Beach, are 1st and 2nd busiest container ports in the US. Funds will also be used to perform sediment testing and engineering and design. Authorized project depths in the various channels range from -35 to -78 feet MLLW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Merced County Streams, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project consists of the following flood control improvements:

- 1) Five flood retention dams:
 - Mariposa, 88-foot-high (15,000-acre-feet), 18 miles east of Merced.
 - Owens 75-foot-high (3,600-acre-feet), 16 miles east of Merced.
 - Bear, 92-foot-high (7,700-acre-feet), 16 miles east of Merced.
 - Burns, 53-foot-high (7,000-acre-feet), 13 miles NE of Merced.
 - Castle, 40-foot-high (6,400-acre-feet), 6 miles NW of Merced.
- 2) Black Rascal and Owens Diversion Canals; and
- 3) Channel improvements on various streams in the vicinity of Merced.

No recreation facilities are included in the project. The project is located in Mariposa County. Initially placed in operation in 1948 and became fully operational in 1954.

CONFERENCE AMOUNT FOR FY 2013: \$350,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$166,000 O: \$234,000 T: \$400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$400,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, limited repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data System modifications.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

Merced County Streams, CA

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Mojave River Dam, CA

AUTHORIZATION: Flood Control Act of 1960

LOCATION AND DESCRIPTION: Project is located 100 miles East of Los Angeles in San Bernardino County, California; consists of an earthenfill dam (106 feet-high; 1,250 feet-long), Service and Spillway Roads, Outlet Works, earthenfill Saddle Dike, Reservoir (89,669 acre-feet cap spillway crest–1975), 1 Recreation Area–Temporarily closed in FY 2001 for renovations (number of Visitors to Recreation Area in FY 2000 – 8,400).

CONFERENCE AMOUNT FOR PY 2013: \$331,000 ^{2/}

BUDGETED AMOUNT FOR FY 2014: M: \$150,000 O: \$203,000 T: \$353,000

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$268,000 provides for operation of dam, buildings, grounds, utilities, and service facilities as well as maintenance of the dam, including appurtenant structures.

RC: \$44,000 provides oversight of out-granted areas.

H: N/A

EN: \$41,000 funding provides for preparation environmental documentation and consultation with US Fish and Wildlife Service for effects on natural resources in O&M areas (which include 2 endangered species) to prevent immediate degradation or loss as well as updating of the project Master Plan.

WS: N/A

OTHER INFORMATION: None

^{1/} Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Morro Bay Harbor, CA

AUTHORIZATION: Rivers and Harbors Act of 1945

LOCATION AND DESCRIPTION: The Harbor is located half way between Los Angeles and San Francisco in San Luis Obispo County. The project consists of the Breakwater, Entrance Channel, the Main Channel, the Navy Channel, the Morro Channel, and the Sand Trap.

CONFERENCE AMOUNT FOR FY 2013: \$2,200,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,353,000 O: \$0 T: \$2,353,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 2,353,000 The harbor entrance is in a high wave energy environment and critical routine dredging is required annually to keep the entrance in manageable state for safe navigation. The entrance channel is normally maintained by the Corps' dredge YAQUINA. The harbor is a critical harbor of refuge, and the US Coast Guard also has a station in the harbor.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Annual fish landing tonnage is approximately \$4,000,000.

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: New Hogan Lake, California

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: The project is located on the Calaveras River, about 28 miles northeast of Stockton, and comprises a rock-fill dam with an impervious earth core and a maximum height of 200 feet together with four dikes, with a maximum height of 18 feet, and a gated spillway to create a reservoir with a gross storage capacity of 325,000 acre-feet. The project is located in Calaveras County. Initially placed in operation and became operational in 1964.

CONFERENCE AMOUNT FOR FY 2013: \$3,971,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$513,000 O: \$2,080,000 T: \$2,593,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,410,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: \$984,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$199,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

New Hogan Lake, California

O&M Justification Sheet

PROJECT NAME: New Melones Lake (Downstream Channel), California

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Project extends along the Stanislaus River from Goodwin Dam to its confluence with the San Joaquin River. The project provides recreationists' access to the Lower Stanislaus River. The project is located in Calaveras, San Joaquin, Stanislaus, and Tuolumne counties. Initially placed in operation in 1978 and became fully operational in 1988.

CONFERENCE AMOUNT FOR FY 2013: \$1,806,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$484,000 O: \$1,453,000 T: \$1,937,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$445,000 Critical funding needed to perform minimum channel operation and maintenance to prevent failure and maintain integrity of Flood Risk Management; limited inspections and engineering consultations.

RC: \$1,129,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$363,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

New Melones Lake
(Downstream Channel), CA

1 May 2013

SPD-132

O&M Justification Sheet

PROJECT NAME: Oakland Harbor, California

AUTHORIZATION: R & H Act of 1910, Pub. L. No. 60-317, 35 Stat. 815,823 (1909); R & H Act of 1917, Pub. L. No. 64-108, 39 Stat. 391,404 (1916), R & H Act of 1922, Pub. L. 67-362, 42 Stat. 1038, 1040 (1922); R & H Act of 1928, Pub. L. No. 69-560, 44 Stat. 1038, 1040 (1922); R & H Act of 1930 Pub. L. No. 46 Stat. 918, 931 (1930); R & H Act of 1945, Pub. L. No. 79-14, 59 Stat. 10, 13 (1945); R & H Act of 1962, Pub. L. No. 87-874 § 101, 76 Stat. 1173, 1176 (1962); WRDA of 1986, Pub. L. No. 99-662 § 202 (a), 100 Stat. 4082 (1986); WRDA of 1999, Pub. L. No. 106-53 § 101 (a) (7), 113 Stat. 269,275 (1999).

LOCATION AND DESCRIPTION: Oakland Harbor is located in Alameda County, California. The project provides for inspection and maintenance of parallel rubble-mound jetties forming the entrance to Oakland Inner Harbor, and annual maintenance dredging of the Oakland Inner and Outer Harbors to -50 feet Mean Lower Low Water. It also provides for reimbursement to Alameda County for operations and maintenance of the Fruitvale Avenue Railroad Bridge.

CONFERENCE AMOUNT FOR FY 2013: \$17,200,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$21,529,000 O: \$540,000 T: \$22,069,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$22,069,000 Funding provides for annual contract maintenance dredging of the Inner and Outer Harbor Channels; management of the Oakland Inner Harbor Tidal Canal; operation and maintenance of the railroad bridge; environmental clean-up of the Nelson Marine site; and monitoring at the San Francisco Deep Ocean Disposal Site and Sonoma Baylands. The project was recently deepened to -50 feet MLLW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Placement of dredged material from Oakland has contributed substantially to the Hamilton Wetland Restoration Project. The Port of Oakland is the major container facility in San Francisco Bay and is a National Strategic Port.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: San Francisco

Oakland Harbor, California

1 May 2013

SPD-133

O&M Justification Sheet

PROJECT NAME: Oceanside Harbor, CA

AUTHORIZATION: Rivers and Harbors Act of 1968

LOCATION AND DESCRIPTION: Located in San Diego County, 30 miles North of the City of San Diego. The project provides for maintenance of the general navigation features of the Del Mar Channel (constructed by the U.S. Navy), Oceanside Harbor (constructed by the local interests) and the Entrance Channel. The harbor supports operations of Marine Corps Base Camp Pendleton.

CONFERENCE AMOUNT FOR FY 2013: \$1,600,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,600,000 O: \$0 T: \$1,600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 1,600,000 The harbor requires annual dredging to keep the harbor entrance open to support all search and rescue vessels, US Navy vessels, Coast Guard Auxiliary and all local marine vessels. The harbor is also a critical harbor of refuge. Oceanside Harbor has an annual revenue of \$3.4 million directly attributed to the commercial fishing industry.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Pine Flat Lake, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: Pine Flat Dam located on the Kings River, about 25 miles east of the city of Fresno, is a straight, gravity-type concrete structure, 429 feet-high, with a gate-controlled spillway in the central section, and creates a reservoir of 1,000,000 acre-feet. The project is located in Fresno County. Initially placed in operation and became operational in 1954.

CONFERENCE AMOUNT FOR FY 2013: \$3,218,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$977,000 O: \$2,616,000 T: \$3,593,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,317,000 Funding provides for routine required dam operation and maintenance. Operation includes: execution of gate operation & service, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data System modifications.

RC: \$944,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$332,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

Pine Flat Lake, California

O&M Justification Sheet

PROJECT NAME: Redwood City Harbor, California

AUTHORIZATION: River & Harbor Act of 1910, 1930, 1935, 1945, 1950

LOCATION AND DESCRIPTION: Redwood City Harbor is on San Francisco Bay in San Mateo County. The project consists of San Bruno Shoal Channel, an entrance channel, outer channel, inner channel, and 2 turning basins. The project is the only deep draft harbor in southern San Francisco Bay.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,750,000 O: \$0 T: \$2,750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR 2014:

N: \$2,750,000 Funding provides for maintenance dredging of the Redwood City Harbor. Authorized project depth is -30 feet MLLW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Maintenance dredging completed in FY 2010 filled the Bair Island beneficial reuse site, which is owned by Fish and Wildlife, to capacity. Authorization language is required in order to expend Corps of Engineers funds to expand a Fish and Wildlife site. A deepening study is in progress.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Richmond Harbor, California

AUTHORIZATION: Rivers and Harbors Act of 1917, Pub. L. No. 64-108; 39 Stat. 391 (1916); Rivers and Harbors Act of 1930, Pub. L. 71-520; 46 Stat. 520 (1930); Rivers and Harbors Act of 1935, Pub. L. No.74-409; 49 Stat. 1028 (1935); Rivers and Harbors Act of 1938, Pub. L. No. 75-685; 52 Stat. 802 (1938); Rivers and Harbors Act of 1945, Pub. L. No. 79-14; 59 Stat. 10 (1945); Rivers and Harbors Act of 1954, Pub.L. No. 83-870; 68 Stat. 1248 (1954).

LOCATION AND DESCRIPTION: Richmond Harbor is located on San Francisco Bay in Contra Costa County, California. The project includes the Outer and Inner Harbor Channels as well as a training wall.

CONFERENCE AMOUNT FOR FY 2013: \$10,700,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$7,000,000 O: \$0 T: \$7,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,000,000 Funding provides for annual maintenance dredging of the Inner Harbor and the Outer Harbor which have authorized project depths of -38 to -45 feet MLLW. The Port of Richmond is the major tanker terminal in San Francisco Bay. Annual commercial tonnage is approximately 25,000,000 tons.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Richmond accounts for over 30% of all commercial tonnage in San Francisco Bay.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Sacramento River (30-Foot Channel), CA

AUTHORIZATION: River and Harbor Act 1946

LOCATION AND DESCRIPTION: The Sacramento Deep Water Ship Channel is the upper 43 miles of an 80 mile deep draft ship channel that connects the Port of West Sacramento with the Pacific Ocean. The Sacramento District maintains the channel to an authorized depth of -30 feet along with 33 miles of dual purpose navigation and flood protection levees. The project is located in the counties of Sacramento, Yolo, and Solano. Operation and Maintenance initiated in 1963.

CONFERENCE AMOUNT FOR FY 2013: \$1,443,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,500,000 O: \$0 T: \$1,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

NAV: \$1,500,000 Funding provides for minimal project condition survey for public safety, critical routine navigation levee maintenance, required environmental compliance for Corps property along the channel, and maintenance of the ship channel to its authorized depth of -30 feet. Basic levee maintenance will be conducted to provide vehicle access during emergencies. Funding also includes Real Estate compliance inspections and out-grant oversight.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The ship channel is an integral component of the California Bay Delta ecosystem and supports the Port of West Sacramento which is a vital link to California's agriculture industry and a key factor in the economic recovery of the nation. The latest commercial tonnage is 260,000 tons. The only U.S. Coast Guard station in the California Bay Delta is located along this channel.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

Sacramento River
(30-Foot Channel), CA

O&M Justification Sheet

PROJECT NAME: Sacramento River and Tributaries (Debris Control), California

AUTHORIZATION: River and Harbor Act of 1935

LOCATION AND DESCRIPTION: Englebright and North Fork Dams are both thin wall concrete arch dams constructed by the California Debris Commission to contain mining debris. Englebright is about 20 miles east of Marysville on Yuba River, and North Fork is on the North Fork of the American River about five miles northeast of Auburn. The projects are located in the counties of Nevada and Yuba. Initially placed in operation in 1939 and became fully operational in 1941

CONFERENCE AMOUNT FOR FY 2013: \$1,382,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$70,000 O: \$1,367,000 T: \$1,437,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$600,000 Funding provides for operation of dam and maintenance of all appurtenant structures including monitoring & analysis of instrumentation and data collection, and Real Estate requirements; includes federal, state and local coordination.

FRM: N/A

RC: \$673,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$164,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS. Funding will minimally support gravel and woody debris augmentation as a result of Endangered Species Act Section 7 consultation with National Marine Fisheries Service and in accordance with ESA final biological opinion. This will be a permanent requirement until the 3 ESA listed species are de-listed.

WS: N/A

OTHER INFORMATION: The Sacramento District was involved in litigation brought by the South Yuba River Citizens League (SYRCL) regarding project impacts to ESA listed species (salmon, steelhead and green sturgeon). As a result of the litigation, the National Marine Fisheries Service (NMFS) was required to issue a new Biological Opinion (BO) in February 2012. The latest BO contains extensive requirements to mitigate for fisheries impacts.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

Sacramento River and Tributaries
(Debris Control), CA

O&M Justification Sheet

PROJECT NAME: Sacramento River Shallow Draft Channel, California

AUTHORIZATION: River and Harbor Acts, 1899, 1912, 1927, 1935, WRDA 1986

LOCATION AND DESCRIPTION: The project consists of a -10 foot channel, from Suisun Bay to Sacramento, a distance of 60 miles; -6 foot channel between Sacramento and Colusa, 85 miles; -5 foot channel between Colusa and Chico Landing, 50 miles; and such depth as practicable between Chico Landing and Red Bluff, a distance of 53 miles. The reach from Colusa to Red Bluff was deauthorized by WRDA 1986. Project is located in the counties of Colusa, Glenn, Placer, Solano, Tehama, and Yolo.

CONFERENCE AMOUNT FOR FY 2013: \$200,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$200,000 T: \$200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$200,000 Funding for inspections and maintenance of wing dams to ensure snags and other navigation hazards are properly cleared. Maintenance also includes replacement of the wing dam buoys. The Sacramento River is a heavily used waterway by recreational vessels. Failure to remove snags and replace wing dam buoys would result in navigation safety hazards which may result in loss of property or life, if not maintained.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: San Francisco Bay Delta Model Structure, California

AUTHORIZATION: Water Resources Development Act of 1974, Pub. L. No. 93-251, § 103, 88 Stat. 12, 16.

LOCATION AND DESCRIPTION: The San Francisco Bay Delta Model Regional Visitor Center is located in Sausalito, California. The facility is a hydraulic to scale three dimensional model covering one and one half acres.

CONFERENCE AMOUNT FOR FY 2013: \$901,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$40,000 O: \$824,000 T: \$864,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: \$864,000 Funding provides annual operation and maintenance of the bay-delta model. The facility currently serves over 150,000 visitors annually, 60% of them school children, fulfilling Corps Strategic Communication goals, providing public and curriculum-based school tours, special events, workshops, and seminars on the Corps's modern missions within the context of the environmental, cultural, and historical issues of the Bay Area.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Bay Model building also houses the back-up Emergency Operations Center for the South Pacific Division.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: San Francisco

San Francisco Bay Delta
Model Structure, CA

1 May 2013

SPD-141

O&M Justification Sheet

PROJECT NAME: San Francisco Harbor and Bay (Drift Removal), California

AUTHORIZATION: River and Harbor Act of 1945, Pub. L. No. 79-14, § 3, 59 Stat. 10, 23

LOCATION AND DESCRIPTION: Drift Removal is the removal of floating hazards to navigation using Government-owned vessels. The project is based at the San Francisco District Operations Base at Richardson Bay in Sausalito, California. The drift removal fleet's areas of operation are San Francisco Bay (central, north and south), San Pablo Bay, Oakland Estuary, Petaluma River, Napa River, Mare Island Strait, Carquinez Strait, Suisun Bay and Redwood City.

CONFERENCE AMOUNT FOR FY 2013: \$3,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,100,000 O: \$0 T: \$3,100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,100,000 Funding for the removal of floating hazards in navigation channels using Government-owned vessels. The drift removal operation affects the navigational safety concerns for all Bay Area Federal channels used by over 1,000 small ports and several major ports including the ports of Oakland, Richmond, Sacramento, and Stockton.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: San Francisco Bay supports 71,000 annual high speed ferry trips servicing over 2,000,000 commuters, 20,000 boat berths, and 100,000+ shipping industry jobs. The shipping industry contributes over \$4.5 billion to the economy.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: San Francisco

San Francisco Harbor and Bay
(Drift Removal), CA

1 May 2013

SPD-142

O&M Justification Sheet

PROJECT NAME: San Francisco Harbor, California

AUTHORIZATION: River and Harbor Act 1927, Pub. L. No. 69-560, 44 Stat. 1010, 1014; River and Harbor Act of 1930, Pub. L. No. 71-520, 46 Stat. 918, 934; River and Harbor Act of 1935, Pub. L. No. 74-409, 49 Stat. 1028, 1037

LOCATION AND DESCRIPTION: The project is located approximately five miles west of the Golden Gate Bridge in the waters leading into San Francisco Bay. The San Francisco Main Ship (Bar) Channel is the gateway to San Francisco Bay.

CONFERENCE AMOUNT FOR FY 2013: \$2,850,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,025,000 O: \$0 T: \$3,025,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,025,000 Funding provides for annual maintenance dredging of the Main Ship (Bar) Channel by Government Dredge ESSAYONS. All commercial deep draft and national defense shipping to San Francisco Bay, Sacramento and Stockton must traverse through this project.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 66 million tons of waterborne commerce traversed the San Francisco Bar entrance channel in the latest year of record. With the completion of the 50 foot channel at the Port of Oakland, the continued maintenance of the 55 foot entrance channel is essential.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: San Joaquin River, Port of Stockton, California

AUTHORIZATION: River and Harbor Act 1876, 1927 & 1950

LOCATION AND DESCRIPTION: The Stockton Deep Water Ship Channel extends 41 miles from the Port of Stockton to Antioch, CA. The Sacramento District is responsible for maintaining both the channel to -35 feet and existing bank protection. The project is located in the counties of Contra Costa, Sacramento and San Joaquin.

CONFERENCE AMOUNT FOR FY 2013: \$5,525,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$5,573,000 O: \$0 T: \$5,573,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,573,000 provides for a project condition survey and mandated water quality certification and dissolved oxygen environmental mitigation as well as maintenance of the ship channel to its authorized depth of -35 feet. Funding also includes Real Estate compliance inspections and outgrant oversight.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The ship channel is an integral component of the California Bay Delta ecosystem and supports the Port of Stockton which is the largest inland port and the fourth busiest in California. The Port is a vital link to the agriculture industry of the California's Central Valley. On average 1 cargo vessel passes through the channel every other day transporting millions of tons of waterborne cargo to and from the Port of Stockton taking more than 1 million trucks off area roads annually. The latest commercial tonnage is 5.0 million tons. The Port of Stockton is the largest inland port and the fourth busiest in California. The Port is a vital link to the agricultural industry of the California Central Valley, providing more than 90% of fertilizer used by the regions growers and more than 50% of California's bagged rice to Japan.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: San Pablo Bay Mare Island Strait, California

AUTHORIZATION: River & Harbor Act of 1902, 1911, 1917, 1938, 1945, 1965, 1968 Sec 117

LOCATION AND DESCRIPTION: The San Pablo Bay and Mare Island Strait project is located in Solano County, California and consists of the Mare Island Strait and Pinole Shoal Channels.

CONFERENCE AMOUNT FOR FY 2013: \$2,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$750,000 O: \$0 T: \$750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$750,000 Funding provides for annual maintenance dredging of the Pinole Shoal Channel. Authorized project depth is -35 feet. The channel provides access to refineries and the ports of Sacramento and Stockton (San Joaquin River project). Annual commercial tonnage is approximately 17,000,000 tons.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Pinole Shoal Channel provides deep water access to the Suisun Bay Channel and the Ports of Sacramento and Stockton for commercial traffic of foreign and domestic deep draft merchant and oil tanker vessels.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: San Francisco

San Pablo Bay Mare
Island Strait, CA

O&M Justification Sheet

PROJECT NAME: Santa Ana River Basin, CA

AUTHORIZATION: Flood Control Act of 1936 (as amended 1936)

LOCATION AND DESCRIPTION:

- a. BREA DAM:** Located 2 miles N of the city of Fullerton, California.
Dam and Appurtenances (87-feet-high; 1,765-feet-long; 4,009-acre-feet cap at spillway crest - 1964), 1 Recreation Area (number of visitors to Recreation Area 402,046 in FY 2009), Initially Operational/ Fully Operational FY42/FY42.
- b. CARBON CANYON DAM:** Located 16 miles NE of the city of Santa Ana, California.
Dam and Appurtenances (99 feet-high; 2,150-feet-long; 6,614-acre-feet cap at spillway crest - 1977), 1 Recreation Area (number of visitors to Recreation Area 94,584 in FY 2009), Initially Operational/ Fully Operational FY61/FY61.
- c. FULLERTON DAM:** Located 2 miles NE of the City of Fullerton, California
Dam and Appurtenances (46 feet-high; 575 ft-long; 764 acre-feet cap at spillway crest 1969), 1 Recreation Area (number of visitors to Recreation Area 282,031 in FY 2009), Initially Operational/Fully Operational FY41/FY41.
- d. PRADO DAM:** Located 45 miles E of the City of Los Angeles, California.
Dam and Appurtenances (106 ft-high; 2,280 ft-long; 196,235 acre-ft cap at spillway Crest - 1980), 3 Recreation Areas (number of visitors to Recreation Areas- 3,181,644 in FY 2009), Initially Operational/Fully Operational FY41/FY41.
- e. SAN ANTONIO DAM:** Located 7 1/2 miles N of the City of Pomona, California.
Dam and Appurtenances (160 ft-high; 3,850 ft-long; 7,703 acre-ft cap at spillway crest 1981), 1 Recreation Area, Initially Operational/Fully Operational FY56/FY56.
- f. SAN ANTONIO AND CHINO CREEKS CHANNELS:** Located 30 miles E of the City of Los Angeles, California.
15.7 miles of channel, Initially Operational – FY60 Fully Operational – FY61

CONFERENCE AMOUNT FOR FY 2013: **\$3,988,000 2**

BUDGETED AMOUNT FOR FY 2014: **M: \$2,026,000 O: \$1,839,000 T: \$3,865,000 1**

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$3,611,000 funding provides for operation and maintenance of 5 flood risk management projects including service facilities and grounds, permanent operating equipment, reservoir operations, provide water control data, inspections, asset management, dam safety, hydrographic instruments, and inspections

RC: \$129,000 provides for oversight of out-granted areas within the Santa Ana River Basin.

H: N/A

EN: \$125,000 provides for consultation and coordination with local, State, and Federal agencies and stakeholders, including on critical habitat for listed species (vireo, flycatchers, Santa Ana sucker) as well as update of the project Master Plan.

WS: N/A

Division: South Pacific

District: Los Angeles

Santa Ana River Basin, CA

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Santa Barbara Harbor, California

AUTHORIZATION: Rivers and Harbors Act of 1935, 1945 (amended 1976)

LOCATION AND DESCRIPTION: Located in Santa Barbara County, 90 miles NW of Los Angeles, California; consists of an Entrance and Navigation Channels. The USCGC Blackfin is stationed in the harbor along with a USCG Marine Safety Detachment.

CONFERENCE AMOUNT FOR FY 2013: \$2,240,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,665,000 O: \$0T: \$2,665,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 2,665,000 provides for maintenance dredging of the project. Authorized project depth is -15 feet in the navigation channel and -20 feet in the entrance channel. The project supports a strategic Coast Guard Station in the area, provides significant navigation service for the region, supports other agencies and is a critical harbor of refuge.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Success Lake, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on the Tule River, about six miles east of Porterville, and comprises an earth-fill dam with a maximum height of -142 feet with an ungated saddle spillway, and an auxiliary earth-fill dam or dike about -40 feet-high, creating a reservoir gross storage capacity of 85,000 acre-feet. This project is located in Tulare County. Initially placed in operation and became fully operational in 1961.

CONFERENCE AMOUNT FOR FY 2013: \$2,328,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$424,000 O: \$2,139,000 T: \$2,563,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,727,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications. Maintenance funding also includes repair of plates and cleaning and painting of the steel liner on the outlet works downstream from the service gates.

RC: \$773,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$63,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: Project is currently not fully able to provide the benefits for which it was designed and constructed . A reservoir restriction will limit water storage. A dam safety investigation is currently underway to determine the appropriate remediation efforts.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

Success Lake, California

O&M Justification Sheet

PROJECT NAME: Suisun Bay Channel, California

AUTHORIZATION: River & Harbor Act of 1927, 1930, 1935, 1960

LOCATION AND DESCRIPTION: The Suisun Bay Channel is 30 miles northeast of San Francisco, California. Project consists of the Main Channel and New York Slough.

CONFERENCE AMOUNT FOR FY 2013: \$2,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,026,000 O: \$0 T: \$2,026,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR 2014:

N: \$2,026,000 Funding provides for annual maintenance dredging of the Main Channel. Authorized project depth is -35 feet. All commercial deep draft and national defense shipping to Sacramento and Stockton must traverse through this project.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Provides access to Ports of Sacramento, Stockton, and Concord Naval Weapons Station, which is important for national security.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Terminus Dam (Lake Kaweah), California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on the Kaweah River about 20 miles east of Visalia, and comprises an earth fill dam with a height of 200 feet, with an auxiliary earth fill dam 130 feet-high and fuse gates adjacent to the left abutment of the dam, creating a reservoir with a storage capacity of 185,630 acre-feet. The project is located in Tulare County. Initially placed in operation and became fully operational in 1962.

CONFERENCE AMOUNT FOR FY 2013: \$2,069,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$664,000 O: \$1,753,000 T: \$2,417,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,579,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications. Maintenance funding also includes repair of plates and cleaning and painting of the steel liner on the outlet works downstream from the service gates.

RC: \$778,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$60,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento Terminus Dam (Lake Kaweah), California

O&M Justification Sheet

PROJECT NAME: Ventura Harbor, CA

AUTHORIZATION: Rivers and Harbors Act of 1965

LOCATION AND DESCRIPTION: Located in Ventura County, 65 miles NW of Los Angeles, California; consists of an Entrance Channel, Sand Trap, 4 Jetties , a South Beach Groin and a Detached Breakwater.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,071,000 O: \$0 T: \$4,071,000

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$ 4,071,000 Dredging will establish and provide safe navigation in the Entrance Channel as harbor is subject to severe wave climate. The harbor is homeport for US National Park Service whose fleet services Channel Islands National Park System. The harbor also services the largest squid fishing fleet on the West Coast. Annual revenue from commercial squid fishing is approximately \$50,000,000.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Los Angeles

Ventura Harbor, California

O&M Justification Sheet

PROJECT NAME: Yuba River, California

AUTHORIZATION: River and Harbor Acts of 1896 & 1902

LOCATION AND DESCRIPTION: Project consists of a debris barrier, Daguerre Point Dam, with dikes across overflow channels and protective works (groins) downstream to maintain the Yuba River in its confined channel to the junction with the Feather River at Marysville. Federal responsibility consists of maintaining dikes and protective works to keep the Yuba River in its confined channel. The project is located in Yuba County. Construction on the original project was initiated in November 1902 and was completed in 1935. Various flood channels and some rehabilitation has been accomplished since then with the latest in 1965.

CONFERENCE AMOUNT FOR FY 2013: \$121,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$ 0 O: \$301,000 T: \$301,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$100,000 Funding will be used for operation and maintenance of the dam and all appurtenant structures which includes the debris barrier with dikes across overflow channels and protective works downstream to maintain the Yuba River in its confined channel. Funding also includes monitoring and analysis of instrumentation and data collection and real estate requirements including state and local agency coordination.

FRM: N/A

RC: N/A

H: N/A

EN: \$201,000 A jeopardy Biological Opinion was issued in 2012 for the Central Valley spring-run Chinook salmon Ecologically Significant Unit (ESU), Central Valley Steelhead Distinct Population Segment (DPS), and the Southern DPS of North American green sturgeon. Funding provides for partial costs to operate & maintain the fish passage facilities as required by the Reasonable Prudent Alternative (RPAs) and Incidental Take Statement (ITS) terms & conditions and avoid further jeopardizing 2 of the listed species. Funding is required to comply with Endangered Species Act Section 7 terms and conditions and the RPAs.

WS: N/A

OTHER INFORMATION: The Sacramento District was involved in litigation brought by the South Yuba River Citizens League (SYRCL) regarding project impacts to ESA listed species (salmon, steelhead and green sturgeon). As a result of the litigation, the National Marine Fisheries Service (NMFS) was required to issue a new Biological Opinion (BO) in February 2012. The latest BO contains extensive requirements to mitigate for fisheries impacts.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

Yuba River, California

Colorado

O&M Justification Sheet

PROJECT NAME: John Martin Reservoir, Colorado

AUTHORIZATION: Flood Control Act of 1936 (P.L. 76-868) as Caddoa Reservoir, renamed in 1940.

LOCATION AND DESCRIPTION: John Martin Reservoir is located in Bent County, Colorado about midway between Lamar and Las Animas on the Arkansas River at river mile 1159 approximately 58 miles upstream from the Colorado – Kansas state line. John Martin Reservoir drainage is 18,130 square miles, has a concrete section, an earth section and two earth wing dikes. The overall structure is 2.6 miles long with a maximum height of 120 ft. above streambed and an overflow gated spillway. Total capacity of the reservoir at the top of the flood control is 603,465 acre-feet (259,417 for flood control and 344,048 for conservation and recreation storage). The concrete gravity section is 1,644 ft. and 118 ft. high. The earth section is 2,600 ft long and 130 ft. high. The two wing dams are 3,700 ft. long 20 ft. high on the north and 5,800 ft long and 100 ft high on the south where they tie to the concrete section. Storage capacity at the spillway crest is 232,940 acre feet. There are six outlet conduits in the dam. The spillway is an ogee weir with sixteen sections controlled by tainter gates with a nest crest of 1,024 feet. There are three recreation areas at the project consisting of 2,300 acres that are operated by Colorado Parks and Wildlife through a lease. A visitor center is operated by the Corps. FY 2012 visitation hours were 1,963,892. Project has been in operation since 1943. Accumulated flood and sediment damages prevented by the project since completion are \$140,767,000 through FY 2012. Irrigation benefits through FY 2012 are \$31,913,000. Irrigation benefit releases for 2012 were 25,812 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: \$2,315,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$702,000 O: \$1,966,000 T: \$2,668,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,331,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$126,000 provides for routine operation and maintenance for recreation and implementation of law enforcement and service contracts.

H: N/A

EN: \$211,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species in compliance with the 2001 Biological Opinion for the Piping Plover and the Interior Least Tern; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

John Martin Reservoir, Colorado

O&M Justification Sheet

PROJECT NAME: Trinidad Lake, Colorado

AUTHORIZATION: Flood Control Act of 1958 (P.L. 85-500).

LOCATION AND DESCRIPTION: Trinidad Dam is located in the foothills of the Rocky Mountains on the Purgatoire River and is located 3 miles west off I-5 and the City of Trinidad. Trinidad Dam drainage is 671 square miles. The structure is a rolled earth filled structure 6,610 feet long with a crest width of 24 foot and maximum height of 200 feet above the streambed. The reservoir has two uncontrolled spillways with a 10 foot diameter gated concrete control conduit with a discharge capacity of 5,700 cubic-feet-per-second. The reservoir storage capacity is 123,224 acre feet which include 35,045 acre feet for sediment, 20,000 acre-feet for irrigation, and 17,179 acre feet for recreation. There is a service spillway and two emergency spillways. The spillways are not gated. There are 4 recreation areas at the project consisting of 389 acres. The state of Colorado operates and maintains the recreations areas. The Corps operates a visitor center at the project office. FY 2012 visitation hours were 603,081. The project has been operational since 1977. Accumulated sediment damages prevented by the project since completion are \$3,250,000 through FY 2012. Irrigation benefits through FY 2012 are \$2,982,000. Irrigation benefit releases for 2012 were 10,186 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: \$2,012,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$76,000 O: \$1,064,000 T: \$1,680,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,542,000 provides for routine operation and maintenance for flood risk management; compliance with Comprehensive Evaluation of Project Datums (CEPD) requirements; access bridge seismic restraint for dam safety and replacement of all damaged embankment piezometers. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$80,000 provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: \$58,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: The project is rated a Dam Safety Action Classification (DSAC) II for risk based assessment of dam safety.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Nevada

O&M Justification Sheet

PROJECT NAME: Martis Creek Lake, Nevada & California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project consists of a 113 foot-high earth-fill dam on Martis Creek (a tributary of Truckee River), about 32 miles southwest of Reno, creating a reservoir with a gross storage capacity of about 20,000-acre-feet. The project is located in Nevada and Placer counties in California and Washoe County in Nevada. Initially placed in operation and became operational in 1972.

CONFERENCE AMOUNT FOR FY 2013: \$1,046,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$285,000 O: \$776,000 T: \$1,061,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$807,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: \$185,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: \$69,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS and real property inventories.

WS: N/A

OTHER INFORMATION: Project is currently not fully able to provide the benefits for which it was designed and constructed because of seepage problems and seismic concerns. A dam safety investigation is currently underway to determine the appropriate remediation efforts.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Sacramento

Martis Creek Lake, NV & CA

O&M Justification Sheet

PROJECT NAME: Pine & Mathews Dams, NV

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION:

PINE CANYON DAM: Located about 100 miles NE of Las Vegas, NV
Dam (earthfill; 92 feet-high; 884 feet-long), Outlet Works (circular conduit)
Spillway (crest- block), Dike (earthfill), Service Roads, Reservoir (7,747 acre-feet cap spillway crest - 1977)

MATHEWS CANYON DAM: Located about 100 miles NE of Las Vegas, NV
Dam (earthfill; 71 feet-high; 800 feet-long), Outlet Works (circular conduit), Spillway (concrete), Service Roads/Trash Rack, Reservoir (6,271 acre-feet cap spillway crest -1977).

CONFERENCE AMOUNT FOR FY 2013: \$354,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$210,000 O: \$127,000 T: \$337,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$293,000 provides for operation of dam grounds, utilities, service facilities, and hydrographic instrumentation as well as maintenance of the dam and appurtenant structures, relief well testing, maintenance and monitoring.

RC: N/A

H: N/A

EN: \$44,000 provides for coordination with local, State, and Federal agencies and stakeholders on the listed species (desert tortoise) and degradation/loss of natural resources and stewardship of cultural resources.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

New Mexico

O&M Justification Sheet

PROJECT NAME: Abiquiu Dam, New Mexico

AUTHORIZATION: P.L. 80-858 Flood Control Act of 1948, 1950, 1960
Water Resources Development Act 1986 PL 99-662 is modified by Energy and Water Development appropriation Act 1997 PL 104-206, 30 Sep 1996 for the Emergency Gate Installation

LOCATION AND DESCRIPTION: Abiquiu Dam is located in Rio Arriba County, approximately 6 miles west of the town of Abiquiu, 32 miles upstream from the confluence of the Rio Chama and the Rio Grande and approximately 120 miles north of Albuquerque, New Mexico. Abiquiu Dam drainage is 2,146 square miles, a rolled earth filled structure with a maximum height above streambed of 341 ft. The crest length is 1,800 ft with a top width of 30 ft and a maximum bottom width of 2,000 ft. The reservoir provides 545,784 acre-feet of flood control and sediment storage. Storage capacity at the spillway crest is 1,192,801 acre-feet which includes 43,748 acre-feet for sediment reserve. Concrete outlet works, consist of a 12 ft. dia. 2,260 foot-long tunnel, gates chamber, intake structure, 2 sets of hydraulic operating and emergency gates, and flip bucket. The uncontrolled spillway is in a rock cut located 4,000 ft northeast of the project. A 13.2 MW non-Federal hydroelectric power plant, developed by Los Alamos County, was constructed in FY 1990. A low-flow hydro-turbine came on-line in FY 2011 that provides a 3.0 MW renewable energy credit (REC) to the Abiquiu project. Recreation facilities at the project include day-use picnic shelters, flush and vault restrooms, an overlook structure, visitor center, campground, and two boat ramps. FY 2012 visitation hours were 783,855. The Project has been operational since 1963. Accumulated flood and sediment damages prevented by the project since completion are \$567,653,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: \$3,258,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$698,000 O: \$2,074,000 T: \$2,772,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A **H:** N/A **WS:** N/A

FRM: \$2,353,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$260,000 provides for routine operation and maintenance for recreation and implementation of law enforcement and service contracts.

EN: \$159,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Abiquiu Dam, New Mexico

O&M Justification Sheet

PROJECT NAME: Cochiti Lake, New Mexico

AUTHORIZATION: Flood Control Act of 1960 (P.L. 86-645), Supplemental Authorization PL 88-293 and the 1976 Water Resources Development Act (P.L. 94-587).

LOCATION AND DESCRIPTION: Cochiti Lake is located in Sandoval County, on the Pueblo de Cochiti lands approximately 50 river miles north of Albuquerque, New Mexico. The dam is located at river mile 340 on the Rio Grande. Cochiti Lake drainage is 11,695 square miles, a rolled earth filled structure with a maximum height above streambed of 251 ft. The dam crest length, which includes the spillway crest, is 28,815 ft (5.4 miles), with a top width of 30 ft and a maximum bottom width of 1,760 ft. Storage capacity at the spillway crest is 582,019 acre-feet which includes 78,640 acre-feet for recreation and sediment control. The concrete outlet works consists of a 1,363 foot-long, hydraulic gate controlled, 3-barrel conduit; intake structure; gate chamber; and flip bucket. The spillway is located in the south end of the embankment which is the left abutment of the Santa Fe River. The spillway is a concrete gravity uncontrolled structure with a notched ogee section. Recreation facilities at the project include day-use picnic shelters, flush and vault restrooms, an overlook structure, visitor center, two campgrounds, and two boat ramps. FY 2012 visitation hours were 848,432. The Project has been operational since 1976. Accumulated flood and sediment damages prevented by the project since completion are \$541,244,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: \$5,256,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$751,000 O: \$2,490,000 T: \$3,241,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,518,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs. The long-term impacts from sedimentation and debris, caused by upstream fires, on the service life of the project will be analyzed.

RC: \$477,000 provides for routine operation and maintenance for recreation and implementation of law enforcement and service contracts.

H: N/A

EN: \$246,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species per the 2003 Biological Opinion for the Rio Grande silvery minnow and the Southwest willow flycatcher; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Cochiti Lake, New Mexico

O&M Justification Sheet

PROJECT NAME: Conchas Lake, New Mexico

AUTHORIZATION: Emergency Relief Act of 1935 (P.L. 74-738), Flood Control Act of 1936 and amended by the Flood Control Act of 1938.

LOCATION AND DESCRIPTION: Conchas Dam and Reservoir is located in San Miguel County, New Mexico on the Canadian River 743 miles upstream from the mouth of the Canadian and Arkansas Rivers and approximately 34 miles NW of Tucumcari, New Mexico. Conchas Dam and Reservoir drainage area is 7,409 square miles. The dam consists of a concrete gravity main section with earth dikes on each side having a combined length of about 3.75 miles. The gravity section is 1,250 feet long with a top roadway width of 18 ft. and maximum height of 200 ft above the streambed. The total storage capacity at the spillway crest is 513,900 acre-feet (198,170 acre-feet for flood control; 254,200 acre-feet for water conservation and irrigation; and 61,530 acre-feet dead storage). Outlet works consist of six regulating conduits, intake structure, gate chamber, and stilling basin. The spillway is a concrete gravity uncontrolled structure located in the main dam. The north dike contains a concrete ogee-type emergency spillway. Recreation facilities at the project include two day-use areas with picnic shelters, flush and vault restrooms, overlook structures; visitor center, two campgrounds, and two boat ramps. Two recreation areas are operated by the New Mexico State Parks Division through a lease. The historic Adobe Bell housing complex is located near the Project office and consists of four rentable duplex units and one concessionaire manager's unit. FY 2012 visitation hours were 789,498. The project has been operational since 1939. Accumulated flood and sediment damages prevented by the project since completion are \$5,461,000 through FY 2012. Irrigation benefits through FY 2012 are \$12,447,000. Irrigation benefit releases for 2012 were 532 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: \$2,864,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$301,000 O: \$1,842,000 T: \$2,143,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,935,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$118,000 provides for routine operation and maintenance for recreation and implementation of law enforcement and service contracts.

H: N/A

EN: \$90,000 provides for routine operation and maintenance for environmental stewardship; habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Conchas Lake, New Mexico

O&M Justification Sheet

PROJECT NAME: Galisteo Dam, New Mexico

AUTHORIZATION: Flood Control Act of 1960 (P.L. 86-645)

LOCATION AND DESCRIPTION: Galisteo Dam is located in Santa Fe County, approximately 20 miles southwest of Santa Fe, New Mexico on Galisteo Creek 11.8 miles upstream from the confluence of the Rio Grande and approximately 40 miles north of Albuquerque, New Mexico. The Galisteo Dam drainage area is 596 square miles. The dam is a rolled earth filled structure with a maximum height above streambed of 165 ft. The dam crest length is 3,210 ft with a top width of 20 ft. Storage capacity at the spillway crest is 89,468 acre-feet which includes 9,320 acre-feet for sediment reserve. The concrete outlet works consists of a 10 foot diameter ungated 810 foot-long tunnel, and flip bucket. The uncontrolled spillway is a rock cut trapezoidal channel located on the right abutment. Dam safety modifications were completed in 1998 to raise the dam and widen the spillway to the present configuration. Recreation facilities at the project include day-use picnic shelters, a vault restroom, and an overlook structure. FY 2012 visitation hours were 3,378. The Project has been operational since 1970. Accumulated sediment damages prevented by the project since completion are \$195,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: \$882,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$172,000 O: \$650,000 T: \$822,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$748,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs. Efforts will be made to continue the control of invasive species, primarily salt cedar, within the upstream basin and on the upstream face of the dam. This on-going eradication efforts will be followed by area restoration with native vegetation.

RC: \$50,000 provides for routine operation and maintenance for recreation and implementation of a law enforcement contract.

H: N/A

EN: \$24,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species per the 2003 Biological Opinion for the Rio Grande silvery minnow and the Southwest willow flycatcher; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Galisteo Dam, New Mexico

O&M Justification Sheet

PROJECT NAME: Jemez Canyon Dam, New Mexico

AUTHORIZATION: Flood Control Act of 1948 (P.L. 80-858) and Flood Control Act of 1950 (P.L. 81-516).

LOCATION AND DESCRIPTION: Jemez Canyon Dam is located in Sandoval County, approximately five miles northwest of Bernalillo, New Mexico on the Rio Jemez 2.8 miles upstream from the confluence of the Rio Grande and approximately 35 miles northwest of Albuquerque, New Mexico. Jemez Canyon Dam drainage is 1,034 square miles. The dam is a rolled earth filled structure with a maximum height above streambed of 150 feet. The crest length is 861 feet with a top width of 23 feet. Concrete intake structure 596.6 feet in length with two gravity operated operation and emergency gates with flip bucket. The spillway is a uncontrolled off-channel saddle 400 ft wide. Storage capacity at the spillway crest is 97,425 acre-feet which includes 24,425 acre-feet for sediment reserve. Recreation facilities at the project include a day-use area with picnic shelters, vault restroom, and overlook structure. FY 2012 visitation hours were 21,446. The project has been operational since 1953. Accumulated flood and sediment damages prevented by the project since completion are \$25,185,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: \$1,299,000 2/

BUDGETed AMOUNT FOR FY 2014: M: \$837,000 O: \$696,000 T: \$1,533,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,444,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$50,000 provides for routine operation and maintenance for recreation and implementation of law enforcement contract.

H: N/A

EN: \$39,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species per the 2003 Biological Opinion for the Rio Grande silvery minnow and the Southwest willow flycatcher; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: Funds are being used to continue on-going Endangered Species Act Biological Opinion work to finalize a preferred alternative for the Jemez Sediment Mobilization and Pool Mitigation studies and begin the Environmental Assessment. Work also continues on addressing impacts to the Santa Ana Pueblo's ancestral Tamaya village which has drainage problems attributable to Corps construction of a "ring levee" for high flood storage protection.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Jemez Canyon Dam, New Mexico

O&M Justification Sheet

PROJECT NAME: Middle Rio Grande Endangered Species Collaborative Program (MRGESCP), New Mexico

AUTHORIZATION: P.L. 109-103; 119 Stat. 2256 Section 121 of the Energy and Water Development Appropriations Act, 2006 and as amended by P.L. 110-161 Sec 109 of the Energy and Water Development & Related Agencies Appropriations Act 2008.

LOCATION AND DESCRIPTION: The program is located in the Middle Rio Grande (MRG), NM, from the Colorado border to the headwaters of Elephant Butte and supports the 2003 Biological Opinion (BO) and subsequent BOs. The program is a partnership with 16 signatories organized to protect and improve the status of endangered species along the MRG of New Mexico while simultaneously protecting existing and future regional water uses. Two species of particular concern are the Rio Grande silvery minnow and the Southwestern willow flycatcher. The program provides funding for all participation in committees and work groups, watershed surveys and assessments, or technical studies.

CONFERENCE AMOUNT FOR FY 2013: \$2,503,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$2,500,000 T: \$2,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,500,000 will be applied to fulfill requirements set forth in the 2003 Biological Opinion and subsequent BOs, which provides Endangered Species Act compliance for the U.S. Army Corps of Engineers' Flood Control Operations, and to assist in the execution of the program's Long Term Plan (LTP). Allows continued participation by Corps' biologists, hydrologists, hydraulic engineers and planners to have input into the LTP and to review program studies and reports as authorized by a series of statutory provisions over the past decade. There are several Corps projects approved in the LTP which include ecological studies evaluating habitat use and recruitment of endangered species, MRG Bosque education and outreach, Southwestern willow flycatcher surveying, and continued funding and management of the program's Database Management System (DBMS). This program facilitates Corps compliance under Section 7 of the Endangered Species Act. Identified program goals include alleviating jeopardy, promote recovery to the listed species in the Program area and developing adaptive management tools to support a sustainable Biological Opinion.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Middle Rio Grande Endangered
Species Collaborative Program, New Mexico

O&M Justification Sheet

PROJECT NAME: Santa Rosa Dam and Lake, New Mexico

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: Santa Rosa Dam & Lake is located on the Pecos River at the river mile 766.4 in Guadalupe County approximately 7 miles north of Santa Rosa and 120 miles from Albuquerque, New Mexico. Santa Rosa Dam & Lake drainage is 2,434 square miles. The dam is a rolled earth filled structure with a maximum height above streambed of 212 ft. Storage capacity at the spillway crest is 438,364 acre-feet which includes 82,000 acre-feet for sediment reserve, 200,000 acre-feet for irrigation and 167,000 acre-feet for flood control storage. The dam crest length is 1,950 ft with a top width of 36 ft. The outlet works consists of a 10 ft diameter circular concrete tunnel controlled by two sets of 5x9 ft hydraulic slide gates, intake structure, gate chamber, and flip bucket energy dissipater. The uncontrolled spillway is cut in rock. There are four recreation areas at the project consisting of 509 acres. Three recreation areas are operated by the New Mexico Park and Recreation Division. The fourth recreation area is a Corps project overlook and visitor center. FY 2012 visitation hours were 309,373. The Project has been operational since 1980. Accumulated flood and sediment damages prevented by the project since completion are \$5,804,000 through FY 2012. Irrigation benefits through FY 2012 are \$5,405,000. Irrigation benefit releases for 2012 were 18,358 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: \$1,519,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$228,000 O: \$1,052,000 T: \$1,280,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

FRM: \$1,084,000 provides for routine operation and maintenance for flood risk management; compliance with Comprehensive Evaluation of Project Datums (CEPD) requirements; and access bridge seismic restraint for dam safety. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$71,000 provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: \$125,000 provides for routine operation and maintenance of environmental stewardship; monitoring and management of endangered species in compliance with the 2006 Biological Opinion for the Pecos Bluntnose Shiner and the threatened Arkansas River Shiner; specialized habitat management; and to insure historical, archeological and cultural resources are protected.

OTHER INFORMATION: The project is rated as DSAC II for risk based assessment of dam safety and has an identified environmental liability caused by mercury in the reservoir sediments.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Santa Rosa Dam and Lake,
New Mexico

O&M Justification Sheet

PROJECT NAME: Two Rivers Dam, New Mexico

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: Two Rivers Dam is located in Chavez County, New Mexico, 14 miles southwest of the city of Roswell and 2,300 miles from Albuquerque, New Mexico. Two Rivers Dam drainage area is 1,027 square miles. The project consists of two dams, one on the Rio Hondo and the other on the Rocky Arroyo, both tributaries of the Pecos River. Diamond "A" Dam on the Rio Hondo and Rocky Dam on the Rocky Arroyo are both earth fill. Diamond "A" is 4,885 feet long and 98 feet high with a concrete gated outlet structure. Rocky Dam is 2,940 feet-long and 118 feet-high with an uncontrolled outlet. Capacity at Two Rivers Reservoirs at the spillway crest is 163,775 acre-feet of which 18,000 acre feet are provided for sediment reserve. Recreation facilities at the project include picnic shelters and an overlook structure. FY 2012 visitation hours were 191. The project has been operational since 1963. Accumulated flood and sediment damages prevented by the project since completion are \$214,579,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: \$916,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$210,000 O: \$525,000 T: \$735,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$674,000 provides for routine operation and maintenance for flood risk management; compliance with Comprehensive Evaluation of Project Datums (CEPD) requirements; and access bridge seismic restraint for dam safety. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$44,000 provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: \$17,000 provides for routine operation and maintenance of environmental stewardship; monitoring and management of endangered species; specialized habitat management; and to insure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: There is an on-going issue with the City of Roswell to have the city recover and maintain sufficient floodwater evacuation enabling channel capacity on the Rio Hondo and Rocky Arroyo below Two Rivers Dams.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Two Rivers Dam, New Mexico

O&M Justification Sheet

PROJECT NAME: Upper Rio Grande Water Operations Model (URGWOM), New Mexico

AUTHORIZATION: Flood Control Act of 1944, Section 7 (P.L. 78-534)

LOCATION AND DESCRIPTION: Rio Grande System (RGR) Hydrologic Unit Code (HUC) Region 13 – Sub regions 1301 – 1309. The Upper Rio Grande Water Operations Model (URGWOM) assists water managers in flood control operations, water accounting, and evaluation of water operations alternatives. URGWOM is a key tool used to provide the community of water managers and water users with a transparent, consistent, and common set of data to formulate, evaluate, and support water management decisions. The operations model performs multi-contractor accounting and forecasting to simulate daily storage and delivery operations. The Corps and several participating agencies coordinated with the public, Native American tribes, and other basin interests to formulate draft alternative operations that are within existing authorities. Evaluation of system operation alternatives and further consultation and coordination are ongoing. The ongoing operation will continue to recommend system operations and provide guidelines for water operators' decisions.

CONFERENCE AMOUNT FOR FY 2013: \$1,580,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$1,438,000 T: \$1,438,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,438,000 provides planning, forecasting and daily water operations modeling for the Upper Rio Grande watershed RGR, HUC Region 13, Sub regions 1301 - 1309. URGWOM is also a tool used for the evaluation of water operations alternatives, as well as evaluation of water management alternatives for Biological Assessments and Opinions.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: URGWOM is an important tool for completing long-term planning studies to evaluate impacts of changes to the system or proposed actions analyzed as potential solutions for addressing the water needs in the basin and is a critical component used by the Corps and other Federal Agencies to develop operational scenarios for Endangered Species Act (ESA) Compliance.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific

District: Albuquerque

Upper Rio Grande Water
Operations Model (URGWOM), New Mexico

1 May 2013

SPD-169

SOUTHWESTERN DIVISION

1 May 2013

SOUTHWESTERN DIVISION
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Gulf Intracoastal Waterway.....	SWD-116
Granger Lake.....	SWD-117
Grapevine Lake.....	SWD-118
Hords Creek Lake.....	SWD-119
Houston Ship Channel.....	SWD-120
Jim Chapman Lake.....	SWD-121
Joe Pool Lake.....	SWD-122
Lake Kemp.....	SWD-123
Lavon Lake.....	SWD-124

Lewisville Lake.....	SWD-125
Matagorda Ship Channel.....	SWD-126
Navarro mills Lake.....	SWD-127
North San Gabriel Dam and Georgetown Lake.....	SWD-128
O. C. Fisher Dam and Lake.....	SWD-129
Pat Mayse Lake.....	SWD-130
Proctor Lake.....	SWD-131
Ray Roberts Lake.....	SWD-132
Sabine - Neches Waterway.....	SWD-133
Sam Rayburn Dam and Reservoir.....	SWD-134
Somerville Lake.....	SWD-135
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Texas City Ship Channel.....	SWD-137
Texas Water Allocation Assessment.....	SWD-138
Town Bluff Dam, B.A. Steinhagen Lake.....	SWD-139
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Wallisville Lake.....	SWD-141
Whitney Lake.....	SWD-142
Wright Patman Dam and Lake.....	SWD-143

INVESTIGATIONS

TEXAS

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY2011 \$	Allocations in FY2011 \$	Allocations in FY2012 \$	Allocations in FY2013 \$	Budgeted Amount in FY2014 \$	Additional to Complete After FY2014 \$
Brazos Island Harbor, Brownsville Channel, TX (Completion)	5,252,000	2,802,000	614,000 3/	725,000	726,000 2/	385,000 1/	0

Galveston District

The Brazos Island Harbor project provides deep draft access from the Gulf of Mexico through a jettied entrance channel to Brownsville, a side channel, authorized to 36 feet, and shallow draft Fishing Boat Harbor near Port Isabel. The project is 22.8 miles in length. The authorized depths are 42 feet for the main channel and 44 feet through the jetties outer bar. The port's survival is based on the ship channel, which is no longer sufficiently wide or deep for many of today's plus-sized cargo vessels. Increased port traffic is a direct result of the North American Free Trade Agreement (NAFTA) as a majority of the increased traffic meets industrial needs in Mexico. The Port of Brownsville is the only U.S. deep draft port available to the industry along the U.S. – Mexico border to accommodate the need. Port activities include offshore rig construction, ship repair and dismantling, steel fabrication, rail car rehabilitation, liquid petroleum gas storage/distribution, chemical and miscellaneous liquid, steel products and ore minerals offloading, and grain handling and storage. In addition to traditional vessel traffic, there is a need for increased channel dimensions in order to serve offshore oil rigs presently operating in the U.S. Gulf Coast. The study is analyzing problems and opportunities to determine if any channel improvements are needed. To date, the study has researched various depths of 45-52 feet and widths up to 400 feet. The Preliminary Plan is to deepen the channel to a depth of 48-50 feet and a width of approximately 350 feet. The Port of Brownsville has been the nation's second largest in-transit harbor by volume. From 1992 to 2010, total short tonnage in the port increased from 1,829,000 tons to nearly 5,000,000 tons with an estimated value of \$3,100,000,000. Foreign imports, primarily in-transit cargo, have been the primary driver for growth, while domestic movements remain relatively constant. In 2008, the foreign trade increased 30.3 percent from the previous year. In 2010, 55 percent of inbound cargo was in-transit to Mexico. Iron ore, iron, and steel products, and other metal ores and products dominate the inbound foreign cargo. The Laguna Madre, a pristine aquatic and marine life habitat is located within the study area. The area also serves as a feeding and breeding area for colonial and migratory birds. Concerns include the detrimental impacts to existing habitat and possibility for enhancement of existing habitat. Several habitats previously subject to tidal inundation have been impacted such that no tidal flow is present. The study is evaluating opportunities to return tidal flow to these areas. Approximately 6,500 acres of tidal marsh and brush habitat associated with the feeding, breeding and wintering of colonial and migratory water birds were destroyed in the mid-20th century due to loss of tidal connection by surrounding development. Storm Surge has been modeled to address any potential Risks associated with major flooding events to the surrounding environmentally sensitive areas and a Sensitivity Analysis for Relative Sea-Level Rise.

In anticipation of project construction, authorization was received in the Fiscal Year 2003 Consolidation Appropriations Act to credit work proposed to be accomplished by the Port of Brownsville for restoration of the Bahia Grande as wetland areas for mitigation against the non-Federal costs of deepening the channel, if it is determined to be integral to the project. The proposal would achieve improved flow and enhanced circulation associated with a wider and deeper channel. This would be especially beneficial with respect to tidal flow and circulation patterns for protected rookery island, and in San Martin Lake. The benefits of deepening would improve channel transportation efficiency including increase in size of ships utilizing the port thus increasing the average annual short tonnage by

Division: Southwestern

District: Galveston

Brazos Island Harbor, Brownsville Channel, TX

Brazos Island Harbor, Brownsville Channel, TX (Continued)

approximately 30 percent. The widening of the channel would allow for larger oil rigs to utilize the channel for construction or repair vessels. The non-Federal Sponsor is the Port of Brownsville.

Fiscal Year 2013 funds are being used to complete the Draft Feasibility Report. The funds requested for Fiscal Year 2014 will be used to prepare the final Feasibility Report. The Total Estimated Study Cost slightly increased from \$9,869,000 to \$10,087,000 due to additional economic studies required to validate the recommended plan. The preliminary estimated cost of the overall feasibility phase is \$9,670,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the Independent External Peer Review (IEPR) will be an estimated cost of \$270,000 and will be 100% Federal funded, which is an exception to the 50-50 cost share. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$10,087,000
Reconnaissance Phase (Federal)	147,000
Feasibility Phase (Federal)	4,835,000
Feasibility Phase (non-Federal)	4,835,000
Feasibility IEPR (Federal)	270,000

The study is authorized by Resolution of the House Committee on Public Works Committee, May 5, 1966, and Section 113 of the Consolidated Appropriations Resolution, 2003 (P.L. 108-7).

The reconnaissance phase was completed in June 2006. The Feasibility Cost Share Agreement (FCSA) was executed in June 2006. The feasibility study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY 2014 from prior appropriations for use on this study effort is \$146,000. This amount, together with the Budget Amount shown above, will be used to perform work on the FY2014 study as follows: To complete the feasibility phase of the study and issuance of the Chief's Report.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$1,385.00 rescinded from the project in 2011.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY2011 \$	Allocation in FY2011 \$	Allocation in FY2012 \$	Allocation in FY2013 \$	Budgeted Amount in FY2014 \$	Additional to Complete After FY2014 \$
Coastal Texas Protection and Restoration, TX (New Start)	100,000	0	0	0	0	100,000 1/	0

Galveston District

The study area consists of the entire Texas Gulf Coast from the mouth of the Sabine River to the mouth of the Rio Grande. The entire area is at risk for hurricane and flood damage. The study area includes Gulf and tidal waters, barrier islands, marshes, coastal wetlands, rivers and streams and adjacent areas that make up the interrelated coastal area of Texas. The Texas coastal zone contains several large cities at risk during storm events including the nation's 4th largest city (Houston). The coastal region is home to approximately 6,100,000 people, or 25 percent of the State's population. Mineral production has a value of nearly \$1,000,000,000 per year and commercial fisheries generate another \$156,000,000. Agriculture in the less populated counties generates approximately \$500,000,000 of product per year. The study area includes critical coastal ecosystems of 3,900,000,000 acres of wetlands, 235,000 acres of sea grass, 367 miles of sea turtle nesting habitat, 380,000 acres of piping plover critical habitat, and 328 square miles of whooping crane critical habitat, as well as 21 state and Federal wildlife refuges. Of the 367 miles of shoreline, more than 60 percent has been identified by the Texas General Land Office (GLO) as subject to high rates of erosion. Flooding from hurricanes and other rainfall events makes the 25 percent of the state population that live within the 18 coastal county area vulnerable to impact from storms. The ten tropical storms and hurricanes that struck Texas in the last decade resulted in 176 fatalities and over \$36,000,000,000 in damages. According to the Federal Emergency Management Agency (FEMA), Hurricane Ike in 2008 was the third most destructive hurricane ever to hit the United States, with losses of more than \$27,000,000,000, and responsible for 112 deaths. Rice University estimates that if Hurricane Ike had hit the coast 30 miles further south, the storm surge would have been between 20-25 feet in the Houston Ship Channel (home to one fourth of the United States oil refineries) and would have caused damages exceeding \$100,000,000,000. The US Coast Guard estimates that a one month closure of a major port like Houston (the Nation's second busiest port) would cost the national economy \$60,000,000,000. Infrastructure is inadequate to evacuate the 1,000,000 residents in hurricane evacuation zones today, and 500,000 more are expected to move into these zones by 2035. Forty percent of the nation's petrochemical industry, 25 percent of national petroleum-refining capacity, 8 deep draft ports (4 of the 10 largest US seaports), 750 miles of shallow draft channels (including 400 miles of the Gulf Intracoastal Waterway (GIWW)), and critical transportation infrastructure will continue to be at risk without a comprehensive plan to restore and maintain a robust coastal ecosystem aimed at reducing storm damage to industries and businesses critical to the nation's economy and protecting the health and safety of Texas coastal communities.

Studies to identify feasible options along the upper Texas coast from the Sabine River to Brazoria County are ongoing under the Sabine Pass to Galveston Bay feasibility study. Under this ongoing study, a six county, state-authorized district (the Gulf Coast Community Protection and Restoration District) has been established to assess opportunities to provide flood risk management and to provide restoration, protection of marshes, national seashores and wildlife refuges, and state wildlife management areas.

Coastal Texas Protection and Restoration, TX (Continued)

The study will develop a comprehensive coastal Protection and restoration plan to reduce risk and damages to public safety, property, and environmental resources from storms and erosion. The goal of the study will be to identify critical data needs and recommend a comprehensive strategy for reducing flood risk through structural and nonstructural measures that take advantage of natural features like barrier islands and storm surge storage in wetlands. The strategy will incorporate integrated plans for ecosystem restoration and flood damage reduction, coast-wide beach and dune ecosystem restoration, and comprehensive barrier island restoration. Alternatives to be considered will include improvements to existing systems (such as existing hurricane protection projects at Port Arthur, Texas City, Freeport, and Lynchburg and seawalls at Galveston, Palacios, Corpus Christi, North and South Padre Island), and the creation of new structural protection plans for hurricane storm damage reduction. This comprehensive study will include assessment of structural, nonstructural and environmental project elements, including hurricane and flood damage reduction, salt water intrusion, shoreline erosion, fish and wildlife protection and ecosystem restoration measures. Comprehensive coastal ecosystem opportunities include: 1) reducing the susceptibility of residential, commercial and public structures and infrastructure to storm-related damages; 2) assisting the recovery and long-term sustainability of coastal ecosystems that support important fish and wildlife resources and buffers storm impacts; 3) restoring barrier island and headland dune ridges that protect vast marsh systems and serve as protection for the nationally critical petrochemical refining industry and navigation infrastructure, including the Gulf Intracoastal Waterway; 4) assisting in recovery of infrastructure damaged by erosion and supporting programs that promote long-term erosion reduction during future storm events; and 5) creating opportunities for the collaboration of local, state and Federal agencies to maximize the use of resources in support of the comprehensive Coastal Protection and Restoration Plan. The State of Texas, acting through the General Land Office, has indicated their intent to share equally in the costs of feasibility studies that may follow the Reconnaissance Phase. The Reconnaissance Phase is scheduled to be completed in FY 2014.

The study is authorized by Section 4091 of the Water Resource Development Act of 2007.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY 2014 from prior appropriations for use on this study effort is \$0. This amount, together with the Budget Amount shown above, will be used to perform work on the study as follows: N/A.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Dallas Floodway, Dallas, TX (Completion)	9,935,000	1,345,000	4,490,000	2,550,000	700,000 2/	850,000 1/	0

Fort Worth District

The study area is located adjacent to the Stemmons business corridor and the central business district in metropolitan Dallas, Dallas County, Texas. The existing floodway extends along the Trinity River upstream from the abandoned Atchison, Topeka and Santa Fe (AT&SF) railroad bridge at river mile 497.37, to the confluence of the West and Elm Forks at river mile 505.50, then upstream along the West Fork for approximately 2.2 miles and upstream along the Elm Fork approximately four miles. Of the 22.6 miles of levees within this project, the East Levee is 11.7 miles in length and the West Levee is 10.9 miles in length. In addition to the existing levees, the floodway includes a modified channel within the existing reach and structures including six pumping plants, five pressure conduits, and seven drainage structures. The original Dallas Floodway levees and interior drainage improvements were completed between 1928 and 1931 by the city of Dallas and the Dallas County Levee Improvement District. The Trinity River was rerouted by constructing a channel within the levied floodway. The original channel was either filled or used for sump storage. In the mid 1940's, major floods compounded by continued upstream urbanization in the watershed overflowed the floodway system and resulted in severe flooding. Subsequently, several Corps of Engineers improvements to the Dallas Floodway were completed in 1959. The improvements included reinforcing and raising the levees to provide conveyance of the Standard Project Flood (SPF) within the floodway, plus four feet of freeboard. To improve interior drainage, additional pump stations were constructed and the channel within the floodway was further excavated to an average depth of 25 feet with a 50-foot bottom width, to provide the design capacity of 13,000 cubic feet per second (cfs). The existing Dallas Floodway project removed approximately 10,500 acres from the floodplain, most of which is now highly developed industrial property. Major floods occurred in 1989, 1990, and 2007 in the Dallas Floodway. The existing Federal levee system prevented approximately \$250 million in damages during the June 2007 flood event. Recent studies of the existing floodway levees within the project reach showed the authorized level of protection to be less than the original SPF plus 4-feet of freeboard level of protection, due to changed hydrologic conditions resulting from increased upstream development. The feasibility study includes a comprehensive assessment of all actions proposed within the Dallas Floodway. The sponsor is the City of Dallas.

The City of Dallas' master plan for future development on the Trinity River, entitled the Trinity River Corridor Project, includes flood risk management, recreation, ecosystem restoration, and transportation features. Section 5141 of the Water Resources Development Act of 2007 (Public Law 110-114) authorized construction of the flood risk management, recreation and ecosystem restoration features of the City of Dallas' comprehensive plan at a total project cost of \$459,000,000 with an estimated Federal share of \$298,000,000 and an estimated non-Federal share of \$161,000,000. On-going studies related to the Trinity River Corridor Project involve coordination with multiple Federal (Federal Highways Administration and Federal Emergency Management Agency), State (Texas Department of Transportation), and local agencies. The Corps of Engineers and the City of Dallas have worked collaboratively with other stakeholders to develop an action plan,

Dallas Floodway, Dallas, TX (Continued)

which includes a comprehensive, system-wide assessment of the City of Dallas' measures to remediate deficiencies in the existing levee system, and to determine the technical soundness and environmental acceptability for implementing elements of the City of Dallas' comprehensive plan, while ensuring the integrity of the Dallas Floodway Levee System.

Fiscal Year 2013 funds are being used to complete detailed flood risk management plan evaluations, comparisons, analysis of the system-wide comprehensive plan, and completion of the draft feasibility report. The results of the Risk Assessment (RA) methodology reduced overall feasibility study costs by \$18,980,000 from the amount previously presented (FY 2013). The estimated cost of the feasibility study is \$19,370,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the Independent External Peer Review (IEPR) will be an estimated cost of \$250,000 and will be 100% Federal funded, which is an exception to the 50-50 cost share. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$19,620,000 3/
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	9,685,000
Feasibility Phase (Non-Federal)	9,685,000
Feasibility IEPR (Federal)	250,000

The study is authorized by WRDA 2007, PL 110-114, Section 5141.

The feasibility cost sharing agreement was executed on 5 May 2010. The feasibility study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Total Estimated Study Costs have been reduced from the estimate presented in FY 2013 (\$38,600,000) due to reduced efforts required for formulation of the levee remediation plan.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Project	Total Estimated Federal Cost \$	Allocations Prior to FY2011 \$	Allocation in FY2011 \$	Allocation in FY2012 \$	Allocation in FY2013 \$	Budgeted Amount in FY2014 \$	Additional to Complete After FY2014 \$
Freeport Harbor, TX	2,768,000	0	0	0	0	1,200,000 1/	1,568,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES - NEW PHASE - Navigation Channels & Harbors

Galveston District

The Freeport Harbor project is located immediately south of the city of Freeport in Brazoria County, Texas, on the middle Texas coast and is formed by the improvement of the Brazos River from the mouth about 6 miles upstream to Freeport, Texas. The heavily developed industrial and commercial project area (channel and harbor) is also about 50 miles southwest of the nation's 4th largest city, Houston. The project area currently provides for a 47 feet deep, 400 feet wide entrance channel; 45 feet deep, 400 feet wide main channel with three associated 45 feet deep turning basins; plus the 36 feet deep, 200 feet wide Brazos Harbor channel and associated 36 feet deep Brazos Harbor Turning Basin. The current channel width limits existing traffic to one-way traffic for all vessels and daylight-only operation for larger vessels. Port Freeport was ranked 27th nationally in top deep-draft ports, Waterborne Commerce Statistics data, 2010. It services one of the largest petrochemical complexes on the Gulf coast. Crude oil represents 74 percent of the benefits for the locally preferred plan; containers account for 16 percent of the benefits; petro-chemical products 7 percent, and offshore traffic for 3 percent. The non-Federal Sponsor, Port Freeport is actively pursuing improvements for its petroleum transits and Liquefied Natural Gas (LNG) facility. Without improvements to the channel, navigation safety for LNG ship traffic is at risk. The Feasibility Report was completed in January 2013. The recommended project, estimated to cost \$232,100,000 with an estimated Federal cost of \$118,400,000 and an estimated non-Federal cost of \$113,700,000. It provides deepening of the Outer Bar Channel from the jetties into the Gulf of Mexico to -58 feet Mean Lower Low Water (MLLW); deepening from the end of the jetties in the Gulf of Mexico to the Lower Turning Basin to -56 feet MLLW; deepening the Main Channel from the Lower Turning Basin to Sta. 132+66 (ConocoPhillips dock area, above 1,200-foot Brazos port Turning Basin) to -56 feet mean low tide; deepening of Freeport Harbor from Sta. 132+66 through the Upper Turning Basin to -51 feet MLLW, and deepen the remainder of the Stauffer Channel to -26 feet MLLW. The average annual benefits for this plan amount to \$47,646,000, all for navigation, based on the latest economic analysis dated June 2012. The Benefit to Cost Ratio for the Recommended Plan is 1.3 to 1 at 7 percent, and 1.9 at the applicable rate of 4 percent. The economics information is based on the Feasibility Report dated December 2012. A deeper channel will allow larger and deeper draft vessels to call on the Port, while also making Port operations more efficient. The non-Federal sponsor, Port Freeport, understands and is prepared to sign a Design Agreement, and has funds available to finance the Preconstruction Engineering and Design portion of the project. The Design Agreement is scheduled to be executed in FY 2014.

Division: Southwestern

District: Galveston

Freeport Harbor, TX

Freeport Harbor, TX (Continued)

Preconstruction Engineering and Design (PED) will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$ 3,690,000	Engineering and Design Costs	\$3,690,000
Initial Federal Share	2,768,000	Ultimate Federal Share	1,845,000
Initial Non-Federal Share	922,000	Ultimate Non-Federal Share	1,845,000

The project is not authorized for construction. The project is not in the Fiscal Year 2013 President's Budget. Fiscal Year 2014 funds will be used to initiate the PED phase of the project to include executing the Design Agreement, initiate design activities, and initiate development of first set of plans and specifications for extending the entrance channel and outer bar to 57 feet, and to improve Placement Areas 8 and 9. The completion date for PED is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on PED as follows: N/A.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Guadalupe and San Antonio River Basins, TX (Completion)	6,839,000	4,775,000	793,000	383,000	400,000 2/	488,000 1/	0

Fort Worth District

The Guadalupe and San Antonio River watersheds are located in south-central Texas. The Guadalupe basin has a drainage area of 6,700 square miles, and the San Antonio River basin has a drainage area of 4,180 square miles. Severe flooding occurred within various portions of the Guadalupe and San Antonio River Basins in 1972, 1978 and 1997, when portions of the river basins were declared disaster areas. Major flood events also occurred in 1998, 2000, 2002, 2004 and 2010. The flood event in October 1998 resulted in approximately \$800 million in residential, infrastructure and commercial damages and 31 deaths. The July 2002 event had similar damages in excess of \$1 billion and nine deaths. The flood event in June 2004 resulted in the loss of three more lives. In June 2010, severe flooding damaged New Braunfels, Texas, and also claimed another life. There is one major Corps of Engineers flood risk management structure, Canyon Dam, on the Guadalupe River upstream of the confluence with the Blanco River. In the last ten years, population has increased by more than 20 percent in the study area, and with it, the potential for flooding associated with increased development concentrated around multiple interstates and state highways in Austin and San Antonio. The Guadalupe and San Antonio River Basins Feasibility Study was initiated to identify risks and opportunities for flood risk management as well as ecosystem restoration and other allied purposes. Interim feasibility studies for Leon Creek, Cibolo Creek, Alamo Heights and Salado Creek were previously conducted. The Leon Creek Interim Feasibility Study focused primarily on flood risk management and secondly on ecosystem restoration. The Leon Creek project, as defined in the Alternative Formulation Briefing documents, consists of a levee, quarry detention, and channel modification. Preliminary formulation indicates that there are three possible buyout areas. The final interim feasibility study in the Guadalupe and San Antonio River Basins study is the Lower Guadalupe River Basin Interim Feasibility Study, whose purpose is to identify, analyze and recommend sustainable flood risk management practices and implementable features to reduce flood risks to life, property and the environment. Participation in the study by state and local entities supports increased collaboration and partnering, innovative financing, and a systems approach to strategic integration of a variety of approaches to manage flood risks.

Fiscal Year 2013 funds are being used to complete the Phase 1 flood risk assessment, evaluate alternatives and recommend possible projects for implementation for the Lower Guadalupe River Basin Interim Feasibility Study; to establish Phase 2 existing and future without project conditions and to identify flood risks within the urban areas for the Lower Guadalupe River Basin Interim Feasibility Study; to initiate and complete the Independent External Peer Review (IEPR) and continue the Leon Creek Interim Feasibility Study. The funds requested in Fiscal Year 2014 would be used to complete the Lower Guadalupe River Basin and Leon Creek Interim Feasibility Studies. The overall feasibility study costs have been reduced \$4,474,000 from the amount previously presented (FY 2013) due to not identifying economically justified alternatives on the Cibolo and Salado Creek Interim Feasibility Studies. The estimated cost of the overall feasibility study is \$12,078,000, which is being cost shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the IEPR will be an estimated cost of \$250,000 and will be 100% Federally funded, which is an exception to the 50-50 cost share.

Guadalupe and San Antonio Rivers, TX (Continued)

Total Estimated Cost for the Feasibility Study	\$ 12,878,000
Reconnaissance Phase (Federal)	550,000
Feasibility Phase (Federal)	6,039,000
Feasibility Phase (Non-Federal)	6,039,000
Feasibility IEPR (Federal)	250,000

The study is authorized by House Resolution 2547, March 11, 1998.

The scheduled completion date for the Leon Creek Interim Feasibility Study is FY 2014, which is a nine month delay from the date previously presented (FY 2013) due to additional plan formulation required to identify the recommended plan. The scheduled completion date for the Lower Guadalupe River Basin Interim Feasibility Study is FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$ 0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY2011 \$	Allocations in FY2011 \$	Allocations in FY2012 \$	Allocations in FY2013 \$	Budgeted Amount in FY2014 \$	Additional to Complete After FY2014 \$
Houston Ship Channel, TX (New Start)	100,000	0	0	0	0	100,000 1/	0

Galveston District

The Houston Ship Channel System is comprised of the Houston Ship Channel, Bayport Ship Channel, Barbour Terminal Channel, and Greens Bayou. The Houston Ship Channel (HSC) extends 52 miles from its juncture with Texas City Channel at the entrance to Galveston Bay and terminates at its turning basin in the city of Houston. From channel mile 0 to channel mile 40 (Boggy Bayou), the authorized channel depth is 45 feet, with a bottom width of 530 feet. The remaining channel depth from channel mile 40 (Boggy Bayou) to channel mile 52 (turning basin) varies from 36 feet to 40 feet, with a bottom width of 300 feet. The Bayport Ship Channel extends 4.1 miles from its juncture with the HSC at mile 20.5 and terminates at its turning basin near the community of Shore Acres. The authorized channel depth is 40 feet, with a bottom width of 300. Barbour Terminal Channel extends 1.5 miles east from its juncture with the HSC at mile 26.3 and terminates at its turning basin. The authorized channel depth is 40 feet with a width of 300 feet. Greens Bayou is a shallow draft channel and will not be considered for improvement under this study. The latest improvement to the Houston Ship Channel included deepening of the channel to 45 feet from the Gulf of Mexico up to Boggy Bayou, which was completed in June 2005. The Port of Houston has expressed their concern and need for improvements to the Houston Ship Channel System, specifically: the reach of HSC from Boggy Bayou to Turning Basin due to current vessel traffic having to light load to be able to transit this reach of the channel; the Bayport flare due to safety concerns with making the turn into the Bayport Channel from the HSC; and both Bayport and Barbour Channels due to vessel traffic having to light load to be able to transit these channels. Development along the channel has continued to increase, resulting in more vessel traffic and creating an increased risk of collisions and other incidents between vessels, along with the need to improve efficiencies. This situation is expected to worsen with the increase in Panama vessels utilizing these channels after the Panama Canal Expansion Project opens in 2015. The Port of Houston is the nation's number one port in terms of foreign waterborne tonnage with an estimated value of \$146,000,000 and number two in total US tonnage with an estimated value of \$212,000,000 based on fiscal year 2010 Waterborne Commerce data. The major commodities include petroleum, chemicals, and bulk goods. A major challenge in this study, due to the industrial growth in the area, will be the coordination of new environmentally suitable placement areas in conjunction with beneficial use of dredge material. An Initial Appraisal Report of the Channel was completed in September 2011 that documented the Federal interests in investigating options to reduce the costs for transporting goods along the Boggy Bayou to Turning Basin reach of the Houston Ship Channel. The Reconnaissance study will investigate the incremental deepening of the reach from 1-foot to 5-foot depth in addition to any necessary widening to accommodate larger vessels. A major challenge in this study, due to the industrial growth in the area, will be the coordination of new environmentally suitable placement areas in conjunction with beneficial use of dredge material. The Port of Houston Authority is the local sponsor for the existing 40 foot project and has indicated their intent to share equally in the cost of a feasibility study that may result from the reconnaissance phase. The reconnaissance phase is scheduled to be completed in FY 2014.

Houston Ship Channel, TX (continued)

The study is authorized by Public Law 91-611; Title II – Flood Control Act of 1970, Section 216, dated December 31, 1970.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$0 This amount will be used to perform work on the study as follows: N/A

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2011 \$	Allocation in FY 2011 \$	Allocation in FY 2012 \$	Allocation in FY 2013 \$	Budget Amount in FY 2014 \$	Additional to Complete After FY 2014 \$
Nueces River and Tributaries, TX	5,518,000	2,897,000	499,000	622,000	650,000 2/	650,000 1/	200,000

Fort Worth District

The Nueces River basin, which lies in the southern part of Texas, has an overall length of approximately 235 miles, a maximum width of 115 miles, and a total drainage area of 17,075 square miles. The Nueces River flows in a southeasterly direction and enters Nueces Bay near Corpus Christi, Texas. The watershed includes portions of three major aquifers – the Edwards, Carrizo-Wilcox, and Gulf Coast. Poor land use practices, recent near-record droughts, and conflicting water resource management issues have resulted in significant environmental degradation. Limited freshwater inflows into the Nueces estuary system as a result of construction and operation of two upstream reservoirs have resulted in hyper-saline conditions that have severely diminished the habitat suitability of approximately 20,000 acres of the Nueces Delta. In addition, the lowering of water levels in the Edwards Aquifer due to drought conditions and water pumpage has reduced spring flows from the San Marcos and Comal Springs causing degradation of rare and unique habitats, which threatens the continued existence of seven endangered (E) and one threatened (T) species endemic to these habitats, including Fountain Darter *Etheostoma fonticola* (E), Texas Blind Salamander *Typhlomolge rathbuni* (E), San Marcos Gambusia *Gambusia georgei* (E), Texas Wild Rice *Zinania texana*(E), Comal Springs Riffle Beetle *Heterelmis comalensis* (E), Comal Springs Dryopid Beetle *Stygoparmus comalensis* (E), Peck’s Cave Amphipod *Stygobromus pecki* (E), and San Marcos Salamander *Eurycea nana* (T). The Edwards Aquifer, the major source of water for the City of San Antonio and Bexar County metropolitan areas, accounts for about 20 percent of the basin and is recognized as having high potential for groundwater recharge. The watershed also crosses many political, jurisdictional, and geographical boundaries and pits groundwater systems management against surface water systems management within the same basin. During a Nueces River basin feasibility study workshop held on 28 June 2011, which was attended by over 50 individuals representing 20 Federal, state and local water and environmental resource agencies, all parties agreed that efforts to model the hydraulics and hydrology and the significant ecosystems of the Nueces watershed are extremely important, not only for the watershed study, but also for the region and Texas’ State Water Planning efforts, including development of environmental flow parameters for protection of riverine and bay and estuary aquatic ecosystems. Potential ecosystem restoration study solutions include modification of systems operations of Choke Canyon Reservoir and Lake Corpus Christi as well as augmentation of water supply to allow increased fresh-water to be passed through the system into the Nueces Delta to improve habitat conditions; implementation of invasive phreatophytic vegetation removal and reestablishment with native species to improve the riparian habitat value for migratory and resident wildlife and bird species, to increase in-stream base flows, and to potentially increase water levels in the Edwards Aquifer allowing for increased spring-flow to benefit sensitive spring habitats that support endemic Threatened and Endangered species; grading and structural modifications to existing impediments in the delta to help reestablish historical fresh and salt water marsh elevations; recontouring of altered river/delta bathymetry to help restore wetland and shallow water elevations; and placement of breakwaters to help protect the delta face from erosion losses caused by wave action. The study sponsors are the Nueces River Authority, San Antonio Water System, San Antonio River Authority, Guadalupe-Blanco River Authority and the city of Corpus Christi, Texas.

Nueces River and Tributaries, TX (Continued)

Fiscal Year 2013 funds will be used to conduct re-scoping and to identify a tentatively selected plan (TSP). The funds requested in Fiscal Year 2014 will be used to develop, analyze and evaluate multi-purpose study alternatives, and prepare the feasibility report with integrated NEPA documentation. After rescoping, the estimated cost of the feasibility phase has been reduced to \$10,236,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the Independent External Peer Review (IEPR) will be at an estimated cost of \$200,000 and will be 100% Federally funded, which is an exception to the 50-50 cost share. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$10,636,000
Reconnaissance Phase – Federal	200,000
Feasibility Phase – Federal	5,118,000
Feasibility Phase – non-Federal	5,118,000
Feasibility IEPR (Federal)	200,000

The study is authorized by Senate Resolution dated 23 June 2004.

The Feasibility Cost Sharing Agreement was signed on 24 September 2004. The completion date for the Nueces River and Tributaries, Texas, feasibility study is TBD.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$ 0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost \$	Allocations Prior to FY2011 \$	Allocation in FY2011 \$	Allocation in FY2012 \$	Allocation in FY2013 \$	Budgeted Amount in FY2014 \$	Additional to Complete After FY2014 \$
Sabine Pass to Galveston Bay, TX	4,309,000	3,181,000	(246,000) 3/4/	191,000	200,000 2/	400,000 1/	583,000

Galveston District

The study area consists of the upper Texas Gulf Coast including Orange, Jefferson, Chambers, Galveston, Harris, and Brazoria Counties. The study area includes Gulf and bay waters, barrier islands, marshes, coastal wetlands, rivers and streams and adjacent areas that make up the interrelated coastal area. Within this reach of the upper Texas coastal zone lies the major population and economic centers of Houston (nation's fourth largest city and home to the nation's second busiest seaport), Freeport, Beaumont, and Port Arthur. Critical coastal ecosystems including sea turtle nesting habitat, piping plover critical habitat as well as two state and Federal wildlife refuges are within the study area. This reach of the upper Texas coastal zone is at risk from wind and surge damage during storm events. The area has experienced significant shoreline erosion causing the destruction of nationally significant wetlands, loss of land and damage to homes, commercial property, and State Highway 87. On September 13, 2008, Hurricane Ike moved directly over the entire study area with category two storm winds of 110 mph (sustained) and an estimate category four storm surge ranging between 10-15 feet above normal tides. The entire study area was significantly altered both physically and economically. The State, through the Texas General Land Office (GLO) agreed to become the new non-Federal Sponsor and a new Feasibility Cost Sharing Agreement was executed in January 2013. The study is following the new "SMART" Planning methodology and framework developed to facilitate more efficient, effective and consistent delivery of USACE Planning decision documents. This study will develop a comprehensive review of the problems and opportunities related to storm surge impacts for the six county region along the upper Texas Coast, and provide impact and economic justifications for potential projects. Potential measures include both structural and non-structural solution types, such as levees, surge gates, beach replenishment, and buyouts.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study by completing the scoping and continuing the alternative formulation portions of the study. The funds requested for Fiscal Year 2014 plus any carry-in funds will be used to continue the feasibility phase, which includes completion of the formulation and selection of the tentatively selected plan. The preliminary estimated cost of the overall feasibility phase is \$7,828,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the Independent External Peer Review (IEPR) will be an estimated cost of \$200,000 and will be 100% Federal funded, which is an exception to the 50-50 cost share. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$8,223,000
Reconnaissance Phase (Federal)	195,000
Feasibility Phase (Federal)	3,914,000
Feasibility Phase (non-Federal)	3,914,000
Feasibility IEPR (Federal)	200,000

Division: Southwestern

District: Galveston

Sabine Pass to Galveston Bay, TX

Sabine Pass to Galveston Bay, TX (Continued)

The study is authorized by the Resolution of the Committee on Environment and Public Works of the United States Senate, June 23, 2004.

A new Feasibility Cost Sharing Agreement for the study was executed in January 2013. The feasibility study schedule for completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is \$138,000. This amount, together with the Budget Amount shown above, will be used to perform work on the FY2014 study as follows: continue plan formulation efforts, conduct the Feasibility Scoping Meeting, complete the Alternative Formulation Briefing, and initiate public coordination of the draft report.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ \$46,000 rescinded from the project in FY2011.

4/ \$200,000 transferred to the Flood Control and Coastal Emergencies (FCCE) account in FY2011.

CONSTRUCTION

OKLAHOMA

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance.

PROJECT: Canton Lake, OK (Dam Safety) (Continuing)

LOCATION: The project is located on the North Canadian River about 2 miles north of Canton in Blaine County, Oklahoma.

DESCRIPTION: The Dam Safety Assurance Report, approved in 2002, indicated two serious and interrelated hydrologic deficiencies occurred at the existing Canton Lake. The deficiencies included inadequate factors of safety against spillway sliding and uncontrolled embankment overtopping by the Probable Maximum Flood. The recommended plan consists of anchoring the existing spillway to improve sliding stability, relocating Highway 58A, constructing an auxiliary spillway with fuse gates to increase the discharge capacity required during a probable maximum flood event, and placing the excavated material from the spillway excavation at the toe of the earthen dam to resolve the seismic and seepage deficiencies as an additional benefit.

AUTHORIZATION: Flood Control Act of 1938.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Never calculated for this project.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2012)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$ 209,870,000		Entire Project	62%	TBD
Future Non-Federal Reimbursement	8,027,000				
Estimated Federal Cost (Ultimate)	201,843,000				
Estimated Non-Federal Cost	\$8,027,000				
Cash Contributions	8,027,000				
Other Costs	0				
Reimbursements	0				
Purpose 1 Water Supply Contract	\$8,027,000				
Total Estimated Project Cost	\$209,870,000				
Allocations to 30 September 2010	75,727,000				
Allocation for FY 2011	36,358,000				
Allocation for FY 2012	11,100,000				
Allocation for FY 2013	6,000,000 1/				
Allocations through FY 2013	129,185,000	62%			
Estimated Unobligated Carry-In Funds	0 2/				
Budget Amount for FY 2014	16,300,000	69%			
Programmed Balance to Complete after FY 2014	64,385,000				
Unprogrammed Balance to Complete after FY 2014	0				

PHYSICAL DATA

Dams

- Anchor Stabilization of Existing Spillway Structure
- New Auxiliary Spillway and Channel
- New Auxiliary Spillway Bridge
- Rehabilitate Existing Spillway Bridge

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

2/ Estimated Unobligated "Carry-In" Funding. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Program Year (Fiscal Year 2014) from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows:
N/A.

PHYSICAL DATA: Canton Lake is located on the North Canadian River at river mile 394.3, about 2 miles north of the town of Canton in Blaine County, Oklahoma. This is a multi-purpose project with flood control, water supply, and irrigation outputs. The project consists of a 15,140 foot long rolled earth-filled embankment with a 640 foot gated concrete spillway that rises to a maximum height of 68 feet. Spillway discharges are controlled by sixteen 40x25 foot tainter gates. At conservation pool the lake covers 7,910 acres. The recommended plan consists of anchoring the existing spillway to improve sliding stability, relocating Highway 58A, constructing an auxiliary spillway with fuse gates to increase the discharge capacity required during a probable maximum flood event, and placing the excavated material from the spillway excavation at the toe of the earthen dam to resolve the seismic and seepage deficiencies as an additional benefit.

JUSTIFICATION: The Dam Safety Assurance Report, approved in 2002, indicated two serious and interrelated hydrologic deficiencies occurred at the existing Canton Lake. The deficiencies included inadequate factors of safety against spillway sliding and uncontrolled embankment overtopping by the Probable Maximum Flood. In 2005 Canton was included in Screening Portfolio Risk Assessment which indicated that Canton was within the top ten percent highest at risk dams with regard to failure by uncontrolled seepage. In 2005 a Seismic Safety Review was conducted which indicated that the embankment could move during a seismic event. The population at risk is 60,000 people with potential economic losses estimated between \$1.75 and \$2.64 Billion.

FISCAL YEAR 2013: The current budget amount of \$6,000,000 is being applied as follows:

Complete Plans and Specifications for phase 2 auxiliary channel contract	900,000
Construction Management weir contract (S&A)	<u>5,100,000</u>
Total	\$ 6,000,000

FISCAL YEAR 2014: The budget amount of \$16,300,000 will be applied as follows:

Initiate Construction on the Phase 2 Channel Excavation Contract	11,200,000
Construction Management/laboratory for weir contract (S&A)	<u>5,100,000</u>
Total	\$16,300,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Requirements of Local Cooperation		
Pay 15 percent of cost assigned to project purposes in accordance with the cost allocation in effect for the project at the time of initial project construction. Water supply storage is 25.5 percent of the joint-use costs.	\$ 8,027,000	0
Total Non-Federal Costs	\$ 8,027,000	0

The Non-Federal sponsor will reimburse its share of construction costs over a period not to exceed 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The city of Oklahoma City has 100 percent of the water supply storage under contract. Water supply storage is 25.5 percent of the joint-use costs. In accordance with the water supply agreement, executed in 1991, reimbursement payments will be initiated at the completion of construction, and will be completed within 30 years.

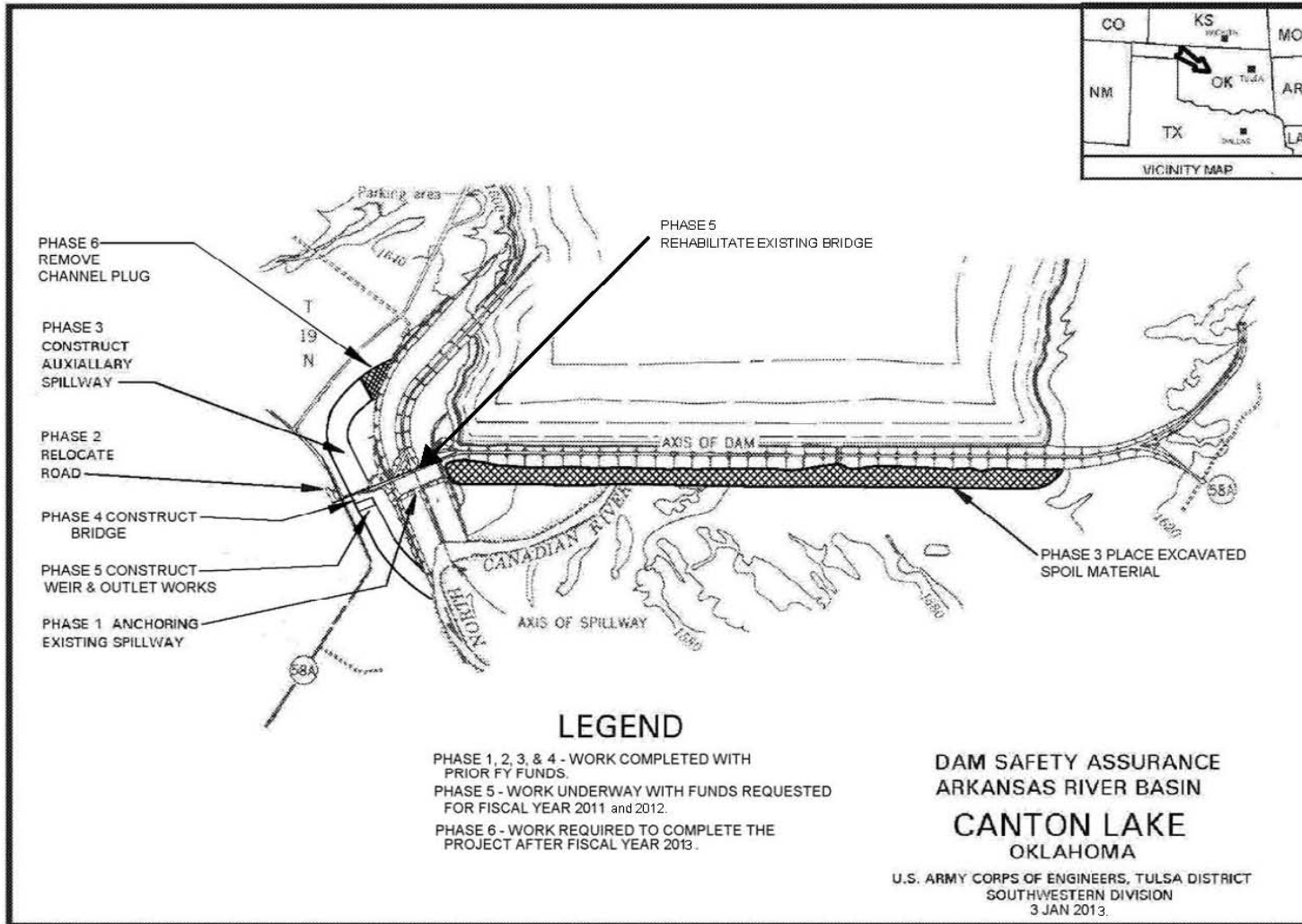
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$209,870,000 is an increase of \$37,870,000 from the last estimate of (\$172,000,000) presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments (including contingency adjustments) for:	
Weir and Hydraulic Structures	\$27,000,000
Phase II Excavation	\$10,870,000
Total	\$37,870,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Not required. The provisions of Section 404 of the Clean Water Act do not apply because the project improvements do not involve the placement of fill material or the discharge of dredge material in the waters of the United States.

OTHER INFORMATION: A Dam Safety Assurance Program Evaluation Report was approved in March 2002. Construction funds were first appropriated for this project in Fiscal Year 2003. During fiscal year 2006, a seismic and seepage study was performed in addition to the Design Document Report (DDR), which required the relocation of the auxiliary spillway from the Left Abutment to the Right Abutment areas of Canton Dam due to foundation issues.

The award of the Phase 2 Channel Excavation contract was originally scheduled to be awarded in Fiscal Year 2013. The contract was delayed based on the current schedule for completion of the weir and hydraulic structures contract. The Phase 2 Channel Excavation contract will now be awarded in Fiscal Year 2014.



TEXAS

APPROPRIATION TITLE: Construction - Local Protection (Flood & Coastal Storm Damage Reduction)

PROJECT: Brays Bayou, Houston, TX (Continuing)

LOCATION: The project is located in the metropolitan area of Houston, in Harris County, Texas. The Brays Bayou watershed encompasses approximately 128 miles in Harris County. The Brays Bayou channel is approximately 31 miles long and flows into Buffalo Bayou in the Houston Ship Channel below the Turning Basin.

DESCRIPTION: The project consists of 4 detention basins (Sam Houston, Old Westheimer Road, Eldridge Road, and Willow Waterhole); enlargement or modification of 21.1 miles of earthen channel, replacement and / or lengthening of 27 bridges, and recreation features including hike and bike trails, picnic facilities, sports fields, comfort stations, and parking areas.

AUTHORIZATION: Section 101(21) of the Water Resources Development Act (WRDA) of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 2.6 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 2.2 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 2.97 to 1 at 7.625 (FY 1998)

BASIS OF BENEFIT-COST RATIO: Benefits for the total project are from the approved updated economic analysis included in the Brays Bayou Economic Update dated December 2010 with October 2010 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2014)	PCT Cmpl	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$ 322,350,000		Entire Project	33%	TBD
Estimated Non-Federal Cost	265,120,000				
Cash Contribution	31,433,000				
Other Costs	233,687,000				
Total Estimated Project Cost	\$ 587,470,000				
Allocations to 30 September 2010	\$ 94,854,000	1/			
Allocation for 2011	23,237,000				
Allocation for 2012	5,004,000				
Allocation for FY 2013	2,100,000	2/			
Allocations through FY 2013	125,195,000		39%		
Estimated Carry-In Funds	0	3/			
Budget Amount for FY 2014	2,500,000		40%		
Programmed Balance to Complete after FY 2014	194,655,000				
Unprogrammed Balance to Complete after FY 2014	0				

1/ Includes \$9,500,000 reprogrammed to the project.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

PHYSICAL DATA: The project consists of construction of 21.1 miles of channel improvements, 4 Detention Basins (Sam Houston, Old Westheimer Road, Eldridge Road, and Willow Waterhole), 27 bridge replacements or modifications, and hike and bike trails.

JUSTIFICATION: Brays Bayou drains approximately 137 square miles in the south-central portion of the Buffalo Bayou watershed. About 53,400 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF), and 25,000 of these properties would be subject to flooding by a 100-year frequency flood. On an average annual basis, stream flooding could cause nearly \$46,000,000 in damages per year to existing properties. The plan would reduce the existing 100-year frequency floodplain area by about 97 percent and average annual flood damages would be reduced by about 95 percent. The recreational development will partially satisfy existing demand in the area. In June 2001, 6,200 residences were flooded during Tropical Storm Allison, known as the most costly tropical storm in U.S. History. Based on the Life Safety Hazard Indicator for 2012 the population at risk is 722,000 and the level of protection is 100 years. Benefits are based on Brays Bayou Economic Update approved December 2010 at October 2010 price levels at a discounted rate of 7 percent. The average annual benefits are as follows:

Division: Southwestern

District: Galveston

Brays Bayou, Houston, TX

Annual Benefits	Amount
Flood Damage Prevention	\$ 124,944,000
Recreation	1,623,700
Total	\$ 126,523,700

FISCAL YEAR 2013: The current amount is being applied as follows:

Final Reimbursement for Discrete Segment #54, Eldridge Detention Basin	\$ 354,000
Final Reimbursement for Discrete Segment #84, Willow Waterhole	354,000
Final Reimbursement for Discrete Segment #94	354,000
Initial Reimbursement for Discrete Segment #204, Willow Waterhole Detention Basin	918,000
Federal Oversight	120,000
Total	\$ 2,100,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Partial Reimbursement for Discrete Segment #112, Channel Mason Park	\$ 280,000
	0
Reimbursement for Federal Share of General Reevaluation Report	2,100,000
Federal Oversight	120,000
Total	\$ 2,500,000

NON-FEDERAL COST & REQUIREMENTS: Brays Bayou has been identified as a demonstration project by Section 211(f) of the Water Resources Development Act of 1996 (P.L. 104-303). This Act authorized the non-Federal sponsor to accomplish the work and be subsequently reimbursed for the Federal share of completed discrete segments, in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged or excavated material disposal areas.	\$ 82,038,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	151,649,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	3,810,000	\$ 357,000
Pay 5 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 25 percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay, but no less than 5 percent of the costs allocated to flood risk management and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood risk management features.	27,623,000	683,000
Total Non-Federal Costs	\$ 265,120,000	\$ 1,040,000

The non-Federal sponsor must also agree to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsor for the flood damage reduction project is the Harris County Flood Control District. The Project Cooperation Agreement (PCA) for the flood control portion of the Upstream (Detention) Component was executed on March 3, 2000, and included the provision of Section 211, WRDA 96. A General Reevaluation Report, dated December 2008, was submitted to the Assistant Secretary of the Army, Civil Works (ASA(CW)), and was approved April 3, 2009 to recombine both the Upstream and Downstream elements of the project into one element. An amendment to the existing PCA was executed on 31 March 2010 to implement the remaining features of the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$322,350,000 is an increase of \$6,418,000 from the latest estimate (\$315,932,000) presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	\$ 6,418,000
Total	\$ 6,418,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Final Environmental Impact Statement was filed with the Environmental Protection Agency in September 1988. An Environmental Assessment (EA) for the Detention Component was completed in 1998, with a Finding of No Significant Impact (FONSI) signed on 3 April 1998. An EA for the Alternative to the Diversion Separable Element was completed in 2008 with a FONSI signed on 5 March 2008.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1990, and funds to initiate construction were appropriated in Fiscal Year 1998. The project will reduce the risk of flooding to the Texas Medical Center, which is the largest medical patient care, teaching, and research center in the world. It covers 1,000 acres, 40 buildings located in 100-year floodplain (daily economic loss during flood estimated at \$30 million), 6,800 patient beds, 93,500 employees (includes 20,000 physicians, scientists, and researchers), 6 million annual patient visits (18,000 international patient visits), and 160,000 daily visitors. The project will reduce life safety concerns related to Texas Medical Center that include patients life and health in the 14 Texas Medical Center hospitals during major flood events due to staff and physicians not being able to travel through high water (many live in nearby cities and subdivisions in the Brays Bayou watershed), and the inability to transport patients to the hospitals during major flood event due to high water. The project will also reduce the risk of flooding along major traffic commuter routes such as State Highway 288, a major commuter route which is depressed below ground level for much of its length crossing the Brays Bayou watershed. It has filled 3 times with stormwater since it was built. In addition to State Highway 288, the project will reduce the risk of high water causing life safety problems on feeder roads and adjacent roadways along Interstate 45, a hurricane evacuation route through Houston and Harris County. Other areas along Brays Bayou that benefit from the project include the City of Houston; Cities of Bellaire, West University Place, and Southside Place; Rice University; University of Houston; Herman Park and Zoo; Astrodome and Reliant Stadium; and West Loop, Sharpstown, and Westchase commercial areas.

The project was included in the Water Resources Development Act of 1996 (Section 211(f)(6)) as a demonstration project to show advantages and effectiveness of non-Federal interests to undertake planning, design, and construction of Federal Flood Control projects. The Harris County Flood Control District will receive reimbursement upon completion and approval of discrete segments of the authorized project contingent subject to the availability of funds. Each discrete segment's work will be audited prior to reimbursement. Funds being appropriated will be used to reimburse the sponsor and to pay Corps oversight costs.

Harris County experienced a major flooding event on October 15 and 16, 2006. The Harris County Flood Control District reported that completed discrete segments of the Brays Bayou project located upstream of the Sam Houston Tollway stored more than 3,500 acre-feet of water (equivalent to 1.1 billion gallons of water or 2.2 Astrodomes), which reduced residential and commercial flooding within the upper reaches of the watershed. At the time this flood event occurred only 60 percent of the 3 upstream detention basins had been completed. Upon completion of the entire project the detention basins will be constructed to hold 9,975 acre-feet of storm water. As submitted in the annual Flood Damage Report to Congress 2011, flood damages prevented amount to \$290,323,000.

The Annual Benefits that were reported in FY 2013 in the amount of \$138,575,000 were changed in FY 2014 to \$126,523,700. The numbers for FY 2013 were reported incorrectly due to the benefits not being revised to incorporate the approved 2010 economic update numbers.

Division: Southwestern

District: Galveston

Brays Bayou, Houston, TX

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Lower Colorado River Basin (Wharton/Onion), TX (New Start)

LOCATION: The Onion Creek separable element of the project is located in southeast Austin, Texas, and in southern Travis County in central Texas. The Wharton separable element of the project is located in the City of Wharton, Texas, in Wharton County in southeast Texas.

DESCRIPTION: The Onion Creek separable element consists of implementing non-structural flood risk management measures at Timber Creek in Travis County and Onion Creek Forest/Yarrabee Bend in Austin, Texas. The Timber Creek component includes the acquisition and removal of approximately 81 residential structures. The vacated land will be utilized for recreation and ecosystem restoration, with approximately 40 acres of the vacated land converted to a park and 16 acres restored to riparian woodlands. Recreation features include picnic shelters, group shelters, trails, basketball courts, parking, and the infrastructure associated with these facilities. The Onion Creek Forest/Yarrabee Bend component includes the acquisition and removal of approximately 410 residential structures. The vacated land will be utilized for recreation and ecosystem restoration, with approximately 100 acres of the vacated land converted to a park and 190 acres restored to riparian woodlands. Recreational features include picnic shelters, group shelters, trails, equestrian trails, basketball courts, tennis courts, volleyball courts, parking, and the infrastructure associated with these facilities. The Wharton separable element consists of approximately 35,600 feet of levees, 2,300 feet of floodwalls, 7,000 feet of channel modifications, and interior drainage features in the city of Wharton.

AUTHORIZATION: Water Resources Development Act of 2007, Section 1001 (43) and Section 5144.

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 5.125 percent.

BASIS OF BENEFIT-COST RATIO: Lower Colorado River Basin Phase I, Texas, Onion Creek Watershed Economic Update of an Authorized Project report dated December 2012.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	80,005,000		Onion Creek Wharton	0 0	TBD TBD
Estimated Non-Federal Cost	45,127,000				
Cash Contributions	6,271,000		Entire Project	0	TBD
Other Costs	38,856,000				
Total Estimated Project Cost	125,132,000				
Allocations to 30 September 2010	1,722,000	1/			
Allocation for FY 2011	0				
Allocation for FY 2012	1,000	1/ 2/			
Allocation for FY 2013	0				
Allocations through FY 2013	1,723,000	3%			
Estimated Carry-In Funds	0				
President's Budget for FY 2014	3,000,000	3/ 8%			
Programmed Balance to Complete After FY 2014	53,048,000	4/			
Unprogrammed Balance to Complete After FY 2014	22,234,000	5/			

1/ Allocations in FY 2012 and earlier were for preconstruction engineering and design (PED) costs associated with Investigation funds.

2/ The FY12 amount reprogrammed from another project.

3/ FY 2014 Budget Amount is for the Onion Creek separable element.

4/ Programmed balance is for the Onion Creek separable element.

5/ Unprogrammed balance is for the Wharton separable element.

PHYSICAL DATA:

The Onion Creek separable element consists of the Timber Creek and Onion Creek Forest/Yarrabee Bend components. The Timber Creek component of the Onion Creek separable element: Buyout of approximately 81 structures; construction of 40-acre park; and ecosystem restoration of 16 acres. The Onion Creek Forest/Yarrabee Bend component of the Onion Creek separable element: Buyout of 410 residential structures; construction of 100-acre park; and ecosystem restoration of 190 acres. The Wharton separable element: 35,600 feet of levees; 2,300 feet of floodwalls; 7,000 feet of channel improvement; and interior drainage facilities.

JUSTIFICATION: Two major flood events estimated as approximately 40-year events occurred in the Onion Creek watershed in 1998 and 2001, with several hundred homes being inundated and many totally destroyed. These events highlighted the fact that annualized flood damages within the watershed are estimated at over \$5 million, based on August 2006 estimates. The Onion Creek project consists of buying out approximately 491 structures, which will reduce annual damages by over \$2.9 million and reduce risk to life and property. In addition, the Onion Creek area will benefit from ecosystem restoration adding 63 average habitat units by improving 206 acres of riparian woodlands and from recreational features placed on land vacated as a result of the removal of structures from the highly flood-prone areas. Another area subject to flooding is located along the banks of the Colorado River in the lower part of the basin, in and around Wharton, Texas. This city of 9,000 citizens has been subject to frequent flooding from both the Colorado River as well as from more localized events. Two major flood events estimated as approximately 25-year events have occurred since 1998. The most recent occurred in November 2004 and inundated approximately 150 homes and businesses, causing \$8 million in damages. In both recent flood events, a low-income minority neighborhood on the southwest side of Wharton was among the hardest hit. Approximately 4,000 structures are located within the 1% exceedance (100-year) floodplain, and approximately 9,000 residents would need to be evacuated in a 100-year flood event. A structural project has been authorized for the Wharton area which would essentially remove the city from this floodplain and significantly reduce damages and risk to life and property. The structural project is expected to reduce flood damages within the study area by an average of \$5.5 million annually. Average annual benefits for the Onion Creek separable element are as follows:

Annual Monetary Benefits	Amount
Flood Risk Management	\$ 2,959,000
Recreation	3,475,000
Total	\$ 6,434,00

Ecosystem Restoration – net increase of approximately 63 Average Annual Habitat Units

FISCAL YEAR 2013: Not in the President's FY2013 budget.

FISCAL YEAR 2014: The budget amount for the Onion Creek separable element will be applied as follows:

Initiate Buyout of residential structures located in Onion Creek Forest/Yarrabee Bend	\$ 2,700,000
Engineering and Design	200,000
Supervision and Administration	100,000
Total	\$ 3,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as modified by the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands; easements; rights-of-way; relocation payments and assistance to displaced persons; disposal areas for borrow and excavated or dredged material; and modify or relocate utilities, roads, bridges, and other facilities, where necessary for the construction of the project.	\$ 69,516,000	\$ 264,000
Pay one-half of the separable costs allocated to recreation (except recreation Navigation) and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities. Includes betterments for recreation.	3,660,000	
Pay 35 percent of the costs allocated to fish and wildlife management, and pay 100 percent of the costs of operations, maintenance, repair, rehabilitation, and replacement of fish and wildlife features.	1,576,000	
Cash reimbursement to sponsor sufficient to limit the sponsor's contribution to the maximum amount set by law.	(42,373,000)	
Total Non-Federal Costs	\$ 32,379,000	\$ 264,000

The non-Federal sponsor will make all required payments concurrently with project construction.

Note: The amounts above are for only the Onion Creek separable element.

STATUS OF LOCAL COOPERATION: The non-Federal sponsors for the Onion Creek separable element are the city of Austin and Travis County, who have each indicated its intention to act as the local sponsor for the project segment within its jurisdictional area and will fund the non-Federal portion of this project. The city of Austin and Travis County will collectively contribute approximately 37 percent of the total project costs, primarily through land, easements, rights-of-way, relocation and disposal areas (LERRD) and cash contributions for construction of the recreation and ecosystem portions of the project. The Project Partnership Agreement (PPA) for the Timber Creek component is scheduled to be executed in FY 2013. The PPA for the Onion Creek Forest/Yarrabee Bend component is scheduled to be executed in July 2013.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimates of \$80,005,000 is an increase of \$9,846,000 from the latest estimate presented to Congress (FY 2013). This change includes the following item.

Item	Amount
Price Escalation	\$9,846,000
Total	\$9,846,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: An Environmental Assessment was conducted and a Finding of No Significant Impact (FONSI) was prepared as part of the required documentation for compliance with the National Environmental Policy Act. The FONSI was executed on 10 October 2006.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 2007. For the Onion Creek separable element, Section 5144 of the Water Resources Development Act of 2007 authorized the Secretary to include the costs and benefits associated with the relocation of flood-prone residences in the study area in the period beginning two years before the date of initiation of the feasibility study (the Feasibility Cost Sharing Agreement was executed on 25 May 2000) and ending on the date of execution of the partnership agreement for construction of the project, to the extent the Secretary determines that such relocations are compatible with the authorized project. This section also authorizes the Secretary to afford credit toward the non-Federal share of the project for the cost of relocation of residences that were incurred by the non-Federal interest. A Limited Reevaluation Report (LRR) is being developed to identify the changes to the project, including the removal of the properties acquired by the sponsor with FEMA funds and the addition of the property acquired before the feasibility study began. The LRR is scheduled to be completed in FY 2013. The Wharton separable element consists of constructing 35,600 feet of levees; 2,300 feet of floodwalls; 7,000 feet of channel improvement; and interior drainage facilities. The non-Federal sponsor is the city of Wharton, Texas. The city of Wharton has been subject to frequent flooding from both the Colorado River as well as from more localized events. Two major flood events estimated as approximately 25-year events have occurred since 1998. The most recent occurred in November 2004 and inundated approximately 150 homes and businesses, causing \$8 million in damages. In both recent flood events, a low-income minority neighborhood on the southwest side of Wharton was among the hardest hit. Approximately 4,000 structures are located within the 1 percent exceedance (100-year) floodplain. During such an event, approximately 9,000 residents would need to be evacuated. A structural project has been authorized in the Water Resources Act of 2007 for the Wharton area which would essentially remove the city from this floodplain and significantly reduce damages and risk to life and property. Preconstruction engineering and design efforts are proceeding on the Wharton separable element under the Design Agreement executed in July 2007.

The project costs, benefit-cost ratios and benefits have been updated to reflect data in the Lower Colorado River Basin Phase I, Texas, Onion Creek Watershed Economic Update of an Authorized Project report dated December 2012.

ONION CREEK SEPARABLE ELEMENT:

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		56,331,000
Estimated Non-Federal Cost		32,379,000
Cash Contributions	4,450,000	
Other Costs	27,929,000	
Total Estimated Project Cost		88,710,000

REMAINING BENEFIT-REMAINING COST RATIO: 1.1 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.1 to 1 at 7 percent.

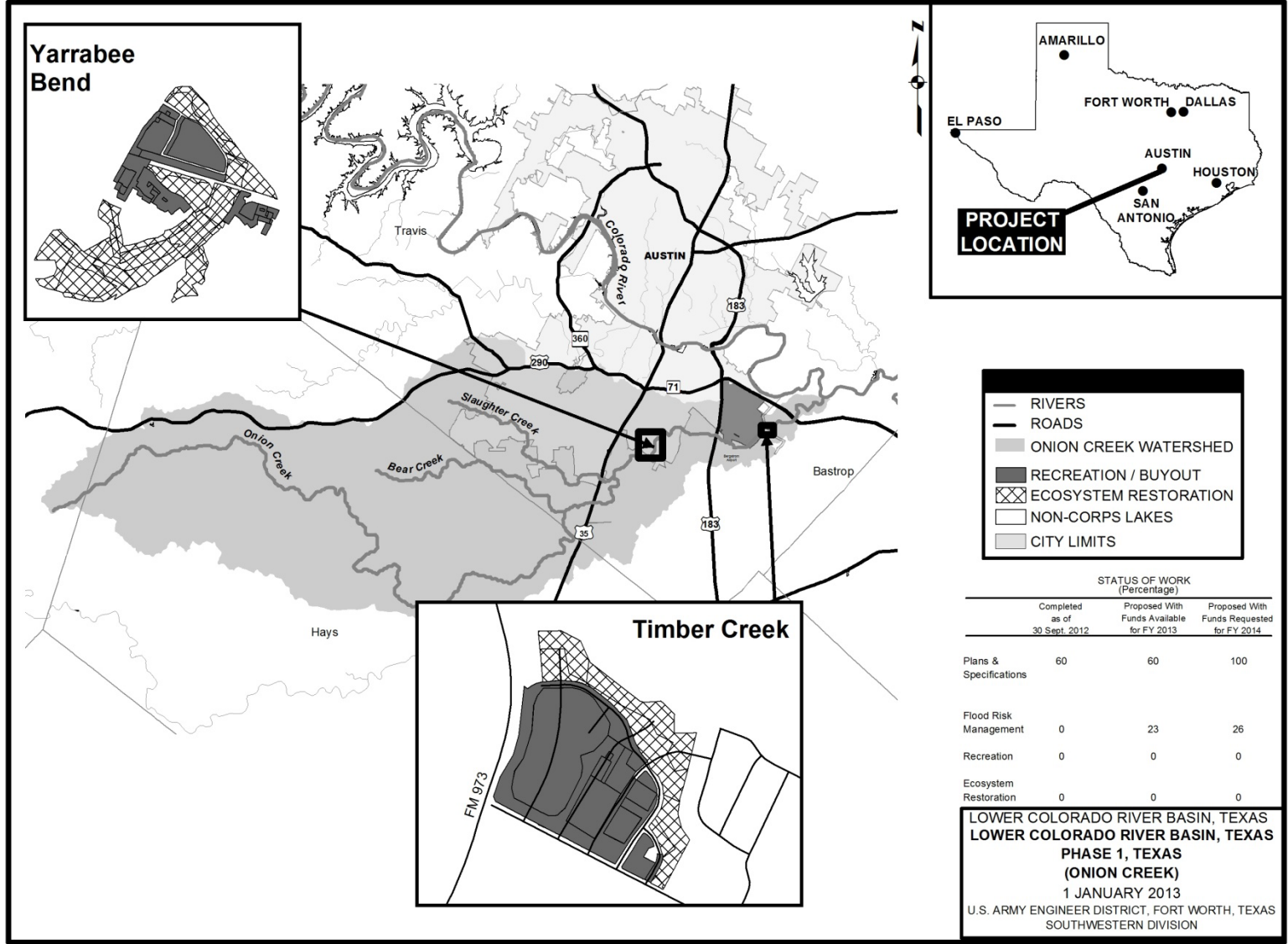
WHARTON SEPARABLE ELEMENT:

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		23,674,000
Estimated Non-Federal Cost		12,748,000
Cash Contributions	1,821,000	
Other Costs	10,927,000	
Total Estimated Project Cost		36,422,000

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 7 percent.



OPERATION AND MAINTENANCE

ARKANSAS

O&M JUSTIFICATION SHEET

PROJECT NAME: Beaver Lake, AR

AUTHORIZATION: Flood Control Act of 1938 and the Water Supply Act of 1958

LOCATION AND DESCRIPTION: The project is located in Benton, Carroll and Washington Counties of Arkansas. Beaver Lake is a multiple-purpose project located in the White River Basin. The project contains two 56,000 kW hydropower generator units.

CONFERENCE AMOUNT FOR FY 2013: \$5,929,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,953,000 O: \$5,234,000 T: \$7,187,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,415,000 – Funds will be used for critical routine operation of the dam, reservoir, service facilities and permanent operating equipment; perform inspection of structures and equipment; and maintenance of the tainter gates, sluice gates, overhead crane, and emergency generator. Other non-routine maintenance activities include vegetation removal from Dikes 1 and 3 (\$60,000), and replacement of exterior incandescent fixtures and interior fluorescent interior fixtures (\$35,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: \$2,864,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: \$2,504,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance by increasing unit availability, thus reducing long-term forced outages, provide for additional revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: \$384,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$20,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Beaver Lake has more than \$83,236,000 in cumulative flood damages prevented. Over 2,643,000 recreation visits, with a local economic impact of more than \$72,623,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Blue Mountain Lake, AR

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: The project is located in Logan and Yell Counties of Arkansas. Blue Mountain Lake is located in the Arkansas River Basin on the Petit Jean River, near Waveland, Arkansas. The primary purpose of the project is flood risk management. The project also offers excellent recreational opportunities.

CONFERENCE AMOUNT FOR FY 2013: \$1,864,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$434,000 O: \$1,475,000 T: \$1,909,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,373,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor gates, hoists, overhead bridge crane and emergency generator (\$50,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: \$399,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: \$129,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$8,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Blue Mountain Lake has more than \$42,151,000 in cumulative flood damages prevented. Over 208,000 recreation visits, with a local economic impact of more than \$5,831,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bull Shoals Lake, AR

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Bull Shoals Lake is located in Marion, Baxter and Boone Counties of Arkansas and Ozark and Taney Counties of Missouri. Bull Shoals is a multi-purpose project with functional capabilities for hydropower and flood risk management. The project contains eight hydropower generating units with a total installed capacity of 340,000 kW.

CONFERENCE AMOUNT FOR FY 2013: \$6,672,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$5,557,000 O: \$6,007,000 T: \$11,564,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$4,945,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tainter gates, sluice gates, overhead crane, and emergency generator. Non-routine maintenance includes refurbishing and painting 3 of the 17 tainter gates (\$2,515,000); and replacement of 30 tons of heating and cooling capacity with new ground source (geothermal) heat pump system, and replacement of exterior incandescent fixtures and fluorescent interior fixtures with high efficiency LED alternatives (\$360,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$1,691,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: \$4,491,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. Non-routine maintenance activities include retrofitting exciter controls and associated devices (\$923,000). These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: \$425,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$12,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Bull Shoals Lake has more than \$267,995,000 in cumulative flood damages prevented. Over 3,730,000 recreation visits, with a local economic impact of more than \$106,784,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Little Rock

Bull Shoals Lake, AR

O&M JUSTIFICATION SHEET

PROJECT NAME: Dardanelle Lock & Dam, AR

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: This project is located in Pope, Logan, Johnson and Yell Counties of Arkansas. Dardanelle Lock and Dam are located on the McClellan-Kerr Arkansas River Navigation System and the project purposes include hydropower and navigation. The project contains four 35,000 kW hydropower generator units.

CONFERENCE AMOUNT FOR FY 2013: \$8,912,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,438,000 O: \$6,312,000 T: \$7,750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,289,000 – Funds will be used for critical routine operation and maintenance for navigation required for pool regulation and lock operations. Maintenance activities include channel dredging (\$300,000). These funds would improve navigation performance by increasing the availability and reliability of the system and provide for decreased future repair costs due to continual deferred maintenance.

FRM: \$250,000 – Funds will be used for critical routine operation and maintenance of pump station, service facilities and permanent operating equipment to meet basic flood risk management mission. These funds would improve flood risk management performance by reducing the risk of failure, provide increased efficiency, and lower future repair costs.

RC: \$1,694,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; water management of water control data systems; and operation and maintenance of visitor center.

H: \$3,317,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: \$192,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$8,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Dardanelle Lock & Dam has more than \$45,721,000 in cumulative flood damages prevented. Over 1,288,000 recreation visits, with a local economic impact of more than \$39,284,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Little Rock

Dardanelle Lock
and Dam, AR

O&M JUSTIFICATION SHEET

PROJECT NAME: DeQueen Lake, AR

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: DeQueen Lake is located on the Rolling Fork River, in Sevier County, approximately four miles northwest of DeQueen, Arkansas. The project's primary purposes are flood risk management, water supply, recreation and environmental stewardship.

CONFERENCE AMOUNT FOR FY 2013: \$1,870,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$532,000 O: \$1,370,000 T: \$1,902,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,434,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor slide gates, hoists, overhead bridge crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$425,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: \$36,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$7,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: DeQueen Lake has more than \$15,719,000 in cumulative flood damages prevented. Over 135,000 recreation visits, with a local economic impact of more than \$4,484,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Dierks Lake, AR

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Dierks Lake is located on the Saline River in Howard and Sevier Counties, Dierks, Arkansas. The project's primary purposes are flood risk management, water supply, recreation and environmental stewardship.

CONFERENCE AMOUNT FOR FY 2013: \$1,567,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$455,000 O: \$1,131,000 T: \$1,586,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,088,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor slide gates, hoists, overhead bridge crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$450,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: \$40,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$8,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Dierks Lake has more than \$11,344,000 in cumulative flood damages prevented. Over 134,000 recreation visits, with a local economic impact of more than \$4,211,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Gillham Lake, AR

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Gillham Lake is located on the Cossatot River, in Howard County, approximately six miles northeast of Gillham, Arkansas. The project's primary purposes are flood risk management, water supply, recreation and environmental stewardship.

CONFERENCE AMOUNT FOR FY 2013: \$1,463,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$700,000 O: \$1,034,000 T: \$1,734,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,312,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor slide gates, hoists, overhead bridge crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$381,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: \$34,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$7,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Gillham Lake has more than \$23,314,000 in cumulative flood damages prevented. Over 93,000 recreation visits, with a local economic impact of more than \$2,739,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Greers Ferry Lake, AR

AUTHORIZATION: Flood Control Act of 1938 as amended by the Flood Control Acts of 1941 and 1944

LOCATION AND DESCRIPTION: Greers Ferry Lake is located on the Little Red River in Cleburne and Van Buren Counties, Heber Springs, Arkansas. Greers Ferry is one of the five multiple purpose projects in the White River Basin and was constructed for the generation of hydropower and flood risk management. The project contains two 48,000 kW hydropower generating units.

CONFERENCE AMOUNT FOR FY 2013: \$6,444,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,671,000 O: \$5,734,000 T: \$7,405,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,667,000 – Funds will be used for critical routine operation of the dam, reservoir, service facilities and permanent operating equipment; inspection and maintenance of structures, tainter gates, sluice gates, overhead crane, and emergency generator. Non-routine maintenance activities include dewatering stilling basin (\$130,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: \$2,967,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: \$2,578,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: \$166,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$27,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Greers Ferry Lake has more than \$44,014,000 in cumulative flood damages prevented. Over 7,283,000 recreation visits, with a local economic impact of more than \$191,114,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: McClellan-Kerr Arkansas River Navigation System, AR

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: The 445-mile long McClellan-Kerr Arkansas River Navigation System consists of 18 locks and dams, providing a 9-foot deep inland navigation channel from the Mississippi River to Catoosa, Oklahoma. The system includes the Arkansas, White and Verdigris Rivers, and the authorized purposes include navigation, environmental stewardship and recreation.

CONFERENCE AMOUNT FOR FY 2013: \$24,961,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$14,981,000 O: \$13,577,000 T: \$28,558,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$23,914,000 – Funds will be used for critical routine operation and maintenance for navigation required for pool regulation and lock operations; critical fleet maintenance support; perform failure diagnostics and repairs; and channel maintenance to include dredging. Non-routine maintenance activities include repair lock wall hole and stilling basin erosion at Ormond (\$312,000), update the dredge material management plan (\$100,000), channel dredging (\$2,400,000), repair lock wall hole and stilling basin erosion at Locks 4 and 7 (\$1,500,000), reduce GHG emissions from 10 lock buildings by replacing outdated and inefficient roofs and windows (\$400,000), reduce GHG emissions from project office by replacing 16 tons of heating and cooling capacity with new ground source (geothermal) heat pump system (\$225,000). These funds would improve navigation performance by increasing the availability and reliability of the system and provide for decreased future repair costs due to continual deferred maintenance.

FRM: N/A

RC: \$4,364,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance; and water management of water control data systems.

H: N/A

EN: \$280,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: N/A

OTHER INFORMATION: The McClellan-Kerr Arkansas River Navigation System has more than \$1,688,055,000 in cumulative flood damages prevented. Over 3,590,000 recreation visits, with a local economic impact of more than \$106,378,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Little Rock

McClellan-Kerr Arkansas River
Navigation System, AR

O&M JUSTIFICATION SHEET

PROJECT NAME: Millwood Lake, AR

AUTHORIZATION: Flood Control Act of 1946 as modified by the Flood Control Act of 1958

LOCATION AND DESCRIPTION: Millwood Lake is located on the Little River, approximately seven miles east of Ashdown, Arkansas. The lake was constructed for the primary purpose of flood risk management. The project also offers excellent recreational opportunities.

CONFERENCE AMOUNT FOR FY 2013: \$2,680,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$718,000 O: \$1,988,000 T: \$2,706,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,859,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor slide gates, hoists, overhead bridge crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$717,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: \$122,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$8,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Millwood Lake has more than \$24,327,000 in cumulative flood damages prevented. Over 461,000 recreation visits, with a local economic impact of more than \$16,311,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Nimrod Lake, AR

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: The project is located in Yell and Perry Counties, Arkansas. Nimrod Lake is located on the Fourche LaFave River, approximately nine miles southeast of Plainview, Arkansas. There are 680 square miles of drainage area above the dam. The primary purpose of the project is flood risk management. The project also offers excellent recreational opportunities.

CONFERENCE AMOUNT FOR FY 2013: \$2,020,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$362,000 O: \$1,654,000 T: \$2,016,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,360,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of 2 Howell-Bunger valves, sluice (slide) gates, hoists, overhead crane, and emergency generator (\$48,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: \$462,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: \$184,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$10,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Nimrod Lake has more than \$33,480,000 in cumulative flood damages prevented. Over 267,000 recreation visits, with a local economic impact of more than \$7,897,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Norfolk Lake, AR

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Norfolk Lake is located in Baxter County, Arkansas and Ozark County, Missouri. Norfolk Lake is one of the five multiple-purpose projects in the White River Basin constructed for flood risk management and the generation of hydropower. The project contains two 40,250 kW hydropower generation units.

CONFERENCE AMOUNT FOR FY 2013: \$8,146,000 2/
BUDGETED AMOUNT FOR FY 2014: M: \$3,638,000 O: \$4,510,000 T: \$8,148,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$4,504,000 – Funds will be used for critical routine operation and maintenance for flood risk management; routine maintenance of 12 tainter gates, sluice gates, overhead crane, and emergency generator; and critical routine operation and maintenance for the joint costs associated with the dam, powerplant and project. Non-routine maintenance activities include clean, refurbish, and paint 3 of 12 tainter gates (\$2,610,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide for increased efficiency, and lower future repair costs.

RC: \$1,261,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance; and water management of water control data systems.

H: \$2,143,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages and provide revenue to the Treasury.

EN: \$229,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: \$11,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Norfolk Lake has more than \$80,802,000 in cumulative flood damages prevented. Over 1,497,000 recreation visits, with a local economic impact of more than \$48,793,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ozark-Jeta Taylor Lock & Dam, AR

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: This project is located in Franklin, Johnson, and Crawford Counties, Arkansas. Ozark-Jeta Taylor Lock and Dam is located on the McClellan-Kerr Arkansas River Navigation System and the project purposes include recreation, hydropower, and navigation. The project contains five inclined axis 20,000 kW hydropower generator units.

CONFERENCE AMOUNT FOR FY 2013: \$5,188,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,673,000 O: \$4,614,000 T: \$6,287,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,337,000 – Funds will be used for critical routine operation and maintenance for navigation required for pool regulation and lock operations. Non-routine maintenance activities include channel dredging (\$400,000), and repair of lock wall hole and stilling basin erosion (\$500,000). These funds would improve navigation performance by increasing the availability and reliability of the system and provide for decreased future repair costs due to continual deferred maintenance.

FRM: N/A

RC: \$1,459,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance; and water management of water control data systems.

H: \$2,389,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: \$102,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: N/A

OTHER INFORMATION: Ozark-Jeta Taylor Lock & Dam has more than \$93,336,000 in cumulative flood damages prevented. Over 551,000 recreation visits, with a local economic impact of more than \$16,033,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Little Rock

Ozark Jeta Taylor
Lock & Dam, AR

KANSAS

O&M JUSTIFICATION SHEET

PROJECT NAME: Council Grove Lake, KS

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: Council Grove Lake is located on the Grand (Neosho) River at river mile 449.5, 1.5 miles northwest of Council Grove in Morris County, Kansas. This is a multi-purpose project with flood control, water supply, water quality control, and recreation outputs. The project is a 6,500 foot long earth embankment with an uncontrolled spillway. At conservation pool the lake covers 3,259 acres.

CONFERENCE AMOUNT FOR FY 2013: \$2,115,000 1/

BUDGET AMOUNT FOR FY 2014: M: \$526,000 O: \$1,333,000 T: \$1,859,000 2/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,218,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$583,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: \$48,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1964, Council Grove Lake has more than \$175,000,000 in cumulative flood damages prevented. Over 407,000 recreation visits with a local economic impact of more than \$9,300,000 took place at Council Grove Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: El Dorado Lake, KS

AUTHORIZATION: Flood Control Act of 1965

LOCATION AND DESCRIPTION: El Dorado Lake is located at river mile 114.7 on the Walnut River, a tributary of the Arkansas River, about 2 miles northeast of the town of El Dorado in Butler County, Kansas. This is a multi-purpose project with flood control, water supply, water quality control, and recreation outputs. The project consists of a 20,850 feet long earth embankment with spillway. At conservation pool the lake covers 7,997 acres.

CONFERENCE AMOUNT FOR FY 2013: \$831,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$294,000 O: \$717,000 T: \$1,011,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$850,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$41,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: \$112,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1981, El Dorado Lake has more than \$286,000,000 in cumulative flood damages prevented. Over 1,050,000 recreation visits with a local economic impact of more than \$26,400,000 took place at El Dorado Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Elk City Lake, KS

AUTHORIZATION: Flood Control Act of 1941

LOCATION AND DESCRIPTION: Elk City Lake is located on the Elk River at river mile 8.7, about 7 miles east of the town of Elk City in Montgomery County, Kansas. This is a multi-purpose project with flood control, water supply, water quality, recreation, and fish and wildlife outputs. The project consists of a 4,840 feet earth embankment with an uncontrolled spillway, 16 feet conduit, and stilling basin. At conservation pool the lake covers 4,118 acres.

CONFERENCE AMOUNT FOR FY 2013: \$795,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$456,000 O: \$651,000 T: \$1,107,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$894,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance consists of paving the gate tower and outlet channel roads (\$270,000).

RC: \$156,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: \$47,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1966, Elk City Lake has more than \$470,000,000 in cumulative flood damages prevented. Over 130,000 recreation visits with a local economic impact of more than \$3,200,000 took place at Elk City Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fall River Lake, KS

AUTHORIZATION: Flood Control Act of 1941

LOCATION AND DESCRIPTION: Fall River Lake is located on the Fall River at river mile 54.2, about 4 miles northwest of the town of Fall River in Greenwood County, Kansas. This is a multi-purpose project with flood control, water quality, fish and wildlife, and supplemental water supply outputs. The project consists of a 5,455 foot long earth embankment with a gate weir and two tainter gates. At conservation pool the lake covers 2,350 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,429,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$258,000 O: \$934,000 T: \$1,192,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$901,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$269,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: \$22,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1949, Fall River Lake has more than \$475,000,000 in cumulative flood damages prevented. Over 141,000 recreation visits with a local economic impact of more than \$3,300,000 took place at Fall River Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: John Redmond Dam and Reservoir, KS

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: John Redmond Dam and Reservoir is located on the Grand (Neosho) River at river mile 343.7, about 3 miles northwest of the town of Burlington in Coffey County, Kansas. This is a multi-purpose project with flood control, water supply, water quality control, and recreation outputs. The project is additionally operated for wildlife objectives. The project consists of a 21,790 feet long structure made up of an earth-filled embankment and a gated ogee weir, concrete spillway with fourteen 40 by 35 feet high tainter gates located in the left abutment. At conservation pool the lake covers 8,084 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,251,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$280,000 O: \$1,285,000 T: \$1,565,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,112,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$302,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: \$116,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$35,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1964, John Redmond Dam and Reservoir has more than \$740,000,000 in cumulative flood damages prevented. Over 110,000 recreation visits with a local economic impact of more than \$2,500,000 took place at John Redmond Dam and Reservoir in FY 2010. The Tulsa District is currently undertaking a water supply reallocation study at the request of the State of Kansas (water supply contract holder) to address current and future water supply demands at the lake. The State of Kansas has also started permit coordination efforts to obtain approval to mechanically dredge within the reservoir in order to increase the current water supply amount available for use at the Wolf Creek nuclear plant downstream of the project.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Tulsa

John Redmond
Dam and Reservoir, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Marion Lake, KS

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: Marion Lake is located on the Cottonwood River at river mile 126.7, about 3 miles northwest of the town of Marion in Marion County, Kansas. This is a multi-purpose project with flood control, water supply, water quality, and recreation outputs. The project consists of an 8,375 foot long rolled earth-filled embankment with a gate-controlled, concrete gravity ogee weir containing three 40 by 40 feet tainter gates. At conservation pool the lake covers 6,210 acres.

CONFERENCE AMOUNT FOR FY 2013: \$2,578,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$198,000 O: \$1,883,000 T: \$2,081,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,328,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$723,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: \$22,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1968, Marion Lake has more than \$345,000,000 in cumulative flood damages prevented. Over 402,000 recreation visits with a local economic impact of more than \$9,900,000 took place at Marion Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pearson-Skubitz Big Hill Lake, KS

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Pearson-Skubitz Big Hill Lake is located at river mile 33.3 on Big Hill Creek, a tributary of the Verdigris River, about 4.5 miles east of the town of Cherryvale in Labette County, Kansas. This is a multi-purpose project with flood control, water supply, recreation, and fish and wildlife outputs. The project consists of a rolled earth-filled embankment that is 3,902 feet long with a broad crested weir and two drop inlet structures. At conservation pool the lake covers 1,240 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,485,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$194,000 O: \$1,188,000 T: \$1,382,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$699,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$649,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: \$26,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1981, Pearson-Skubitz Big Hill Lake has more than \$60,000,000 in cumulative flood damages prevented. Over 148,000 recreation visits with a local economic impact of more than \$3,700,000 took place at Pearson-Skubitz Big Hill Lake in FY 2010 .

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Tulsa

Pearson-Skubitz
Big Hill Lake, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Toronto Lake, KS

AUTHORIZATION: Flood Control Act of 1941

LOCATION AND DESCRIPTION: Toronto Lake is located on the Verdigris River at river mile 271.5, about 4 miles southeast of the town of Toronto in Woodson County, Kansas. This is a multi-purpose project with flood control, water supply, water quality, fish and wildlife, and recreation outputs. The project consists of a rolled impervious and random earth-filled embankment that is 4,712 feet long with a gate-controlled, concrete, gravity, ogee weir with eight 40x25 foot tainter gates. At conservation pool the lake covers 2,660 acres.

CONFERENCE AMOUNT FOR FY 2013: \$904,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$398,000 O: \$498,000 T: \$896,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$835,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of replacing sluice gate counterbalance valves and repairing riprap along the downstream outlet channel (\$250,000).

RC: \$24,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$27,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1960, Toronto Lake has more than \$490,000,000 in cumulative flood damages prevented. Over 138,000 recreation visits with a local economic impact of more than \$3,400,000 took place at Toronto Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSOURI

O&M JUSTIFICATION SHEET

PROJECT NAME: Clearwater Lake, MO

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Clearwater Lake is located near Piedmont, Missouri, in Reynolds and Wayne Counties. There are 898 square miles of drainage area above the dam. The primary purpose is flood risk management, but the project also provides environmental and recreation outputs.

CONFERENCE AMOUNT FOR FY 2013: \$3,291,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,046,000 O: \$2,533,000 T: \$3,579,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,495,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor gates, hoists, overhead bridge crane and emergency generator. Non-routine maintenance activities include replacement of 30 tons of heating and cooling capacity with new ground source (geothermal) heat pump system and replacement of exterior incandescent fixtures, fluorescent interior fixtures, and fluorescent shop bulbs with high efficiency LED alternatives (\$305,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: \$986,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: \$98,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: N/A

OTHER INFORMATION: Clearwater Lake has more than \$277,368,000 in cumulative flood damages prevented. Over 466,000 recreation visits, with a local economic impact of more than \$15,312,000, took place in FY 2010.

1/ Estimated Unobligated “Carry-In” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Table Rock Lake, MO & AR

AUTHORIZATION: Flood Control Act of 1938 as amended by the Flood Control Acts of 1941 and 1944

LOCATION AND DESCRIPTION: Table Rock Lake is located in Branson, Missouri and is one of five multiple-purpose projects within the White River Basin. The primary purposes of the lake are power generation flood risk management and recreation. The project contains four 50,000 kW hydropower generator units.

CONFERENCE AMOUNT FOR FY 2013: \$8,254,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$1,595,000 O: \$6,990,000 T: \$8,585,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,758,000 – Funds will be used for critical routine operation and maintenance; inspection and maintenance of structures and equipment; routine operation of dam, reservoir, service facilities and permanent operating equipment; critical routine operations and maintenance for the joint costs associated with the dam, powerplant and project; and maintenance of tainter gates, sluice gates, overhead crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: \$2,289,000 – Funds will be used for routine operations and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance; water management of water control data systems; and operation and maintenance of a visitor center.

H: \$3,748,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: \$790,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: N/A

OTHER INFORMATION: Table Rock Lake has more than \$206,282,000 in cumulative flood damages prevented. Over 4,792,000 recreation visits, with a local economic impact of more than \$120,840,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

OKLAHOMA

O&M JUSTIFICATION SHEET

PROJECT NAME: Arcadia Lake, OK

AUTHORIZATION: Flood Control Act of 1970

LOCATION AND DESCRIPTION: Arcadia Lake is located on the Deep Fork River at river mile 218.3, in the metropolitan area of Oklahoma City and Edmond in Oklahoma County, Oklahoma. This is a multi-purpose project with flood control, water supply, and recreation outputs. The project consists of a 5,250 feet long rolled earth-filled embankment with an uncontrolled saddle spillway and 7 by 10 feet conduit controlled by two conduit gates. At conservation pool the lake covers 1,820 acres.

CONFERENCE AMOUNT FOR FY 2013: \$521,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$56,000 O: \$567,000 T: \$623,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$563,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$39,000 – Funds will be used for routine operations and maintenance of activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$13,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1986, Arcadia Lake has more than \$29,000,000 in cumulative flood damages prevented. Over 619,000 recreation visits with a local economic impact of more than \$15,000,000 took place at Arcadia Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Birch Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Birch Lake is located at river mile 0.8 on Birch Creek, a tributary of Bird Creek, about 1.5 miles south of the town of Barnsdall in Osage County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality control, recreation, and fish and wildlife outputs. The project consists of a 3,193 foot long rolled earth-filled embankment with an uncontrolled spillway and 7.5 by 10 feet conduit controlled by two slide gates. At conservation pool the lake covers 1,137 acres.

CONFERENCE AMOUNT FOR FY 2013: \$809,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$165,000 O: \$560,000 T: \$725,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$515,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$194,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$16,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1977, Birch Lake has more than \$126,000,000 in cumulative flood damages prevented. Over 61,000 recreation visits with a local economic impact of more than \$1,500,000 took place at Birch Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Broken Bow Lake, OK

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Broken Bow Lake is located on the Mountain Fork River, a tributary of the Little River, at river mile 20.3, approximately 9 miles northeast of the town of Broken Bow in McCurtain County, Oklahoma. This is a multi-purpose project with flood control, hydroelectric power, water supply, recreation, and fish and wildlife outputs. The project consists of a 2,750 feet long rolled earth-filled embankment with a concrete ogee weir controlled spillway and two 50,000 kW generators. At conservation pool the lake covers 14,200 acres.

CONFERENCE AMOUNT FOR FY 2013: \$2,425,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$3,704,000 O: \$2,000,000 T: \$5,704,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,915,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance consists of replacing the tainter gate bulkhead and bulkhead mooring system (\$2,000,000), and removal of vegetation from embankment (\$213,000).

RC: \$121,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: \$2,615,000 – Funds will be used for routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment; performing preventative, routine, and limited breakdown maintenance on equipment; inspecting equipment for suitability of service; and improve hydrological modernization initiative priority activities. Budgeted non-routine maintenance consists of replacing the unwatering and station drainage system (\$350,000), and repairing penstock expansion joints and painting the penstocks (\$350,000).

EN: \$43,000 - Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 - Funds will be used for monitoring of water usage; management of current water storage agreements; and tracking water storage contract billing and payments.

OTHER INFORMATION: Since construction in 1970, Broken Bow Lake has more than \$85,000,000 in cumulative flood damages prevented. Over 933,000 recreation visits with a local economic impact of more than \$21,860,000 took place at Broken Bow Lake in FY2010. The cold water fishery below Broken Bow Lake is one of the premier brown and rainbow trout streams in the south-central United States.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

Division: Southwestern

District: Tulsa

Broken Bow Lake, OK

O&M JUSTIFICATION SHEET

PROJECT NAME: Canton Lake, OK

AUTHORIZATION: Flood Control Act of 1938, Flood Control Act of 1946, Flood Control Act of 1948, and the Water Resources Development Act of 1990

LOCATION AND DESCRIPTION: Canton Lake is located on the North Canadian River at river mile 394.3, about 2 miles north of the town of Canton in Blaine County, Oklahoma. This is a multi-purpose project with flood control, water supply, and irrigation outputs. The project consists of a 15,140 foot long rolled earth-filled embankment with a 640 foot gated concrete spillway that rises to a maximum height of 68 feet. Spillway discharges are controlled by sixteen 40x25 foot tainter gates. At conservation pool the lake covers 7,910 acres.

ALLOCATION FOR FY 2013: \$ 2,242,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$558,000 O: \$1,635,000 T: \$2,193,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,132,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$1,018,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$35,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1948, Canton Lake has more than \$103,000,000 in cumulative flood damages prevented. Over 760,000 recreation visits with a local economic impact of more than \$19,785,000 took place at Canton Lake in FY 2010. Canton Lake is currently undergoing construction (funded under the Construction Account) to remediate potential dam safety concerns that include underseepage, and to ensure the project can safely pass the probable maximum flood event.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Tulsa

Canton Lake, OK

O&M JUSTIFICATION SHEET

PROJECT NAME: Copan Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Copan Lake is located at river mile 7.4 on the Little Caney River, a tributary of the Caney River, about 9 miles north of the town of Bartlesville in Washington County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality control, recreation, and fish and wildlife outputs. The project consists of a 7730 foot long rolled earth-filled embankment with a gate controlled, concrete, gravity ogee weir with four 50x35 foot tainter gates. At conservation pool the lake covers 4449 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,352,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$198,000 O: \$671,000 T: \$869,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$614,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$226,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$21,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1983, Copan Lake has more than \$847,000,000 in cumulative flood damages prevented. Over 73,000 recreation visits with a local economic impact of more than \$2,000,000 took place at Copan Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Eufaula Lake, OK

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: Eufaula Lake is located on the Canadian River at river mile 27.0, about 12 miles east of the town of Eufaula in McIntosh County, Oklahoma. This is a multi-purpose project with flood control, water supply, hydroelectric power, and navigation outputs. The project consists of a 3300 feet long rolled earth-filled embankment with a concrete, gravity ogee weir controlled spillway with eleven 40 feet by 32 feet tainter gates. The project contains three hydropower generator units. At conservation pool the lake covers 105,500 acres.

CONFERENCE AMOUNT FOR FY 2013: \$5,494,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,755,000 O: \$4,741,000 T: \$6,496,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$51,000 – Funds will be used for limited operations and maintenance of structures for navigation water releases for the McClellan-Kerr Arkansas River Navigation System.

FRM: \$1,563,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance consists of an energy sustainability package to place the remaining project office buildings on the hydropower grid (\$100,000).

REC: \$1,969,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: \$2,415,000 – Funds will be used for critical routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment and improving hydrological modernization initiative priority activities. Budgeted non-routine maintenance consists of replacing the 480 volt switchgear breakers (\$350,000).

EN: \$398,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$100,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; and tracking water storage contract billing and payments.

OTHER INFORMATION: Since construction in 1964, Eufaula Lake has more than \$500,000,000 in cumulative flood damages prevented. Over 2,295,000 recreation visits with a local economic impact of more than \$59,400,000 took place at Eufaula Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fort Gibson Lake, OK

AUTHORIZATION: Flood Control Act of 1941, River and Harbor Act of 1946, and the Water Resources Development Act of 1986

LOCATION AND DESCRIPTION: Fort Gibson Lake is located on the Grand (Neosho) River at river mile 7.7 about 12 miles northeast of the town of Muskogee in Mayes, Wagoner, and Cherokee Counties, Oklahoma. This is a multi-purpose project with flood control and hydroelectric power outputs. The project consists of a 2,990 foot long rolled earth-filled embankment which includes the concrete, gravity ogee weir controlled spillway and the powerhouse intake structure. The spillway is equipped with thirty 40 feet by 35 feet tainter gates, while the powerhouse contains four 11,250 kW hydropower generator units. At conservation pool the lake covers 19,900 acres.

ALLOCATED AMOUNT FOR FY 2013: \$4,760,000 2/

BUDGET FOR FY 2014: M: \$1,387,000 O: \$5,173,000 T: \$6,560,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,449,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance includes removal of woody vegetation from embankment (\$481,000).

RC: \$1,654,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: \$3,240,000 – Funds will be used for critical routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment. Budgeted non-routine maintenance includes removal of woody vegetation from embankment (\$444,000).

EN: \$217,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1949, Fort Gibson Lake has more than \$390,000,000 in cumulative flood damages prevented. Over 1,972,000 recreation visits with a local economic impact of more than \$46,700,000 took place at Fort Gibson Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fort Supply Lake, OK

AUTHORIZATION: Flood Control Act of 1936

LOCATION AND DESCRIPTION: Fort Supply Lake is located at river mile 5.5 on Wolf Creek, a tributary of the North Canadian River, about 12 miles northwest of the town of Woodward in Woodward County, Oklahoma. This is a multi-purpose project with flood control and conservation storage (water supply) outputs. The project consists of an 11,865 foot long rolled earth-filled embankment with an uncontrolled, concrete, chute-type spillway. Spillway discharges are controlled by three 7x16 foot vertical lift gates. At conservation pool the lake covers 1,820 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,086,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$153,000 O: \$730,000 T: \$883,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$462,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$405,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$16,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1942, Fort Supply Lake has more than \$41,000,000 in cumulative flood damages prevented. Over 302,000 recreation visits with a local economic impact of more than \$6,900,000 took place at Fort Supply Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013

O&M JUSTIFICATION SHEET

PROJECT NAME: Great Salt Plains Lake, OK

AUTHORIZATION: Flood Control Act of 1936

LOCATION AND DESCRIPTION: Great Salt Plains Lake is located on the Salt Fork of the Arkansas River at river mile 103.3 about 12 miles east of the town of Cherokee in Alfalfa County, Oklahoma. This is a multi-purpose project with flood control, conservation, recreation, and fish and wildlife outputs. The project consists of a rolled earth-filled embankment and concrete spillway having a total crest length of 6,010 feet and rising to a maximum height of 68 feet above the streambed. At top of the flood control pool, the lake covers 25,660 acres.

CONFERENCE AMOUNT FOR FY 2013: \$501,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$99,000 O: \$277,000 T: \$376,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$306,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of repairing spalls on the spillway weirs (\$50,000).

RC: \$34,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$36,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1941, Great Salt Plains Lake has more than \$247,000,000 in cumulative flood damages prevented. Over 198,000 recreation visits with a local economic impact of more than \$7,800,000 took place at Great Salt Plains Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Heyburn Lake, OK

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: Heyburn Lake is located at river mile 48.6 on Polecat Creek, a tributary of the Arkansas River, about 11 miles southwest of the town of Sapulpa in Creek County, Oklahoma. This is a multi-purpose project with flood control and conservation (water supply, recreation, and fish and wildlife) outputs. The project consists of a 2,920 foot long rolled earth-filled embankment with an uncontrolled spillway. At conservation pool the lake covers 877 acres.

ALLOCATED AMOUNT FOR FY 2013: \$629,000 2/

BUDGET FOR FY 2014: M: \$81,000 O: \$515,000 T: \$596,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$304,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$240,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$37,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$15,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1950, Heyburn Lake has more than \$64,000,000 in cumulative flood damages prevented. Over 136,000 recreation visits with a local economic impact of more than \$3,200,000 took place at Heyburn Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Hugo Lake, OK

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: Hugo Lake is located on the Kiamichi River at river mile 17.6, about 7 miles east of the town of Hugo in Choctaw County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality, recreation, and fish and wildlife outputs. The project consists of a 10,200 feet long rolled earth-filled embankment with a gate controlled, concrete gravity ogee weir spillway with six 40 by 50 feet gates. At conservation pool the lake covers 13,144 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,716,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,405,000 O: \$1,461,000 T: \$2,866,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,015,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance actions will consist of filling embankment erosion and constructing a new bulkhead mooring location (\$1,000,000) and an energy sustainability package to install a ground source HVAC system to the project office (\$185,000).

RC: \$777,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$59,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$15,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1974, Hugo Lake has more than \$152,000,000 in cumulative flood damages prevented. Over 402,000 recreation visits with a local economic impact of more than \$9,800,000 took place at Hugo Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Hulah Lake, OK

AUTHORIZATION: Flood Control Act of 1936

LOCATION AND DESCRIPTION: Hulah Lake is located at river mile 96.2 on the Caney River, a tributary of the Verdigris River, about 15 miles northwest of the town of Bartlesville in Osage County, Oklahoma. This is a multi-purpose project with flood control, water supply, low flow regulation, and conservation outputs. The project consists of a 10,200 feet long rolled earth-filled embankment with a gate controlled, concrete gravity ogee weir spillway with ten 40 by 25 feet tainter gates. At conservation pool the lake covers 3,120 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,751,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$164,000 O: \$711,000 T: \$875,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$789,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$50,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$21,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$15,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1951, Hulah Lake has more than \$1,570,000,000 in cumulative flood damages prevented. Over 72,000 recreation visits with a local economic impact of more than \$1,700,000 took place at Hulah Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Kaw Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Kaw Lake is located on the Arkansas River at river mile 653.7, about 8 miles east of the town of Ponca City in Kay County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality, hydropower, recreation, and fish and wildlife outputs. The project consists of a 9,466 feet long rolled earth-filled embankment with a gate controlled, concrete gravity ogee weir spillway with eight 50 by 47 foot tainter gates. A single 37 kW generator operated by run of the river is located at the project. At conservation pool the lake covers 16,750 acres.

CONFERENCE FOR FY 2013: \$2,413,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,674,000 O: \$1,789,000 T: \$3,463,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,445,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance actions include installing a drain system to control left abutment seepage (\$1,000,000) and an energy sustainability package to install a ground source HVAC system to the project office (\$325,000).

RC: \$807,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$211,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1977, Kaw Lake has more than \$945,000,000 in cumulative flood damages prevented. Over 216,000 recreation visits with a local economic impact of more than \$5,400,000 took place at Kaw Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Keystone Lake, OK

AUTHORIZATION: River and Harbor Act of 1950

LOCATION AND DESCRIPTION: Keystone Lake is located on the Arkansas River at river mile 538.8, about 15 miles west of Tulsa in Tulsa County, Oklahoma. This is a multi-purpose project with flood control, water supply, hydroelectric power, navigation, and fish and wildlife outputs. The project consists of a 4,600 feet long rolled earth-filled embankment with a concrete, gated ogee weir controlled spillway with eighteen 40 feet by 35 feet tainter gates. The project contains two 35,000 kW hydropower generator units. At conservation pool the lake covers 23,610 acres.

CONFERENCE AMOUNT FOR FY 2013: \$13,468,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,463,000 O: \$3,427,000 T: \$4,890,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$66,000 – Funds will be used for limited operations and maintenance of structures for navigation water releases for the McClellan-Kerr Arkansas River Navigation System.

FRM: \$1,588,000 – Funds will be used for critical operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$969,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: \$1,914,000 – Funds will be used for critical routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment, and improve hydrological modernization initiative priority activities.

EN: \$345,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; and tracking water storage contract billing and payments.

OTHER INFORMATION: Since construction in 1964, Keystone Lake has more than \$1,510,000,000 in cumulative flood damages prevented. Over 1,081,000 recreation visits with a local economic impact of more than \$26,600,000 took place at Keystone Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: McClellan-Kerr Arkansas River Navigation System, OK

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: The McClellan-Kerr Arkansas River Navigation System provides a route from the Mississippi River through Arkansas and Oklahoma to the head of navigation at the Port of Catoosa near Tulsa, Oklahoma. The navigation channel has a minimum depth of 9 feet and minimum widths of 250 feet on the Arkansas River and 150 feet on the Verdigris River. Total length of the Tulsa District portion of the system is 137 navigation miles. The three locks on the project have chambers that are 110 by 600 feet in size with 20-21 feet normal lifts.

CONFERENCE AMOUNT FOR FY 2013: \$5,552,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$785,000 O: \$4,589,000 T: \$5,374,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,000,000 – Funds will be used for critical routine operations and maintenance for navigation, including critical fleet maintenance support; channel dredging and upland disposal of dredged material; navigation portion of joint costs for dam safety data; implementation of risk reduction measures; and critical lock and dam inspections. Budgeted non-routine maintenance will consist of installing a new pintle ball and bushing at WD Mayo Lock and Dam (\$450,000).

FRM: N/A

RC: \$310,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: N/A

EN: \$64,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Over 314,000 recreation visits with a local economic impact of more than \$7,300,000 took place at the Oklahoma portion of the McClellan-Kerr Arkansas River Navigation System in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Tulsa

McClellan-Kerr Arkansas
River Navigation System, OK

O&M JUSTIFICATION SHEET

PROJECT NAME: Oologah Lake, OK

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Oologah Lake is located on the Verdigris River at river mile 90.2, about 2 miles southeast of the town of Oologah in Rogers County, Oklahoma. This is a multi-purpose project with flood control, water supply, navigation, recreation, and fish and wildlife outputs. The project consists of a 4,000 foot long rolled earth-filled embankment with a gate controlled, modified concrete gravity ogee weir spillway with seven 40x21 foot high radial gates. At conservation pool the lake covers 31,043 acres.

CONFERENCE AMOUNT FOR FY 2013: \$5,100,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$2,917,000 O: \$2,029,000 T: \$4,946,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$3,752,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of replacing one service gate and associated wall liners (\$2,200,000).

RC: \$1,085,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$66,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$43,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1963, Oologah Lake has more than \$870,000,000 in cumulative flood damages prevented. Over 1,019,000 recreation visits with a local economic impact of more than \$24,400,000 took place at Oologah Lake in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Optima Lake, OK

AUTHORIZATION: Flood Control Act of 1936 as amended by the Flood Control Act of 1950

LOCATION AND DESCRIPTION: Optima Lake is located on the North Canadian River at river mile 623.2, about 4.5 miles northeast of the town of Hardesty in Texas County, Oklahoma. This is a multi-purpose project with flood control, water supply, recreation, and fish and wildlife outputs. The project consists of a 16,900 foot long rolled earth-filled embankment with an uncontrolled emergency spillway. At conservation pool the lake covers 5,340 acres.

**CONFERENCE AMOUNT FOR FY 2013: \$49,000 2/
BUDGET AMOUNT FOR FY 2014: M: \$13,000 O: \$31,000 T: \$44,000 1/**

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$44,000 – Funds will be used for minimal maintenance and inspection of project structures as required by regulation and sound engineering judgment.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Funds are sufficient to ensure the safety, security, and integrity of the project. In order to reduce annual Civil Works O&M costs, 12,400 acres of the 13,250 acres of Federal lands at Optima Lake are being managed by the U.S. Fish and Wildlife Service and the Oklahoma Department of Wildlife Conservation under licensing and cooperative agreements.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pensacola Reservoir, Lake of the Cherokees, OK

AUTHORIZATION: Flood Control Act of 1941

LOCATION AND DESCRIPTION: Pensacola Reservoir, Lake of the Cherokees, is located on the Grand (Neosho) River at river mile 77.0 about 13 miles southeast of the town of Vinita in Mayes and Delaware Counties, Oklahoma. This is a multi-purpose project with hydroelectric power and flood control outputs. The project consists of a concrete, multiple-arch dam with gated spillways. The total length of the dam and spillways is 6,565 feet. The main spillway is equipped with twenty-one 36 by 25 feet tainter gates, while the two east spillways are equipped with twenty-one 37x15 foot tainter gates. A total of six 20,000 kW power generating units are located within the structure. At power pool the lake covers 46,500 acres.

CONFERENCE AMOUNT FOR FY 2013: \$133,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$2,000 O: \$144,000 T: \$146,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$146,000 – Funds will be used for routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project was constructed by the Grand River Dam Authority, an Oklahoma State agency, in 1940. Operation of the flood control storage in the reservoir is the responsibility of the US Army Corps of Engineers in accordance with the provisions of Section 7 of the Flood Control Act of 1944.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Tulsa

Pensacola Reservoir,
Lake of the Cherokees, OK

O&M JUSTIFICATION SHEET

PROJECT NAME: Pine Creek Lake, OK

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Pine Creek Lake is located on the Little River at river mile 145.3, about 5 miles northwest of the town of Wright City in McCurtain County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality, fish and wildlife, and recreation outputs. The project consists of a 7,712 foot long rolled earth-filled embankment with an uncontrolled, gravity ogee weir spillway. At conservation pool the lake covers 3,750 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,053,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$226,000 O: \$1,053,000 T: \$1,279,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$868,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$363,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$40,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1969, Pine Creek Lake has more than \$109,000,000 in cumulative flood damages prevented. Over 274,000 recreation visits with a local economic impact of more than \$6,900,000 took place at Pine Creek Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Robert S. Kerr Lock and Dam and Reservoir, OK

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: Robert S. Kerr Lock and Dam and Reservoir is located on the Arkansas River at navigation mile 336.2, about 8 miles south of the town of Sallisaw in LeFlore County, Oklahoma. This is a multi-purpose project with navigation, hydroelectric power, and recreation outputs. The project consists of a 7,230 feet long rolled earth-filled embankment with a concrete, gated ogee weir controlled spillway with eighteen 50 feet by 44 feet tainter gates. The lock is a single-lift Ohio River type with 110 feet by 600 feet long chamber and a normal lift of 48 feet. The project contains four 27,500 kW hydropower generator units. At top of power pool the lake covers 43,796 acres.

CONFERENCE AMOUNT FOR FY 2013: \$5,476,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$2,339,000 O: \$5,103,000 T: \$7,442,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,662,000 – Funds will be used for critical routine operations and maintenance for navigation, including critical fleet maintenance support; channel dredging and upland disposal of dredged material; navigation portion of joint costs for dam safety data; implementation of risk reduction measures; and critical lock and dam inspections.

FRM: N/A

RC: \$404,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: \$4,242,000 – Funds will be used for routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment, and improve hydrological modernization initiative priority activities. Budgeted non-routine maintenance will consist of replacing the unit governors (\$1,230,000).

EN: \$134,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Over 311,000 recreation visits with a local economic impact of more than \$7,000,000 took place at Robert S. Kerr Lock and Dam and Reservoir in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Sardis Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Sardis Lake is located at river mile 2.8 on Jackfork Creek, a tributary of the Kiamichi River, about 2.5 miles north of the town of Clayton in Pushmataha County, Oklahoma. This is a multi-purpose project with flood control, water supply, recreation, and fish and wildlife outputs. The project consists of a 14,138 feet long rolled earth-filled embankment with an uncontrolled spillway and a gate tower with two 4 by 12 feet wheel gates. At conservation pool the lake covers 13,610 acres.

CONFERENCE AMOUNT FOR FY 2013: \$3,801,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$576,000 O: \$836,000 T: \$1,412,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,104,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of an energy sustainability action to add a ground source HVAC system to the project office (\$285,000).

RC: \$235,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$63,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1983, Sardis Lake has more than \$60,000,000 in cumulative flood damages prevented. Over 112,000 recreation visits with a local economic impact of more than \$2,800,000 took place at Sardis Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Skiatook Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Skiatook Lake is located at river mile 14.3 on Hominy Creek, a tributary of Bird Creek, about 5 miles west of the town of Skiatook in Osage County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality control, recreation, and fish and wildlife outputs. The project consists of a 3,590 feet long rolled earth-filled embankment with an uncontrolled spillway and a gate tower with two 4 by 10 feet gates. At conservation pool the lake covers 10,190 acres.

CONFERENCE AMOUNT FOR FY 2013: \$2,012,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$522,000 O: \$1,344,000 T: \$1,866,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,025,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of an energy sustainability action to add a ground source HVAC system to the project office (\$285,000).

RC: \$771,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$35,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$35,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1984, Skiatook Lake has more than \$440,000,000 in cumulative flood damages prevented. Over 544,000 recreation visits with a local economic impact of more than \$12,700,000 took place at Skiatook Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Tenkiller Ferry Lake, OK

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Tenkiller Ferry Lake is located on the Illinois River at river mile 12.8, about 22 miles southeast of the town of Muskogee in Cherokee and Sequoyah Counties, Oklahoma. This is a multi-purpose project with flood control and hydroelectric power outputs. The project consists of a 3,000 feet long rolled earth-filled embankment with a concrete, gravity controlled spillway with ten 50 feet by 25 feet tainter gates. The project contains two 19,550 kW hydropower generator units. At conservation pool the lake covers 12,900 acres.

CONFERENCE AMOUNT FOR FY 2013: \$5,055,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$5,422,000 O: \$3,973,000 T: \$9,395,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$5,057,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of performing structural repairs on ten tainter gates at the project (\$4,000,000).

RC: \$1,633,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: \$2,440,000 – Funds will be used for routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment, and improve hydrological modernization initiative priority activities. Budgeted non-routine maintenance will consist of replacing the unit governors (\$530,000).

EN: \$181,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities. Budgeted non-routine activities will entail revising the project master plan (\$100,000).

WS: \$84,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1952, Tenkiller Ferry Lake has more than \$215,000,000 in cumulative flood damages prevented. Over 3,274,000 recreation visits with a local economic impact of more than \$83,700,000 took place at Tenkiller Ferry Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Tulsa

Tenkiller Ferry Lake, OK

O&M JUSTIFICATION SHEET

PROJECT NAME: Waurika Lake, OK

AUTHORIZATION: PL 88-253

LOCATION AND DESCRIPTION: Waurika Lake is located at river mile 27.0 on Beaver Creek, a tributary of the Red River, about 6 miles northwest of the town of Waurika in Jefferson County, Oklahoma. This is a multi-purpose project with flood control, irrigation, water supply, water quality, recreation, and fish and wildlife outputs. The project consists of a 16,000 foot long rolled earth-filled embankment with an uncontrolled spillway. At conservation pool the lake covers 10,100 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,616,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$230,000 O: \$1,110,000 T: \$1,340,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$815,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

REC: \$452,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

HYD: N/A

ES: \$55,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$18,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1977, Waurika Lake has more than \$189,000,000 in cumulative flood damages prevented. Over 487,000 recreation visits with a local economic impact of more than \$12,500,000 took place at Waurika Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Webbers Falls Lock and Dam, OK

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: Webbers Falls Lock and Dam is located on the Arkansas River at navigation mile 366.6, about 5 miles northwest of the town of Webbers Falls in Muskogee County, Oklahoma. This is a multi-purpose project with navigation and hydroelectric power outputs. The project consists of a 4,370-foot long rolled earth-filled embankment with a concrete, gated ogee weir controlled spillway with twelve 50 feet by 41 feet tainter gates. The lock is a single-lift Ohio River type with a 110-foot by 600-foot long chamber and a normal lift of 30 feet. The project contains three inclined-axis hydropower generator units with a total capacity of 60MW. At top of power pool the lake covers 11,640 acres.

CONFERENCE AMOUNT FOR FY 2013: \$3,852,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$959,000 O: \$4,067,000 T: \$5,026,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,385,000 – Funds will be used for critical routine operations and maintenance for navigation, including critical fleet maintenance support; channel dredging and upland disposal of dredged material; navigation portion of joint costs for dam safety data; implementation of risk reduction measures; and critical lock and dam inspections. Budgeted non-routine maintenance will consist of procuring a new pintle ball and bushing assembly for the miter gate (\$117,000).

FRM: N/A

RC: \$633,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: \$1,911,000 – Funds will be used for routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment.

EN: \$97,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Over 713,000 recreation visits with a local economic impact of more than \$16,600,000 took place at Webbers Falls Lock and Dam in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wister Lake, OK

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Wister Lake is located on the Poteau River at river mile 60.9, about 2 miles south of the town of Wister in LeFlore County, Oklahoma. This is a multi-purpose project with flood control, water supply, low flow augmentation, water conservation, and sedimentation outputs. The project consists of a 5,700 foot long rolled earth-filled embankment with an uncontrolled, concrete, chute-type spillway with a modified broad-crested weir. The conservation pool covers 7,386 acres.

CONFERENCE AMOUNT FOR FY 2013: \$738,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,108,000 O: \$692,000 T: \$1,800,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,461,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of rehabilitating the 35 ton gantry crane, repairing the toe drain outfall, repairing river bank erosion, replacing electrical service at the gate tower (\$750,000), and installing new hoist machinery wire rope and replacing the emergency generator fuel system (\$230,000).

RC: \$50,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: \$276,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$13,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1949, Wister Lake has more than \$660,000,000 in cumulative flood damages prevented. Over 180,000 recreation visits with a local economic impact of more than \$4,300,000 took place at Wister Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

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O&M JUSTIFICATION SHEET

PROJECT NAME: Aquilla Lake, TX

AUTHORIZATION: Flood Control Act of 1968

LOCATION AND DESCRIPTION: Aquilla Lake is located in Hill County, 0.8 miles southwest of Hillsboro, Texas. The project consists of an earth fill dam and uncontrolled concrete spillway, which creates a lake with total storage capacity of 146,500 acre-feet, flood control of 93,600 acre-feet, water supply of 34,100 acre-feet, and sediment reserve of 25,700 acre-feet. There is one undeveloped recreation area of 957 acres and six access areas totaling 27 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,176,000 2/

BUDGET FOR FY 2014: M: \$467,000 O: \$818,000 T: \$1,285,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,067,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package (\$125,000) is to remove woody growth and control vegetation on dam embankment at toe.

RC: \$116,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$82,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$20,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Aquilla Lake has more than \$47,241,600 in cumulative flood damages prevented. Over 91,534 recreation visits with a local economic impact of more than \$1,225,349 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Arkansas-Red River Basins Chloride Control – Area VIII, TX

AUTHORIZATION: Flood Control Act of 1966, as modified by the Flood Control Act of 1970, and as amended by the Water Resources Development Acts of 1974, 1976, and 1986

LOCATION AND DESCRIPTION: The Arkansas-Red River Basins Chloride Control – Area VIII Project is located within the Wichita River basin in northern Texas. This is a single purpose project with water quality control outputs. The project consists of a low flow collection dam on the South Fork of the Wichita River and the Truscott Brine Lake on the North Fork of the Wichita River.

CONFERENCE AMOUNT FOR FY 2013: \$1,529,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$149,000 O: \$1,442,000 T: \$1,591,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: \$1,591,000 – Funds will be used for routine operations and maintenance at the project; water quality control; intensive wildlife management as required by WRDA 1986; monitoring of endangered and other fish and wildlife species; compliance activities associated with the National Historic Preservation Act; natural resources management; and water quality monitoring.

WS: N/A

OTHER INFORMATION: The Red River Authority of Texas has partnered with a private company and proposed to enhance the method of salt water containment and evaporation at the project through the construction and use of salt gradient solar ponds. These salt gradient solar ponds would be used to generate renewable electricity, which could be sold to nearby military installations to assist them in meeting their energy sustainability goals. The implementation of this proposal would decrease project O&M costs and potentially decrease future construction costs associated with completion of Areas VII and X of the project.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bardwell Lake, TX

AUTHORIZATION: PL 96-399

LOCATION AND DESCRIPTION: Bardwell Lake is located in Ellis County near the city of Ennis, Texas. The project consists of an earth fill dam, an uncontrolled spillway, and a gated conduit through the dam with two sluice gates. Flood control storage capacity is 85,400 acre-feet. Seven recreation areas comprise 1,238 acres.

CONFERENCE AMOUNT FOR FY2013: \$1,915,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$594,000 O: \$1,256,000 T: \$1,850,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,170,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$584,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$81,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$15,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Bardwell Lake has more than \$50,312,800 in cumulative flood damages prevented. Over 135,860 recreation visits with a local economic impact of more than \$1,392,764 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Belton Lake, TX

AUTHORIZATION: Flood Control Act of 1946 as modified by the Flood Control Act of 1954

LOCATION AND DESCRIPTION: Belton Lake is located on the Leon River in Bell and Coryell Counties near the city of Belton, Texas. The project consists of an earth fill dam, uncontrolled spillway, gated outlet structure, and flood control for 3,560 square miles of the Brazos River Basin. There are 644,200 acre-feet of flood control storage, 136 miles of shoreline and a boundary of 158 miles. Fourteen recreation areas comprise 2,983 acres.

CONFERENCE AMOUNT FOR FY2013: \$3,486,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$791,000 O: \$2,822,000 T: \$3,613,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$1,315,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$2,065,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$223,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Belton Lake has more than \$800,682,900 in cumulative flood damages prevented. Over 1,675,383 recreation visits with a local economic impact of more than \$18,160,299 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Benbrook Lake, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Benbrook Lake is located in Tarrant County on the Clear Fork of the Trinity River, 15 river miles upstream from its confluence with the West Fork of the Trinity River, 10 miles southwest of Fort Worth, Texas. The project consists of a rolled earth fill dam (9,130 feet long by 130 feet high); an uncontrolled spillway (500 feet wide); a 13-foot diameter conduit controlled by two (6.5 feet x 13 feet) broom-type gates for inlets; and 2 gated outlets into two 30-inch steel pipe conduits. The flood control storage capacity is 170,350 acre-feet. Benbrook Lake has six recreation areas which comprise 3,033 acres.

CONFERENCE AMOUNT FOR FY2013: \$2,313,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,082,000 O: \$1,692,000 T: \$2,774,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,443,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package (\$500,000) is to repair badly eroded concrete surface of the conduit by installing an epoxy liner.

RC: \$1,213,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$101,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$17,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Benbrook Lake has more than \$8,948,580,700 in cumulative flood damages prevented. Over 842,292 recreation visits with a local economic impact of more than \$11,581,403 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Brazos Island Harbor, TX

AUTHORIZATION: House Document 16, 71st Congress, 2nd Session, 1930, as amended, and PL 99-662

LOCATION AND DESCRIPTION: The Brazos Island Harbor project provides deep draft access from the Gulf of Mexico through a jettied entrance channel to Brownsville, and a side channel, authorized to 36 feet, and shallow draft Fishing Boat Harbor near Port Isabel. The project is 22.8 miles long. The authorized depths are 42 feet for the main channel and 44 feet through the jetties and outer bar. A side channel with a project depth of 36 feet leads to the Port Isabel and an adjacent shallow draft Fishing Boat Harbor.

CONFERENCE AMOUNT FOR FY 2013: \$3,560,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,200,000 O: \$0 T: \$3,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,200,000 – Funds will be used for routine annual dredging of the Brazos Island Harbor Jetty Channel to project depth with placement on adjacent shoreline of South Padre Island (\$3,200,000). These funds will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

En: N/A

WS: N/A

OTHER INFORMATION: Based on an economic impact study, the effect of not maintaining the channel to 42 feet results in cost penalties over \$5,700,000 per year for a 38 feet draft restriction and \$19,400,000 for a 35 feet restriction.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Buffalo Bayou and Tributaries, TX

AUTHORIZATION: House Document 456, 75th Congress, 2nd Session 1938 and modified by the Flood Control Act of 1954

LOCATION AND DESCRIPTION: The Buffalo Bayou and Tributaries project is located on Buffalo Bayou and Mayde Creek on the west side of the City of Houston, in Harris and Fort Bend Counties, Texas. Addicks Dam and Reservoir is an earthen dam 61,166 feet long and 48.5 feet above the Mayde Creek streambed with a storage capacity of 200,000 acre-feet. Barker Dam and Reservoir is an earthen dam 71,960 feet long and 36.5 feet above the Buffalo Bayou streambed with a storage capacity of 209,000 acre-feet. These reservoirs are designed to reduce flooding in the City of Houston.

CONFERENCE AMOUNT FOR FY 2013: \$2,862,000 2/
BUDGETED AMOUNT FOR FY 2014: M: \$530,000 O: \$2,354,000 T: \$2,884,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,884,000 – Funds will be used for critical routine operation of the project, implementing the stream gauging and water control bill-back programs, and updating reservoir regulation emergency operation schedules. The funds will also be used for Dam Safety work to clean piezometers, survey structures, and survey top of dam.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Both dams were screened by the National Dam Safety Cadre and were reclassified as DSAC-1 (the highest risk category) due to their location on the west side of the City of Houston, TX and the high population at risk if a dam failure occurred.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Canyon Lake, TX

AUTHORIZATION: River and Harbor Act of 1945 as modified by the Flood Control Act of 1954

LOCATION AND DESCRIPTION: Canyon Lake is located in Comal County, 12 miles northwest of New Braunfels, Texas, on the Guadalupe River. The project consists of a rolled earth fill dam, an uncontrolled spillway and one conduit controlled by two slide gates. The flood control storage is 354,600 acre-feet. Eight recreation areas comprise 1,544 acres.

CONFERENCE AMOUNT FOR FY2013: \$3,321,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$399,000 O: \$2,579,000 T: \$2,978,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$1,236,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$1,578,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$157,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$7,000 - Funds will be used to monitor water usage; manage current water storage agreements and track water storage contract billing and payments.

OTHER INFORMATION: Canyon Lake has more than \$600,598,900 in cumulative flood damages prevented. Over 899,555 recreation visits with a local economic impact of more than \$16,073,926 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Fort Worth

Canyon Lake, TX

O&M JUSTIFICATION SHEET

PROJECT NAME: Cedar Bayou, TX

AUTHORIZATION: Senate Document 107, 71st Congress, 2nd Session

LOCATION AND DESCRIPTION: The Cedar Bayou project is a shallow draft navigation channel adjacent to the Houston and Bayport Ship Channels. The improved portion of the channel extends from its junction with the Houston Ship Channel near Mile 25 eastward across Galveston Bay to the mouth of Cedar Bayou to a point 3 miles upstream. The project dimensions are 10 by 100 feet.

CONFERENCE AMOUNT FOR FY 2013: \$227,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$100,000 T: \$100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$100,000 – Funds will be used for completion of the Dredge Material Management Plan (DMMP) to develop new placement areas and beneficial use sites in preparation for future channel maintenance dredging.

FRM: N/A

REC: N/A

HYD: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: The project is classified as a moderate deep draft port (between 1 - 10 million tons of commercial cargo per year) as it supports barge traffic for Koppel Steel, Gendal United Steel and Bayer Corp. The Cedar Bayou Dredge Material Management Plan requires completion in order to develop new placement areas and beneficial use sites in preparation for future channel maintenance dredging.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Galveston

Cedar Bayou, TX

O&M JUSTIFICATION SHEET

PROJECT NAME: Channel to Port Bolivar, TX

AUTHORIZATION: Senate Document 99, 90th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Channel to Port Bolivar project is a shallow draft channel extending from deep water in the Bolivar Road Channel northward to the tip of Bolivar Peninsula. The channel is 14-foot deep, 300-foot wide, and approximately 950 feet long. It is maintained to accommodate the Texas Department of Transportation Galveston-Bolivar ferry.

CONFERENCE AMOUNT FOR FY 2013: \$409,000 2/
BUDGETED AMOUNT FOR FY 2014: M: \$400,000 O: \$0 T: \$400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$400,000 – Funds will be used for annual maintenance dredging of the main channel to project depth. This will improve navigation performance and project reliability.

FRM: N/A

REC: N/A

HYD: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: Channel to Port Bolivar is utilized heavily by Texas Department of Transportation's Ferry System for public transportation. Dredging to project depth ensures safe and reliable ferry usage. The ferry system serves as the only feasible access to/from Bolivar Peninsula from/to Galveston Island. It provides a hurricane evacuation route for the residents of Bolivar Island, an emergency services system for transporting Bolivar Island residents to Galveston hospital facilities, and a means for businesses and residents to traverse the area.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Corpus Christi Ship Channel, TX

AUTHORIZATION: Senate Document 99, 90th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Corpus Christi Ship Channel (CCSC) is a 45 feet deep channel that extends from the Gulf of Mexico, 34 miles into the Port of Corpus Christi.

CONFERENCE AMOUNT FOR FY 2013: \$8,129,000 2/
BUDGETED AMOUNT FOR FY 2014: M: \$7,250,000 O: \$0 T: \$7,250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$7,250,000 – Funds will be used to perform maintenance dredging within the Corpus Christi Entrance Channel to project depth (\$3,500,000), the La Quinta Channel to advance maintenance depth (\$2,750,000), and perform levee improvements at PA #2 (\$1,000,000). These funds will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Corpus Christi is ranked 6th in the nation with respect to commercial import and export tonnage. The CCSC is utilized by high commercial and recreational traffic - oil tankers, barges, and private fishing and recreational vessels that share navigation in the area. The major commodities that come through the port include crude oil, gasoline, fuel oil, bauxite, feed stock, and wheat. Maintenance of the channel is critical for oil and product tankers transiting to/from the refineries in Corpus Christi, and to the increased need for full channel limits to accommodate new tension-leg platform (TLP) and semi-submersible oil rigs utilizing the channel. The Port of Corpus Christi will see a substantial increase in tonnage by the export of coal as New ELK Coal Company, a U.S. subsidiary of Cline Mine Corporation out of Toronto, Canada will begin using the port as its port of export to Europe, Brazil and Asia. Construction of the La Quinta Channel Extension to a depth of 39 feet is scheduled for completion in summer 2013. The Local Sponsor is pursuing non-Federal deepening of the entire La Quinta Channel from 39 feet to 45 feet, with construction scheduled to commence in summer 2013.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Galveston

Corpus Christi Ship
Channel, TX

O&M JUSTIFICATION SHEET

PROJECT NAME: Denison Dam, Lake Texoma, TX and OK

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Denison Dam, Lake Texoma is located on the Red River at river mile 725.9, about 5 miles northwest of the town of Denison in Grayson County, Texas. This is a multi-purpose project with flood control, water supply, hydroelectric power, regulation of Red River flows, improvement of navigation, and recreation outputs. The project consists of a 17,200 feet long rolled earth-filled embankment with an uncontrolled concrete, gravity chute-type spillway and six 9 feet by 19 feet vertical lift gates. The project contains two 35,000 kW hydropower generator units. At top of power pool the lake covers 74,686 acres.

CONFERENCE AMOUNT FOR FY 2013: \$7,137,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$4,025,000 O: \$7,202,000 T: \$11,227,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$5,245,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of replacing two flood gates (\$2,889,000).

RC: \$2,698,000 – Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and limited breakdown maintenance.

H: \$2,565,000 – Funds will be used for critical routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment, with focus on improving hydrological modernization initiative priority activities. Budgeted non-routine maintenance will consist of replacing the station air compressors, battery chargers, and the inverter (\$200,000).

EN: \$679,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities. Updating the project master plan is part of the budgeted activities planned for FY 2014 (\$200,000).

WS: \$40,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Since construction in 1944, Denison Dam, Lake Texoma has more than \$972,000,000 in cumulative flood damages prevented. Over 6,205,000 recreation visits with a local economic impact of more than \$166,700,000 took place at Denison Dam, Lake Texoma in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Tulsa

Denison Dam,
Lake Texoma, TX and OK

O&M JUSTIFICATION SHEET

PROJECT NAME: Estelline Springs Experimental Project, TX

AUTHORIZATION: Flood Control Act of 1966

LOCATION AND DESCRIPTION: The Estelline Springs Experimental Project is located on the Prairie Dog Town Fork of the Red River, about 0.5 miles east of the town of Estelline in Hall County, Texas. This is a single purpose project with water quality control outputs. The project consists of an earthen ring dike nine feet high and 340 feet in diameter that surrounds Estelline Springs.

CONFERENCE AMOUNT FOR FY 2013: \$42,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$0 O: \$43,000 T: \$43,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: \$43,000 – Funds will be used for routine operations and maintenance at the project; water quality control; intensive wildlife management as required by WRDA 1986; monitoring of endangered and other fish and wildlife species; compliance activities associated with the National Historic Preservation Act; natural resources management; and water quality monitoring.

WS: N/A

OTHER INFORMATION: Construction of the Estelline Springs Experimental Project started in 1963 and was completed and placed in permanent operation in 1964.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ferrells Bridge Dam – Lake O’The Pines, TX

AUTHORIZATION: Flood Control Acts of 1937 and 1946

LOCATION AND DESCRIPTION: Ferrells Bridge Dam – Lake O’The Pines is located on Cypress Creek in Marion, Harrison, Upshur, Morris, Camp and Titus Counties, eight miles west of the city of Jefferson, Texas. The project consists of an earth fill embankment and two conduits. Flood control storage is 587,200 acre-feet and water supply storage is 279,900 acre-feet. Thirty-four recreation areas comprise 758 acres.

CONFERENCE AMOUNT FOR FY2013: \$3,529,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,174,000 O: \$2,226,000 T: \$3,400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$1,482,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$1,472,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$438,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Ferrells Bridge Dam - Lake O’The Pines has more than \$80,184,800 in cumulative flood damages prevented. Over 1,105,318 recreation visits with a local economic impact of more than \$14,508,894 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Freeport Harbor, TX

AUTHORIZATION: House Document 289, 93rd Congress, 2nd Session

LOCATION AND DESCRIPTION: The Freeport Harbor project is located in the vicinity of Freeport, in Brazoria County, Texas. The project is a deep draft navigation channel 45 feet deep by 400 feet wide extending 8.5 miles in length from the Gulf of Mexico through a jettied entrance channel to the port facilities.

CONFERENCE AMOUNT FOR FY 2013: \$8,848,000 2/
BUDGETED AMOUNT FOR FY 2014: M: \$8,300,000 O: \$0 T: \$8,300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$8,300,000 – Funds will be used for annual maintenance dredging of the Freeport Entrance Channel to project depth (\$7,000,000) and perform dewatering activities on PA #1 (\$1,300,000). Funding will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Local Sponsor has obtained a permit to widen channel Freeport channel with non-Federal funding. The project will be widened from 45 feet by 400 feet to 45 feet by 600 feet in the Entrance Channel and 45 feet by 540 feet in the Jetty Channel. Channel widening will provide the ability to maintain two-way traffic of the wider Liquid Natural Gas (LNG) ships scheduled to call the port. The Port of Freeport currently handles 26.7 million tons of commerce annually (16th in foreign tonnage and 27th overall).

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Galveston Harbor and Channel, TX

AUTHORIZATION: House Document 121, 92nd Congress

LOCATION AND DESCRIPTION: The Galveston Harbor project is located in the vicinity of the city of Galveston in Galveston County, Texas. Galveston Harbor project is a 45 feet deep by 800 feet wide channel extending approximately 23.9 miles from deep water in the Gulf of Mexico through jetties to Galveston Bay near Bolivar Road and to the port facilities.

CONFERENCE AMOUNT. FOR FY 2013: \$3,914,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$6,300,000 O: \$0 T: \$6,300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$6,300,000 – Funds will be used for maintenance dredging of the Galveston Entrance Channel to project depth (\$4,300,000) and the advance maintenance depth (\$2,000,000). The funds will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Ranked 12th in the world for cruise lines and first cruise port in the Gulf of Mexico, the Port of Galveston welcomed over 800,000 passengers last year. Also the port ranks 41st as it moved over 13.9 million tons in 2010 consisting of containers, break-bulk, fertilizers and roll-on, roll-off cargo. The Galveston Harbor project provides the entrance channel for the Ports of Houston and Texas City and Galveston (Ranked #2, #10 & #41 in the nation, respectively). The Galveston Harbor Entrance Channel is the busiest channel in North America with respect to tonnage and number of trips.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: GIWW, Channel to Victoria, TX

AUTHORIZATION: PL 100-676

LOCATION AND DESCRIPTION: The Channel to Victoria project is located in the vicinities of Seadrift and Victoria in Calhoun and Victoria Counties, Texas. The Channel to Victoria project is a shallow-draft project 12 feet deep by 200 feet wide and 35.4 miles extending from the Gulf Intracoastal Waterway at Mile 492 northwesterly across San Antonio Bay to the Port of Victoria. The Channel to Seadrift portion of the project provides a 12 feet by 2 mile shallow draft channel from the Channel to Victoria northeasterly and terminating at the facilities at Seadrift.

CONFERENCE AMOUNT FOR FY 2013: \$363,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,200,000 O: \$0 T: \$3,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,200,000 – Funds will be used to perform minimal levee improvements for PA #1 (\$1,000,000) and for maintenance dredging of the Victoria Middle Reach to project depth (\$2,200,000). These funds will improve navigation performance and project reliability.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Port of Victoria ranked 89th in the Nation with respect to commercial tonnage in 2011. A sharp increase in tonnage was realized in 2012. Tonnage is expected to triple from 2.8 million tons in 2011 to 7.5 million tons in 2013. The increase is attributed to recent installation of the Catapillar manufacturing facility and one million barrels per month of crude oil being barged from Victoria to regional refineries. Innovations in oil recovery technology (FRACKING) has re-energized oil production within the Eagle Ford Shale Formation; with an estimated sustained production of 25+ years.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: GIWW, Chocolate Bayou, TX

AUTHORIZATION: House Doc. 217, 89th Cong., 1st Sess.

LOCATION AND DESCRIPTION: The Chocolate Bayou project is located between Galveston and Freeport in Brazoria County, Texas. The project provides a shallow draft channel 12 feet deep by 125 feet wide by 21.3 miles in length from the Gulf Intracoastal Waterway at Mile 376 through Chocolate Bay and Chocolate Bayou to the port facilities in the vicinity of Cottonwood Bayou.

CONFERENCE AMOUNT FOR FY 2013: \$0 2/

BUDGETED AMOUNT FOR FY 2014: M: \$2,800,000 O: \$0 T: \$2,800,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$2,800,000 – Funds will be used for maintenance dredging Chocolate Bayou Main Channel to project depth. These funds will improve navigation performance and project reliability.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Historically, shoaling along the channel has required dredging every four years. However, changes in estuary hydrodynamics changed shoaling patterns, and the channel now requires dredging every two - three years. Increased dredge material has exhausted capacity within upland placement areas and Beneficial Use sites. Construction General funding is required to expand these disposal facilities in accordance with the Dredged Material Management Plan.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Gulf Intracoastal Waterway, TX

AUTHORIZATION: PL 77-675 authorized the Laguna Madre reach and the Water Resources Development Act of 1996 authorized the work at Aransas National Wildlife Refuge

LOCATION AND DESCRIPTION: The Gulf Intracoastal Waterway (GIWW) project traverses the entire Texas Coast, from the Sabine River to Port Isabel, TX. The navigation portion of the Main Channel of the GIWW covers a distance of 423 miles, along with other tributaries. The authorized depth and width is generally 12 feet by 125 feet. The GIWW project also includes flood gates and lock structures at the Brazos and Colorado Rivers, respectively.

CONFERENCE AMT. FOR FY 2013: \$25,580,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$25,135,000 O: \$3,750,000 T: \$28,885,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$28,885,000 – Funds will be used for routine operation and maintenance of the facilities at the Brazos River Floodgates (\$1,725,000) and Colorado River Locks (\$1,825,000), non-routine maintenance at both facilities (\$400,000), shoreline protection at the Colorado River Locks (\$200,000) and timber guide walls at the Colorado River Locks (\$200,000). Funds will be used for maintenance dredging within the following reaches: High Island to Port Bolivar to project depth (\$3,133,000) and to advanced maintenance depth (\$1,027,000), Route across Matagorda Bay to project depth (\$200,000) and to advanced maintenance depth (\$200,000), Freeport to Brazos River Crossing to project depth (\$9,200,000), Colorado River to Upper Matagorda Bay to project depth (\$2,750,000), Turnstake to Live Oak to project depth (\$2,400,000), and Corpus Christi to Port Isabel to project depth (\$4,000,000). Funds will also be used for routine Mooring Buoy Maintenance (\$425,000), Brazos River Mooring Basin Expansion (\$500,000), Colorado River Mooring Basin Expansion (\$500,000) and completion of the High Island to Brazos River Dredged Material Management Plan (\$200,000).

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The navigation structures on the Texas portion of the system do approximately 10,000 commercial lockages a year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Granger Lake, TX

AUTHORIZATION: Flood Control Acts of 1954 and 1962

LOCATION AND DESCRIPTION: Granger Lake is located on the San Gabriel River in Williamson County, about 10 miles northeast of the city of Taylor. The project consists of a rolled earth fill dam and controlled outlet works with two hydraulically-operated gates. The conservation pool impoundment is 4,400 acres, government fee land consists of 13,602 acres and flood control storage capacity is 178,600 acre-feet. Six recreation areas comprise 1,387 acres.

CONFERENCE AMOUNT FOR FY2013: \$2,298,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$414,000 O: \$1,719,000 T: \$2,133,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,207,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package (\$79,000) is to replace service and emergency gate motors and brakes.

RC: \$817,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$101,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Granger Lake has more than \$73,798,300 in cumulative flood damages prevented. Over 200,340 recreation visits with a local economic impact of more than \$2,203,231 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Grapevine Lake, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Grapevine Lake is located in Denton and Tarrant Counties, at river mile 11.7 on Denton Creek, Trinity River Basin, near the city of Grapevine, and approximately 20 miles northwest of the city of Dallas, Texas. The project consists of a rolled earth fill dam, a 500-foot uncontrolled concrete ogee weir spillway, and conduit controlled by two broom-type gates. The flood control/storage capacity is 243,050 acre-feet and conservation/water supply storage is 158,900 acre-feet. Twelve recreation areas comprise 3,660 acres.

CONFERENCE AMOUNT FOR FY2013: \$2,696,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$525,000 O: \$2,116,000 T: \$2,641,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,328,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$1,134,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$164,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$15,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Grapevine Lake has more than \$15,465,840,600 in cumulative flood damages prevented. Over 2,701,181 recreation visits with a local economic impact of more than \$42,292,590 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Hords Creek Lake, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Hords Creek Lake is located in Coleman County, about 13 miles west of the city of Coleman, Texas. The project consists of an earth fill embankment and one conduit controlled by two gates. The water supply outlet is cast iron pipe and the controlled conduit outlet has two slide gates. Flood control storage is 16,670 acre-feet and water supply storage is 5,684 acre-feet. Three recreation areas comprise 1,215 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,895,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$489,000 O: \$1,163,000 T: \$1,652,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$869,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$737,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$46,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Hords Creek Lake has more than \$1,068,800 in cumulative flood damages prevented. Over 206,885 recreation visits with a local economic impact of more than \$1,696,089 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Houston Ship Channel, TX

AUTHORIZATION: House Document 101 (30), PL 104-303

LOCATION AND DESCRIPTION: The Houston Ship Channel project consists of reaches varying depths of 45-ft, 40-ft, & 36-ft and, generally, 300-ft in width and approximately 55.4 mile long. The project extends from the Bolivar Roads channel near Galveston, Texas; north, through Galveston Bay, the San Jacinto River, and Buffalo Bayou to the port facilities in Houston, Texas. The project also provides for 40-ft deep channels, which provide access to the container terminals at Bayport and Barbours Terminal. Finally the project provides for a deep and shallow draft channel extending 6.5 miles from the main stem to the port facilities at Greens Bayou. The Port of Houston is ranked 2nd in the nation with respect to commercial import and export tonnage.

CONFERENCE AMOUNT FOR FY 2013: \$24,110,000 2/ 3/

BUDGETED AMOUNT FOR FY 2014: M: \$29,700,000 O: \$450,000 T: \$30,150,000 1/ 3/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$30,150,000 – Funds will be used for maintenance dredging to advanced maintenance depth for Bayport to Morgans Point (\$5,300,000) and to project depth for Redfish to Beacon 76 (\$3,000,000), Sims to Turning Basin (\$3,200,000) and Bayport Flare (\$2,700,000). Funds will be used for placement area improvements of Peggy Lake PA (\$5,000,000), Alexander Island PA (\$4,000,000), Glendale PA (\$3,000,000), and House Tract PA (\$2,500,000). Funds will also be used for placement area de-watering at Spillman PA (\$1,000,000) and continuation of project DMMP study (\$450,000). These funds will improve navigation performance and project reliability through maintenance dredging and placement area management.

FRM: N/A

RC: N/A

H: N/A

En: N/A

WS: N/A

OTHER INFORMATION: The Houston Ship Channel services the Port of Houston, which is ranked 2nd among U.S. ports, and provides \$118 billion in annual economic benefit to the state of Texas, including more than 785,000 jobs. The HSC has 115 private and public facilities, including more than 160 deep-draft berths and a large number of barge docks and industries. Insufficient funds are impacting the ability to maintain authorized project depth and maintain dredge material PA capacity.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ The Houston Ship Channel funding includes the Houston Ship Channel, Bayport Channel, Barbour's Terminal, and Greens Bayou Channels.

Division: Southwestern

District: Galveston

Houston Ship Channel, TX

O&M JUSTIFICATION SHEET

PROJECT NAME: Jim Chapman Lake, TX

AUTHORIZATION: Flood Control Act of 1954 as amended by the Flood Control Act of 1955

LOCATION AND DESCRIPTION: Jim Chapman Lake is located on the South Sulphur River in Delta and Hopkins Counties, about four miles southeast of the city of Cooper, Texas. The project consists of an earth fill embankment, an uncontrolled spillway, and an outlet works tower. Five recreation areas comprise 2,977 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,736,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$714,000 O: \$1,044,000 T: \$1,758,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,108,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$135,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$500,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$15,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Jim Chapman Lake has more than \$21,129,000 in cumulative flood damages prevented. Over 313,304 recreation visits with a local economic impact of more than \$3,870,882 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Joe Pool Lake, TX

AUTHORIZATION: River and Harbor Act of 1965

LOCATION AND DESCRIPTION: Joe Pool Lake is located in Dallas, Tarrant and Ellis Counties, about 10 miles southwest of the City of Dallas. The project consists of an earth fill dam with an uncontrolled concrete spillway. Total storage capacity is 304,500 acre-feet (flood control 127,200 acre-feet, water supply 142,900 acre-feet, and sediment reserve 38,000 acre-feet). There are five recreation areas with 3,730 acres.

CONFERENCE AMOUNT FOR FY2013: \$1,309,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$424,000 O: \$584,000 T: \$1,008,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$646,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$55,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$280,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$27,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Joe Pool Lake has more than \$3,897,387,700 in cumulative flood damages prevented. Over 989,291 recreation visits with a local economic impact of more than \$19,404,261 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Kemp, TX

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Lake Kemp is located on the Wichita River at river mile 126.7, about 40 miles southwest of the town of Wichita Falls in Wichita County, Texas. This is a multi-purpose project with flood control and conservation outputs. The project consists of a rolled earth-filled embankment and spillway having a total length of 8,890 feet and rising to a maximum height of 115 feet above the streambed. At top of flood control pool the lake covers 15,590 acres.

CONFERENCE AMOUNT FOR FY 2013: \$241,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$84,000 O: \$201,000 T: \$285,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$285,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The city of Wichita Falls, Texas, and Wichita County Water Improvement District No. 2 own Lake Kemp jointly. District No. 2 manages the conservation storage, and the US Army Corps of Engineers manages the flood control storage.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lavon Lake, TX

AUTHORIZATION: River and Harbor Act of 1945 and the Flood Control Acts of 1946 and 1962

LOCATION AND DESCRIPTION: Lavon Lake is located in Collin County, on the East Fork of the Trinity River, about 22 miles northeast of the city of Dallas, Texas. The project consists of an earth embankment, a gate-controlled concrete spillway with twelve tainter gates, and five gate controlled conduits. Flood control storage is 291,600 acre-feet and water supply storage is 443,800 acre-feet. Nineteen recreation areas comprise 2,834 acres.

CONFERENCE AMOUNT FOR FY2013: \$3,017,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$885,000 O: \$2,229,000 T: \$3,114,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,360,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$1,527,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$215,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$12,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Lavon Lake has more than \$642,189,300 in cumulative flood damages prevented. Over 2,059,067 recreation visits with a local economic impact of more than \$34,816,796 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lewisville Dam, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Lewisville Dam is located in Denton County on the Elm Fork of the Trinity River, 30 river miles above its confluence with the Trinity River, and 22 miles northwest of the city of Dallas, Texas. The project consists of a rolled earth fill dam, 32,888 feet in length, with a 16-foot diameter flood conduit, controlled by three (6.5-foot x 13-foot) broom-type gates and a 560-foot concrete spillway. Flood control storage capacity is 340,800 acre-feet and conservation/water supply storage is 598,400 acre-feet. Lewisville Dam has twenty-five recreation areas comprising 4,014 acres.

CONFERENCE AMOUNT FOR FY2013: \$3,295,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$760,000 O: \$2,517,000 T: \$3,277,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: \$1,930,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve the performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include (\$180,000) replace flood gate rollers and chains and (\$175,000) to replace the deck overlay/paint, repair abutment and install retainers.

RC: \$1,103,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$234,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Lewisville Lake has more than \$30,877,497,600 in cumulative flood damages prevented. Over 3,129,345 recreation visits with a local economic impact of more than \$58,046,229 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Matagorda Ship Channel, TX

AUTHORIZATION: House Document 388, 84th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Matagorda Ship Channel project consists of a 38 feet deep by 300 feet wide entrance channel through a jettied entrance and a 36 feet deep by 200 feet wide main channel that extends 25.2 miles and terminates at a 1,000 feet by 1,000 feet wide turning basin at Point Comfort. The navigation project is located in the vicinities of Port O'Connor, Port Lavaca, and Point Comfort in Matagorda and Calhoun Counties, Texas.

CONFERENCE AMOUNT FOR FY 2013: \$4,920,000 2/
BUDGETED AMOUNT FOR FY 2014: M: \$5,200,000 O: \$0 T: \$5,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$5,200,000 – Funds will be used for maintenance dredging from Matagorda Point to Point Comfort to project depth (\$3,200,000). Funds will also be used to construct Beneficial Use Sites to provide required capacity for out year maintenance (\$2,000,000). These funds will improve navigation performance and project reliability.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The Matagorda Ship Channel is ranked 54th in the nation with respect to commercial import and export tonnages.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Navarro Mills Lake, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Navarro Mills Lake is located in Navarro County on Richland Creek, Trinity River Basin, and is 16 miles southwest of the city of Corsicana, Texas. The project consists of an earth fill dam, a controlled spillway using six tainter gates and two conduits controlled by slide gates. Flood storage capacity is 149,200 acre-feet. Six recreation areas comprise 1,195 acres.

CONFERENCE AMOUNT FOR FY 2013: \$3,151,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$960,000 O: \$2,193,000 T: \$3,153,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,948,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include (\$30,000) DIACAP Security requirements for SCADA system for operation of gates remotely, (\$50,000) to evaluate load rating for crane required to set stop logs and strengthen bridge to carry loads and (\$100,000) to remove woody growth and control vegetation on dam embankment at toe.

RC: \$1,108,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$89,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Navarro Mills Lake has more than \$84,319,400 in cumulative flood damages prevented. Over 774,874 recreation visits with a local economic impact of more than \$7,291,217 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: SWD

District: Fort Worth

Navarro Mills Lake, TX

O&M JUSTIFICATION SHEET

PROJECT NAME: North San Gabriel Dam and Georgetown Lake, TX

AUTHORIZATION: Flood Control Acts of 1954 and 1962

LOCATION AND DESCRIPTION: The North San Gabriel Dam and Georgetown Lake are located on the North Fork of the San Gabriel River in Williamson County, about 3.5 miles west of the city of Georgetown, Texas. The project consists of a rock fill dam with impervious earth core. Flood control outlet works include two hydraulically operated gates. Conservation/water supply storage is 29,200 acre-feet and flood control storage capacity is 93,700 acre-feet. Five recreation areas comprise 1,638 acres.

CONFERENCE AMOUNT FOR FY2013: \$2,303,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$541,000 O: \$1,730,000 T: \$2,271,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,042,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$1,065,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$129,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$35,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: North San Gabriel Dam and Georgetown Lake has more than \$15,961,300 in cumulative flood damages prevented. Over 543,187 recreation visits with a local economic impact of more than \$8,284,940 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: O. C. Fisher Dam and Lake, TX

AUTHORIZATION: Flood Control Acts of 1941 and 1944

LOCATION AND DESCRIPTION: O. C. Fisher Dam and Lake is located in Tom Green County, on the North Concho River, near the city of San Angelo, Texas. The project consists of an earth embankment, an uncontrolled spillway, gate-controlled intakes, and two flood control conduits. Flood control storage is 276,900 acre-feet and water supply storage is 79,500 acre-feet. Seven recreation areas comprise 4,710 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,011,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$498,000 O: \$459,000 T: \$957,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$842,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include (\$25,000) to replace outlet works entrance doors, and (\$100,000) to remove woody vegetation along embankment toe.

RC: \$57,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$51,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$7,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: O. C. Fisher Lake has more than \$21,140,800 in cumulative flood damages prevented. Over 102,377 recreation visits with a local economic impact of more than \$1,112,932 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pat Mayse Lake, TX

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Pat Mayse Lake is located at river mile 4.6 on Sanders Creek, a tributary of the Red River, about 12 miles north of the town of Paris in Lamar County, Texas. This is a multi-purpose project with flood control, water supply, recreation, and fish and wildlife outputs. The project consists of an 8,780 feet long rolled earth-filled embankment with an uncontrolled spillway. At conservation pool the lake covers 5,940 acres.

CONFERENCE AMOUNT FOR FY 2013: \$1,148,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$24,000 O: \$980,000 T: \$1,004,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$509,000 – Funds will be used for routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: \$437,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: N/A

EN: \$50,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: \$8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Proctor Lake, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Proctor Lake is located in Comanche County on the Leon River, about 8 miles northeast of the city of Comanche, Texas. The project consists of an earth fill dam with concrete spillway, which is controlled by eleven tainter gates and two low flow conduits. Flood control storage is 314,800 acre-feet and water supply storage is 60,524 acre-feet. Four recreation areas comprise 1,210 acres.

CONFERENCE AMOUNT FOR FY 2013: \$2,454,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$509,000 O: \$1,929,000 T: \$2,438,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,456,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package (\$104,000) is to remove woody vegetation from toe of dam.

RC: \$904,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$68,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Proctor Lake has more than \$82,345,700 in cumulative flood damages prevented. Over 233,419 recreation visits with a local economic impact of more than \$2,764,004 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ray Roberts Lake, TX

AUTHORIZATION: Flood Control Act of 1965

LOCATION AND DESCRIPTION: Ray Roberts Lake is located in Denton, Cook and Grayson Counties, near the city of Denton, Texas. The project consists of an earth fill dam, an uncontrolled spillway, and a gated conduit through the dam with two sluice gates. Flood control storage capacity is 52,400 acre-feet. Ten recreation areas comprise 3,810 acres.

CONFERENCE AMOUNT FOR FY2013: \$1,493,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$421,000 O: \$991,000 T: \$1,412,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,249,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package (\$103,000) is to repair/expand seepage collector system.

RC: \$64,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$89,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Ray Roberts Lake has more than \$21,981,318,400 in cumulative flood damages prevented. Over 1,220,758 recreation visits with a local economic impact of more than \$14,116,273 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Sabine - Neches Waterway, TX

AUTHORIZATION: House Document 553, 87th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Sabine - Neches Waterway (SNWW) project is a 40 feet deep by 400 feet wide network of navigation channels totaling approximately 97 miles. The project extends from the deep water of the Gulf of Mexico to the port facilities at Port Arthur, the Port of Beaumont (via the Neches River), and the Port of Orange (via the Sabine River). The project is located in the vicinities of Beaumont, Port Arthur, Orange, and Sabine Pass in Jefferson and Orange Counties, Texas, and Cameron and Calcasieu Parishes, Louisiana.

CONFERENCE AMOUNT FOR FY 2013: \$19,591,000 2/
BUDGETED AMOUNT FOR FY 2014: M: \$15,600,000 O: \$450,000 T: \$16,050,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$16,050,000 – Funds will be used for maintenance dredging of the following reaches: Sabine-Neches Outer Bar and Bank Channel to project depth (\$4,200,000) and advanced maintenance depth (\$1,800,000), Port Arthur Canal, Junction & Turning Basin to project depth (\$3,800,000) and advanced maintenance depth (\$3,000,000), and the Sabine Pass Channel to project depth (\$2,000,000) and advanced maintenance depth (\$800,000). In addition, funds will be used to perform routine operation and maintenance of the facilities at the Neches River Saltwater Barrier facilities (\$450,000). These funds would improve navigation performance and reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The port facilities at Beaumont, Port Arthur and Orange are ranked 4th, 25th and 110th in the nation with respect to commercial import and export tonnage. The SNWW supports a large percentage of the Nation's petrochemical industry and has two Liquefied Natural Gas (LNG) facilities. Unlike other liquid cargo vessels, LNG vessels cannot be lightered and require under-keel clearances between 5-7 feet for safety considerations. The Port of Beaumont is classified as a "Strategic Port" as it is a major outload port for military deployments. Therefore, proper maintenance dredging of the Neches River reach is critical to the support the military mission.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Galveston

Sabine - Neches
Waterway, TX

O&M JUSTIFICATION SHEET

PROJECT NAME: Sam Rayburn Dam and Reservoir, TX

AUTHORIZATION: River and Harbor Acts of 1945 and 1948

LOCATION AND DESCRIPTION: The Sam Rayburn Dam and Reservoir project is located in Angelina, San Augustine, Sabine, Nacogdoches, and Jasper Counties, on the Angelina River, about ten miles northwest of the city of Jasper, Texas. Features of the dam include: an earth embankment, combined concrete power intake and flood control outlet works, a labyrinth weir spillway, and two gate controlled conduits. Flood control storage capacity is 1,099,500 acre-feet, power pool storage is 1,446,500 acre-feet, and water supply storage is 43,000 acre-feet. Twenty-eight recreation areas comprise 3,151 acres. The project contains two 30,000 kW hydropower generation units.

CONFERENCE AMOUNT FOR FY 2013: \$5,881,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$2,593,000 O: \$4,427,000 T: \$7,020,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,973,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include (\$100,000) to repair piezometers and relief wells located above power pool and (\$600,000) to repair erosion along downstream spillway channel.

RC: \$1,506,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: \$2,800,000 - Funds will be used for critical routine operation and maintenance on hydropower generations and power plant equipment.

EN: \$731,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Sam Rayburn Dam and Reservoir has more than \$1,230,479,805 in cumulative flood damages prevented. Over 1,677,923 recreation visits with a local economic impact of more than \$23,546,849 took place in FY 2010. Additional funds were allocated to the project in FY 2012 to acquire stone for placement below elevation 143.0 to allow additional water supply capacity during drought conditions. Hydropower produced in FY 2012 totaled 27,647 MWh.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern

District: Fort Worth

Sam Rayburn Dam
and Reservoir, TX

O&M JUSTIFICATION SHEET

PROJECT NAME: Somerville Lake, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Somerville Lake is located in Bureson, Lee, and Washington Counties on Yegua Creek, about two miles south of the city of Somerville, Texas. The project consists of an earth fill dam, a dike, an uncontrolled spillway, conduit and gated intake. Flood control storage capacity is 347,400 acre-feet and conservation/water supply storage is 158,900 acre-feet. Eleven recreation areas comprise 3,599 acres.

CONFERENCE AMOUNT FOR FY2013: \$3,190,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$559,000 O: \$2,531,000 T: \$3,090,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,554,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package (\$100,000) is to remove woody vegetation from toe of dam.

RC: \$1,340,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$186,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Somerville Lake has more than \$189,828,200 in cumulative flood damages prevented. Over 1,162,000 recreation visits with a local economic impact of more than \$14,554,290 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Stillhouse Hollow Dam, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Stillhouse Hollow Lake is located in Bell County on the Lampasas River, 16 river miles upstream from its confluence with the Little River, and 5 miles southwest of the city of Belton. The project consists of an earth fill flood control dam, a dike section, and an uncontrolled spillway. Flood control storage capacity is 394,700 acre-feet and conservation/water supply storage is 232,000 acre-feet. Controlled flood releases are accomplished through two hydraulically-operated floodgates. Seven recreation areas comprise 2,089 acres.

CONFERENCE AMOUNT FOR FY2013: \$2,040,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$295,000 O: \$1,718,000 T: \$2,013,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$785,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$1,050,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$168,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Stillhouse Hollow Lake has more than \$154,698,300 in cumulative flood damages prevented. Over 283,784 recreation visits with a local economic impact of more than \$3,070,518 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Texas City Ship Channel, TX

AUTHORIZATION: House Document 427, 86th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Texas City Ship Channel project is a 45 feet by 400 feet wide by 7.6 miles long channel extending from the intersection with the Houston Ship Channel to the port facilities at Texas City. This project supports the petrochemical industry facilities at the Port of Texas City.

CONFERENCE AMT. FOR FY 2013: \$2,234,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$4,300,000 O: \$0 T: \$4,300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$4,300,000 – Funds will be used to perform maintenance dredging within the Main Channel and Turning Basin to project depth (\$2,800,000) and advanced maintenance depth (\$1,500,000). These funds will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Texas City is ranked 10th in the nation with respect to commercial import and export tonnage. The project was recently deepened from 40 feet to 45 feet in 2011. As of 2011, the Port of Texas City supports approximately 150,372 jobs, personal income of \$6.3M, and business sales of \$36.8M. These estimates include direct, indirect and induced income effects of the project.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Texas Water Allocation Assessment

AUTHORIZATION: Flood Control Act of 1970

LOCATION AND DESCRIPTION: The study area includes the state of Texas. The purpose of the study is to identify potential opportunities for the Corps to assist the state in meeting future water needs through immediate technical assistance, and/or through initiation of studies leading to possible implementation of cost-shared water resources projects.

CONFERENCE AMOUNT FOR FY 2013: \$100,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$0 O: \$100,000 T: \$100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: \$100,000 - Funds will be used to continue Sulphur River Environmental and Allen's Creek Instream Flow Studies and ensure that the Fort Worth District plays a role in state water planning. In addition, the funds will be used to complete hydrographic studies at two high priority lakes to be coordinated with the Texas Water Development Board (Waco and Whitney). Additional funds would be used for Belton, Stillhouse, Canyon, Sam Rayburn and Ray Roberts to complete hydrographic studies.

OTHER INFORMATION: Studies conducted under the TWAA program include hydrologic and hydraulic modeling, ground- and surface-water modeling, in-stream flow analyses, reservoir system assessments, reservoir yield studies, water-rights analysis modeling, reallocation guidance, basin studies, environmental assessments, hydrographic surveys, and obtaining digital orthophotos and digital elevation models.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Town Bluff Dam, B.A. Steinhagen Lake, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Town Bluff Dam, B. A. Steinhagen Lake and the Robert Douglas Willis Hydropower Project are located in Tyler and Jasper Counties, on the Neches River, one-half mile from the city of Town Bluff, Texas. The project consists of an earth fill concrete capped embankment which serves as an uncontrolled spillway. The outlet works is controlled by 6 - 40 foot tainter gates. The lake has ten recreation areas comprising 2,185 acres and two 3,700 kW hydropower generation units.

CONFERENCE AMOUNT FOR FY 2013: \$2,769,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,057,000 O: \$2,036,000 T: \$3,093,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$1,416,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: \$562,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: \$962,000 - Funds will be used to operate and maintain hydropower generations and power plant equipment.

EN: \$153,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Town Bluff Dam and BA Steinhagen Lake has more than \$217,143,495 in cumulative flood damages prevented. Over 23,643,943 recreation visits with a local economic impact of more than \$590,061,265 took place in FY 2010. Hydropower produced in FY 2012 totaled 27,000.8 MWh.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Waco Lake, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Waco Lake is located in McLennan County on the Bosque River, 4.6 miles above its confluence with the Brazos River, and two miles west of Waco, Texas. The project consists of a rolled earth fill dam (24,618 feet long, 140 feet high), spillway (560 feet long), controlled by fourteen (40-foot X 35-foot) tainter gates. One 20-foot diameter conduit in outlet works is controlled by three (6-foot, 8-inch x 20-foot) broom type tractor sluice gates. Flood control storage capacity is 573,300 acre-feet and conservation/ water supply storage is 135,700 acre-feet. Eleven recreation areas comprise 3,599 acres.

CONFERENCE AMOUNT FOR FY 2013: \$3,036,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$1,255,000 O: \$2,149,000 T: \$3,404,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,055,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include (\$250,000) to dewater stilling basin and repair concrete sections of chute, and (\$150,000) to remove woody vegetation from toe of dam.

RC: \$1,167,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$170,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$12,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Waco Lake has more than \$423,539,400 in cumulative flood damages prevented. Over 1,025,839 recreation visits with a local economic impact of more than \$14,493,192 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wallisville Lake, TX

AUTHORIZATION: River and Harbor Acts of 1945, 1946, and 1962 and the Supplemental Appropriations Act of 1983 (PL 98-63)

LOCATION AND DESCRIPTION: The Wallisville Lake project is a multiple purpose project built on the Trinity River to prevent salinity intrusion and provide water supply, recreation, navigation, and fish and wildlife enhancements. The project includes approximately 8 miles of earthen dam, an overflow spillway with a tainter gate assembly, and an 84 by 600 feet navigation lock with a sill depth of 16 feet for commerce and pleasure craft use.

CONFERENCE AMOUNT FOR FY 2013: \$2,482,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$701,000 O: \$1,605,000 T: \$2,306,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,306,000 – Funds will be used for labor (district and field) and non-labor field costs for critical routine operation of the project, conducting a study of the river flow, critical routine project maintenance, and implementing the stream gauging and water control bill-back programs. These funds will improve project performance and reliability.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Whitney Lake, TX

AUTHORIZATION: Flood Control Acts of 1941 and 1944

LOCATION AND DESCRIPTION: Whitney Lake is located in Hill, Bosque and Johnson Counties at river mile 442 on the Brazos River, 5.5 miles southwest of the city of Whitney and 35 miles upstream from the city of Waco, Texas. The project consists of an earthen dam 16,795 feet long. The 894 foot spillway is controlled by 17 40-foot wide tainter gates. The 23,560 acre lake has a flood storage capacity of 1,372,400 acre feet above the normal pool level. The project has thirty-four recreation areas totaling 5,394 acres. The project contains two 17,000 kW hydropower generating units.

CONFERENCE AMOUNT FOR FY 2013: \$6,725,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$2,689,000 O: \$5,868,000 T: \$8,557,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$3,248,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package (\$100,000) is to install piezometers in seepage areas and along left downstream abutment.

RC: \$1,818,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: \$3,070,000 – Funds will be used for critical routine operation and maintenance of hydropower generations and power plant equipment.

EN: \$414,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$7,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Whitney Lake has more than \$958,087,600 in cumulative flood damages prevented. Over 1,195,394 recreation visits with a local economic impact of more than \$15,182,265 took place in FY 2010. Hydropower produced in FY 2012 totaled 24,672 MWh.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wright Patman Dam and Lake, TX

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: Wright Patman Dam and Lake is located in Cass and Bowie Counties, on the Sulphur River, and is 9 miles southwest of the city of Texarkana. The project consists of an earth fill dam, uncontrolled spillway, two conduits, and four gates. Flood control storage is 2,329,100 acre-feet and water supply storage is 321,900 acre-feet. Twenty-three recreation areas consist of 3,243 acres.

CONFERENCE AMOUNT FOR FY 2013: \$3,513,000 2/

BUDGET AMOUNT FOR FY 2014: M: \$2,134,000 O: \$2,377,000 T: \$4,511,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: \$2,913,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include (\$1,040,000) to repair conduits, gates and embedded metals, badly corroded and pitted from cavitations, and (\$150,000) to rehabilitate piezometers and relief wells.

RC: \$1,270,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: \$316,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: \$12,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Wright Patman Dam and Lake has more than \$96,602,100 in cumulative flood damages prevented. Over 813,911 recreation visits with a local economic impact of more than \$9,315,165 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Other Business Programs

Regulatory

APPROPRIATION TITLE: Regulatory Program, FY 2014

AUTHORIZATION: Rivers and Harbors Act of 1899, Sections 9 and 10
Clean Water Act, Section 404
Marine Protection, Research and Sanctuaries Act, Section 103

SUMMARIZED FINANCIAL DATA:

Budget Request for Fiscal Year 2014	\$200,000,000
President's Budget for Fiscal Year 2013	\$205,000,000
Change in FY 2014 from FY 2013	-\$ 5,000,000

JUSTIFICATION:

Background. The Corps of Engineers has been regulating specific activities in the Nation's waters since 1899. The Corps' Regulatory program is highly decentralized, with most of the authority for administering the program delegated to District Commanders. There is also a large range in the variability of the types of aquatic resources found in Districts, as well as varying levels of development pressure and the complexity of permit reviews. The Corps' dynamic regulatory program has received more intense interest with the growth of public awareness of the aquatic environment and the state, Federal, and tribal entities' involvement and the increased public and interest group input in the permit application process. This heightened scrutiny may add time to the decision making process, but also provides balance in the overall review. Interagency cooperation in the management and protection of the Nation's aquatic resources has greatly improved over the last ten years, resulting in improved efficiency and effectiveness of the Corps' Regulatory Program. The Corps has worked to implement program changes to enhance decision making, such as establishing procedures and tools to enable more timely responses to permit applicants while also improving protection the aquatic environment. The Corps works with other Federal agencies, states, tribal, and local governments to develop mechanisms that reduce duplication; this is achieved primarily through programmatic and regional general permits. Strategies to eliminate duplication of effort also include joint federal-state permit applications and processing procedures as well as work-sharing agreements with state and local governments. The Corps continues to collaborate with Federal agencies to share information and data to deliver efficient and effective regulatory permit decisions. The 2008 Federal mitigation establishes mitigation requirements procedures and lays out a framework for all Federal agencies involved in the USACE decision-making process to abide by.

Types of Activities Regulated by the Corps:

- a. Construction and other work in waters of the United States including wetlands;
- b. Construction of fixed structures and artificial islands on the outer continental shelf;
- c. Discharges of dredged or fill material into waters of the United States, including wetlands;
- d. The transportation of dredged material for the purpose of disposal in ocean waters.

Evaluation Criteria: The decision whether to issue a permit is based on an evaluation of the probable impacts of proposed activities on the aquatic environment, including wetlands, and other aspects of the public interest. In order to issue a permit, District Commanders must determine that activities are not contrary to the public interest. In addition, for Section 404 permits, the Corps must determine compliance with the Clean Water Act, Section 404 (b)(1) guidelines. Corps permits must also comply with other Federal laws, including the Endangered Species Act, National Historic Preservation Act, and address the mandates guiding the Federal government's trust responsibility for Tribes.

ACCOMPLISHMENTS: In FY 2012, the Corps processed approximately 90,000 activities, authorized over 63,000 actions and completed approximately 59,000 jurisdictional determinations. Of these authorizations, approximately 94 percent were authorized by Regional and Nationwide general permits with

the remainder authorized by individual permits.

In FY 2012, the Corps also reissued the Nationwide permits in March of 2012 to include two new Nationwide permits for land based and water based renewable energy projects. The Corps depends on its nationwide permit program to help manage its regulatory workload. Without regional and nationwide general permits, all activities would have to be evaluated by the individual permit process, which is generally considered more complex and time-consuming. Individual permits comprise approximately 6% of all permits in numbers, but account for almost a third of all Corps man-days expended on permit reviews. Environmental review for these individual permits often involves endangered species, historic resources, and compensatory mitigation, making for a time-consuming process. Although the evaluation time for an individual permit is typically greater than that for a general permit, most general permits also involve substantive evaluation and determination of necessary mitigation.

The Corps continues to be a leader in the arena of utilizing technology to support decision making and tracking regulatory actions. In 2012, additional enhancements were made to the ORM2 geospatial database to further standardize data entry, and regulators were provided with standard operating procedures and guidance on data management. This database is essential for collecting and reporting data for all actions including impact, mitigation, and location data, in a consistent manner. The use of geospatial data from internal and external sources is also a component of the ORM2 system, allowing district Regulators to use data and perform analyses in support of the decision making process. As a result, decisions are based on the best available information and science, and are made in a timely manner. The Corps has made ORM2 data available to our USEPA counterparts and provides nightly updates to key permit information. Regulatory continues to maintain an online interactive report that provides the public with a listing of permits associated with all emergencies that require regulatory action. This capability was expanded in 2012 to support the publications of all final Individual permit regulatory actions, and will continue to be expanded to include pending applications, and impact and mitigation data in 2013.

The Corps Regulatory program, with support from the Institute for Water Resources, used a Cumulative Effects Assessment (CEA) framework to develop a CEA methodology for aquatic resource impacts associated with the Appalachian surface mining projects. The methodology includes a review of available literature, acquisition of available land use and ecological GIS (geographic information system) data, development of logic models to characterize the relationships between land uses and aquatic ecosystem effects, and development of a computer interface ("the CEA tool") with supporting documentation. The Corps based this methodology on the ecological management decision support (EMDS) system, which was originally developed by the U.S. Forest Service to support watershed characterization and decision-making in National Forests. The Corps CEA tool will be used to inform the agency decision maker about the condition of a geographic area. The Corps evaluates the regulated impact in relationship to the past, present and reasonably foreseeable future actions. The CEA tool helps frame a proposed Section 404 action in the context of other activities in the watershed and will be incorporated with other site-specific analyses, including those by the Corps and other agencies. The applicability of this tool will be expanded in 2013, to include additional geographic areas, while an on-going initiative will make this available on a national level by 2014.

In 2012, the Regulatory Program updated and published the National Wetland Plant List, for which it is the Federal lead. Wetland plants are one of three factors used in the 1987 Corps Wetland Delineation Manual; the methodology used to delineate wetlands for purposes of Section 404 of the Clean Water Act. In 2012 the Corps, led by scientists from the Cold Regions Research and Engineering Lab, issued a Federal Register Notice announcing the final updated list after analyzing over 350,000 comments and votes by agencies, academia and the public. The Corps, in cooperation with U.S. Environmental Protection Agency, the U.S. Fish & Wildlife Service and the Natural Resources Conservation Service, also finalized publication of all 10 regional supplements to the 1987 Wetland Delineation Manual to aid in the regional identification of jurisdictional wetlands in the US and US territories. These supplements reflect state-of-the-art science and update the 25-year old wetland delineation manual, while improving the accuracy of wetland delineations based upon regional differences in climate, landforms, geology, soils, hydrologic regimes, and plant/animal distributions. The Corps expanded the Hydrogeomorphic approach for assessing functions of wetland aquatic resources to streams. This comprehensive guidebook provides a science-based stream assessment protocol to evaluate the functions of headwater streams impacted by surface coal mining projects and to support defensible permit and mitigation decisions associated with Corps Regulatory permits. Development of the expansion of the guidebook to other geographic areas and an additional stream type will occur in 2013.

To improve service to the regulated public and stakeholders, the Corps continues to utilize web-based AVATARS and the interactive information systems to assist the public in understanding the Regulatory Program, our mission, and how to obtain permits. This interactive media aims to step the public through the Corps regulatory process and ensure all necessary information is provided with permit applications. The anticipated result is that a greater percentage of permit applications received will have complete and accurate information, reducing the need for Corps staff to spend time and resources requesting additional information. In FY 2013 the Regulatory program will continue to maintain these advancements including required modifications to bring them into compliance with Section 508 of the U.S. Rehabilitation Act.

The Corps continues to protect the Nation's aquatic environment, while working to provide fair and equitable decisions in a timely manner. As development pressure persists or increases, more applicants seek approval to build in or near higher value aquatic areas, including wetlands. Given the complexity of the review and a changing development landscape, more permit decisions—whether issued or denied—are resulting in litigation. The potential for litigation increases the need for more-in-depth review and documentation for complex permits. Court decisions related to Clean Water Act jurisdiction also complicate the permitting process and increase the time needed to provide landowners with decisions, the need for clear guidance, and geospatial decision support tools.

FISCAL YEAR 2014: The FY 2014 request will result in an anticipated flat line of targeted performance and permit execution abilities. Regardless, the Corps will continue to strive to exceed target performance levels and increase the program's level of documentation and consistency necessary for jurisdictional determinations and permit decisions. Pending changes to Clean Water Act guidance and the potential changes to jurisdiction will have an impact on jurisdictional determinations, permit application, and administrative appeal workloads. This projected increase in work may result in additional processing time delays across the program. With reduced staffing levels and potentially increased workloads, the Corps will strive to maintain processing times at or near the current levels for standard permits and general permits. Funds will be allocated for compliance inspections of Corps permitted activities, including critical monitoring of permittee responsible compensatory mitigation. Enforcement and compliance funding collectively will comprise no more than 25% of the request. These funds do not support any additional requirements from the Deepwater Horizon settlements (e.g. RESTORE, NRDA, NFWF, or others) or any other initiatives which do not provide any funding to the Regulatory program which may impact Regulatory workload and performance.

Other program management efforts will continue, including specialized training of Corps personnel and technical assistance to Corps districts by the Engineering Research and Development Center (ERDC) and the Institute for Water Resources (IWR). For FY 2014, approximately \$6,500,000 will be allocated to ERDC and IWR for their direct technical, scientific and policy development for complex and sensitive issues, including ORM2 and RIBITS. This funding will also allow ERDC and IWR to continue to provide scientific and technical support for programmatic initiatives including revisions to the Federal regional wetland delineation supplements, develop guidelines for regional assessment methodologies, expansion of the HGM guidebook geography and to include other stream types, and expansion of the Cumulative Impacts Assessment tool nationally. These initiatives will strengthen our decision-making and ensure consistent implementation of the program at a regional level. Funds will also be applied to ORM2 upgrades and technical advancements for increased data management that support workload statistics and program performance including data for aquatic resource impacts and mitigation. The program will continue to provide funding for currently funded activities that support the Draft National Ocean Policy Implementation Plan.

The \$200 million will be applied approximately as follows:

Permit Evaluation and Jurisdictional Determinations	\$ 163,600,000
Compliance for Authorized Activities & Mitigation	\$ 13,700,000
Enforcement & Resolution	\$ 13,700,000
Administrative Appeals	\$ 1,300,000
National Initiatives and Technical Support	\$ 7,700,000
TOTAL	\$ 200,000,000

Formerly Utilized Sites Remedial Action Program (FUSRAP)

APPROPRIATION TITLE: Formerly Utilized Sites Remedial Action Program, Fiscal Year 2014

State Project Name	Allocated through FY 2012	FY 2013 Budget	Total	FY 2014 Request	Remaining Requirement Low Estimate	Remaining Requirement High Estimate
Connecticut						
COMBUSTION ENGINEERING SITE, WINDSOR, CT	9,962,000	5,000	9,967,000	5,000	9,977,000	9,977,000
Iowa						
IOWA ARMY AMMUNITION PLANT, IA	24,698,000	3,500,000	28,198,000	5,500,000	68,673,000	68,673,000
Maryland						
W.R. GRACE & CO., CURTIS BAY, MD	15,913,000	700,000	16,613,000	800,000	17,293,000	18,293,000
Massachusetts						
SHPACK LANDFILL NORTON, MA	58,795,000	200,000	58,995,000	200,000	74,961,962	74,961,962
Missouri						
LATTY AVE. PROPERTIES, HAZELWOOD, IL	162,689,000	5,000,000	167,689,000	2,000,000	186,836,323	186,836,323
ST. LOUIS AIRPORT SITE VICINITY PROPERTIES, ST. LOUIS, MO	82,181,600	9,900,000	92,081,600	10,500,000	106,957,504	106,957,504
ST. LOUIS AIRPORT SITE, ST. LOUIS, MO	305,867,800	50,000	305,917,800	50,000	308,964,000	308,964,000
ST. LOUIS DOWNTOWN SITE, ST. LOUIS, MO	242,969,400	13,000,000	255,969,400	17,000,000	275,969,400	TBD
New Jersey						
DUPONT & CO., DEEPWATER, NJ	22,837,400	5,000,000	27,837,400	9,000,000	27,837,400	50,897,600
MAYWOOD SITE, MAYWOOD, NJ	567,649,000	28,800,000	596,449,000	34,000,000	930,000,000	940,000,000
MIDDLESEX SAMPLING PLANT, MIDDLESEX, NJ	111,594,000	400,000	111,994,000	400,000	112,059,000	115,059,000
New York						
COLONIE SITE COLONIE, NY	191,264,000	250,000	191,514,000	200,000	193,434,000	202,330,000
FORMER GUTERL SPECIALTY STEEL CORPORATION, LOCKPORT, NY	9,522,650	500,000	10,022,650	500,000	10,664,242	10,664,242
LINDE AIR PRODUCT, TONAWANDA, NY	292,433,056	15,270,000	307,703,056	500,000	309,707,696	309,707,696
NIAGARA FALLS STORAGE SITE, LEWISTOWN, NY	71,829,151	3,600,000	75,429,151	3,600,000	326,236,000	TBD
SEAWAY INDUSTRIAL PARK, TONAWANDA, NY	9,992,000	200,000	10,192,000	200,000	44,230,224	TBD
SYLVANIA CORNING PLANT, HICKSVILLE, NY	20,313,000	1,000,000	21,313,000	1,000,000	TBD	TBD
TONAWANDA LANDFILL, NY	2,496,616	600,000	3,096,616	640,000	4,913,482	4,913,482
Ohio						
FORMER HARSHAW CHEMICAL CO., CLEVELAND OH	17,288,400	500,000	17,788,400	400,000	18,255,551	TBD
LUCKEY SITE, LUCKEY, OH	20,811,105	250,000	21,061,105	3,600,000	265,047,000	265,047,000
Pennsylvania						
SHALLOW LAND DISPOSAL AREA, PARKS TOWNSHIP, ARMSTRONG CO., PA	72,373,786	14,410,000	86,783,786	12,000,000	415,880,007	415,880,007
SUPERIOR STEEL SITE, CARNEGIE, PA	614,300	0	614,300	1,905,000	13,909,754	TBD
Potential Sites	8,597,000	465,000	9,062,000	0	TBD	TBD
Totals	2,322,691,264	99,739,000	2,426,291,264	104,000,000	TBD	TBD

CONNECTICUT

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Combustion Engineering Windsor, CT New England District	9,977,000	9,957,000	5,000	N/A	5,000	5,000	5,000

The Combustion Engineering (CE) site is a 600-acre area in Windsor, Connecticut. CE, under contract to the Atomic Energy Commission (AEC), fabricated nuclear fuel assemblies using highly enriched uranium (HEU) from 1958 to 1961. CE also conducted licensed commercial nuclear activity on the site from the early 1960's to 1993. Although the commercial nuclear fuel fabrication ceased in 1993, CE is still licensed by the Nuclear Regulatory Commission (NRC) for other commercial nuclear activities and the facility is still operating today. HEU is the primary radiological contaminant of concern at the site which may be addressed by Formerly Utilized Sites Remedial Action Program (FUSRAP). Only limited site characterization work had been performed when FUSRAP was transferred from the Department of Energy (DOE) to the Corps for execution. Since then, the Corps has performed a gamma survey of the site, completed site characterization (SI), completed an investigation action at the "Rapaport Building", completed a Remedial Investigation Report and completed a draft Feasibility Study.

CE's NRC license was expanded to cover the FUSRAP waste in FY07. CE will now be responsible for addressing any FUSRAP waste as part of their site decommissioning efforts.

In FY2012 funds were used to continue Corps' monitoring of site activity, support to negotiations with CE and to prepare site close out documents.

In FY2013 we are preparing a no further action decision document.

In FY2014 we will begin the 2-year monitoring period for the site.

**Completion of site remediation by Combustion Engineering in 2013.

IOWA

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014* \$
Iowa Army Ammunition Plant Middletown, IA, St. Louis District	68,673,000	21,398,000	3,300,000	N/A	3,500,000	5,500,000	34,975,000

The Iowa Army Ammunition Plant (IAAAP) is a secured, operational, Army-owned facility located on approximately 19,100 acres near Burlington in Des Moines County, in southeastern Iowa. During its use as an Army facility, portions of the IAAAP were occupied by tenant organizations including the Atomic Energy Commission (AEC). From 1947 to 1975, the AEC operated areas of the plant as the Burlington Atomic Energy Commission Plant (BAECP). In 2002 a Preliminary Assessment was completed for the BAECP and the IAAAP was included in FUSRAP. Evidence of a release was found in several areas. Two areas (Line 1 and the Wet Burn Pads South Area) were already investigated under other Army programs and remedial action remained. Other areas at the plant required additional investigation, which was accomplished by USACE as part of a Remedial Investigation. The FUSRAP Remedial Investigation, which was completed in August 2008, identified three areas (the Firing Site area and Yards C and G) for further evaluation in the Feasibility Study. Contamination consisted of radiological depleted uranium (DU). Alternatives to address the DU contamination were presented in the Feasibility Report and a Record of Decision was completed in September 2011. The selected plan consists of (1) the excavation and sorting of DU contaminated soil with offsite shipment to a properly permitted disposal facility and (2) decontamination of structural surfaces in two buildings at Line 1. The primary regulators/stakeholders include the Environmental Protection Agency Region VII, Iowa Departments of Public Health and Natural Resources, Iowa Army Ammunition Plant (Army) and the local residents. The site was placed on the National Priority List in 1990.

FY 2012 funds were used to complete remediation at seven areas along Line 1 and to sample sump and clarifiers at Line 1 under the Army's existing non-radiological Record of Decision. Approximately 5,599 cubic yards of contaminated material were removed. Funds were also used to prepare a draft remedial design for the depleted uranium areas under the 2011 Record of Decision.

FY 2013 funds will be used to complete remediation at the Line 1 area, to complete the design for removal of depleted uranium contamination at the Firing Sites Area and to initiate remedial action at the areas contaminated with depleted uranium. Approximately 2,500 cubic yards of contaminated material will be removed.

FY 2014 funds will be used to continue remediation of the Firing Sites Area. Approximately 2,000 cubic yards of contaminated material will be removed.

MARYLAND

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
W.R. Grace Site Baltimore, MD Baltimore District	17,293,000 18,293,000	15,113,000	800,000	N/A	700,000	800,000	1,256,540 2,256,540

The W.R. GRACE site is situated within a 260-acre property owned by W.R. Grace-Davidson Chemical Manufacturing Company (GRACE) and located in southwestern Baltimore City on an industrialized peninsula. Currently, GRACE manufactures and produces specialty chemicals at this facility. Contamination at the site is located in two separate and distinct areas of concern. The first is located in the southwestern corner of Building 23 which housed the thorium extraction process and has contaminated surfaces which were impacted by this process. The second area is the approximately 7-acre Radioactive Waste Disposal Area (RWDA) located east of the plant proper. This area received the process byproducts and spent monazite sand and gangue from the thorium extraction process. The Department of Energy (DOE) conducted radiological surveys at the site; however, no characterization or remediation had been performed. The Corps has finalized the remedial investigation/feasibility study (RI/FS) and Record of Decision (ROD) for Building 23 and the RWDA. The remedial action for Building 23 is approximately 80% complete.

A Site-Wide Settlement Agreement was signed in 21 April 2008 by the District of Delaware, Bankruptcy Court. The agreement states that financial liability shall be shared between GRACE and the Government in a 40/60 split and giving GRACE the site lead to obtain, manage and direct the site cleanup according to the Records of Decision for each respective area of concern. GRACE is given the right to seek cost reimbursement from the Government, through the Department of Justice Settlement Fund, for those funds spent on the Government's behalf (60%) in conducting the cleanup work.

In FY 2012, the funds were used to continue to provide technical oversight of GRACE's remedial activities in Building 23 conducted according to the Settlement Agreement.

In FY 2013, funds are being used to complete technical oversight, including a Final Status Survey of Building 23 Remedial Action. Additionally, the Corps will work with Grace to begin oversight of RWDA Remedial Action planning activities conducted according to the Settlement Agreement.

FY 2014 funds will be used to oversee the start of the RWDA Remedial Action work according to the Settlement Agreement.

** The schedule for completion of site remediation is to be determined as USACE as the owner has input on the schedule and contributes to the payment of the costs for the remedial action activities. Currently, USACE anticipates completion of the RWDA remedial action by FY 2018.

MASSACHUSETTS

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Shpack Landfill Norton/Attleboro, MA New England District	74,961,962	58,295,000	500,000	15,766,962	200,000	200,000	0

The Shpack site is an 8-acre abandoned domestic and industrial landfill which operated from 1946 to 1965. It is located along the Norton/Attleboro town boundary line with approximately 5.5 acres in Norton and 2.5 acres in Attleboro. The Town of Norton and Attleboro Landfill, Inc. owns the property. FUSRAP-related radioactive contamination is believed to have come from Metals and Controls, Inc. (now Texas Instruments), which had used the landfill to dispose of trash and other materials from 1957-1965. The General Plate Division of Metals and Controls began to fabricate enriched uranium foils at their Attleboro plant in 1952. In 1959 it merged with Texas Instruments, which continued the operations until 1981, using enriched and natural uranium for the fabrication of nuclear fuel for the U.S. Navy and commercial customers. The site was also listed on the National Priority List (NPL) in 1986, primarily to address other contaminants on site. The Environmental Protection Agency (EPA) has signed an Administrative Order by Consent with a group of Settling Parties (which includes Texas Instruments) for the performance of a remedial investigation/feasibility study (RI/FS). This study was completed in FY04 and a Record of Decision (which addressed the radiological contamination) was signed on 30 September 2004. The Corps has completed a gamma walk-over survey, site characterization, and potentially responsible party (PRP) investigations and completed a draft Engineering Evaluation/Cost Analysis (EE/CA). In FY 2005, the Corps initiated the remedial action in accordance with EPA's Record of Decision. Quantities of contaminated soil have increased significantly over those in the Record of Decision requiring a significant increase in funding to complete the project

In FY2012 funds were used to complete the remedial action and document the work.

In FY2013 funds are being used to document the work and monitor the site.

In FY2014 funds will be used to complete the 2-year monitoring period for the site.

MISSOURI

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Latty Avenue Properties / Hazelwood Interim Storage Site Berkeley, MO St. Louis District	186,836,323	159,699,000	2,990,000	N/A	5,000,000	2,000,000	17,147,323

The Latty Avenue Properties site is comprised of several different tracts of land in North St. Louis County, Missouri. The project includes an 11-acre site, encompassing the Hazelwood Interim Storage Site (HISS) and Futura Coatings on Latty Avenue, and the Latty Avenue Vicinity Properties, which are at various nearby locations. The Hazelwood Interim Storage Site and Futura Coatings were placed on the National Priority List in 1989. The primary contaminants of concern are radium-226, thorium-230, and uranium-238. Surface and subsurface soils are known to be contaminated at levels which pose an unacceptable human health risk based on projected future land use scenarios. The primary regulators/stakeholders include the Environmental Protection Agency Region VII, Missouri Department of Natural Resources, and the St. Louis Oversight Committee.

FY 2012 funds were used to complete the sampling and remediation of the Futura building, to perform verification sampling on two vicinity property buildings, to install a long-term monitoring well on the Futura property and to prepare documentation to release four Latty Avenue properties. Approximately 1,496 cubic yards of contaminated soil were shipped.

FY 2013 funds are being used to complete remediation of the VP-1 building, prepare release documents for three properties and to sample the monitoring well.

FY 2014 funds will be used to release the final property, apply institutional controls, and to sample the monitoring well.

MISSOURI

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
St. Louis Airport Site, Vicinity Properties St. Louis, MO St. Louis District	106,957,504	72,591,600	9,590,000	2,000,000	9,900,000	10,500,000	2,375,904

The St. Louis Airport Site (SLAPS) Vicinity Properties consists of 78 properties in North St. Louis County, Missouri. The contaminated sites include former ball fields (located directly north of SLAPS), areas along haul roads, and Coldwater Creek. The primary contaminants of concern are radium-226, thorium-230, and uranium-238. Dispersion of radioactive material occurred by direct migration from SLAPS via air or water, or as a result of transport along the roadways between the St. Louis Airport Site and the HISS/Latty Avenue Site. This is the case for most of the roadway, shoulder, and ditch contamination. The properties are used for residential, commercial, industrial, recreational and transportation (road easement) purposes. The primary regulators/stakeholders include the Environmental Protection Agency, Region VII, Missouri Department of Natural Resources, and the St. Louis Oversight Committee. The Record of Decision for this site was finalized in FY 2005. A Potentially Responsible Party investigation is underway.

American Recovery and Reinvestment Act (ARRA) funds were used in FY 2010 to remediate 5 vicinity properties. The funds were awarded to a small business contractor which removed and shipped approximately 3,100 cubic yards of material and restored the properties to their pre-excavation state. The ARRA funded remediation was completed one month ahead of schedule in August 2010.

FY 2012 funds were used to remove and ship approximately 9,100 cubic yards from the IA-9 Ballfields and Eva Avenue Ditches, to prepare Remedial Designs for the remainder of the Ballfields area, to sample the upstream reach of Coldwater Creek and to complete pre-design sampling on six additional properties. In addition, documentation to return two vicinity properties to beneficial use was prepared.

FY 2013 funds are being used to excavate and ship approximately 5,000 cubic yards from the IA-9 Ballfields area, to sample Coldwater Creek and three other vicinity properties and to prepare documentation to return nine vicinity properties to beneficial use.

FY 2014 funds will be used to excavate and ship approximately 4,400 cubic yards of material, to prepare one Remedial Design, to perform sampling on 4 additional vicinity properties and to prepare documentation to return ten vicinity properties to beneficial use.

MISSOURI

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
St. Louis Airport Site St. Louis, MO St. Louis District	308,964,000	305,817,800	50,000	N/A	50,000	50,000	2,996,200

The St. Louis Airport Site (SLAPS) consists of 21.7 acres north of Lambert International Airport in North St. Louis County, Missouri. The site is bordered by McDonnell Boulevard on the north and east, Coldwater Creek on the west, Banshee Road and Norfolk and Western Railway on the south. The ditches immediately adjacent to the north and south of SLAPS are considered part of this location. The primary contaminants of concern are radium-226, thorium-230, and uranium-238. The St. Louis Airport Authority owns the property. The primary regulators/stakeholders include the U.S. Environmental Protection Agency Region VII, Missouri Department of Natural Resources, and the St. Louis Oversight Committee. A Potentially Responsible Party Investigation is underway. The site was placed on the National Priority List in 1989. In 2008, the Corps completed remediation of this site in accordance with the 2005 Record of Decision.

FY 2012 funds were used to perform groundwater monitoring and long term management activities in accordance with the Record of Decision.

FY 2013 funds are being used to perform groundwater monitoring and long term management activities in accordance with the Record of Decision.

FY 2014 funds will be used to perform groundwater monitoring and long term management activities in accordance with the Record of Decision.

MISSOURI

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
St. Louis Downtown Site St. Louis, MO St. Louis District	275,969,400 TBD	227,149,400	15,820,000	N/A	13,000,000	17,000,000	0 TBD

The St. Louis Downtown Site and vicinity properties are located in St. Louis, Missouri. The site includes an operational chemical manufacturing facility (Mallinckrodt Inc.) and 36 surrounding properties used by a variety of interests for industrial and commercial purposes. The primary contaminants of concern are radium-226, thorium-230, uranium-238, metals, and organic compounds. The extent of contamination includes 17 acres where contaminated soils are accessible for remediation (17 buildings, subsurface soil, and vicinity properties). The primary regulators/stakeholders include the U.S. Environmental Protection Agency Region VII, Missouri Department of Natural Resources, and the St. Louis Oversight Committee. In 1998, a Record of Decision (ROD) for the accessible areas was signed to allow the removal of approximately 87,000 cubic yards of contaminated soils. The total estimated Federal cost shown above does not reflect possible costs of addressing contamination in inaccessible soils. The inaccessible soils remain to be addressed by CERCLA documentation including a Record of Decision.

FY 2012 funds were used to remediate approximately 21,000 cubic yards (from the Plant 6W/Building 101 area, the City Property (east of the levee), and the Plant 7W building 700 pad in accordance with the Record of Decision for accessible areas), to prepare a draft Explanation of Significant Difference to officially include the Building 101 area to the Record of Decision scope, and to issue documents releasing four vicinity properties. In addition, FY 2012 funds were used to issue the final Remedial Investigation Report, and begin preparation of the Feasibility Study Report and Proposed Plan for the inaccessible areas.

FY 2013 funds are being used to remediate approximately 15,000 cubic yards from the Plant 6 West/Building 101 area and the City Property (east of the levee), to issue documentation releasing five vicinity properties in accordance with the Record of Decision for accessible areas and to issue the Feasibility Report, Proposed Plan and Record of Decision for the inaccessible areas.

FY 2014 funds will be used to remediate approximately 17,700 cubic yards from the Plant 6 West/Building 101 area and to release two properties.

The completion schedule will depend on final calculation of the additional costs resulting from addition of the Building 101 area (as detailed in the Explanation of Significant Difference).

NEW JERSEY

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
DuPont Chambers Works Deepwater, NJ Philadelphia District	27,837,400 50,897,600	22,237,400	600,000	N/A	5,000,000	9,000,000	0 21,560,200

The DuPont Chambers Works site is a 700-acre active chemical plant located in Pennsville and Carneys Point Townships on the southeastern shore of the Delaware River, north of the I-295 Delaware Memorial Bridge, and adjacent to the residential community of Deepwater, N.J. The plant is owned and operated by E.I. Dupont de Nemours & Company. Operations involving uranium at the Chambers Works site began in 1942. As part of its work on the Manhattan Engineer District (MED) Program, DuPont worked on developing a process for converting uranium oxide to produce uranium tetrafluoride and small quantities of uranium metal. The major contaminant is U-238 found in both soil and water samples. Through FY 2004, the Corps continued site characterization and Remedial Investigation / Feasibility Study (RI/FS) activities for soil contamination and investigation of possible groundwater contamination, conducted Technical Project Planning sessions with the stakeholders including the New Jersey Department of Environmental Protection, held Restoration Advisory Board Meetings, conducted extensive coordination with the landowner, and completed work-plans for on-site investigations and completed soil sampling and well installation. In FY 2010 the Corps completed the Draft Feasibility Study (FS) for Regulator review and comment.

In FY 2012, funds were used to develop the draft and final versions of the Proposed Plan, begin the public comment period, and develop the Draft Record of Decision

In FY 2013, funds are being used to develop the final version of the Record of Decision, develop the engineering design and begin construction activities.

In FY 2014, funds will be used to continue remediation activities at the Site, including excavation, transportation and permanent storage of contaminated material at an approved landfill facility.

The schedule for completion of site remediation is to be determined.**

*The total cost will depend upon the specific cleanup standards established for this site, taking into account input from federal, state, and local regulators, the general public, and other stakeholders. Once a final cleanup plan for the site has been approved in a Record of Decision, it will be possible to provide a more definitive estimate. Current project completion schedules and cost estimates do not include any remedial design or remediation action for potential ground-water contamination.

** The completion schedule will depend on the cleanup standards established for this site.

NEW JERSEY

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Maywood Site Maywood, N.J. New York District	930,000,000 940,000,000	527,149,000	40,500,000	54,286,000	28,800,000	34,000,000	299,551,000 309,551,000

The Maywood site is included on the Environmental Protection Agency Superfund National Priorities List. The Corps is currently working under the Federal Facilities Agreement (FFA) signed by DOE and EPA. The site consists of 140 acres of residential, commercial and industrial property totaling 88 commercial and residential properties, located 20 miles north of Newark adjacent to Interstate 80 and State Route 17. There are approximately 281,000 cubic yards of subsurface contaminated material containing thorium-232, radium-226, and uranium-238. The United States owns 11.7 acres of the site, which is being used as a staging area during cleanup operations. The Stepan Company occupies part of the site and operates a chemical factory processing a patented product. Sears operates a large central distribution warehouse (leased) on the site. In the mid-1980's, 25 residential vicinity properties were remediated. In 1994 an Engineering Evaluation/Cost Analysis (EE/CA) by the Department of Energy approved a further interim removal action to remediate an additional 39 vicinity properties. As of the end of FY 00, all of the 39 vicinity properties included in the 1994 EE/CA have been remediated, including 23 completed by the Corps (15 in FY 98, 7 in FY99, and 1 in FY00). Additionally, the Corps has completed a Remedial Investigation/Feasibility Study/Proposed Plan, Record of Decision, Remedial Design (RI/FS/PP/ROD/RD) for soils and buildings on the remainder of the site, prepared an EE/CA for an interim removal action involving 10 commercial properties impacted by New Jersey Department of Transportation projects, initiated remedial action for the remainder of soils and completed potentially responsible party (PRP) negotiations through the Department of Justice with the Stepan Company. A complete review of the cost estimate prepared in 2003 has identified inconsistencies with what we presently know. A new cost estimate has been prepared and the funding information above has been revised accordingly.

American Recovery and Reinvestment Act (ARRA) funds were used to excavate the burial pits 1, 2 and other contaminated portions of the Maywood site on the Stepan property.

FY 2012 funds have been used to continue the remedial action under the soils ROD and finalize the groundwater ROD.

FY 2013 funds are being used to continue the remedial action under the soils and groundwater RODs.

FY 2014 funds will be used to continue the remedial action under the soils and groundwater RODs.

**The completion schedule will depend on the groundwater cleanup standards established for this site.

NEW JERSEY

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Middlesex Sampling Plant Middlesex, NJ New York District	112,059,000 115,059,000	111,194,000	400,000	N/A	400,000	400,000	0 2,665,000

The Middlesex site is a Federal government-owned site located in Middlesex, NJ. There are also 36 Vicinity Properties (VPs). Primary contaminants are Uranium-232, Radium-226, and Thorium-232. The Manhattan Engineer District (MED) established the Middlesex Sampling Plant (MSP) in 1943 for use in sampling, storage, and shipment of uranium, thorium, and beryllium ores. MED operations ended in 1955, and the Atomic Energy Commission (AEC) later used the site for storage and performed limited sampling of thorium residues. In 1967, the AEC terminated activities at the MSP and decontaminated onsite structures to meet criteria then in effect. From 1969 to 1979, the site served as a US Marine Corps training center. In 1980, the MSP was returned to the Department of Energy (as AEC's successor), which designated it for clean up under FUSRAP. MSP was used for interim storage of two piles of radioactively contaminated soils removed from the vicinity properties (VPs) and from the Middlesex Municipal Landfill (MML). The Middlesex site was added to the Environmental Protection Agency Superfund National Priorities List (NPL) in FY 1999. Through the end of FY 2001, the Corps has removed and disposed of the MML pile and the VP pile. Additionally, the Corps has completed a Remedial Investigation/Feasibility Study/Proposed Plan, Record of Decision, Remedial Design (RI/FS/PP, ROD/RD) for soils on the remainder of the site. Coordination with Federal and state agencies, and local communities is continuing.

FY 2012 funds were used to conduct the Groundwater Feasibility Study.

FY 2013 funds are being used to complete the Groundwater Feasibility Study.

FY 2014 funds will be used to complete the Groundwater Proposed Plan.

The schedule for completion of site remediation is to be determined.**

* The total cost will depend upon the specific cleanup standards established for this site, taking into account input from federal, state, and local regulators, the general public, and other stakeholders. Once a final cleanup plan for the site has been approved in a Record of Decision, it will be possible to provide a more definitive estimate.

** The completion schedule will depend on the cleanup standards established for this site.

NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Colonie Site Colonie, NY New York District	193,434,000 202,330,000	191,014,000	250,000	N/A	250,000	200,000	1,720,000 10,616,000

The Colonie site consists of a total area of 11.2 acres plus 56 vicinity properties (VPs). The primary site was owned and operated by National Lead Industries (NL) from 1937-1984. The facility was used for electroplating and manufacturing various components from uranium and thorium. Radioactive materials released from the plant exhaust stacks spread to site buildings, portions of the grounds, and the 56 commercial and residential VPs. NL also dumped contaminated casting sand into the former Patroon Lake. By order of a New York State Court the NL plant shut down in 1984. Coordination is ongoing with the New York State Department of Environmental Conservation, and local leaders. The transfer of the property from NL to the Federal government in 1984 contained "hold harmless" language, which precludes holding NL as a PRP. At the time of transfer of FUSRAP execution to the Corps, the Department of Energy (DOE) had completed remediation of the vicinity properties; and in 1995 finalized an Engineering Evaluation/ Cost Analysis (EE/CA), authorizing a removal action to address soils contamination at the former NL property itself. Through FY 2002, the Corps disposed, off-site, stockpiled materials and excavated contaminated soils, in accordance with the DOE EE/CA; completed a reevaluation of the DOE EE/CA and issued an amended EE/CA and revised action memorandum; and continued the groundwater investigations. Additionally, the Corps has completed the removal action under the revised Action Memorandum. The Corps completed the Groundwater ROD and commenced the preparation of a Soils Record of Decision.

FY 2012 funds were used to complete the Soils Proposed Plan and prepare a Soils Record of Decision document. In addition, investigations were performed at 4 properties for dust contamination and a soil removal action was performed at one DOE remediated vicinity property.

FY 2013 funds are being used to complete the Soils Record of Decision and further evaluate dust contamination.

FY2014 funds will be used to address dust contamination in a decision document and commence the transfer back to Department of Energy.

The schedule for completion of site remediation is to be determined.**

* Once a final soils proposed plan for the site has been approved, it will be possible to provide a more definitive estimate.

** The completion schedule will depend on the cleanup standards established for this site.

NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Guterl Specialty Steel Lockport, NY Buffalo District	10,664,242	8,722,650	800,000	N/A	500,000	500,000	141,592

The former Guterl Specialty Steel site, (a.k.a. Simmonds Saw and Steel Corporation), comprises about 70 acres in the City of Lockport, New York, approximately 20 miles north of Buffalo, New York. The site is bordered by residential and commercial properties to the north, State Route 93 to the west, and the New York State Barge Canal to the south. An active steel plant adjacent to the site is currently being operated by ALLVAC, a business unit of the Allegany Technologies, Inc. Currently, employment is approximately 60 people. The site was used to perform rolling mill operations on about 35-million pounds of uranium metals and 40-thousand pounds of thorium metals between 1948 and 1955 under contracts issued by the Atomic Energy Commission (AEC). The buildings used to support the AEC process encompass about 9 acres, and are abandoned. The site also includes a 9-acre landfill. The USACE is investigating the nature and extent of radiological contamination, and associated human health and ecological risks, resulting from the past AEC operations. The USACE coordinates proposed investigative and remedial activities with the New York State Department of Environmental Conservation, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program.

In FY 2012, funds are being used to continue the FS, and perform annual groundwater sampling and analysis to detect potential contaminant migration.

In FY 2013, funds will be used to finalize the FS and initiate the Proposed Plan, and perform annual groundwater sampling and analysis to detect potential contaminant migration.

In FY 2014, funds will be used to complete the Proposed Plan and initiate the Record of Decision.

* The total estimated federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the Record of Decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

** The completion schedule for this site will depend on the USACE selection of potential long-term remedies (cleanup standards and technologies) developed for this site in the RI, FS, PP, and ROD.

NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Linde Air Products Tonawanda, NY Buffalo District	309,707,696	280,433,056	12,000,000	N/A	15,270,000	500,000	1,504,640

The Linde site is located at 135 East Park Drive in the Town of Tonawanda, a suburb north of Buffalo, NY. The site is owned by Praxair Technology Incorporated. The Linde site is a former industrial complex in an urban area that now serves as the worldwide research and development facility for Praxair with approximately 1,400 workers on site. A public elementary school and numerous residential properties adjoin the property. During the 1940s, the Linde Division of the Union Carbide Corporation used portions of the properties for processing of uranium ores in support of the Manhattan Engineering District (MED) activities to develop the nation's first atomic weapons. The USACE is remediating radiological contamination in the soils, buildings, and groundwater under the authority of the FUSRAP and in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The USACE coordinates project activities with the New York State Department of Environmental Conservation, the New York State Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In FY2012, funds are being used to continue the remediation of contaminated soils at the Linde site, including utility replacement.

In FY2013, funds will be used to continue the remediation of contaminated soils at the Linde site.

In FY 2014, funds will be used to initiate project closeout.

* The total estimated Federal cost is increased to include \$25,051,000 of USDOE costs not previously included and \$106,000,000, estimated by the Corps in its CSRA (Cost-Schedule Risk Analysis), as the 80% confidence cost to complete remedial action at the site. Cost to complete reflects project execution and updated cost to complete via CSRA.

NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Niagara Falls Storage Site Lewiston, NY Buffalo District	326,236,000 TBD	66,529,151	5,300,000	4,680,549	3,600,000	3,600,000	242,526,300 TBD

The Niagara Falls Storage Site (NFSS) is located at 1397 Pletcher Road in the Town of Lewiston, NY approximately 19 miles north of Buffalo, NY. The NFSS is a 191-acre Federally-owned site with environmental impacts from past activities supporting the nation’s early atomic weapons programs under the Manhattan Engineer District (MED) and Atomic Energy Commission (AEC). The site contains a 10-acre Interim Waste Containment Structure (IWCS) built by the US Department of Energy (USDOE) in the 1980s to store high-activity radioactive wastes brought to the site in the 1940s and 1950s. The USACE mission at the NFSS consists of three components. First, the USACE serves as the federal site operator and maintains the facilities and grounds to ensure physical and environmental security. Second, the USACE conducts an environmental surveillance program to ensure that the IWCS is performing as designed and there are no impacts to the environment or public health exceeding federal standards. Third, the USACE is conducting a comprehensive environmental investigation of the IWCS, site soils, groundwater, facilities and infrastructure to evaluate the nature and extent of contamination, the associated human health and ecological risks, and the cleanup alternatives to mitigate risk for long term future land use. The USACE works closely with local, state, and federal law enforcement and homeland security specialists to ensure the site’s physical security. The USACE coordinates project activities with the New York State Department of Environmental Conservation, the New York State Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In FY2012 funds were used to complete and publicly release two IWCS Feasibility Study Technical Memoranda (i.e., Radon Assessment and Health Effects from Hypothetical Exposures) to support the NFSS IWCS Feasibility Study. Funds were also used to draft two IWCS Feasibility Study Technical Memoranda (i.e., Remedial Alternatives Technology Development, and Remedial Action Objectives and Applicable and Relevant and Appropriate Requirements (ARARs), drafting the IWCS Feasibility Study Report, execute public information sessions and outreach activities including technical facilitated services, and perform annual environmental surveillance and maintenance activities. Additionally, a contract was awarded to obtain additional Balance of Plant data for the Feasibility Study on this operable unit.

In FY2013, funds will be used to complete and publicly release two IWCS Feasibility Study Technical Memoranda (i.e., Remedial Alternatives Technology Development, and Remedial Action Objectives and Applicable and Relevant and Appropriate Requirements (ARARs). Funds will also be used to develop and finalize the IWCS Feasibility Study Report, execute public information sessions and outreach activities including technical facilitated services, and perform annual environmental surveillance and maintenance activities. Funds may also be used to obtain additional data as warranted by the results of the Balance of Plant data gap investigation.

In FY2014, funds will be used to complete and publicly release the IWCS FS Report, execute public information sessions and outreach activities including technical facilitated services, and perform annual environmental surveillance and maintenance activities. Funds may also be used to initiate development of the Proposed Plan depending on release date of the Feasibility Study in FY2014. Additionally, a contract will be awarded to obtain services for the preparation and development of four technical memoranda and the Feasibility Study report associated with the Balance of Plant Operable Unit.

* The scope of this project includes seven Operable Units (NFSS-IWCS, NFSS Buildings, Infrastructure, Soils [Balance of Plant], NFSS Groundwater, NFSS Off-Site Underground Utilities Impacts, and the Off-Site Vicinity Properties E, E-Prime, and G).

** Updated Federal costs for the NFSS-IWCS is expected to be completed in 2014 with the completion of the IWCS Feasibility Study. The ultimate Federal project cost for closing out all Operable Units will be known upon completion of Records of Decision for all seven Operable Units. Total Federal Cost is To Be Determined (TBD) after the completion of Feasibility Studies for all operable units.

The completion schedule for this site will depend on the USACE selection of potential long-term remedies (cleanup standards and technologies) developed for all Operable Units.

NEW YORK

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Seaway Site Tonawanda, NY Buffalo District	44,230,224 TBD	9,762,000	230,000	N/A	200,000	200,000	33,838,224 TBD

The Seaway Site is located between River Road and the I-190 expressway in the Town of Tonawanda, 10 miles north of Buffalo, New York. The Seaway Site is owned by Benderson Development Corporation and is a closed commercial landfill of 93-acres. The site is contaminated with radiological wastes, disposed in the landfill by Ashland Oil, which originated from the Linde site approximately 2 miles to the east. During the 1940s the Linde Division of the Union Carbide Corporation processed uranium ores in support of the Manhattan Engineering District (MED) activities to develop the nation's first atomic weapons. At the Seaway Site, approximately 16 acres of the closed landfill are contaminated with radiological waste, including thorium, uranium and radium. There are six areas associated with the Seaway Site; Areas A, B, C, D, Seaway Southside and Seaway Northside. Areas A, B and C are located within the landfill containment system. Cleanup of accessible (i.e., outside of the landfill) Area D soils was included in the Record of Decision (ROD) for the remediation of the Ashland 1 and 2 Sites. During remediation of the adjacent Ashland 1 and 2 Sites contamination was identified outside of the landfill containment system that extends beyond the fence line to the north and south sides of the Seaway Site that is considered as part of the Seaway Site (Seaway Northside and Southside). The Record of Decision for the Seaway Site was signed by the U.S. Army Corps of Engineers in October 2010. The ROD selected Alternative-6 "Containment with Limited Off-Site Disposal" as the long-term remedy for the site. Project activities are coordinated with the New York State Department of Environmental Conservation, the New York State Department of Health, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program.

FY 2012 funds were used to continue preliminary remedial design activities to implement the ROD and support environmental outreach activities.

FY 2013 the Corps continues preliminary remedial design activities, coordinates with stakeholders, and supports environmental outreach activities.

FY 2014 funds will be used to continue remedial design activities and provide stakeholder coordination and environmental outreach services as needed.

NEW YORK

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Sylvania Corning Plant Hicksville, NY New York District	TBD*	18,313,000	2,000,000	4,500,000	1,000,000	1,000,000	TBD*

The Sylvania Corning Plant (Hicksville) site consists of a total area of 10.5 acres divided into three separate properties located at 70, 100, and 140 Cantiague Rock Road. The Verizon entities, current owners of the 140 and 70 properties and lessees of the 100 property, are the corporate successors to the Atomic Energy Commission's (AEC) contract operator. The facility was used for two distinct but similar operations. The first operation (1952-1965) was under contracts with the AEC for research, development and production primarily in support of the Government's nuclear weapons program. The other operation (1952-1967) was AEC licensed work primarily for the production of reactor fuel, and other reactor core components. Radioactive materials, metals and volatile organic compounds were discharged to the plant sumps, which contaminated site soils and groundwater. Coordination is ongoing with the New York State Department of Environmental Conservation, and Verizon entities. The Site has been included in a regional groundwater listing on the National Priorities List (NPL) in September 2011.

American Recovery and Reinvestment Act (ARRA) funds were used to expedite the remedial investigation of contaminated groundwater at the site.

FY2012 funds were used to continue a Sitewide Feasibility Study.

FY2013 funds are being used to continue the Sitewide Feasibility Study.

FY2014 funds will be used to complete the ongoing Feasibility Study.

*Study costs only, a preliminary cost estimate for site remediation, if necessary, will be determined during the development of the Feasibility Study. The completion schedule will depend on the cleanup standards for the site established in the Record of Decision.

NEW YORK

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Tonawanda Landfill Vicinity Property Tonawanda, NY Buffalo District	4,913,482	1,796,616	700,000	902,284	600,000	640,000	274,582

The Tonawanda Landfill Vicinity Property is located in the Town of Tonawanda, a suburb north of Buffalo, NY. The Tonawanda Landfill Vicinity Property consists of two separate parcels of property, or Operable Units; the Tonawanda Landfill Operable Unit (OU) and the Mudflats OU, both located about one mile north of the Linde Site. Both Operable Units are owned by the Town of Tonawanda. The Tonawanda Landfill OU was operated as a municipal landfill by the Town of Tonawanda from the 1930s through 1989, and accepted a variety of waste including incinerator ash, sewage sludge, construction debris, municipal waste, and yard waste. The Mudflats OU is a vacant property, apparently used in the past for pasture or agricultural purposes, and most recently used by the Town of Tonawanda for temporary storage of yard waste, mulch, road repair debris, etc. The Town of Tonawanda is currently planning to develop the Mudflats for commercial use. Early investigations by the US Department of Energy (USDOE) found isolated locations at the site contaminated with Formerly Utilized Remedial Action Program (FUSRAP) material. However, no documentation has ever been found indicating the origin of the material or how it was placed at the site. The U.S. Army Corps of Engineers (USACE) completed a Remedial Investigation in 2005, and issued a Proposed Plan for the site in 2007, which recommended No Action for both the Tonawanda Landfill and Mudflats OUs. A No Action Record of Decision was issued for the Mudflats OU in 2008; however, based on public comments received on the Proposed Plan, the Corps decided to conduct additional sampling in the Tonawanda Landfill OU to confirm whether a hazard exists that warrants further action. An updated Baseline Risk Assessment completed in 2012 concluded that while current risks to human health under current site conditions are within the acceptable limits established in the National Oil and Hazardous Substances Pollution Contingency Plan, if the landfill is not maintained risks to future site users could potentially increase above the acceptable limit. Project activities are coordinated with the NY State Department of Environmental Conservation, the NY State Department of Health, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program.

American Recovery and Reinvestment Act (ARRA) funds were used to execute the contract to complete Phase 2 Remedial Investigation sampling in the Tonawanda Landfill OU.

FY 2012 funds were used to complete the Updated Baseline Risk Assessment (BRA) and begin the Feasibility Study.

FY 2013 funds are being used to complete the Feasibility Study.

FY 2014 funds will be used to prepare the Proposed Plan.

* The total estimated federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the Record of Decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

** The completion schedule for this site will depend on the USACE selection of potential long-term remedies (cleanup standards and technologies) developed for this site in the RI, FS, PP, and ROD.

OHIO

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Former Harshaw Chemical Company Cleveland, OH Buffalo District	18,255,551 TBD	16,688,400	600,000	N/A	500,000	400,000	67,151 TBD

The former Harshaw Chemical Company site is located at 1000 Harvard Avenue, approximately 3 miles south of downtown Cleveland, OH. The site consists of 12 real estate parcels owned by several owners including BASF Incorporated and Chevron Corporation. The site is approximately 40-acres in size and is located in a predominately industrial setting on the banks of the Cuyahoga River. From 1944 through 1959, the Manhattan Engineering District (MED) and the Atomic Energy Commission (AEC) contracted the Harshaw Chemical Company to process uranium in support of the Nation's early atomic energy program. Various forms of uranium were produced for shipment to Oak Ridge, Tennessee, for isotopic separation and enrichment. In 1960, the site was released for unrestricted use by the AEC, following decontamination efforts by the Harshaw Chemical Company, under the guidance of the AEC. The USACE coordinates project activities with the Ohio Environmental Protection Agency, the Ohio Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In FY 2012, funds were used to complete the Feasibility Study for site-wide soils and groundwater and conduct annual groundwater sampling, testing and reporting.

In FY 2013, funds will be used to prepare the Proposed Plan for site-wide soils and conduct annual groundwater sampling, testing and reporting activities.

In FY 2014, funds will be used to prepare the Record of Decision for site-wide soils and conduct annual groundwater sampling, testing and reporting activities.

* The total estimated federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the Record of Decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

** The completion schedule for this site will depend on the USACE selection of a preferred remedial alternative with public and stakeholder acceptance.

OHIO

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Luckey Site Luckey, OH Buffalo District	265,047,000	19,911,105	900,000	1,118,000	250,000	3,600,000	239,267,895

The Luckey Site is located at 21200 Luckey Road near the village of Luckey OH, 22 miles southeast of Toledo. The site is approximately 40-acres in size and is a former magnesium processing facility built in 1942 by the Federal government. The site is currently owned by Abdo Wrecking, LLC. In 1949, the Atomic Energy Commission (AEC) constructed a beryllium production facility at the site which was operated by private contractors. The waste solutions and sludge from the beryllium production operations were stored in lagoons on the property. Waste solutions were also discharged into Toussaint Creek. In 1951 and 1952, the site operator purchased 1,000 tons of contaminated scrap steel from the Lake Ontario Storage Area in Lewiston, NY. The scrap steel is believed to be the source of the radiological contamination. In 1958, beryllium production operations ceased and in 1961 the Federal General Services Administration transferred the property to private ownership. FUSRAP contamination on site consists of both radiological and chemical wastes. The primary radiological contaminants at the site include radium, uranium and thorium. The primary chemical contaminants at the site are beryllium and lead. The USACE coordinates project activities with the Ohio Environmental Protection Agency, the Ohio Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

American Recovery and Reinvestment Act (ARRA) funding was used to complete pre-design field investigations to gather data and further refine the contaminated soil volume estimates which will reduce cost and schedule risk for completing the project.

In FY 2012, funds were used to remove Investigation Derived Waste (IDW) stored on-site, continue remedial design lead-up activities, and conduct annual groundwater sampling, testing and reporting activities.

In FY 2013, funds will be used to develop the acquisition strategy for remedial actions and conduct annual groundwater sampling, testing and reporting activities.

In FY 2014, funds will be used for contract actions required to award a remediation contract, develop remediation work plans, and perform annual groundwater sampling and reporting activities.

PENNSYLVANIA

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Shallow Land Disposal Area (SLDA) Parks Township, PA Pittsburgh District	415,880,007	63,573,786	8,800,000	N/A	14,410,000	12,000,000	323,506,221

The Shallow Land Disposal Area (SLDA) site encompasses 44-acres of land located in Parks Township, Pennsylvania located about 23 miles northeast of Pittsburgh, Pennsylvania. A nuclear fuel production facility located in Apollo, Pennsylvania generated wastes that were emplaced into a series of 10 trenches at the Shallow Land Disposal Area (SLDA) from the period 1960 to 1970. The contamination is believed to consist primarily of uranium and thorium associated with production of nuclear materials at the Apollo facility. The 10 trenches occupy an area of about 1.2 acres of the 44-acre Shallow Land Disposal Area. The site is currently owned by BWX Technologies. The site had operated under a Nuclear Regulatory Commission (NRC) license that was placed in abeyance by the NRC in August 2011. Any future U. S. Army Corps of Engineers (USACE) activities at the site will be consistent with the Memorandum of Understanding (MOU) between the USACE and the NRC for coordination on cleanup and decommissioning of the FUSRAP sites with NRC-licensed facilities, dated July 5, 2001. This project is being coordinated with Pennsylvania Department of Environmental Protection, Pennsylvania Department of Health and USEPA.

In FY 2013, The Corps completed transportation and disposal of radioactive waste exhumed from 2 trenches and demobilization of the existing contract. Additionally the Corps maintained security at the site, continued with O&M of government facilities and equipment, completed a market survey on the new contract for remedial work, initiated preparation of scope or work for future O&M and security contracts, initiated the preparation of a draft for a ROD Amendment and negotiations on an MOA with NRC and DOE for SLDA specific use.

FY 2014 funds will be used to maintain site security, increase interagency coordination, select new contractors, revise remedial work plans and begin site infrastructure improvements.

FY 2015 funds will be used for mobilization planning, mobilization and initiating remediation action (physical excavation).

PENNSYLVANIA

Site	Total Estimated Federal Cost* \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014** \$
Superior Steel Site Scott Township, PA Buffalo District	13,909,754 TBD	614,300	0	N/A	0	3,285,000	11,375,454 TBD

The former Superior Steel Site is located in Scott Township, PA about five miles southwest of downtown Pittsburgh. The Superior Steel Site property is a 25-acre site which has five interconnected warehouse buildings (known as "Building 23"). The site processed uranium metal in support of the Atomic Energy Commission (AEC) fuel element development program between 1952 and 1957. In addition, the site was commercially licensed by the AEC in 1956 to "...receive possession of thorium metal for rolling and cutting" until the license expired in 1958. The AEC operations at the Superior Steel Site resulted in uranium-contaminated building surfaces and subsurface contamination and a collection of investigation-derived waste from a previous remediation by the current site owner, a small manufacturing firm "Superbolt, Incorporated". The USACE is authorized under the FUSRAP to investigate and respond to AEC contamination at the site. Any residual radioactive contamination resulting from the former commercial processing of thorium metal is not eligible for cleanup by the USACE under FUSRAP. The USACE coordinates proposed investigative and remedial activities with the Pennsylvania Department of Environmental Protection, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program.

In FY 2012, no funds are allocated on this project. FY 2011 carryover funds will be used to finalize the SOOH and close out the contract.

In FY 2013, no funds will be allocated on this project.

In FY14, funds will be used to award a contract to initiate a Remedial Investigation.

* The total estimated federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the Record of Decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

** The completion schedule for this site will depend on the USACE selection of potential long-term remedies (cleanup standards and technologies) developed for this site in the RI, FS, PP, and ROD.

APPROPRIATION TITLE: Formerly Utilized Sites Remedial Action Program, Fiscal Year 2014

NATIONAL

Site	Total Estimated Federal Cost \$	Allocation Through FY 2011 \$	Allocation for FY 2012 \$	ARRA Allocation \$	Requested FY 2013 Budget \$	Requested Allocation FY 2014 \$	Additional to Complete After FY 2014 \$
Potential Sites / Contingencies	TBD*	8,582,000	15,000	N/A	465,000	0	TBD*

The Department of Energy (DOE) considered several hundred sites in the public and private sectors for the potential for residual radioactive contamination as a consequence of work accomplished in support of nuclear energy technology development that began in the early 1940s by the Manhattan Engineer District (MED). Of these considered sites, a limited number initially were designated for remediation under FUSRAP and the others were eliminated from further consideration at that time. Thereafter, the DOE notifies the Corps of new information changing the status of eliminated sites to that of eligible according to FUSRAP criteria.

FY2002 funds were used to complete preliminary assessments at a number of sites referred by DOE, and if necessary, site inspections or other activities to determine if there is a release or threat of a release of a hazardous substance into the environment that will present an imminent and substantial danger to public health or welfare, and whether the site should be added to FUSRAP as an active site for further study and remediation.

FY2013 funds are being used to start a preliminary assessments at a one sites recently referred by DOE.

FY2014 no funds have been requested at this time. Minor project contingencies will be addressed if funds are available.

*To Be Determined (TBD). Any new sites added to FUSRAP as a result of the preliminary assessment/site inspection performed with these funds will be included in future budgets.

Recreation

O&M Justification Sheet

PROJECT NAME: Budget Management Support for OM Business Programs

Performance Based Budgeting Support Program
Recreation Management Support Program
Stewardship Support Program
Optimization Tools for Navigation (OTN) Program

AUTHORIZATION:

Performance Based Budgeting Support Program: The Government Performance and Results Act of 1993 (GPRA) and under general authorities contained in various laws.

Recreation Management Support Program: This program is conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

Stewardship Support Program: This program is conducted under the authority of ER 1130-2-540, Chapter 7.

Optimization Tools for Navigation (OTN) Program: Efforts are necessary to provide practical quantitative and predictive tools and data for minimizing and optimizing the costs of dredging of Federally-sponsored navigation projects. The objective is to be able to identify more efficient and effective management strategies for existing navigation infrastructure and to improve the analysis of proposals to deepen and widen channels. These efforts will help lead to an improvement of channel design criteria across the Corps, for the U.S. Navy, and other government/academic institutions.

LOCATION AND DESCRIPTION: These are national programs.

CONFERENCE AMOUNT FOR FY 2013: \$7,042,000 2/

BUDGETED AMOUNT FOR FY 2014: \$7,042,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

ALL: Performance Based Budgeting Support Program. \$4,000,000 will provide enhanced continuing support of Civil Works O&M integrated business line information systems; centrally distributed performance measures, outputs and system inventory information; and evaluation of new measures through the Performance Based Budgeting Support Program. FY 2014 funds will also support enhanced development of cross business output-result oriented performance measures of the incremental return on investment in Corps Civil Works program area including the investigation, acquisition and integration of decision-making software. The funding provides enhanced support for all business lines but with an increased focus for flood risk management, water supply, environmental restoration for the data entry modules and integration: The President's management agenda and GPRA requires that the Corps implement performance based budgeting for Civil Works Operations and Maintenance. The Performance Based Budgeting Support Program addresses this requirement by the collection, management and distribution of data; seeking new methods for linking performance to annual budget requests; and for analyzing the potential economic impacts on service to customers of varying budget levels.

a. Civil Works Business Function Information: Provides critical data and information related to Civil Works project inventories, outputs and performance measures; and for the operational and strategic management of Corps' projects, programs, budget development and studies that directly support the Navigation, Hydropower, Recreation, Environment (Stewardship, Compliance, and Restoration), Water

Organizations: Headquarters and Institute for Water Resources Budget Management Support for OM Business Programs

Supply and Flood Risk Management Business Line missions. This information supports the Corps O&M program and is the sole source for the Corps, other Federal agencies, partners, stakeholders, and public. These funds include supporting the collection, database management, integration, standardization, operation, enhancement, quality control, user assistance, training, compliance with security requirements and ACE-IT services. The IT activities are also reported under OMBIL-Plus in ITIPS and the annual OMB 300b submittal accounting for \$1,423,741 of the overall OMBIL-Plus costs. Funding for this program increases the Corps' ability to produce efficient, effective, and timely performance measures for budgeting, management and the prioritization of capital investment decisions.

b. Civil Works Performance Measurements: Work includes improvement and integration of business line performance measurements to be incorporated into the budget decision-making process; support for the Office of Management & Budget's performance driven initiatives; and support for the future Corps budget preparation process. Efforts focus on the refinement of corporate performance principles; and program and project level performance measures that focus on anticipated performance and output at different levels of funding. Aligns and integrates with the O&M business processes - navigation, hydropower, flood risk management, recreation, water supply and environment. These measurements, at different organizational levels, provide the analytical basis to identify the incremental return on investment in Corps programs at various funding levels and to make adjustments in priorities both at the program and project levels concerning efficiency of facilities or services. Comparison of across business lines measurements among projects at all levels helps focus management attention on the priorities of programs and projects related to capital investments principles.

c. Civil Works Business Analysis: This task analyzes data using statistical and other analytical techniques and tools to uncover relationships among budget, expenditures and performance within and between Corps business line processes. The relationships and statistics drawn from the data will provide evidence to support capital investment priorities and decisions increasing the Corps ability to delivery business line service in the most efficient and effective manner. This task will also develop effective products to explain relationships found in the data and allow decision-makers to visualize cause and effect. This task links the data gathering, collection and distribution, and use of data in the decision-making process.

N: Optimization Tools for Navigation. \$392,000 will be used for the Optimization Tools for Navigation (OTN) Program to continue the deployment and maintenance of the National Navigation Operation & Management Performance Evaluation Assessment System (NNOMPEAS) capabilities and methodology and further its use as a budgeting tool and general project evaluation tool. Funding will also be used (to the extent available) for continued maintenance of the Channel Analysis Design Evaluation Tool (CADET) and development of a vessel lines library to allow use of CADET without proprietary hull line information and to complete technology transfer to USACE so that USACE can independently support general update and maintenance of the algorithms integral to CADET. Funds will also in part be applied in support of continued compilation of dredging cost and quantity data at the channel segment level through implementation of changes to the Resident Management System (RMS) database and to implement changes to NNOMPEAS deemed critical by field analysts to more efficiently facilitate project evaluation and analysis for O&M and new work where applicable.

To maintain the Nation's Federal navigable coastal and inland waterways, nearly 230 million cubic yards of material are dredged in the U.S. annually. In addition, these quantities are likely to increase under proposals for deeper and wider channels to support emerging commercial cargo vessel designs. This initiative will enable the Corps to provide a more credible and informed evaluation of maintenance requirements, based on the economic return. The Corps is developing metrics that would help demonstrate the incremental return-on-investment (ROI) from an increase or decrease of dredging funds and associated maintenance at any specific location. NNOMPEAS is being developed to demonstrate whether such a metric can be provided across all coastal deep-draft harbors and waterways. This tool

uses domestic and foreign trade data to determine and analyze the loaded or immersed drafts and related utilization of vessel cargo-carrying capacity for all recorded cargo vessel calls for individual harbors and channels. The system in turn can provide for the estimation of incremental transportation cost benefits foregone with reduction or absence of maintenance for waterway depth, and of the transportation cost savings with a limited increase in depth. This could offer the potential to optimize maintenance dredging requirements for individual channel reaches and across much of the overall USACE dredging program. A companion tool being developed under the OTN program is CADET, which will allow sophisticated vessel hull modeling not previously available. IWR is conducting this modeling activity jointly with the USACE Engineering Research and Development Center (ERDC) and the U.S. Naval Surface Warfare Center (NAVSEA-Carderoc). CADET will render advanced technologies for methods of analysis and compilation of new physical and numerically-generated data sets descriptive of vessel movement and response within confined waterways and offshore channel areas subject to significant wave climate.

FRM: N/A

RC: Recreation Management Support Program. \$1,650,000 will support the implementation of the Recreation Strategic Plan which will guide many of the support activities performed this FY particularly in the areas of efficiency evaluation, communication and partnerships. The Recreation Budget Evaluation System (Rec-BEST) will be refined to increase the capability to monitor and report Recreation performance measures and evaluate and prioritize budget submissions in response to OMB guidance, also to better link with the Asset Management and risk informed budget process. The Recreation module of the Natural Resource Management Gateway will be further developed to address high priority needs. Demonstrations will be conducted to identify and communicate the benefits of the Corps recreation program and improve effectiveness in addressing the needs of ethnic minority visitors. Emphasis will be placed on improving recreation use monitoring procedures that will be incorporated into recreation performance measures. Customer satisfaction survey methods and benchmarking capabilities will be refined and fully integrated into program performance measures. Technical support will be provided to field staff to implement improved procedures. Support will be provided to standing Natural Resource Management (NRM) committees and task forces including: Partnership Advisory Committee, Ranger CoP, Water Safety, Career Development etc. Support will be provided to Headquarters Recreation program staff regarding strategic planning, development of program evaluations, staffing evaluation and other high priority Headquarters initiatives. Provides resources for evaluation tasks associated with the implementation of the National Recreation Program Road Map.

The recreation program serves almost 370 million recreation visitors and generates about \$40 million in revenue annually. Visitors spend over \$16 billion annually to engage in recreation at Corps projects; over 270,000 full and part time jobs are associated with this spending.

The RMSP supports the recreation program through the conduct of focused management studies to improve operational efficiencies and the provision of technical assistance, to include technology transfer and technology support and maintenance for recreation specific automated information systems. The RMSP supports strategic planning for and performance monitoring of the Corps recreation business program, subject to the Government Performance and Results Act (GPRA).

The RMSP has 3 major components, which together provide comprehensive support to the Corps Recreation Business Program:

1. Focused Management Studies. RMSP provides focused management studies and reports to acquire and analyze information about recreation trends, accessibility, emerging issues, user conflicts, visitor diversity, use fee impacts and similar elements affecting the Corps recreation program. Analyses are

conducted to support the recreation area modernization program, implementing facility and service standards, and in similar product delivery improvement efforts. Information and technology transfer pursuant to these studies is funded by the RMSP. Ongoing trends analysis provides valuable data on which to base decisions about necessary short and long term adjustments to the program to meet public needs.

2. Management/Technical Assistance. RMSP provides technical assistance to the Recreation Community of Practice in the development of management tools, which quantify recreation program outputs and relate them to customer needs and budget allocations for the purpose of measuring performance. This includes gathering and analyzing information about customer satisfaction with the Corps recreation program. RMSP assures the field workforce is equipped with "state-of-the-art" skills and knowledge to deal with a rapidly changing public. RMSP provides technical support and maintenance of performance based budgeting tools, visitation monitoring and analysis systems, fee collection and reporting, economic analysis, facility inventory and condition assessment, and similar automated information programs. RMSP provides short-term assistance to projects in solving specific technical problems.

3. Support to Recreation Program Strategic Planning. Funding to support the activities of the Recreation Leadership Advisory Team (RLAT) is included in this program. The RLAT is composed of representatives from the division, district and project levels of the Corps natural resources management program. It provides input, advice and support to the Corps strategic planning for the recreation business program.

H: N/A

EN: Stewardship Support Program. \$1,000,000 will conduct focused management action studies and recommend guidance to address high priority program efficiency and effectiveness concerns, including responses to new protocols for asset and risk management, regulation changes and administration priorities through the Stewardship Support Program (SSP). Efforts will continue in support of performance based budgeting including further development of performance measures, development of strategies to improve program outputs and outcomes, and refinement of E-S BEST and related guidance to monitor program performance and risk analysis. Progress in recent years on developing standards, published protocols and web-based data entry programs have resulted in improvements in advancing completion of the inventories and will result in expanded data from national GIS analysis to prioritize work during declining or flat budgets. Increased technical support to the field will provide training and guidance to assist in revision to performance measures during 2014, as needed to meet new Civil Works transformation implementation and recent new High Priority Goals of OMB. The SSP will also continue support of the Environment-Stewardship Community of Practice (CoP) including further development of the NRM Gateway for information and technology exchange. These activities will provide benefits in increased program effectiveness through implementation of assessment recommendations. Improved program performance will be facilitated through increased CoP access to best practices and policy guidance, and effective development and execution of performance based budgets.

The Stewardship Support Program (SSP) was established by regulation in FY 02 to provide broad support to Environment-Stewardship function at operating projects by assisting in the identification of national program needs, the development of new national program activities, strategic program planning, and the recommendation of national stewardship program funding priorities. Support will be provided in refining the Environment–Stewardship business program strategic plan and goals, and budget processes, to address the targeted outcomes of the overall Corps CW Strategic Plan, using input from the Stewardship Advisory Team, other associated Corps business programs and stakeholders. Goals and

Organizations: Headquarters and Institute for Water Resources Budget Management Support for OM Business Programs

objectives have been refined, and actions will be identified to achieve them. Funding this program from a single source reflects the nationwide application and supports standardization in program direction and outputs. The program will continue to meet business line needs involved with the Corps Civil Works Transformation, initiating asset management and risk assessment along with additional changes in the administration focus on the America's Great Outdoors (AGO) Initiative and long term sustainability. The SSP supports the Environment–Stewardship program by addressing issues or initiatives that have a broad applicability to many USACE Civil Works projects.

The three basic components of the SSP are:

- (1) Focused Management Actions and Studies. These activities are to implement a course of action or practice within field office activities, a region, or nationwide. Examples of management actions might include developing/ assembling an array of management practices for establishing riparian habitat, or creating a forum to share common experiences, build teams, and disseminate information. Examples of management studies might include geospatial tools for use at the projects or conducting studies on management of threatened and endangered species and meeting biological opinion requirements
- (2) Policy Guidance and Management Support. Such activities relate to the development and/ or implementation of guidance. Examples of policy guidance included facilitating cooperative agreements with stewardship non-governmental organizations, or amending the annual Budget Engineer Circular to provide emphasis on new environmental threats or nationally significant resources. Mapping stewardship performance and adjusting to more integrated watershed and asset management will be a focus for FY 14. Funding to support the activities of the Stewardship Advisory Team (SAT) is included in this program. The SAT is composed of representatives from the division, district and project levels of the Corps Environmental Stewardship Program. It provides input, advice and support to the Corps strategic planning for the Environment-Stewardship business program.
- (3) Information Exchange. These activities are designed to build, integrate, and share our knowledge base to support greater understanding of the environment and the impacts of program work.

WS: N/A

OTHER INFORMATION:

ACCOMPLISHMENTS IN PRIOR YEARS:

Performance Based Budgeting Support Program. Included were newly fielded centralized natural resource, water supply collection system and user's training in OMBIL Plus data entry and access. The One-stop access for much of Civil Works budget performance information was expanded for budget submittals in lieu of separate data calls. An integrated data set for all business lines was created with data for FY1999-2011 providing trend information for analysis. Performance data was merged with P2 for use in the navigation budget development process eliminating data calls and providing nationally standardized information. The inclusion of asset management and capital investment principals were considered.

Recreation Management Support Program. Recent accomplishments include conducting an evaluation of NRM Staffing levels, support for the Recreation Strategic Planning team, development and implementation of a national survey of Park Rangers, refinement of the OMBIL Recreation module and development of platforms to market the CE recreation program on social media websites, (i.e. FaceBook and YouTube). Other past products include Recreation Budget Evaluation System (RecBEST), visitation estimation methodology and data collection and reporting tools, economic impact methodology and analysis tools, customer satisfaction survey and benchmarking tools implemented at all CE projects, studies on recreation preferences of ethnic groups including cross-cultural communication issues, and

Organizations: Headquarters and Institute for Water Resources Budget Management Support for OM Business Programs

support for development of a strategic context as a foundation for transitioning to a performance based environment, to include performance based budgeting. The Natural Resources Management Gateway was developed as a knowledge management tool for the NRM community and is compatible with other Corps KM and Community of Practice initiatives. The Corps Lakes Gateway was developed and provides information to millions of visitors annually on recreation opportunities at Corps projects (in FY10 over 45 million page views). The Corps Lakes Gateway also delivers Corps recreation information to the interagency RecreationOneStop project in support the Administration's E-GOV initiative. Guidance and appropriate tools were developed to improve interpretive services associated with the CE recreation program that advance the public's understanding of the environment and the Corps Environmental Operating Principles. Support to Headquarters was provided to refine the recreation business program strategic plan, utilizing input from the RLAT and stakeholders. Goals and objectives were refined, and actions identified to achieve them. Innovative partnership approaches were developed and field guidance prepared to improve stakeholder participation. Stakeholder outreach was conducted to develop partnerships for strategic initiatives.

Stewardship Support Program. The allocation of project operations and maintenance funds to conduct specified nationwide (multiple project) activities to improve the efficiency and cost effectiveness of the Environment-Stewardship business program has been employed, with subcommittee staff knowledge and concurrence, since the late 1990s for activities similar to those identified for FY 2014. Past products of the Stewardship Support Program include the initial set of Environment-Stewardship program performance measures, which are in accord with the Government Performance and Results Act and used to measure and monitor priority program outputs and outcomes; the Stewardship module of the Operations and Maintenance Business Information Link (OMBIL), which receives and stores selected data concerning the stewardship of project natural resources, and which provides for retrieval of that information by all levels of the Corps; the pilot version and subsequent refinements of the Environment-Stewardship Budget Evaluation System (E-S BEST) used to assist in developing budget scenarios and ranking budget proposals. Components of the Environment-Stewardship portion of the Natural Resources Management (NRM) Gateway, a knowledge management tool for the NRM community, have been completed and others are underway. Support to Headquarters was provided to develop and refine; the Environment-Stewardship business program objectives and budget criteria, the program management plan for the Environment-Stewardship Community of Practice, and the revision of the Environment-Stewardship program regulation. Formulation of program decision tool to evaluate the threats to, and significance of CE managed natural resources was initiated in FY 13 and will continue into FY 14

Optimization Tools for Navigation. Funds in FY 13 will allow maintenance of the core CADET vessel hull modeling effort in conjunction with ERDC with reduced support from NAVSEA-CARDERO, and the initiation of work and requirements to develop a deep-draft self-propelled vessel lines library. Work will continue on the NNOMPEAS initiative with updating vessel transportation and vessel operating cost data for additional years through the latest year of data availability, increasing or expanding vessel transportation trips and costs to over 115 to 120 coastal harbors nationwide, initial software development to link foreign trade databases with vessel characteristics and vessel movement databases, initiating second-phase modifications to the RMS database for collecting dredging costs and quantities for discrete channel segments, and continued deployment of the modified RMS database through training sessions for coastal District operations staff. Continued(ing) use of NNOMPEAS for further development of efforts to measure incremental transportation costs and benefits, and development of relative rankings based on ROI for major coastal harbors under ongoing initiatives for Value-to-the-Nation (VTN) and for HQUSACE O&M program budgeting input. Currently NNOMPEAS is also being employed for evaluation of vessel calling patterns and supporting load factor analysis (LFA) critical to coastal deep-draft studies, and the evaluation of vessel diversion for offshore wind farm development. Correspondingly, efforts for CADET

will involve deployment and training for use on coastal waterway projects through FY 13 which will support better evaluation of depth needed in offshore environments with simultaneous objectives of minimizing related dredging costs.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Cultural Resources (NAGPRA/Curation)

AUTHORIZATION: The Native American Graves Protection and Repatriation Act (NAGPRA), P.L. 101-601, enacted on 16 November 1990 contains data gathering, reporting, consultation, repatriation, and permitting provisions that have near-term and long-term implications for Civil Works programs and projects.

LOCATION AND DESCRIPTION: This nationwide project encompasses all civil work districts with the goal of ensuring USACE compliance with the reporting requirements of NAGPRA and the federal curation regulation, 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections.

CONFERENCE AMOUNT FOR FY2013: \$4,500,000 2/

BUDGETED AMOUNT FOR FY2014: \$4,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The Native American Graves Protection and Repatriation Act (NAGPRA) addresses the recovery, treatment, and repatriation of Native American and Native Hawaiian cultural items by Federal agencies and museums. As defined by the Act, cultural items are human remains, associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony. In FY 1994, the Corps began the process of inventorying human remains and associated funerary objects and completing summaries as mandated by the legislation. In addition, the Corps is responsible for curation of cultural resource materials collected from its water resources development projects. A Mandatory Center of Expertise (MCX), located at the St. Louis District, provides overall management of the Corps NAGPRA programs and serves as an information source and a centralized base for curation compliance and contracting. The MCX will facilitate the assurance of consistent nationwide NAGPRA program implementation and operation. The Corps is responsible for the curation of at least 46,255 cubic feet of artifacts collected from its water resources development projects and at least 3,511 linear feet of associated records. Curation of these materials, the largest volume of all federal agencies responsible for this activity, is required by a number of public laws with implementing guidance in 36 CFR Part 79. Corps collections represent over 80 percent of the total DoD collections. These extensive collections are located in hundreds of curation facilities across the nation. The costs are to accomplish NAGPRA work and to fund MCX curation support to the districts. Associated with efforts to complete NAGPRA and because of the fragile nature of many of the artifact and record collections, the MCX is seeking to accelerate the process of effectively managing the Corps curation effort with a project (i.e., Veterans Curation Project) that provides disabled veterans with training and additional job skills in archaeological collections management, while providing for the rehabilitation of the fragile collections. Funding this item will ensure full USACE compliance with NAGPRA legislation and expedite collection stabilization, proper storage, and curation support to all Districts.

PROPOSED ACTIVITIES FOR FY 2014: The MCX and Corps Commands will continue the process of inventorying Native American and Native Hawaiian human remains and associated funerary objects and complete summaries of unassociated funerary objects, sacred objects, and objects of cultural patrimony as mandated by the legislation. Information will be made available to interested individuals and groups through notices in the Federal Register. Through MCX-provided funding, districts will continue to be engaged in formal consultation with tribes for the legislated purpose of repatriating cultural objects for which there are legitimate claims. The MCX will continue to fulfill its chartered activities in support of other military services and DoD and lead in the implementation of an agency-wide, long-term plan for the curation of USACE archeological collections (heritage assets). The MCX will implement the initial phases of the curation task plan, which involves addressing the rehabilitation needs of USACE's most critical archeological collections and continuing the Veterans Curation Project; however, due to increasing costs, the staffing of veterans and the rehabilitation of at-risk archaeological materials and associated records will be reduced in FY 2014. The MCX will also continue to work closely with USACE commands on the implementation of final guidelines and procedures for field collection of archeological materials and the long-term treatment of those collections. In this regard, the MCX will act as a source of expertise for

O&M Justification Sheet

processing and rehabilitation of USACE collections. Finally, the MCX will provide leadership in the development of a training curriculum on the treatment of heritage assets and working in consultation with all stakeholders and take initial steps to make this training available to USACE and other appropriate DoD managers and decision makers.

OTHER INFORMATION: A Mandatory Center of Expertise (MCX), located at the St. Louis District, was established to provide overall management of the Corps NAGPRA programs and has served as an information source, a centralized base for curation compliance and contracting. The MCX has facilitated the assurance of consistent nationwide program implementation and operation. The MCX, in providing NAGPRA inventories, has assisted in establishing the extent of Corps holdings. Associated with efforts to complete NAGPRA, the MCX began the process of effectively managing the Corps curation efforts. A phased task plan for curation has been developed and is being implemented on at-risk collections. In addition, the MCX supports and leads the Veteran's Curation Project, whereby disabled veterans receive training in proper identification and curation of artifacts. The project gives them additional qualifications for employment after military service and rehabilitates at-risk archaeological collections.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Fish & Wildlife Operating Fish Hatchery Mitigation

AUTHORIZATION: Public Law 111-85

LOCATION AND DESCRIPTION: This is a recurring national program. In 2008, Congress authorized the U.S. Fish and Wildlife Service (USFWS) to seek reimbursement from the Corps of Engineers for O&M costs incurred by the National Fish Hatchery System for mitigation of certain Corps dam projects which typically predated the National Environmental Policy Act. Subsequent congressional direction as well as concurrence by OMB and ASACW has resulted in a specific line item authorization in the Corps FY10-14 budgets to meet the Corps mitigation requirements.

CONFERENCE AMOUNT FOR FY 2013: \$4,300,000 2/

BUDGETED AMOUNT FOR FY 2014: \$4,700,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

EN: \$4,700,000 The 2014 funding will be transferred to the USFWS for National Fish Hatchery (NFH) for their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams. This amount meets the 100 percent of Corps fish mitigation as determined by 2008 Fish and Wildlife Service estimate.

PREVIOUS YEAR ACCOMPLISHMENTS:

FY 2012: \$3,800,000 to be transferred to the USFWS for National Fish Hatchery (NFH) toward their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams.

FY 2013: \$3,800,000 transferred to the USFWS for National Fish Hatchery (NFH) toward their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2013 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National (Multiple Project) Natural Resources Management Activities

AUTHORIZATION: This program is conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

LOCATION AND DESCRIPTION: The National (Multiple Project) Natural Resources Management Activities project allows the Corps to allocate a portion of Civil Works projects appropriated funds to conduct certain, specified operations and maintenance activities that benefit all or a majority of operating Civil Works projects. This approach—which was formalized in FY 2002 appropriations language—allows multiple project activities to be funded as single entities, rather than on a project-by-project basis. This approach is more efficient and cost effective, reducing administration costs and providing for efficient management and oversight. Providing a nationwide funding source at HQUSACE for centralized procurement of these items used by all operating projects having a natural resources management program precludes the need for funds to be transferred by each project or district to a single procurement agent, a savings of from 60 to 300 transactions a year. An example of such an activity is the procurement of park ranger uniforms through a contract administered by the National Park Service.

CONFERENCE AMOUNT FOR FY 2013: \$6,530,000 2/

BUDGETED AMOUNT FOR FY 2014: T: \$8,673,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

1. Nationwide (Multiple-Project) NRM Activities that will be accomplished with these funds include the following activities:

- a. Natural Resources Management Career Development/Training Support and Material Development. Funds are used to address training and career development issues for the Corps' 2,000 Natural Resources Management (NRM) field staff. Staff needs are served through the development of products, such as exportable training courses to meet established training requirements. Funding this as a nationwide activity is appropriate because all NRM field staff benefit equally from the work accomplished.
- b. Park Ranger/Manager Uniforms. The Corps purchases uniforms for field personnel through an interagency contract administered by the National Park Service. Funding this as an interagency, nationwide effort reduces administrative costs by eliminating fund transfer requirements from each individual project to the NPS. Since this arrangement was established in 1984, significant economies of scale have been achieved. Costs include the authorized employee allowance funds (including an HQ-approved increase in replacement allowance), NPS contract administration costs, buy out of discontinued items, program management/committee support, and the purchase of required emblems.
- c. Printing and Publishing - Printing of forms, brochures, and similar materials—such as Annual Day Use Passes—used by all Corps projects achieves economies of scale and reduces total administrative and procurement costs. Printed materials are stored at the Corps Publications Depot for distribution to all projects upon request.
- d. Sign Standards Manual and Software Update and MCX Operation. A Mandatory Center of Expertise provides technical support and assistance to all projects in the operation of the Corps Sign Standards Program, through the maintenance of the Sign Standards Program Manual and software and providing technical assistance to field users. These efforts allow the Corps to maintain a consistent image that we present to the visiting public. Funding this as a nationwide activity assures competent and timely assistance to users, which increases the consistency, effectiveness and efficiency of the sign program.

Division: HQUSACE
National (Multiple Project) Natural Resources Management Activities

District: HQUSACE

e. Volunteer Clearinghouse Operation. The Volunteer Clearinghouse is operated under contract with Goodwill Industries to support volunteer efforts at all Corps projects. Use of a single nationwide contract on this achieves economies of scale and reduces administrative costs by eliminating the need to transfer funds from each project.

f. Water Safety Products. The Corps Water Safety National Operating Center produces and distributes water safety products and programs to all Corps projects. Products educate and inform visitors of the dangers associated with water-oriented recreation. Significant economies of scale have been realized through the centralized administration of this program that assures current and critical topics are covered, using effective media targeted to high-risk groups. Drownings and associated lawsuits have been reduced significantly since the implementation of this program in the mid 1980's. Current command emphasis is requiring an even further reduction of fatalities during the next two years.

g. Nationwide Recreation Visitation Surveys. Recreation surveys will be conducted to generate traffic counter load factor data required to reliably monitor visitation at CE managed recreation areas through the Visitation Estimation and Reporting System (VERS). Surveys will be conducted in regions nationwide using teams of interviewers from the Student Conservation Association. Funding this as a nationwide activity enhances quality control, achieves economies of scale through the use of a single contract and reduces administrative costs by eliminating the need to transfer funds from all projects to the single contracting element.

h. Other Nationwide NRM Activities. The following additional NRM Activities are recommended for funding to achieve cost efficiencies at the national level. Challenge Partnership Seed Funds; Critical Incident Stress Management (CISM) Program; Natural Resources Management Awards; Operations CoP Gateway; Partnership Advisory Committee; Property Protection Program; RecBEST Coach, Assist and Train Team; Career Assignment Program for Operations Project Managers; Visitor Center Initiative/Corps Story; and Bilingual Support Team.

N: \$0
FRM: \$0
RC: \$4,980,000
H: \$0
EN: \$0
WS: \$0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

2. Environmental Management System (EMS) Implementation:

Navigation and Flood Reduction Management Projects: The issuance of the latest revision of Engineering Regulation (ER) 200-2-3 in October 2010 expanded the coverage of the USACE EMS to include all Civil Works missions and facilities with significant environmental compliance requirements, and also incorporated Federal statutory and executive order-based sustainability and energy requirements. The USACE organization-wide EMS incorporates existing facility-level EMSs within a single, USACE-wide systematic management framework. In addition to traditional water, air, waste and materials compliance requirements, the USACE EMS includes the energy, water and petroleum efficiency requirements of the Energy Independence and Security Act of 2007 and the Energy Policy Act of 2005, as well as the

Division: HQUSACE District: HQUSACE
National (Multiple Project) Natural Resources Management Activities

sustainable acquisition, electronics stewardship, waste reduction/recycling, and greenhouse gas accounting and reporting requirements of Executive Orders 13423 and 13514. Funding this as a nationwide activity allows USACE to reduce costs and improve performance by implementing standardized compliance and sustainability policies, procedures, and tools for auditing, data management, metrics, reporting, and management review at USACE facilities without transferring funds from each project to a central source.

a. Energy Independence and Security Act (EISA 2007) Section 432 energy and water evaluations (audits) at USACE Covered Facilities (\$1.3M Estimated).

b. Energy and sustainability data management, tracking and reporting; energy management technical and contracting support for audits, advanced/enhanced metering, and alternative financing (\$1.2M Estimated).

c. Energy Policy Act (EPA 2005) Section 103 advanced metering for electricity, natural gas and water utilities at USACE Covered Facilities and other facilities that trigger the Federal Energy Management Program advanced metering threshold (\$1.1M Estimated).

d. Environmental Compliance and Sustainability (ECS) Career Assignment Program. Covers TDY costs for two, 5-month developmental assignments at HQ USACE supporting USACE Environmental Compliance, EMS and EO 13514 Sustainability requirements (\$0.1M Training Estimated).

N: \$2,743,000

FRM: \$950,000

RC: \$0

H: \$0

EN: \$0

WS: \$0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: HQUSACE District: HQUSACE
National (Multiple Project) Natural Resources Management Activities

O&M Justification Sheet

PROJECT NAME: Program Development Technical Support

AUTHORIZATION: The automated information system P2 has replaced the Automated Budget System (ABS) for budget development processes. The transition to P2 from ABS has aligned all Civil Works budget requests within one automated information system (AIS). Previously, the ABS supported gathering, analyzing and submitting project funding requests to respond to all authorized missions within the Corps of Engineers Operation and Maintenance program.

LOCATION AND DESCRIPTION: This is program National in scope.

CONFERENCE AMOUNT FOR FY 2013: \$300,000 2/

BUDGETED AMOUNT FOR FY 2014: \$300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: Funds will be used to continue to assist civil works program development for budget submissions and identify needed changes and recommend new analytical program development tools and procedures to support civil works program development. P2 provides the program development capability previously provided by ABS. The transition to P2 from ABS for program development began in FY 2007 and continued through FY 2011. Presently work under this activity in current and future years continues to ensure that all relevant business processes and monitoring needs are incorporated into new databases, data requirements continue to be refined, and analytical capabilities are being expanded to support the Corps' budgeting process without creating an undue administrative burden. Changes are being incorporated to support the budget development analytical and reporting needs and to continually refine the system to meet evolving objectives. The deployment of P2 and updated versions has shifted program efforts towards development of methods and procedures for setting program priorities and providing technical support for all civil works activities and analysis across the civil works program. In FY14 this project will continue to assist civil works program development for budget submissions and identify needed changes and recommend new analytical program development tools and procedures to support civil works program development. All business lines benefit from this activity.

N: \$75,000

FRM: \$78,000

RC: N/A

H: \$72,000

EN: \$75,000

WS: N/A

OTHER INFORMATION: NA

ACCOMPLISHMENTS IN PRIOR YEARS: Maintained and updated the software systems, provided new tools to generate reports, provided training and support to managers, and enhanced analytical tools to support the budget development process.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Recreation One Stop (R1S)

AUTHORIZATION: These programs are conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

LOCATION AND DESCRIPTION: The Recreation One Stop initiative is to enhance customer satisfaction with recreational experiences on public lands. It improves access to recreation-related information generated by the Federal government, streamlines the systems used to manage that information, and increases the sharing of recreation-related information among government and non-government organizations. At the direction of Office of Management and Budget (OMB), Recreation.gov and Volunteer.gov was combined and is now under the umbrella of Recreation One Stop, a priority E-gov initiative on the President's Management Agenda. Providing a nationwide funding source at HQUSACE for centralized procurement of these items used by all operating projects having a natural resources management program precludes the need for funds to be transferred by each project or district to a single procurement agent, a savings of from 60 to 300 transactions a year.

CONFERENCE AMOUNT FOR FY 2013: \$65,000 2/

BUDGETED AMOUNT FOR FY 2014: T: \$215,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

Recreation.gov - \$200,000 - is an interagency website providing public information about recreation opportunities on federal lands. This website provides a customer friendly recreation portal with information for planning visits to Federal recreation sites and making campground reservations. Required budgeted amount provides payment IAW Interagency Agreement NO.10-1A-11132461-167 between the National Recreation Reservation Service as managed by US Forest Service and Department of Defense. This annual funding supports the Corps responsibility of providing funds for the management and operations costs of the Recreation One-Stop initiative. Recreation.gov provides a customer friendly recreation portal with information for viewing and planning visits on over 4,000 Corps recreation sites and activities, reserve and make payment on line. Recreation.gov provides a customer friendly recreation portal with information for viewing and planning visits on over 4,000 Corps recreation sites and activities, reserve and make payment on line.

Volunteer.gov - \$15,000 is an interagency website coordinating volunteer activities among federal agencies. Provides a user-friendly, web based resource to citizens, offering a single point of access to information about volunteer opportunities nationwide. Volunteer.gov is a partner in the White House's USA FreedomCorps Network, and the site is also linked to the Recreation.gov website in which the Corps participates. Required budgeted amount provides payment to Department of Interior (DOI) as the managing partner IAW February 2000 Federal Interagency Team on Volunteerism Memorandum of Understanding. This annual funding supports the Corps responsibility of providing funds for the management and operations costs of the Recreation One-Stop initiative. Volunteer.gov provides a comprehensive clearinghouse of Corps volunteer opportunities. The public can enter geographic information about where they want to get involved and areas of interest to access volunteer opportunities offered by the Corps. Over 55,000 volunteers at Corps projects worked 1.4 million hours, providing \$29.7 million value of service in fiscal year 2011.

N: \$0

FRM: \$0

RC: \$215,000

H: \$0

Division: HQUSACE

District: HQUSACE

Recreation One Stop (R1S)

EN: \$0

WS: \$0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Emergency Management

APPROPRIATION TITLE: Flood Control and Coastal Emergencies (FCCE), FY 2014

SUMMARIZED FINANCIAL DATA:

Annual Appropriation FY 2009	\$	0
Emergency Supplemental FY2009	\$	754,290,000
Annual Appropriation FY 2010	\$	0
Emergency Supplemental FY2010	\$	20,000,000
Annual Appropriation FY 2011	\$	0
Emergency Supplemental FY2011	\$	
Annual Appropriation FY 2012	\$	27,000,000
Emergency Supplemental FY2012	\$	388,000,000
Budget for FY 2013	\$	30,000,000
Emergency Supplemental FY2013	\$	0
Budget for FY 2014	\$	28,000,000

DISASTER PREPAREDNESS: The U.S Army Corps of Engineers (USACE) plays an important role in support of the Federal response to natural disasters throughout the United States. Management of FCCE funds ensures mobilization of people and materials, obtaining contractor support, and coordinating with other agencies. It includes coordination and planning with key local, state and federal stakeholders/partners under the under the Corps' statutory authority, PL 84-99, and in support of the National Response Framework with Federal Emergency Management Agency, Department of Homeland Security. It also allows the Corps to purchase and stockpile critical supplies, equipment (i.e. sandbags, pumps) which likely would be otherwise unavailable during the initial response and support of facilities (Emergency Operations Centers).

FISCAL YEAR 2014: The budgeted fund for this program is \$28 million. The 2014 budget seeks funding for planning and preparedness activities as part of the regular budget process, instead of relying on emergency supplemental funding.

There had been no annual appropriations from 2004 to 2011. Supplemental appropriations have provided funding for preparedness since 2005, augmented by carryover funds. FY 2013 funds are being used for preparedness activities.

FY 2014 budget of \$28 million is a decrease from the latest estimate \$30 million presented to Congress (FY2013). These funds provides minimal funding for required training, essential support services and systems, communication systems, contracts renewals to support missions for roofing, water, debris, readiness support, manning of operations centers, stockage of flood-fight equipment and supplies, and inspections of eligible non federal projects. Personnel trained will include Planning and Response teams, Crisis Management teams, Crisis Action teams, and staff for manning of Emergency Operations Centers and Regional Response Coordination Centers. Training and Exercises will include State exercises as Golden Guardian, Makani Pahili, Hurricane Table Top; and Divisions and Districts exercises as flood fighting training and regional all hazard training.

Water Supply

O&M Justification Sheet

PROJECT NAME: National Portfolio Assessment for Reallocations

AUTHORIZATION: Specific project authorizations, Section 216 of the River and Harbor and Flood Control Act of 1970.

LOCATION AND DESCRIPTION: This is a national program.

CONFERENCE AMOUNT FOR FY 2013: \$571,000 2/

BUDGETED AMOUNT FOR FY 2014: \$571,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN:

WS: Assessment of Data. \$286,000 will be used to finalize the National Portfolio Assessment of Data for Reallocations: Status and Challenges for USACE Reservoirs. The report will leverage data gathered and analyzed as part of the National Portfolio for Reallocations and from other collaborative efforts. Ultimately, the goal of the data assessment includes developing a project by project projection of water supply availability and sustainability over the next 10, 20 and 50 year periods, the ability to roll the developed data up into basin and regional projections which can support watershed based efforts and developing a program to keep the data current.

The National Portfolio Assessment for Reallocations was a two year appraisal, initiated in FY 2008, to develop a portfolio of existing Corps of Engineer multipurpose projects to be used as a screening tool to identify the best candidates for opportunities for operational changes and/or reallocation opportunities. This effort resulted in (1) the development of a portfolio of Corps projects that identified the best candidates for opportunities for operational changes and/or reallocation opportunities to ensure existing Corps reservoirs contribute to enhance economic and ecosystem values as water demands evolve and a better understanding of climate change issues are gained and (2) a paper on alternative funding arrangements for water supply reallocation studies. This report was transmitted to HQUSACE by the Institute for Water Resources in June 2010 and by HQUSACE to the ASA (CW) in August 2010.

During the development of the survey for the National Portfolio Assessment, the Corps was considering two other national surveys, one on the water management aspects of Corps reservoir projects and an other on sedimentation management concerns. USACE leaders recognized that combining these efforts would result in cost and time savings. This combined effort provided not only data for the Portfolio but also created a database to examine the status of Corps water management from local, regional, and national perspectives, an engineering and scientific foundation for a national adaptive management program, a baseline data set for investigating the evolution of operational water management policies, an assessment of sediment infilling, its impacts to operating purposes and management practices, and a database for sediment data collection efforts.

While water and sediment management concerns were originally incorporated to encourage efficiencies between reservoir-oriented data requests, these efforts have proven relevant to the assessment of

reallocation opportunities at multi-purpose reservoirs where any change in operation affects multiple purposes. As a result, after the initial Portfolio Report was completed, this effort was transformed into an Assessment of Data study for FY 2011 and FY 2012 and included the water supply, water management, and sediment management components as well information gained through collaboration with other USACE work efforts.

Sustainable Rivers. \$285,000 will be used to advance an ongoing effort to improve practices for evaluating evolving water demands from an environmental perspective. This includes:

- Support the definition of environmental flow needs
- Model application and development
- Implementation of operational changes to meet environmental flow needs
- Monitoring and initiation of a process to revise water control plans

Experiences at existing sites will be used to inform other efforts to modify project operations and refine the practices for evaluating evolving water demands.

The Sustainable Rivers Project (SRP) was initiated in 2002. SRP is an ongoing national partnership between the Corps of Engineers and The Nature Conservancy. The purposes of this effort are to assess ecosystem needs downstream of Corps projects, to evaluate water management opportunities for potential operational changes and/or reallocations to enhance ecosystem values while maintaining or improving primary project purposes (e.g. flood risk reduction, water supply, and hydropower), and to implement environmental flows where feasible.

The SRP involves work on 36 Corps reservoirs in 8 river basins. It is the most large-scale and comprehensive project for implementing environmental flows below Corps reservoirs. Funds from the National Portfolio Assessment for Reallocations (2010-2013) have been instrumental in the advancement of SRP, which has now defined environmental flows for 20 reservoirs and implemented environmental flows at 10, thereby affecting ecological condition for approximately 600 river miles. The Portfolio is currently the only national funding source for the SRP. Full implementation of environmental flows below Corps reservoirs would benefit an estimated 50,000 river miles.

Funding from the Portfolio will be used to support a combination of national level and site specific work. National level work focuses on measuring and communicating the successes of the whole SRP. Site work will define ecological needs, model potential operational changes, and implement and monitor ecological outcomes resulting from changes to the operation of particular reservoir systems. SRP efforts complement the national portfolio assessment by demonstrating that a strategic and science-based adaptive management approach that can be used at Corps projects to maintain or enhance the benefits they provide to the nation. This Sustainable Rivers Project was combined with the National Portfolio Assessment in FY 2010 under the recommended plan.

OTHER INFORMATION:

ACCOMPLISHMENTS IN FY 2013:

The fiscal year 2013 funding of \$571,000 was a two-increment effort.

Assessment of Data. Funding in the amount of \$286,000 was used to: (a) initiate an effort to complete the compilation of Corps' projects in the Portfolio to include all our projects with irrigation storage. While repayment of irrigation costs are administered by the Bureau of Reclamation, the general physical and operating data of these projects and the knowledge of how these projects operate for irrigation is critical to complete the Portfolio of Corps projects with water supply; and (b) initiate the development of a draft report on the National Portfolio Assessment of Data for Reallocations: Status and Challenges for USACE Reservoirs.

Sustainable Rivers. Funding in the amount of \$285,000 was used to continue the efforts of described above to improve practices for evaluation water demands. These efforts included development and

application of models for use at select Corps Sustainable Rivers Project sites, defining environmental flow needs, implementation operational changes to meet environmental flow needs and development of a framework to inform nationwide application of the knowledge gained through the implementation of the Sustainable Rivers Program.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is 0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Expenses

Justification of Estimates for Civil Functions Activities
Department of the Army, Corps of Engineers Fiscal
Year 2014
(\$000)

APPROPRIATION TITLE: Expenses Fiscal Year 14

	<u>FY 2013</u> <u>Appropriation</u>	<u>FY 2014</u> <u>Request</u>	<u>Change</u> <u>FY 2013-2014</u>
1. Expenses for Headquarters & Major Subordinate Commands (MSC)			
a. FY 14 Carry In			-0-
b. Headquarters, U.S. Army Corps of Engineers	(\$ 82,888,000)	\$ 82,934,000	\$ 46,000
(1) Base level Operating Expenses			
(a) Labor	(\$ 61,391,000)	(\$ 61,888,000)	(\$ 497,000)
(b) Non-labor	(\$ 20,497,000)	(\$ 21,046,000)	(\$ 549,000)
(2) Campaign Plan Activities (formerly Program Acct)	(\$ 1,000,000)	\$ _____	(\$ 1,000,000)
SUB-TOTAL	\$ 82,888,000	\$ 82,934,000	\$ 46,000
c. Major Subordinate Commands	\$ 79,827,000	\$ 79,909,000	\$ 82,000
(1) Base level Operating Expenses			
(a) Labor	(\$ 58,972,000)	(\$ 59,528,000)	(\$ 556,000)
(b) Non-Labor	(\$ 20,855,000)	(\$ 20,381,000)	(\$ 474,000)
SUB-TOTAL	\$ 79,827,000	\$ 79,909,000	\$ 82,000

	<u>FY 2013</u> <u>Appropriation</u>	<u>FY 2014</u> <u>Request</u>	<u>Change</u> <u>FY 2013-2014</u>
2. Administrative Expenses for Field Operating Activities (FOA)			
a. Humphreys Engineer Center Support Activity (HECSA)	\$ 6,624,000	\$ 6,543,000	\$ (81,000)
b. Institute of Water Resources (IWR)	5,294,000	5,280,000	(14,000)
c. U.S. Army Engineer Research & Development Center (ERDC)	300,000	300,000	0
d. USACE Finance Center (UFC)	1,247,000	1,230,000	(17,000)
e. USACE Logistics Activity	3,326,000	3,293,000	(33,000)
f. Army Corps of Engineers – Information Technology (ACE-IT)	<u>2,494,000</u>	<u>2,511,000</u>	<u>(17,000)</u>
SUB-TOTAL	\$19,285,000	\$ 19,157,000	\$ (128,000)
TOTAL	\$182,000,000	\$182,000,000	\$ 0

The Expenses appropriation funds the Executive Direction and Management (ED&M) of the Civil Works responsibilities of the Corps headquarters and division offices, and several field operating activities. The Expenses appropriation funds all operational costs necessary for the supervision and general administration of Civil Works functions in the Headquarters, U.S. Army Corps of Engineers, and eight (8) major subordinate commands. The Expenses appropriation is aligned with all of the National priorities/goals that guide, inform, and shape the civil works program priorities and goals. This account funds the salary/support costs of senior leadership that provides oversight and execution of the mission of the civil works program via five key functions. Expenses Program functions include the following: program management in developing, defending and executing all major Civil Works programs; national and regional coordination with other agencies, states, local governments, and national stakeholders; and quality assurance to ensure that the Civil Works program is executed in a technically sound way in accordance with law, regulation and policy.

- a. Command and Control of USACE civil work operations: action by CWP leadership to lead, decide, and direct USACE's CWP operations;
- b. Policy and Guidance: action by CWP leadership to develop and issue policy and guidance for USACE's CWP operations in headquarters, regional MSCs, and SFOAs;
- c. Program Management: action by CWP leadership to develop, defend, and execute USACE's CWP, including 8 appropriation programs, namely: the Flood Control, Mississippi River and Tributaries (FC,MR&T) Project; Investigations (I) Program; Construction (C) Program; Operation & Maintenance (O&M) Program; Expenses (E) Program; Regulatory Program (RP); Flood Control and Coastal Emergencies (FC&CE) Program; and Formerly Utilized Sites Remedial Action Program (FUSRAP);
- d. National Coordination – action by CWP leadership to coordinate with the Administration, other federal and state agencies, national stakeholders, and other interest groups development of USACE's CWP policy and guidance and efficient development, defense, and execution of the CWP; Track and maintain database of more than 80 recurring national events including the Native American (Tribal Nation) Program; Inland Waterways Users Board; National Waterways Conference Budget/Legislative Summit; California Marine Affairs and Navigation Conference

e. Quality Assurance – action by CWP leadership to assure that products of USACE’s CWP are of high quality and timely, and executed in strict accordance with law, policy, and guidance.

Principal activities include corporate leadership, strategic planning and performance measurement. Performance measurement is accomplished through performance assessment metrics, construction leading/lagging indicators, and efficiency studies. ED&M also does national coordination and collaboration with other agencies, States, local governments, and non-governmental organizations.

A future challenge is to manage the development of the Civil Works Budget Transformation process. This will force evaluation and establishment of improved performance measures to show the extent in which Corps programs are successful in providing value to the nation through planned efficiency, outputs and outcome performances, rather than the current justification based on asserted resource needs.

The FY 2014 budget for the Expenses program is \$184 million. Passback provides \$182 million, below ceiling, for this appropriation. The \$182 million accurately reflects the Expenses portion of the proposed 30 percent reduction in FY10 travel costs briefed to OMB in September. As per OMB’s request, on March 1, 2013, the Corps will provide an update of the unexpended end-of-year balances over the past several years. Funding was held constant in FY10 and FY11 at \$185M and declined in FY12 due to Executive Order 13598, “Promoting Efficient Spending”.

3. General Administration

The FY 2014 Budget provides for execution at 895 Full Time Equivalents (FTEs) for the U.S. Army Corps of Engineers. The FTEs were validated as a result of a manpower survey conducted by the U.S. Army Manpower and Analysis Agency in April-September 2011. The purpose of the manpower survey was to determine essential staffing requirements for the USACE. USACE implemented the study’s organizational changes in November 2011. The FTE are allocated across the Headquarters, Major Subordinate Commands (MSC), and Support Activities.

In direct support of the five functions, FY14 and 15 are focused on improving development of the CWP ED&M Program through redesign of E Program structure, management organization, and processes consistent with: Laws; National priorities, goals, and objectives; The Corps’ campaign plan; The CWP’s strategic plan; and CWP policy and guidance, In order to maximize benefit of the CWP to the Corps, Army, and Nation, continually. The goal is to describe the program in terms of its two different kinds of work – “routine operations” and “initiatives”. The Expenses appropriation pays for:

Routine Operations (work of the CWP ED&M Program that is done, year-in, year-out)

Labor Activities—Civilian--E Program Work/Products or OMA Program Work/Products or Military (E Program, only Work/Products)

Non-labor Activities (E Program, only Work/Products)

Common (Work/Products done by all offices)

Mandatory (Unavoidable short-term), i.e., military pay (uniformed military officers supporting the civil mission), GSA rentals payments, communication (landline telephones); centralized finance, logistics, personnel support; enterprise information technology baseline support and fee for service automated information systems.

Discretionary (Avoidable short-term) i.e., are travel, training, contracts, supplies, printing and office equipment.

Unique (Work/Products done by only some offices)

Mandatory (Unavoidable short-term), seat management, rent, utilities, GUMP, IMIT Service Management, budget printing, customer surveys, travel.

Discretionary (Avoidable short-term) i.e. museum activities, conferences, travel
Initiatives (new work of CWP ED&M Program to be completed within 3 years)

E Program, Only, Work/Products

– Initiative 1,.....Initiative n

E and OMA Programs, Jointly, Work/Products

– Initiative 1.....Initiative n

–

The Expenses program executes 65-70% labor and 30% non-labor requirements.

Executive Order 13514, signed October 2009, requires Federal agencies to set a 2020 Greenhouse gas (GHG) emissions reduction target; The Corps established USACE-wide policies, plans, processes, and tools, required to support annual reporting requirements related to GHG.

General administration comprises command and control, policy and guidance formulation, program management in developing, defending and executing all major USACE programs; national and regional coordination level coordination with elements of the Administration, Congress and other agencies and national stakeholders; and quality assurance to ensure that the Civil Works Program is executed in accordance with law, policy and regulation. Execution of the Corps' mission is decentralized across 38 districts, eight (8) MSCs, six field operating activities (FOA), including the Engineering Research and Development Center (ERDC) comprising seven (7) laboratories. The budget will enable the Corps to accomplish its workload, particularly the program and project management, national and regional coordination, and quality assurance functions.

As an organization, the Corps has to transform and evolve to meet changing needs of the nation, and its Armed Forces. As the needs of society and the workforce have changed, Civil Works primary mission of development and management of water resources have changed, to include protection and restoration of water resources and the ecosystems they support. The complexity of water resources development and management requires closer partnerships and greater collaboration. To accomplish the Corps and Civil Works mission, work plans will be developed in accordance with the following priorities:

- Improving program justification statements and program development, defense, and execution as requested by the ASA (CW).
- Improving budgeting and financial performance by reducing carryover and monitoring expenditures.
- Increasing training to retain, maintain and improve technical competence.
- Becoming a more efficient and effective organization through technology (E-government).
- Strengthening dam safety and levee safety and risk management.
- Strengthening business program management for the navigation, environmental restoration and hydropower programs.
- Operate within OMB's imposed 30% travel efficiency..

a. **Headquarters, U.S. Army Corps of Engineers**

Base Level Operating Expenses

FY 2014 Request

\$ 82,934,000

(1) The Headquarters, U.S. Army Corps of Engineers manages and supervises the execution of civil works programs, including program development, design, planning, project management, engineering, construction, operations and maintenance of Corps projects, regulatory activities, real estate functions and research and development functions. Designation of essential functions and delineation of processes to execute these functions are retained at HQ to ensure consistent customer support across the Corps. The headquarters is also responsible for activities of the Nation's water and related environmental

resources; developing and managing programs; planning, designing, constructing, and operating projects for commercial navigation, flood and storm damage reduction, aquatic ecosystem restoration, and related activities, such as hydropower generation. The headquarters assists the field command by providing command and control, policy formulation, national programs management, national coordination, quality assurance, preparation of the annual budget and legislative submission, national and international interface, resource distribution and oversight of execution, and performance measurement. The Headquarters is also responsible to improve the performance of management functions and to increase the level of effort on management initiatives. In FY2014, Headquarters' will continue to address initiatives as follows:

- Improving planning capabilities through the development and update of planning guidance and training,
- Expanding stakeholder coordination at the regional and national levels,
- Increasing training to retain, maintain and improve technical competence, and
- Managing business process/civil works transformation.

The Expenses appropriation funds the management of the Civil Works eight business lines, i.e., emergency management, environment, hydropower, flood and coastal storm damage reduction, navigation, recreation, regulatory and water supply. The FY2014 amount required for the headquarters consists of the base-level operating expenses of \$82,934 for "routine operations". Headquarters has an active program to manage its personnel resources and is responsible for reviewing positions to determine need and priority, consider need for new labor capability and determine which existing labor capability can be "traded out" for needed additional and/or new labor capability. Positions are prioritized and, as opportunities arise, least important positions are eliminated and new positions are created to respond to evolving challenges, such as those in Planning and Policy Division, the Regulatory Program, and Programs Integration Division. Through this prioritization process, headquarters is planning to strengthen its future capabilities in contract management, internal review, program management for development, defense and execution of the Civil Works program, and the execution of project cooperation agreements. Under Government Performance and Results Act (GPRA), each agency is required to establish a Strategic Plan. The Corps' implementation of its Strategic Plan is called the Campaign Plan. The Corps Campaign Plan describes the vision and goals for the entire organization.

(2) Using \$182M as a base, the buying power is decreased as a result of inflation due to increases in salary, rent, utilities and information technology. The loss in buying power and funding reductions in FY2014 and FY2015 will negatively impact civil works oversight requirements program as well as maintaining, strengthening, and improving training and technical competences for each employee. In the past, the Corps used recoveries to bridge funding shortfalls. Therefore, in spite of the relatively flat funding levels (\$182-\$185M) of the last three years, the Corps executed an average of \$195M per year in the Expenses appropriation. The use of recoveries were based on our aggressive oversight to clear aged unliquidated obligations. The recoveries balance is fast declining and will cease to exist in the near future.

(3) In FY13, Corps initiated action to transition most activities previously presented as Campaign Plan Activities to routine operations. These formerly known initiatives will be managed as standard HQ functions and will not be grouped with special allocation. Initiatives shown in the Expenses initiative line will based on priority, urgency and sunset of the requirement essential to supporting the Civil Works mission, and benefitting HQ, MSCs and FOAs.

The FY 2014 Headquarters staffing level is 373 civilian FTE. HQ reimburses Department of Army for 34 Expenses funded uniformed military spaces. The Headquarters funding breakout of operational costs by major category is shown below.

\$ 61,888,000	Civilian Personnel Compensation and Benefits
<u>21,046,000</u>	Non-labor Costs (routine operations & initiatives)
\$ 82,934,000	Total

b. **Major Subordinate Commands (MSC)**

FY 2014 Request

Base Level Operating Expenses

\$ 79,909,000

Eight division offices (MSCs) of the Civil Works Program provide quality assurance for, and supervise work of 38 district offices that have civil works responsibilities, as well as provide regional coordination with other Federal and non-federal entities. MSCs have the following primary roles:

- Command and Control – executive direction and management (including resource management) of subordinate districts;
- Policy Guidance – development of strategy, policy, and guidance for development, defense, and execution of division-wide programs and projects;
- Program Management – program development to integrate district-wide programs into division-wide programs, program defense of division-wide programs, and execution oversight and analysis of division-wide programs and projects;
- Regional Interface – coordination of issues which cross district boundaries and/or involve regional interests, higher headquarters, state agencies, and regional or higher headquarters of Federal agencies/foreign governments; and
- Quality Assurance – oversight to ensure process and procedures are in place to produce safe, timely, reliable, and cost-effective products and services.

A division headquarters office manages itself and all of its subordinate districts as a single business center, balancing the types of quantities of workload against resources throughout the division’s area of responsibility. The organizational structure has been delegated to division commanders and supported by a recent USACE manpower survey. Subordinate commanders have the flexibility necessary to meet customer needs, obtain efficiencies, adjust to resource constraints, and optimize good business practices. MSCs are responsible for program coordination among district offices to ensure efficient and effective program execution, establishment and oversight of technical centers of expertise, and workload and workforce planning. MSCs are responsible for a strong navigation mission, as well as preservation, restoration, and enhancement of environmental resources, including but not limited to, measures for fish and wildlife, increased water supplies, recreation, cultural resources, and other related water resources development programs.. The FY 2014 civilian FTE staffing level for MSCs is 405. HQs reimburses the Department of Army for 18 civil uniformed military positions at MSCs. The civilian FTE level for each MSC varies based upon the scope of their Civil Works responsibilities. Due to an MSC’s predominate military workload; They may have between 49 to 63 FTEs, except for Pacific Ocean Division, which has 17 FTE.

\$	59,528,000	Civilian Personnel Compensation and Benefits
	20,381,000	Non-labor Costs
\$	79,909,000	Total

c. **Administrative Expenses for Field Operating Activities**

FY 2014 Request

Base Level Operating Expenses

\$19,157,000

Expenses appropriation funds management and operation costs allocable to the civil works program of Corps-wide support facilities. This includes:

- Humphreys Engineer Center Support Activity (HECSA) – This field operating activity of the Corps provided day-to-day operational support services to the Corps; Institute for Water Resources (IWR) – This institute performs studies and analyses on a wide range of water resource issues and develops project planning techniques;

- Engineering Research and Development Center (ERDC) – This center operates several labs and conducts research and development for the Corps and other agencies;
- U.S. Army Corps of Engineers Finance Center (UFC) – This center supports all Corps finance and accounting activities;
- US Army Corps of Engineers Logistics Activity (ULA) This activity provides logistics planning and operations support, supply and maintenance services, facilities maintenance services, transportation services, and regional logistics liaisons to USACE commands and activities in order to provide supply and service support across the full spectrum of operations. The Expense appropriation funds 30 FTE to oversee these operations;
- Corps of Engineers – Information Technology (ACE-IT), ACE-IT (Army Corps of Engineers - Information technology) was selected as the IM/IT service provider for the U.S. Army Corps of Engineers as part of the USACE A-76 competitive sourcing initiative. The ACE- IT team is comprised of USACE Government staff, providing mission-assured services, along with Lockheed Martin staff. ACE-IT is the provider of Information Management/Information Technology (IM/IT) support for USACE. The ACE-IT mission provides enterprise-wide IM/IT services for all information management functional areas to include Automation, Communication, Information Assurance, Records Management, Printing & Publications, and Visual Information. These services include local support activities, as well as enterprise services, such as centralized AIS hosting, long-haul communications, e-mail support, service desk, and information assurance services. The Expense appropriation funds 15 FTE to oversee the services provided by ACE-IT. The FOAs have a total of 120 civilian (no uniformed military positions) FTE.

\$	15,207,000	Civilian Personnel Compensation and Benefits
	<u>3,950,000</u>	Non-labor Costs
\$	19,157,000	Total

4. **Account Summary:**

	<u>HQ</u>	<u>MSC</u>	<u>FOA</u>	<u>TOTAL</u>
Civilian Personnel Compensation and Benefits	\$ 61,888,000	59,528,000	15,207,000	\$136,623,000
Non-labor Costs	21,046,000	20,381,000	3,950,000	<u>45,377,000</u>
TOTAL	\$ 82,934,000	79,909,000	19,157,000	\$ 182,000,000

a. **Headquarters**

**FY2014
Request
\$82,934,000**

The FY 2014 Headquarters staffing level is 385 civilian FTE. HQs reimburses Department of Army for 34 expense funded uniformed military spaces. The Headquarters breakout of operational costs by major category is shown below.

\$	61,888,000	Civilian Personnel Compensation and Benefits
	16,644,000	Fixed Costs
	(10,686,000)	(Rent, utilities, AIS, communication, critical support services, etc.)
	(5,958,000)	(Reimbursement to Department of Army for Uniform Military salaries)
	<u>4,402,000</u>	Variable Costs (Transportation, printing, travel, training, supplies and equipment)
\$	82,934,000	Total

b. Major Subordinate Commands (MSC)

**FY 2014
Request
\$ 79,909,000**

Eight MSC provide command and control, program management, regional coordination, quality assurance and technical oversight of subordinate district offices. In addition, MSCs are responsible for program coordination among district offices to ensure efficient and effective program execution, establishment and oversight of technical centers of expertise, and workload and workforce planning. MSC are responsible for a strong navigation mission, as well as preservation, restoration, and enhancement of environmental resources, including but not limited to measures for fish and wildlife, increased water supplies, recreation, cultural resources, and other related water resources development programs. The FY 2014 civilian FTE staffing level for MSCs is 405. HQs' reimburses Department of Army for 18 civil uniformed military positions. The civilian FTE level for each MSC varies based upon the scope of their Civil Works responsibilities. MSCs may have between 49 to 63 FTEs, except for Pacific Ocean Division, which has 17 FTE.

\$	59,528,000	Civilian Personnel Compensation and Benefits
	15,879,000	Fixed Costs
	(12,020,000)	(Rent, utilities, training, travel, communication, critical support services, etc.)
	(3,859,000)	(Reimbursement to Department of Army for Uniform Military salaries)
	<u>4,502,000</u>	Variable Costs (Transportation, printing, training, travel, supplies and equipment, and admin support from districts)
\$	79,909,000	Total

FY 2014

5. Account Summary:

	<u>HQ</u>	<u>MSC</u>	<u>FOA</u>	<u>TOTAL</u>
Civilian Personnel Compensation and Benefits	\$ 61,888,000	\$59,528,000	\$15,207,000	\$136,623,000
Fixed Costs	16,644,000	15,879,000	2,664,000	35,187,000
(Rent, utilities, communication, critical support services, etc.)	(10,686,000)	12,020,000)	0	(22,706,000)
(Reimbursement to Department of Army for Uniform Military salaries)	(5,958,000)	(3,859,000)	0	(9,817,000)
Variable Costs(Transportation, travel and training, supplies, district services	4,402,000	4,502,000	1,286,000	10,191,000
Campaign Plan Activities (transferred into routine operations, variable)				
TOTAL	<u>\$ 82,934,000</u>	<u>\$79,909,000</u>	<u>\$ 19,157,000</u>	<u>\$182,000,000</u>

Assistant Secretary of the Army (Civil Works)

Justification of Estimate for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 2014
(\$000)

APPROPRIATION TITLE: Office of the Assistant Secretary of the Army (Civil Works)

	<u>FY 2013</u> <u>Budget</u>	<u>FY 2014</u> <u>Budget</u>	<u>Change</u> <u>FY 2013-2014</u>
Policy Direction and Oversight	\$ 5,000,000	\$5,000,000	0

JUSTIFICATION:

In accordance with 10 USC 3016(b)(3), the Assistant Secretary of Army for Civil Works (ASA (CW)), has the principal responsibility for overall policy direction and supervision of Department of the Army (DA) functions relating to all aspects of the Civil Works Program, including all reimbursable work performed by the U.S. Army Corps of Engineers (USACE) on behalf of Federal and non-Federal entities.

Specific responsibilities of the ASA (CW), assigned by statute and/or Army General Orders, include the following:

A. Managing and supervising the DA Civil Works Program, including:

1. Developing, defending, and directing the execution of DA Civil Works policy, legislative activities, and financial programs and budget.
2. Developing policy and guidance for, and administering the DA regulatory program to protect, restore, and maintain the waters of the United States in the interest of the environment, navigation, and national defense, pursuant to the Rivers and Harbors Appropriations Act of 1899, the Federal Water Pollution Control Act (Clean Water Act), as amended, and the Marine Protection Research and Sanctuaries Act of 1972.
3. Developing the DA position on USACE civil works studies and projects, including coordination with OMB under E.O. 12322, and transmission of the Secretary's recommendations to Congress.
4. Serving as congressional liaison on civil works matters, including serving as the DA point of contact for House and Senate Authorization and Appropriations Committees charged with oversight of the DA Civil Works Program.

B. Overseeing the development, coordination, and implementation of policy for USACE programs in support of other Federal and non-Federal entities, except those activities that are exclusively in support of U.S. military forces.

C. The OASA-CW also, in coordination with the Army's Deputy Chief of Staff, G-3, develops policy for and directing the foreign activities of the USACE, except for those foreign activities that are exclusively in support of U.S. military forces overseas.

DESCRIPTION:

The budgeted amount will be used to finance costs sub-allocated to the Office of the ASA (CW) by the Department of the Army, including the costs of 23 full time equivalent work years, and indirect and overhead costs consistent with those funded in recent appropriations.

SUMMARIZED FINANCIAL DATA:

	<u>FY 2014</u>
Personnel Compensation and Benefits (fully fund authorized staff to accomplish mission)	\$ 3,500,000
Support Services (space, utilities, communications, ADP, etc.)	\$ 1,100,000
Other (travel, transportation, training, printing, supplies and equipment)	<u>\$ 400,000</u>
Total FY 2014 amount:	\$ 5,000,000

Revolving Fund - Plant Replacement and Improvement Program (PRIP)

APPROPRIATION TITLE: Revolving Fund- Plant Replacement and Improvement Program (PRIP)

1. Explanation of Revolving Fund. The Revolving Fund, established by Congress in 1953 (P.L. 83-153, 67 Stat. 199), replaced the Plant Allotment Account authorized by the Secretary of War, on 13 December 1934, which had in turn replaced the Plant Program - Appropriation Basis that was used prior to 1934. Prior to the establishment of the Revolving Fund, accounting procedures necessitated by the two previous systems were cumbersome and resulted in a distorted picture of costs when plant was transferred from one appropriation to another.

a. Essentially, P.L. 83-153 provided that the Revolving Fund assumed the total capital value of \$127.9 million in 1953, consisting of the unexpended cash balance (\$25.3 million) and the net value (\$102.6 million) of the assets and liabilities of the plant accounts. The Revolving Fund would finance all future services as a separate entity within its own resources. The Plant Replacement and Improvement Program of the Revolving Fund (PRIP), has proven to be an effective means of providing equipment and materials needed on more than one project. Some advantages of the system are that it: (1) Simplifies funding and accounting procedures; (2) Provides consideration for plant replacement costs and inflation; (3) Eliminates distorted project costs when plant is used on multiple projects throughout its economic life; and (4) Permits plant availability on a timely basis to meet requirements.

b. The Revolving Fund operates within its own resources rather than from recurring annual appropriations. The Fund owns land, structures, dredges, floating plant, aircraft, fixed and mobile land plant, tools, office furniture, special equipment, computers and automated systems, which serve two or more projects or appropriation accounts. In order for the Revolving Fund to acquire and replace assets, plant or equipment items, it is necessary that the user, project, or appropriation be charged a fee when equipment or services are consumed. This fee consists of operating and fixed costs. The operating costs are reimbursed without a surcharge. The fixed costs include straight-line depreciation and a PRIP surcharge to provide for price growth and inflation. When planned expenditures exceed the income producing capability of the Fund, additional direct appropriations are required.

c. When the Revolving Fund was established, Congress authorized a capital fund limitation or ceiling of \$140.0 million. The capital fund value or corpus consists of the total assets, less liabilities and reserves. The initial corpus ceiling was adequate until 1965, when rising workload and inflation forced the Corps of Engineers to begin Budgeting annual increases of the corpus. These requests were generally granted, because the ceiling limited the income generating capability, which in turn, adversely affected the overall management of the Fund. Therefore, the Corps recommended and Congress granted the request in FY 1979, that annual capital-expenditure ceilings be substituted for the corpus ceiling. Then in FY 1985, expenditure ceilings were replaced by expenditure estimates. Starting in FY 1994, the Corps replaced the estimate of expenditures with an estimate of obligations in accordance with recommendations by the General Accounting Office.

2. The Revolving Fund accounts for facilities, payroll, and operations throughout the Army Corps of Engineers at its divisions, districts, separate field offices, and laboratories including its Engineer Research and Development Centers like the Waterways Experiment Station. The fund incurs expenses for acquisition, rehabilitation, operation, and maintenance of multiple use structures such as warehouses, shops and garages, as well as general-purpose plant, such as dredges, tugs, launches, trucks, cranes, bulldozers, drill rigs and other construction equipment. It also provides for reimbursement of the general and administrative expenses of District offices.

3. The FY 2014 PRIP includes 1 New Major Item and 29 Continuing Major Items from FY 2013. 2 Continuing Major Items have revised cost estimates greater than twenty percent above the original estimated cost. The tables that follow provide cost estimates for the New Major Items and revised cost estimates for the Continuing Major Items with increases in excess of twenty percent from the original cost estimate.

APPROPRIATION TITLE: Revolving Fund- Plant Replacement and Improvement Program (PRIP)

FY 2014 New Major Items	Page	Total Estimated Cost (\$000)
1. Remove and Replace Docks A and B – U.S. Moorings (Portland District)	4	11, 325
		Total: 11,325

Continuing Major Items with Revised Cost Estimates in Excess of 20%	Page	Original Estimated Cost (\$000)	Previous Estimated Cost (\$000)	Revised Estimated Cost (\$000)	Total Cost Increase (\$000)
1. A&B To Information Technology Lab Bldg 8000	3	27,500	33,600	35,100	1,500
2. P2: Corps of Engineers Programs & Project Management System	8	29,945	34,270	37,324	3,054

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<u>PRIP Category</u>	<u>Page</u>
Land and Structures	3
Dredges	4
Other Floating and Mobile Land Plant	6
Fixed Land Plant and Automated Systems	7

4. FY 2013 and FY 2014 (Items costing \$5,000,000 or more)

Of the 29 items listed below, 11 are scheduled for completion with FY 2013 funding and 2 are scheduled for completion in FY 2014.

a. Land and Structures:

(1) Additions and Betterment to Information Technology Lab – Engineer Research and Development Center (Continuing). Additions and betterments are needed to expand the Information Technology Lab (ITL) to accommodate a new Department of Defense purchased supercomputer. The Engineer Research and Development Center (ERDC) examined all of its requirements for computer acquisitions in the next five years in order to determine the new building requirements. Along with the building expansion, extensive increases in power and cooling requirements are included in the project. The design of the addition to the facility will also allow employees who currently work in adjoining trailers to move into the building. Total estimated cost: \$35,100,000. Prior years: \$33,600,000. FY 2013: 1,500,000. Cost increase was due to contractor being terminated for default and as a result, additional funds will be needed to cover additional contract inspections, administrative costs and provide some contingency since the liquidated damages are not available to the Government at this time. Congressional authorization to use PRIP funds to construct a new Environmental Laboratory and provide improvements to the Information Technology Laboratory was provided in Section 107 of the Consolidated Appropriations Act, 2008 (Public Law 110-161).

(2) New Engineer Research and Development Center (ERDC) Headquarters Building (Continuing). ERDC Headquarters, Command Staff Division, and assembly facilities are currently housed in five separate facilities that are aging and energy-inefficient. The current buildings do not comply with “Green standards” set by the Leadership in Energy and Environmental Design (LEED) Certification Program or anti-terrorism standards and some buildings contain asbestos. The proposed facility would replace several buildings and would provide office, meeting, training, reception, technical support, and quality of life space for ERDC headquarters and administrative personnel and tenant organizations in a modernized facility that complies with DoD minimum antiterrorism standards for buildings. The new facility would increase productivity, reduce operating costs, improve morale and synergy among the staff, enhance force protection, and promote efficiency and enhanced management control through co-location of functions and personnel currently located in a number of widely separated buildings on the 700-acre Vicksburg installation. Preliminary estimates are that approximately 120,000 square feet would be sufficient to replace the current approximately 169,000 square feet in five separate outmoded buildings. Funding in FY 14/15 predicated on the result of the design. Total estimated cost: \$47,000,000. Prior Years: \$340,000. FY 2013: \$3,660,000. FY 2014: \$43,000,000.

(3) Service Base Mooring Replacement, Pile Clusters, MDC 2768, St Louis District (Continuing). This project addresses safety, environmental conditions and mission requirements associated with the St. Louis District mooring facility due to the failure of four out of twelve wood pile clusters and the compromised southern mooring fleet area. The scope of work includes design and replacement of the piling system, removal of the existing pilings and replacing the trestle. The piling system supports the mooring facility at Mississippi River Mile 276. Currently, the southern wood pile clusters have failed and fleet barges are resting against a minimal number of remaining wood pile clusters. The replacement of the pile system will provide the St. Louis District fleet with mooring facilities designed to meet Coast Guard and marine safety criteria. Total estimated cost: \$19,000,000. Prior year: \$14,566,300 FY 2013: \$3,000. Contingency Reserve: \$4,430,700

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(4) Huntington District Federal Building Upgrade, Huntington District (Continuing). The Huntington District Federal Building is currently scheduled to undergo GSA ARRA funded renovations starting in FY 2010. During these renovations, Huntington District will make improvements to the building in order to meet Department of Defense minimum antiterrorism standards for buildings, and improve work environments to accommodate the recent increase in staffing. The work will consist of tenant improvements such as replacement of interior walls, ceiling, floor finishes, and carpet. More efficient floor layouts will be constructed as well. Security upgrades will include reinforcement of walls and windows, and structural retrofit for progressive collapse. Total estimated cost: \$21,000,000. Prior Years: \$20,703,754. FY 2013: \$125,000. FY 2014: \$97,000. Future Years: \$74,246 to complete.

(5) Remove and Replace Docks A and B – U.S. Moorings - Portland District (New). The U.S. Government moorings facility, Docks A and B has been in existence since 1903 to provide berthing during the winter repair period for minimum fleet hopper dredges ESSAYONS and YAQUINA. The last major refurbishment of the docks was in 1964. Since then, the dock surfaces have been re-decked and shear piles replaced periodically due to normal wear and tear. The stringers have rotted and several pile cap timbers have extensive dry rot up to four feet back from the exposed ends. As a result, a project increase is required for removal of the docks instead of refurbishing them. This will allow the cleanup of the sediment in the way of docks by GASCO, design, removal and installation of the decking once clean-up is complete. Total estimated cost: \$11,325,000. FY 2013: \$4,200,000. FY 2014: \$675,000. Future Years: \$6,450,000.

(6) Maintenance Bulkheads, CELRL, Louisville, KY (Continuing). The maintenance bulkheads used at the Louisville District's Ohio River projects are averaging 30 to 40 years old. These bulkheads are fabricated from aluminum and are riveted and bolted together. Of the 16 bulkheads, the district has 4 out of service and not considered worth repairing due to corrosion and unavailability of the original material. Six other bulkheads were repaired and re-inspected during the winter of 2009. They will be re-inspected in 2012. Varying levels of corrosion are present on all the bulkheads. To de-water a lock chamber for maintenance requires 6 bulkheads on the downstream end and up to 5 on the upstream end. This only leaves one bulkhead in reserve. Without new bulkheads if any more are placed out of service the ability of LRS to accomplish its dewatering mission is compromised. Total estimated cost: \$8,200,000. FY 2013: \$4,200,000. FY 2014: \$4,000,000 to complete.

b. Dredges:

(1) Dredge YAQUINA Repowering – MDC Project 2507 Portland District (Continuing). The dredge YAQUINA entered service in 1981. It is based in Portland, Oregon, and is part of the Corps hopper dredge fleet. The dredge operates on the West Coast to maintain Federal navigation channels. The main engines and ancillary systems have been in continuous service for twenty nine years. The main engines are no longer manufactured and it is becoming increasingly difficult to locate and procure replacement parts. Replacement of the main engines and ancillary systems is required in order to assure continued operation of the vessel. In addition, due to the ever increasing stringent emission standards, the engines should be replaced with more efficient marine diesels. Total estimated cost: \$18,211,000. Prior Years: \$15,520,961. FY 2013: \$75,000. FY 2014: \$10,000. Future Years: \$2,555,039.

(2) Dredge YAQUINA Dredging System Improvement MDC Project 2727 – Portland District (Continuing). The dredge YAQUINA entered service in 1981. It is based in Portland, Oregon, and is part of the Corps hopper dredge fleet. The dredge operates on the West Coast to maintain Federal navigation channels. The dredge pump engines, reduction gears, dredge pumps, hopper distribution system, and ancillary systems have been in continuous service for twenty eight years. The dredge pump engines are no longer manufactured and have been rebuilt several times. It is becoming increasingly difficult to locate and procure replacement parts. Replacement of the dredge pump engines and ancillary systems is required in order to assure continued operation of the vessel. The hopper distribution system is dated and will require redesign in order to maximize the settling and loading times from the new engine and more efficient dredge pump combinations. In addition, due to the ever increasing stringent emission standards, the engines should be replaced with more efficient marine diesels. Total estimated cost: \$9,176,000. Prior Years: \$4,755,528. FY 2013: \$50,000. Contingency Reserve: 4,370,472.

(3) Dredge POTTER Flexible Discharge – MDC Project 2717 St. Louis District (Continuing). This project entails the purchase of a flexible discharge floating pipeline, a spill and store barge, and handling gear for the Dredge POTTER. The new floating pipeline will provide the ability to better perform

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environmental dredging on the Mississippi River. Environmental dredging requires the use of fixed point discharge equipment in order to place dredged materials in specific locations to build beaches, islands, and underwater islands. Total estimated cost: \$8,000,000. Prior Years: \$6,790,800. FY 2013: \$500,000. Contingency Reserve: \$709,200.

(4) Dredge McFARLAND Asbestos/Lead Abatement MDC 2603 – Philadelphia District (Continuing). Abate asbestos and red lead paint to achieve current occupational safety standards in active crew spaces: forward and aft crew quarters (pilothouse, galley, etc.); aft engine and machinery rooms; and the forward dredge pump rooms. The dredge McFarland was built in 1967 when both asbestos and red lead paint were in wide use. Asbestos is present throughout the McFarland in the fireproof crew space joinery (sheathing, ceiling, and paneling); pipe insulation; and structural fireproof insulation on steel bulkheads. Red lead paint was used throughout the ship as the corrosion resistant base primer coat on all interior hull and steel. The aged vessel has asbestos fragments lodged in inaccessible areas behind the joinery panels. The vessel and its crew of 60 have two missions: (1) emergency and national defense dredging worldwide and (2) planned dredging in commercial waterways, mainly Federal navigation projects along the Atlantic and Gulf Coasts. Total estimated cost: \$6,000,000. Prior Years: \$5,774,300. FY 2013: \$10,000. Contingency Reserve: \$215,700.

(5) Dredge POTTER Texas Deck Rehab MDC 2738 – St. Louis District (Continuing). This project entails the refurbishment of the forward quarters and pilot house for the Dredge POTTER. The dredge is a 2,400 horsepower dustpan dredge which maintains 300 miles of the Mississippi River. The project will provide for more usable and habitable crew space and remove all lead based paint and asbestos. The pilot house has become crowded with all of the new electrical and electronic equipment, controls, and navigation aids that are required for modern day dredging and navigation. The present pilot house is a 1932 vintage design and is very narrow. The captain and crew must go outside during operations in all kinds of weather in order to avoid hitting obstructions. The Texas Deck also was designed in 1932 and it is where the offices are located on the dredge. The Second Deck is where the messing area and bunkrooms are located. The contaminants need to be removed from this area for the health and safety of the crew. Total estimated cost: \$8,468,000. Prior Years: \$8,449,184. Contingency Reserve: \$18,816.

(6) Dredge WHEELER Repowering and Integrated Control and Monitoring System, MDC 2620 – New Orleans District (Continuing). Repowering by installing four replacement diesel engines is considered an addition and betterment to the WHEELER, due to the anticipated increase in fuel efficiency and the lowering of exhaust emissions for the vessel. A horsepower increase for propulsion is feasible. The engines currently in service are aged and recurring component wear and failure problems with these engines, combined with the manufacturer inability to provide replacement spare parts in a timely manner have warranted their replacement. If the WHEELER is not repowered, the engines currently in service are likely to suffer catastrophic damages as they have in the past. The high maintenance and high fuel consumption for the engines will continue. If one of the engines should become unserviceable, the vessel would likely be out of service for a period of three years in order to affect such major repairs. The vessel is primarily to support the navigation mission by dredging on the Mississippi River, Southwest Pass, and other Federal waterways. The ICMS is to be added in FY2009. The current system is obsolete and many of the electronic components are unsupportable with regard to repair or direct replacement. The benefits of repowering the WHEELER would be significantly reduced if the current ICMS is not replaced due to the decreased reliability of the vessel. Total estimated cost: \$54,200,000. Prior Years: \$34,573,661. FY 2013: \$1,804,000. FY 2014: \$500,000. Future Years: \$17,322,339.

(7) Dredge FRY Shallow Draft Dredge Replacement (MDC 2609 (Murden)) - Wilmington District (Continuing). Purchase a new shallow-draft hopper dredge in order to maintain shallow coastal inlets along the Atlantic coast while adhering to environmental restrictions on side cast dredges. The dredge FRY was built in 1944 as a U.S. Navy seaplane wrecking derrick and converted to a side-casting dredge in 1972 when acquired by the Corps. Theoretically, the FRY has a remaining useful life of 9 years but in reality, it is virtually worn out and does not meet current environmental standards. Regulatory agencies have restricted its use due to the disturbance created by the discharge of dredged materials. In 2002, the dredge crane failed resulting in emergency maintenance and more downtime. Alternatively, a crane replacement and a propulsion system upgrade would require lengthy shipyard work. It has been determined by the Marine Design Center that it would be more economical to replace the vessel FRY with a new shallow draft hopper dredge than to continue repairs/upgrades. In addition, a new dredge would be compliant with new environmental restrictions on side cast dredging. Total estimated cost: \$20,750,000. Prior Years: \$19,847,100. FY 2013: \$800,000. Contingency Reserve: \$102,900.

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(8) Dredge Ladder Extension for the HURLEY, MDC 2450 - Memphis District (Continuing). Make modifications to increase the dredging depth of the HURLEY from 40' to 75'. This involves lengthening the existing dredge ladder, extending the hull to accommodate the longer ladder, and modifying the ladder hoisting mechanism. As presently equipped, the HURLEY can effectively be utilized only to dredge the shallow draft channel of the Mississippi River. The ladder extension will allow the HURLEY to be used to maintain the deep draft channel from Baton Rouge to New Orleans, extending its useful dredging season to about 250 days per year. Additional ladder hoisting and forward hull propulsion and maneuverability requirements associated with the longer hull form are included. Modifications will be accomplished during the lay up period, which normally runs from December to June. Total estimated cost: \$17,800,000. Prior Years: \$13,376,200. FY 2013: \$275,000. FY 2014: \$5,000. Future Years: \$4,143,800.

(9) Dredge McFARLAND Ready Reserve, MDC 2802, Philadelphia District, (Continuing). The Hopper Dredge McFARLAND is one of four Corps seagoing hopper dredges, which comprise the minimum fleet, authorized by PL 95-269. Section 2047(a) of the Water Resources Development Act of 2007 (Public Law 110-114) directed the Secretary of the Army to place the McFARLAND in ready reserve status not earlier than October 1, 2009 and not later than December 31, 2009. The dredge requires a number of upgrades and renovations to its mechanical and electrical systems in order to be reliable and meet all regulatory requirements. Total estimated cost: \$9,699,897. Prior Years: \$9,618,200. FY 2013: \$34,300. Contingency Reserve: \$47,397.

c. Other Floating and Mobile Land Plant:

(1) Revetment Crane Barge MDC Project 2690 – Memphis District (Continuing). The existing barge is of a 1958 series and is leaking badly and beyond repair. The crane barge is a vital part of the revetment operation on the Mississippi River where articulated concrete mats are placed on the banks of the river during low water to prevent scour and erosion. This operation has been ongoing for about one hundred years. There are two cranes and one of the cranes is used for the land clearing operation prior to the placement of the mats. The other crane is used for placement of gravel. The existing 100-ton capacity crawler cranes will be placed on the transport equipment and debris to and from the work sites. Total estimated cost: \$10,000,000. Prior Years: \$9,431,400. FY 2013: \$3,000. Contingency Reserve: \$565,600.

(2) Motor Vessel STRONG Replacement, 2730. Memphis District, (Continuing). A replacement vessel is required for the Motor Vessel STRONG. The Strong has been used on many occasions to assist the Revetment Unit, Mat Sinking Unit, and Dredge Hurley in towing of plant because of emergency conditions or equipment breakdown during the Revetment Season. The exact timing for any one of these missions is virtually impossible to predict because they are dependent on river levels and/or breakdown of other government or leased vessels. In the aftermath of Hurricane Katrina, the availability of motor vessels and barges for lease has become much more difficult. The increased horsepower and height of the new vessel will allow it to more safely and effectively respond to the needs of the Memphis District. The work includes development of a suitable progression of design and construction of one 2200-2500 BHP, self-propelled towboat. Total estimated cost: \$14,000,000. Prior year: \$11,061,800. FY 2013: \$250,000. FY 2014: \$5,000. Future Years: \$2,683,200.

(3) Revetment Crane Barge - Snag Barge, MDC 2800, Memphis District (Continuing). There are currently two barges but because of escalating costs only one barge will be replaced at a time. The first barge to be replaced is believed to be a 1958 series barge. The hull has deteriorated because of corrosion and harsh operating conditions. The barge has experienced leakage due to normal deterioration and extreme service. Loss of either barge could adversely impact the overall revetment mission. Total estimated cost: \$12,600,000. Prior Years: \$10,646,500. FY 2013: \$150,000. FY 2014: \$50,000. Future Years: \$1,735,500.

(4) Crane Barge (Strong Vessel), MDC 2733, Memphis District (Continuing). The project involves the design and construction of one crane barge. The current barge was obtained as salvage from the Coast Guard and will not be compatible with the motor vessel Strong replacement due to be delivered in FY09. The existing barge is narrower than the Strong replacement vessel and will create problems when setting buoys. The new barge will also have enhanced firefighting capabilities. Total estimated cost: \$9,000,000. Prior Years: \$5,671,700. FY 2013: \$165,000. FY 2014: \$5,000. Future Years: \$3,158,300.

(5) Motor Vessel CLINTON Replacement, MDC 2688, Rock Island District (Continuing). The project involves design and construction of a replacement towboat. The current vessel was placed in service in 1974 and the propulsion system and other major components have reached the end of their useful life. The towboat is used to push maintenance barges for strike removal, rock placement, and repairs to structures. The vessel is required to operate at times in perilous

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conditions near dams and other control structures where reliability and performance is essential in order to minimize risk to crews and other floating plant. Total estimated cost: \$5,547,000. Prior Years: \$4,987,353. FY 2013: \$12,000. Contingency Reserve: \$547,647.

(6) Survey Vessel FLORIDA Replacement, MDC 2806, Jacksonville District (Continuing). The survey vessel FLORIDA was purchased in 1973 and has deteriorated to the point that it is not longer cost effective to maintain and repair. The condition of the vessel is no longer adequate to ensure efficient and reliable coverage of all assigned survey areas. Total estimated cost: \$4,989,000. Prior Years: \$4,602,900. FY 2013: \$165,000. FY 2014: \$15,000. Future years: \$206,100.

(7) SHORTY BAIRD Replacement, MDC 2885, Little Rock District (Continuing). The Project consists of replacement of the existing towboat. The current vessel is past its useful life and does not meet current safety or environmental requirements. The new towboat will support the operation and maintenance mission on the McClellan-Kerr Arkansas River Navigation System for the Little Rock District. The new vessel will provide propulsion and act as a berthing platform for the Arkansas River Fleet. The towboat will also be utilized by the Omaha District, Memphis District, and other Corps Districts as needed. Total estimated cost: \$15,000,000. Prior Years: \$496,000. FY 2013: \$9,475,000. FY 2014: \$300,000 Future Years: \$4,728,100.

(8) Motor Vessel Quad Cities REPLACEMENT, MDC 2685, Rock Island District (Continuing). The Quad Cities Heavy Lift Crane is a one of a kind Manitowoc 36ft. ringer, heavy lift crane capable of lifting 350 tones with full 360 degree rotation that currently serves the entire Mississippi River from St. Paul to New Orleans as a regional asset. This unique piece of equipment is critical to our entire Structures Maintenance Unit mission and is central to our ongoing work process for lock miter gate and lift gate repair. It is regularly used with the Rock Island District to remove aging and damaged miter gates and install temporary spare gates so that navigation can continue uninterrupted. There is no other heavy lift barge mounted crane capable of performing these required emergency heavy lifts on the Upper Mississippi River. This 22 year old derrick barge has been exposed to repeated structural fatigue, deterioration of the base metal, and degradation of structural welds. The potential for catastrophic breakdown of the barge's main structural members during heavy lifts significantly increases with each added year of service; inevitably, this will cause extended lock closures and result in mission work stoppage. Total estimated cost: \$44,840,000. Prior Years: \$253,000. FY 2013: \$9,050,000. FY 2014: \$26,250,000. Future Years: \$9,287,000.

d. Fixed Land Plant and Automated Systems:

(1) Real Estate Management Information System (REMIS) – Corpwide (Continuing). The Army Corps of Engineers is the responsible agent for the acquisition and disposition of real estate for the Army Civil Works and Military projects and for the Air Force. REMIS is the tool that the Corps uses to administer and manage property that is out-granted at civil projects, Army bases and Air Force installations. REMIS is the official, auditable database of record for the Corps Civil Works Real Property Inventory (RPI) of public lands, buildings and structures. REMIS supports e-Gov as the official database of record for the real property inventory of Army and Air Force land holdings. Base Realignment and Closure (BRAC) actions are administered by the Corps and recorded in REMIS. REMIS serves as a Chief Financial Officer compliant subsidiary ledger to CEFMS (Corps of Engineers Financial Management System), and provides annual accountability reports to the GSA (General Services Administration). The original version of REMIS had performance gaps relating to: full compliance with the DoD Real Property Inventory Requirements (RPIR), DoDI 4165.14 Instructions, DoD Real Property Unique Identification Registry (RPUIR), and Geographic Information System (GIS) capability, Graphical User Interface, Data Sharing, Document Administration and Disposal. Closure of these performance gaps will enable REMIS to become a more competent tool for life-cycle accountable asset management. Total cost has increased from \$10,400,000 to \$19,500,000 due to new requirements. The FY12 new requirements include the following. 1.) Office of the Secretary of Defense (OSD) mandates that REMIS interface with OACSIM's HQIIS using an automated bi-directional web exchange for near real-time interaction, rather than the original annual static submission. 2.) New enterprise level requirements mandates by the Corps Corporate Information Directorate force all system changes to go through a formal Test & Evaluation prior to release to production. 3.) Conversion of remaining data within REMIS, including Civil Works Real Property Assets, to conform to DoD Real Property Inventory Requirements (RPIR). 4.) Costs associated with postponement of the Training module development from FY11 to FY12 due to HQIIS requirement (item 1 above). 5.) The USACE Corporate Enterprise Architecture (CeA) mandates that the new graphical user interface be developed using a configurable, manageable programming protocol leading to the selection of the .NET family of programming languages. These development tasks and procedures to meet these requirements have already been, or are currently in the process of being, implemented, delaying some original tasks, including: 1) GIS capability, 2) Document Administration, 3) Timber Harvesting Module, and 4) Asset

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Disposal. The modernization process had revealed two (2) additional requirements to complete the current modernization project: 1) Digitalization of hard-copy data for the GIS feature, and 2) Contingencies for annual unplanned requirements. The requested additional funding is required to complete these tasks and to continue developing under the current OSD, OACSIM, and USACE mandates. The Real Estate Programs Office is preparing a proposal for requirements that were not addressed during the current modernization cycle, projected to begin in late FY 2013 or FY 2014. Additional funding is to cover shortfalls for the initial requirements that have or will be awarded for the completion of the modernization effort. Since the beginning of the modernization effort many of the original assumptions have changed due to the continued changes in both software and hardware requirements, as well as organizational and enterprise level changes, which have lead to the incorporation of more complex and secure requirements to meet the modernization goal. Total estimated cost for the current modernization project: \$23,231,000. Prior Years: \$8,306,000. FY 2013: \$5,900,000. FY 2014: \$5,000,000. Future Years: \$4,025,000. Any future funding requests will be part of a new modernization five-year plan and project.

(2) P2: Corps of Engineers Programs and Project Management System – Corpswide (Continuing). This project represents scope and cost changes to the Corps of Engineers automated information management system, P2. The P2 project was initially completed and deployed in 2004 and significantly upgraded in 2011. P2 is designed to support the business processes of Programs and Project Management for all districts, divisions, and Corps headquarters. P2 currently uses two primary commercial off the shelf applications, which include Oracle Projects and Primavera software. Additional software applications are required to provide an interface for reporting as well to import and export data fluidly between P2 and other USACE systems. One of those applications is Oracle Financial Analyzer (OFA). It allows reporting across all program areas and has specific modules for various USACE programs / accounts-- Civil Works, General, Environmental and CEMRS (USACE Manpower application). Oracle has discontinued future development and support of the OFA software, therefore a new application has to be selected to meet the USACE mission reporting needs that OFA served. The functional requirements for the replacement are currently being determined. After they have been documented procurement will be sought for OFA replacement. Additional functionality that enhances the efficiency of USACE project management may be included with the replacement application. As a result of the need to replace OFA, Project cost is increasing from \$37,324,000 to \$39,524,000. Cost increase is primarily due to P2 enhancing data analysis capabilities and developing a consolidated enterprise solution for greater efficiency in planning, scheduling, and tracking small and specialized projects across all mission areas. Total estimated cost: \$39,524,000. Prior Years: \$34,045,000. FY 2013: 3,054,000. FY 2014: \$2,200,000. Future Years: \$225,000.

(3) Electronic Document Management System (EDMS) - Corpswide (Continuing). Project involves purchasing and installing software for the Corps to implement a document management system and comply with Federal regulations. This document and records management initiative will establish policies, standards, and procedures to identify, classify, archive, preserve, and destroy documents. Total estimated cost: \$8,856,000. Prior Years: \$7,354,696. Project to be completed in FY 2013.

(4) Army Corps of Engineers Information Technology (ACE-IT) Server Refresh (Hardware) - Corpswide (Continuing). Project includes purchasing hardware for the Corps enterprise information technology requirements over the next 5 years (technology refresh). The servers that are currently running the existing enterprise programs such as Program and Project Management System (P2), Corps of Engineers Financial Management System (CEFMS), and Operations and Management Business Information Link (OMBIL) are becoming obsolete and need to be replaced. In addition, servers will be purchased for emerging requirements such as the Enterprise Data Warehouse and, the Facilities and Equipment Management System (FEMS). Total estimated cost: \$20,000,000. Prior Years: \$5,800,000. FY 2013: \$4,000,000. FY 2014: \$4,000,000. Future Years: \$6,200,000.

(5) Army Corps of Engineers Information Technology (ACE-IT) Server Refresh (Software) – Corpswide (Continuing). Project includes purchasing software for the servers being purchased for the refresh of the Corps enterprise information technology requirements over the next 5 years (technology refresh). The servers that are currently running the existing enterprise programs such as Program and Project Management System (P2), Corps of Engineers Financial Management System (CEFMS), and Operations and Management Business Information Link (OMBIL) are becoming obsolete and need to be replaced. In addition,

APPROPRIATION TITLE: Revolving Fund- Plant Replacement and Improvement Program (PRIP)

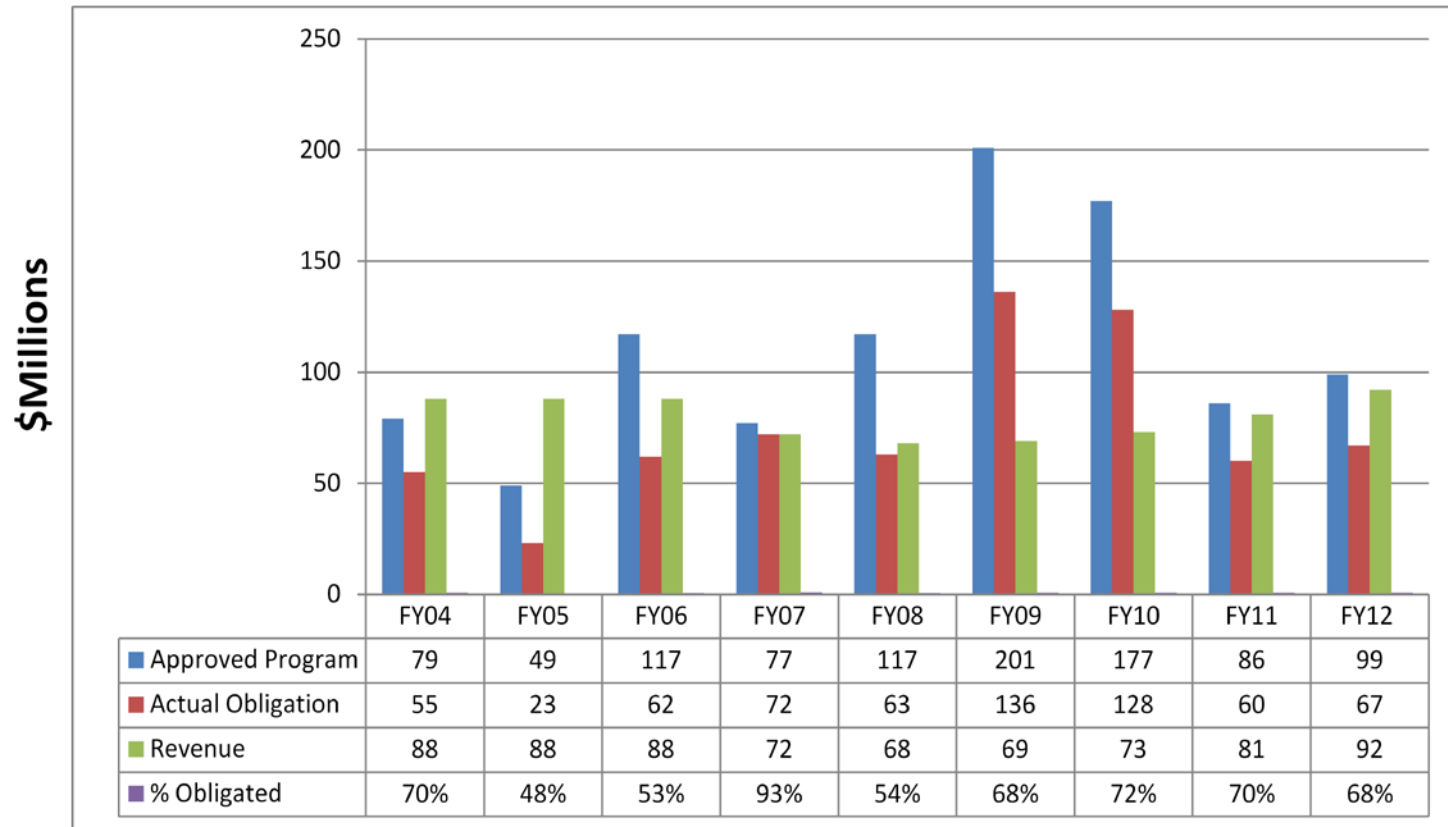
servers will be purchased for emerging requirements such as the Enterprise Data Warehouse and, the Facilities and Equipment Management System (FEMS). Total estimated cost: \$5,000,000. Prior Years: \$2,000,000. FY 2013: \$1,000,000. FY 2014: \$1,000,000. Future Years: \$1,000,000.

(6) USACE Enterprise Data Warehouse (EDW) – Corpswide (Continuing). The project involves development and implementation of the Enterprise Data Warehouse (EDW). The EDW provides a means for storing data from the various Corps systems in a standard format and a central location. The EDW supplements and will ultimately replace multiple legacy automated information system databases that provide only summary roll up reporting. These local systems provide analytical reporting solutions outside of the approved systems. The EDW will provide USACE leadership with an improved reporting capability, producing more comprehensive standardized analysis allowing for more informed decision-making. The EDW has attained a three-year authority to operate through the Army accreditation process. Since the inception of the EDW initiative the project has successfully completed a prototype, pilot, and limited production phase. Successful implementation of the EDW requires accurate analysis and re-design of USACE data structures. This enables the implementation of effective data sharing and data integration across USACE systems as well as with outside agencies. The EDW improves the Corps ability to monitor and report on the planning, budgeting and execution of projects across the organization, offering the USACE community increased functionality at a lower cost through the adoption of Enterprise information technology solutions. Total estimated cost: \$14,750,000. Prior Years: \$7,658,427. FY 2013: \$3,000,000 to complete.

DIVISION/ DISTRICT	PRIP PROJECTS, CONTINUING AND NEW TO BE FUNDED ((PROJECTS LESS THAN \$5M)	CAT	TOTAL ESTIMATED COST	PRIOR FY (\$000)	FY 13 (\$000)	FY 14 (\$000)	Future Years (\$000)	Remarks
ERDC	COGNITIVE ECOLOGY FACILITY (CEF), ENGINEER RESEARCH AND DEVELOPMENT CENTER (ERDC), VICKSBURG MS	05	1,433	1,433				CONTINUING. TO BE COMPLETED
LRD/LRH	LRH REPAIR STATION	05	700	0	700			CONTINUING
LRD/LRN	CRANE-Mobile Land 35 Ton, Rough Terrain	05	500			500		NEW
MVD/MVR	ADDITION AND BETTERMENT CLOCK TOWER & ANNEX WINDOW REPLACEMENT, ROCK ISLAND ARSENAL	05	1,614	732	882			CONTINUING
MVD/MVR	IWW Material Handler	05	1,500			1,500		NEW
SAD/SAJ	Replace Building at Dredge Depot in Jacksonville, FL	05	2,800		200	2,550	50	NEW
SWD/SWG	DEMOLISH AND REPLACEMENT-BUILDING 23	05	1,187	980	207			CONTINUING
SWD/SWG	DEMOLISH AND REPLACEMENT - PORT ARTHUR OFFICE BLDG	05	1,173	655	518			CONTINUING
MVD/MVR	CLOCK TOWER ANNEX BUILDING, CENTRAL HEATING SYSTEM REPLACEMENT	10	1,277	0	150	1,092	35	CONTINUING
NWD/NWS	PERIMETER FENCE (SEATTLE DISTRICT)	10	561	561				CONTINUING
MDC-NWP	2726 YAQUINA SHIP SERVICE GENERATORS	30	3,031	2,431	400	200		CONTINUING
NWD/NWP	ESSAYONS STEERING GEAR SYSTEM	30	929	0	929			CONTINUING
LRD/LRH	DECK CARGO BARGES (Design Funds)District needs to provide total project cost and when expect to start as new major item.	40	75	0	75			CONTINUING
LRD/LRH	WORKBOAT #70 REPLACEMENT (Design Funds)District needs to provide total project cost and when expect to start as new major item	40	75	0	75			CONTINUING
LRD/LRN	EMERGENCY NAVIGATION LOCK CLOSURE CAISSON, NASHVILLE DISTRICT	40	3,300	3,300				CONTINUING
MDC/LRN	2960 LRN Deck Barges (2)	40	1,675			20	1,655	NEW
MDC/MVN	2887 MVN Deck Barges (3)	40	2,741		15	50	2,676	NEW
MDC/LRP	2900 DESIGN EFFORT-SPUD BARGE	40	1,675	7	100	1,330	238	CONTINUING
MDC-LRP	2882 DECK CARGO BARGE	40	1,885	6	100	1,540	239	CONTINUING
MDC-MVN	2623 SURVEYBOAT BRETON REPLACEMENT	40	1,887	17	1,655	150	65	CONTINUING
MDC-MVS	2783 BUOY BARGE #3 REPLACEMENT	40	700	662	10		28	CONTINUING
MDC/NAB	2794 NAB Survey Vessel Replacement	40	3,300	2	5	2,507	786	NEW
MDC/NAO	2895 NAO Drift Collector & Survey Vessel	40	3,500	4	10	2,607	879	NEW
MDC-SAM	2892 STOP LOG BARGES	40	3,600	0	3,390	180	30	CONTINUING
MDC/SAM	2893 Heavy Deck Maintenance Barge	40	3,660			3,385	275	NEW
MDC-SWL	2889 BIG ISLAND CRANE PROCUREMENT	40	3,400	15	85	3,200	100	CONTINUING

DIVISION/ DISTRICT	PRIP PROJECTS, CONTINUING AND NEW TO BE FUNDED ((PROJECTS LESS THAN \$5M)	CAT	TOTAL ESTIMATED COST	PRIOR FY (\$000)	FY 13 (\$000)	FY 14 (\$000)	Future Years (\$000)	Remarks
MVD/MVN	Replacement of Survey Boat M/V Burwood	40	1,900	50		1,655	195	NEW
MVD/MVR	Replacement Crane for Manitowoc 3900	40	2,500			2,500		NEW
NWD/NWS	DEBRIS STORAGE BARGE NWS 1-12-3 REPLACEMENT	40	1,100	0	1,025		75	CONTINUING
SAD/SAJ	SAJ Replacement Barge (CN-2 with SPUD Barge	40	2,000			100	1,900	NEW
MVD/MVP	Bulldozer #1-250 HP (D7) range	50	500			500		NEW
MVD/MVP	Bulldozer #2-250 HP range	50	500			500		NEW
MVDMVP	Excavator-track mounted 2.5 cubic yard, 250 HP	50	400			400		NEW
LRD/LRC	CHICAGO DISTRICT OFFICE FURNITURE	70	1,405	0	1,405			CONTINUING
LRD/LRH	50 TON TRUCK CRANE	5X	650	0	650			CONTINUING
LRD/LRN	CRANE-MOBILE LAND 50 TON, CRAWLER, RUBBER TRACK	5X	690	0	690			NEW
LRD/LRP	CRANE-MOBILE-100 TON (REPLACE#96801) NEVILLE ISLAND, PA 15335	5X	970	10	10		950	CONTINUING
MVD/MVR	IWW MOBILE TRUCK CRANE LINKBELT REPLACEMENT	5X	675	0	675			CONTINUING
NAD/NAP	Caterpillar Articulating Dump Truck	5X	600			600		NEW
NAD/NAP	Caterpillar Wide Track Bulldozer	5X	450			450		NEW
NAD/NAP	Caterpillar 330C Excavator	5X	500			500		NEW
NWD/NWO	REPLACEMENT MOBIL DRILL RIG	5X	600			600		NEW
SAD/SAJ	40-TON TRUCK CRANE TO REPLACE 25 yr old, 25-TON TRUCK CRANE for SOUTH FLORIDA OPS OFFICE	5X	695	0	695			CONTINUING
SAD/SAM	BW&T/ALABAMA RIVERS	5X	325	0	325			CONTINUING
SAD/SAS	SONIC DRILL RIG	5X	850	0	850			CONTINUING
SWD/SWT	75 TON HYDRAULIC CRANE REPLACEMENT	5X	698		698			NEW
SWD/SWF	MOBILE DRILL RIG REPLACEMENT	5X	600			600		NEW
SPD/SPN	ACOUSTIC SINGLE AND MULTI-BEAM SONAR SYSTEMS AND RTK GPS EQUIPMENT-SIDE MOUNT TO OUTFIT S/V TIBURON	9A	515	0	515			CONTINUING
SPD/SPN	ACOUSTIC SINGLE AND MULTI-BEAM SONAR SYSTEMS AND RTK GPS EQUIPMENT-SIDE MOUNT TO OUTFIT S/V TIBURON SAFEBOAT	9A	515	0	515			CONTINUING
NWD/NWP	REGULATORY/CONSTRUCTION/WILLAMETTE VALLEY RELOCATION	LH	950	400	550			CONTINUING
	TOTAL:		68,766	11,265	18,109	29,216	10,176	

PRIP Trend



The trend in the PRIP account from FY 2008 through FY 2010 (as can be seen in the trend chart) shows Program requirements increasing but revenue declining resulting in a rapid decline in the fund balance. During FY 2010 our Finance and Accounting (F&A) office reviewed procedures for collecting income to determine why it was declining. The analysis resulted in the F&A office implementing policy changes that provide a more timely repayment of PRIP financing and a more equitable assessment of plant increment charges. Implementation of these changes occurred during FY 2011 and contributed to the increase in revenue for the year. In addition, careful planning and prioritization of new projects, close tracking of project execution and regular reviews of the collection process for increment and depreciation with adjustments being made as needed, have produced the desired effect of stabilizing the decline of funds in the account.

PRIP FUND STATUS
as of 30 September 2012

PRIP FY 2012	ACTUAL (\$000)
Balance as of 1 Oct 11:	\$170,153
Income:	
Recovery of PY	663
Depreciation	49,861
Plant Increment	42,463
Total Income:	92,987
Expenses:	
Less Obligations	66,730
Total Expenses:	66,730
End of Year Balance	196,411
Less Insurance Reserve	38,000
Available to Allocate in FY13	\$158,411

PRIP PROJECTED	FY 2013 (\$000)	FY 2014 (\$000)
Beginning Fund Balance:	\$196,411	\$208,283
Less Insurance Reserve	38,000	38,000
Less Obligation Plan for Projects	80,452	74,416
Plus Projected Income	92,324	92,324
Available to Allocate FY XX:	170,273	188,191
Plus Insurance Reserve	38,000	38,000
Ending Balance:	\$208,283	\$226,191

National Programs

O&M JUSTIFICATION SHEET

PROJECT NAME: Inspection of Completed Works

AUTHORIZATION: Section 221 of the Flood Control Act of 1970, as amended (84 Stat. 1831, 42 U.S.C. 1962d-5b), requires that a written agreement be executed between the Secretary of the Army and the non-Federal sponsor to identify the "items of local cooperation" for Corps projects, including operation and maintenance requirements. It also authorizes the Corps to "undertake performance of those items of cooperation necessary to the functioning of the project for its purposes, if the Corps has first notified the non-Federal interest of its failure to perform the terms of its agreement and has given such interest a reasonable time after such notification to so perform." To determine whether the non-Federal sponsor is performing as it has agreed, the Corps undertakes inspections of completed projects. Engineer Regulation 500-1-1, Emergency Employment of Army and Other Resources, Civil Emergency Management Program, Chapter 5, Rehabilitation and Inspection Program in conjunction with related policy guidance memoranda for the Corps Levee Safety Program establishes the policy for the inspection of Federal flood risk management projects which have non-Federal sponsors responsible for operation, maintenance, repair, replacement, and rehabilitation as specified in formal agreements based on Section 221 of the Flood Control Act of 1970 or other legislation.

LOCATION AND DESCRIPTION: The Corps civil works program includes approximately 11,750 miles of levees and floodwall systems, 383 reservoirs, and more than 90 storm damage reduction projects along 240 miles of the nation's 2,700 miles of shoreline. These account for a major portion of the projects protecting communities across the nation. Upon completion, and with the exception of reservoirs, most of the infrastructure built under this program is transferred to the sponsoring cities, towns, and special use districts to own and operate the projects. Many of these structures are adjacent to highly urbanized areas, and all of them require continued maintenance (either by the Federal government or Non-federal interests) after construction in order to ensure the project will function as intended to prevent loss of life and catastrophic damages; as well as preserve the value of the Federal investment; and to encourage non-Federal sponsors to bear responsibility for their own protection.

CONFERENCE AMOUNT FOR FY 2013: \$30,603,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$718,000 O: \$29,713,000 T: \$30,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0

FRM: \$30,431,000- See attached table for breakdown by state.

The Inspection of Completed Works activities encompass all federally constructed and primarily locally maintained flood risk reduction projects that meet the Corps condition requirements. In 2006, the U.S. Army Corps of Engineers created its Levee Safety Program with the mission to assess the integrity and viability of levees and recommend courses of action to make sure that levee systems do not present unacceptable risks to the public, property and environment. The Inspection of Completed Works Program is now guided by the Levee Safety Program. One of the main activities includes inspections of federally authorized projects operated and maintained by a non-Federal sponsor. These inspections determine if the project will perform as expected; identify deficiencies or areas which need monitoring or immediate repair; to identify any changes over time; and collect information in order to be able to make informed decisions about future actions. Other activities will include updating information in the National Levee

Database; screening levees to rank them in order of risk; conducting pre-storm inspections of Federally authorized hurricane shore protection systems; conducting pre-inspection preparation and post inspection reporting and notification requirements; coordinating Levee Safety Program efforts with public sponsors or stakeholders; reviewing sponsor proposed alterations, improvements, excavations or construction which are in accordance with Corps policy and guidance for such proposals i.e. Section 208/408 proposals; and updating project operation and maintenance manuals.

RC: \$0 .

H: \$0

EN: \$0 -

WS: \$0 - N/A

OTHER INFORMATION: Coordination between the Corps and other Federal, state, and local agencies is essential for proper accomplishment of this program. In addition to satisfying Corps' requirements, the improved inspection results will be made available on the National Levee Database for use by local, State, and other Federal agencies responsible for state and local Levee Safety Programs

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the President's budget amount for FY 2013.

TABLE BREAKDOWN BY STATE

	<u>STATE</u>	<u>AMOUNTS</u>
LRD	INSPECTION OF COMPLETED WORKS, IL	570
LRD	INSPECTION OF COMPLETED WORKS, IN	1008
LRD	INSPECTION OF COMPLETED WORKS, KY	988
LRD	INSPECTION OF COMPLETED WORKS, MI	230
LRD	INSPECTION OF COMPLETED WORKS, NY	612
LRD	INSPECTION OF COMPLETED WORKS, OH	694
LRD	INSPECTION OF COMPLETED WORKS, PA	818
LRD	INSPECTION OF COMPLETED WORKS, VA	42
LRD	INSPECTION OF COMPLETED WORKS, WV	346
MVD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, IL	50
MVD	INSPECTION OF COMPLETED WORKS, AR	236
MVD	INSPECTION OF COMPLETED WORKS, IA	338
MVD	INSPECTION OF COMPLETED WORKS, IL	1986
MVD	INSPECTION OF COMPLETED WORKS, KY	45
MVD	INSPECTION OF COMPLETED WORKS, LA	708
MVD	INSPECTION OF COMPLETED WORKS, LA	466
MVD	INSPECTION OF COMPLETED WORKS, MN	484
MVD	INSPECTION OF COMPLETED WORKS, MO	882
MVD	INSPECTION OF COMPLETED WORKS, MS	85
MVD	INSPECTION OF COMPLETED WORKS, ND	271
MVD	INSPECTION OF COMPLETED WORKS, TN	96
MVD	INSPECTION OF COMPLETED WORKS, WI	61
NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, CT	15

NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, MA	15
NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, ME	15
NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, RI	15
NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, VA	15
NAD	INSPECTION OF COMPLETED WORKS, CT	268
NAD	INSPECTION OF COMPLETED WORKS, DC	115
NAD	INSPECTION OF COMPLETED WORKS, DE	40
NAD	INSPECTION OF COMPLETED WORKS, MA	306
NAD	INSPECTION OF COMPLETED WORKS, MD	135
NAD	INSPECTION OF COMPLETED WORKS, ME	95
NAD	INSPECTION OF COMPLETED WORKS, NH	61
NAD	INSPECTION OF COMPLETED WORKS, NJ	466
NAD	INSPECTION OF COMPLETED WORKS, NY	914
NAD	INSPECTION OF COMPLETED WORKS, PA	400
NAD	INSPECTION OF COMPLETED WORKS, RI	45
NAD	INSPECTION OF COMPLETED WORKS, VA	317
NAD	INSPECTION OF COMPLETED WORKS, VT	220
NAD	INSPECTION OF COMPLETED WORKS, WV	115
NWD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, OR	20
NWD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, WA	53
NWD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, WY	10
NWD	INSPECTION OF COMPLETED WORKS, CO	135
NWD	INSPECTION OF COMPLETED WORKS, IA	318
NWD	INSPECTION OF COMPLETED WORKS, ID	358
NWD	INSPECTION OF COMPLETED WORKS, KS	631

NWD	INSPECTION OF COMPLETED WORKS, MO	631
NWD	INSPECTION OF COMPLETED WORKS, MT	177
NWD	INSPECTION OF COMPLETED WORKS, ND	113
NWD	INSPECTION OF COMPLETED WORKS, NE	449
NWD	INSPECTION OF COMPLETED WORKS, OR	578
NWD	INSPECTION OF COMPLETED WORKS, SD	146
NWD	INSPECTION OF COMPLETED WORKS, WA	1093
NWD	INSPECTION OF COMPLETED WORKS, WY	123
POD	INSPECTION OF COMPLETED WORKS, AK	155
POD	INSPECTION OF COMPLETED WORKS, HI	885
SAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, GA	15
SAD	INSPECTION OF COMPLETED WORKS, AL	100
SAD	INSPECTION OF COMPLETED WORKS, FL	1500
SAD	INSPECTION OF COMPLETED WORKS, GA	180
SAD	INSPECTION OF COMPLETED WORKS, MS	50
SAD	INSPECTION OF COMPLETED WORKS, NC	261
SAD	INSPECTION OF COMPLETED WORKS, SC	66
SPD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, CA	10
SPD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, CO	10
SPD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, NM	30
SPD	INSPECTION OF COMPLETED WORKS, AZ	101
SPD	INSPECTION OF COMPLETED WORKS, CA	3987
SPD	INSPECTION OF COMPLETED WORKS, CO	187
SPD	INSPECTION OF COMPLETED WORKS, NM	676
SPD	INSPECTION OF COMPLETED WORKS, NV	73

SPD	INSPECTION OF COMPLETED WORKS, TX	543
SPD	INSPECTION OF COMPLETED WORKS, UT	52
SWD	INSPECTION OF COMPLETED WORKS, AR	281
SWD	INSPECTION OF COMPLETED WORKS, KS	352
SWD	INSPECTION OF COMPLETED WORKS, MO	44
SWD	INSPECTION OF COMPLETED WORKS, OK	180
SWD	INSPECTION OF COMPLETED WORKS, TX	1270
	TOTAL	30,431,000

O&M JUSTIFICATION SHEET

PROJECT NAME: Water/Environmental Certification

AUTHORIZATION: Authorities inherent in project-specific authorizations for operation and maintenance for navigation purposes.

LOCATION AND DESCRIPTION: The water quality certification is for deep draft and shallow draft navigation projects. No dredging activities can be performed without necessary environmental and water certifications. This national program is to perform critical, routine activities needed to acquire or renew water and environmental certifications for projects that are not funded separately. Funding is for critical activities to acquire water quality, environmental certification, and coordination with other Federal, State and local agencies for cyclical dredging at projects that do not receive annual funding to ensure required environmental documentation. Projects are required to comply with local, state, and federal environmental laws and regulations. These activities provide the necessary effort to ensure compliance, including endangered species compliance.

CONFERENCE AMT. FOR FY 2013: \$315,000 2/

BUDGETED AMOUNT FOR FY 2014: M: 0 O: \$130,000 T: \$130,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$130,000 - The Water/Environmental Certification activities encompass coordination with Federal and State natural resources agencies to meet environmental requirements associated with dredging for deep and shallow draft navigation projects. The primary purpose of these activities is coordination between the Corps and other Federal, local, and state agencies to meet environmental requirements associated with dredging. These projects are typically not regularly funded. Without Water Quality Certification renewal, extensive delays in dredging will result when funding is received for necessary dredging. See table in Other Information below for breakdown by state.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION:

FY 2013 WATER/ENVIRONMENTAL CERTIFICATION PROGRAM

WATER/ENVIRONMENTAL CERTIFICATION, FL	\$ 0
WATER/ENVIRONMENTAL CERTIFICATION, MS	\$ 0
WATER/ENVIRONMENTAL CERTIFICATION, VA	\$ 130,000
TOTAL	\$ 130,000

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Project Condition Surveys

AUTHORIZATION: Public Law 85-480, approved July 2, 1958 authorizes the Chief of Engineers to publish information, including condition surveys, that may be of value to the general public.

LOCATION AND DESCRIPTION: This national program consists of performing hydrographic surveys for Federally maintained navigation projects on a state-by-state basis. Hydrographic surveys are conducted for navigation channels, inlets and anchorages within, approaching and surrounding states.

CONFERENCE AMT. FOR FY 2013: \$17,884,000 2/

BUDGETED AMOUNT FOR FY 2014: M: 0 O: \$19,302,000 T: \$19,302,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$19,302,000- Hydrographic surveys of Federal navigation channels are planned for Fiscal Year 2014 in order to disseminate the navigation channel condition for users of the waterways. This information is also used in the decision making process for channel maintenance operations. The selection of which projects to survey and scheduling of surveys is based upon channel usage, shoaling rates and maintenance dredging schedules. The need for Project Condition Surveys (PCS) is based primarily upon when that project was last surveyed. The surveys are generally conducted on a rotational basis, taking into account the expected sedimentation rates and historic maintenance. This generally includes projects that do not routinely receive O&M appropriations and that are not regularly maintained. For those projects scheduled to be dredged in the budget year, PCS for that segment of the project is not requested since that project will include pre- and post-dredging surveys. Another consideration in the use of funding for PCS is the ability to respond to unanticipated needs, including concerns raised by the U.S. Coast Guard, local harbor masters, or other agencies regarding projects that have become shoaled as a result of severe storms and/or abnormal deposition rates that may have compromised safe navigation. See table below in Other Information for breakdown by state.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION:

FY14 PROJECT CONDITION SURVEYS

PROJECT CONDITION SURVEYS, AL	\$ 148,000
PROJECT CONDITION SURVEYS, AR	\$ 2,000
PROJECT CONDITION SURVEYS, CA	\$ 1,663,000
PROJECT CONDITION SURVEYS, CT	\$ 850,000
PROJECT CONDITION SURVEYS, DC	\$ 25,000
PROJECT CONDITION SURVEYS, DE	\$ 200,000
PROJECT CONDITION SURVEYS, FL	\$ 1,465,000
PROJECT CONDITION SURVEYS, GA	\$ 161,000
PROJECT CONDITION SURVEYS, HI	\$ 683,000
PROJECT CONDITION SURVEYS, IL	\$ 106,000
PROJECT CONDITION SURVEYS, IN	\$ 185,000
PROJECT CONDITION SURVEYS, KY	\$ 2,000

O&M JUSTIFICATION SHEET

PROJECT CONDITION SURVEYS, LA	\$ 59,000
PROJECT CONDITION SURVEYS, MA	\$ 900,000
PROJECT CONDITION SURVEYS, MD	\$ 450,000
PROJECT CONDITION SURVEYS, ME	\$ 1,100,000
PROJECT CONDITION SURVEYS, MI	\$ 670,000
PROJECT CONDITION SURVEYS, MN	\$ 87,000
PROJECT CONDITION SURVEYS, MO	\$ 14,000
PROJECT CONDITION SURVEYS, MS	\$ 154,000
PROJECT CONDITION SURVEYS, NC	\$ 700,000
PROJECT CONDITION SURVEYS, NH	\$ 250,000
PROJECT CONDITION SURVEYS, NJ	\$ 1,797,000
PROJECT CONDITION SURVEYS, NY	\$ 2,089,000
PROJECT CONDITION SURVEYS, OH	\$ 305,000
PROJECT CONDITION SURVEYS, OR	\$ 400,000
PROJECT CONDITION SURVEYS, PA	\$ 170,000
PROJECT CONDITION SURVEYS, RI	\$ 350,000
PROJECT CONDITION SURVEYS, SC	\$ 875,000
PROJECT CONDITION SURVEYS, TN	\$ 2,000
PROJECT CONDITION SURVEYS, TX	\$ 325,000
PROJECT CONDITION SURVEYS, VA	\$ 1,368,000
PROJECT CONDITION SURVEYS, WA	\$ 606,000
PROJECT CONDITION SURVEYS, WI	\$ 288,000
TOTAL	\$ 19,302,000

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Scheduling of Reservoir Operations

AUTHORIZATION: Section 7 of the Flood Control Act of 1944 (as amended).

LOCATION AND DESCRIPTION: Funding provided for Nation-wide program to facilitate and coordinate the operations of Federal and non-Federal dams for which there is a Federal interest and investment in providing dedicated flood space.

CONFERENCE AMOUNT FOR FY 2013: 7,598,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$769,000 O: \$6,119,000 T: \$ 6,888,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0

FRM: \$6,888,000 See attached table for breakdown by state.

NAD: Provide reservoir regulation instructions to regulate Savage River Dam, which is owned by Upper Potomac River Commission and Stevenson Dam, owned by the Commonwealth of PA.

NWD: Funds the Districts' portions of the Water Management budget necessary for management of non-Corps dams where the Corps has flood control responsibilities, including any dam built with federal dollars. Within NWD, the vast majority of these non-Corps dams are Bureau of Reclamation projects, but others including Wynoochee Dam and the congressionally authorized project at Upper Baker Dam are also managed with these funds. Funds are used for water control data collection for the portion of the total USGS Cooperative Stream gage Program which supports these non-Corps projects. Funding to the USGS Cooperative Stream gage Program maintains only those stream gages necessary for scheduling the release of flood control storage from these non-Corps projects for which the Corps has flood control responsibility. Funds are also used for each District's daily Water Management activities in support of these projects. This includes all aspects of daily operations within Water Management including reservoir regulation and flood releases from these projects. These projects require District Water Management offices to develop and maintain water control plans; direct flood control operations; prepare monthly summary reports (R0168's); ensure daily review of stream gages; review and comment on Bureau of Reclamation annual operating plans for use of conservation storage; maintain water control manuals, as well as review, comment and process deviations and manual-change requests through Division Water Management.

SAD: The project provides required water management oversight and monitoring of water control plans located in Central & Southern Florida to achieve maximum benefits. \$35,000 Funding is utilized to support labor needed to coordinate with Sponsor on water related management activities to achieve maximum benefits on monitoring of water control plans.

SWD: Funds the Districts' portions of Water Management System (Reservoir Control Center); water control data collection; portion of the total USGS Cooperative Stream gage program which supports Section 7 projects; and daily water management activities, including flood pool operations, in support of Section 7 projects. Also supports daily operations within the Districts' water management program which is to develop and maintain water control plans; direct flood control operations; ensure daily review of stream gages; forecast during flood events; review and comment on Section 7 annual operating plans for use of conservation storage; and review, comment and process deviations and manual-change requests through Division Water Management.

OTHER INFORMATION: None

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Table Breakdown by State

MSC	PROGRAM NAME	Total	M/O
NAD	SCHEDULING RESERVOIR OPERATIONS, MD	45	O
NAD	SCHEDULING RESERVOIR OPERATIONS, PA	45	O
NWD	SCHEDULING RESERVOIR OPERATIONS, ID	580	O
NWD	SCHEDULING RESERVOIR OPERATIONS, KS	205	O
NWD	SCHEDULING RESERVOIR OPERATIONS, MO	205	O
NWD	SCHEDULING RESERVOIR OPERATIONS, MT	243	O
NWD	SCHEDULING RESERVOIR OPERATIONS, ND	247	O
NWD	SCHEDULING RESERVOIR OPERATIONS, OR	104	O
NWD	SCHEDULING RESERVOIR OPERATIONS, WA	500	O
NWD	SCHEDULING RESERVOIR OPERATIONS, WY	121	O
SAD	SCHEDULING RESERVOIR OPERATIONS, FL	35	O
SPD	SCHEDULING RESERVOIR OPERATIONS, AZ	53	O
SPD	SCHEDULING RESERVOIR OPERATIONS, CA	44	M
SPD	SCHEDULING RESERVOIR OPERATIONS, CA	1391	O
SPD	SCHEDULING RESERVOIR OPERATIONS, CO	35	M
SPD	SCHEDULING RESERVOIR OPERATIONS, CO	573	O
SPD	SCHEDULING RESERVOIR OPERATIONS, NM	547	O
SPD	SCHEDULING RESERVOIR OPERATIONS, UT	40	M
SPD	SCHEDULING RESERVOIR OPERATIONS, UT	501	O
SWD	SCHEDULING RESERVOIR OPERATIONS, KS	75	M
SWD	SCHEDULING RESERVOIR OPERATIONS, KS	75	O
SWD	SCHEDULING RESERVOIR OPERATIONS, OK	500	M
SWD	SCHEDULING RESERVOIR OPERATIONS, OK	500	O
SWD	SCHEDULING RESERVOIR OPERATIONS, TX	75	M
SWD	SCHEDULING RESERVOIR OPERATIONS, TX	149	O

O&M JUSTIFICATION SHEET

PROJECT NAME: Surveillance of Northern Boundary Waters

AUTHORIZATION: Boundary Waters Treaty of 1909.

LOCATION AND DESCRIPTION: The main activities conducted under the Surveillance of Northern Boundary Waters Program is the support of the Boundary Waters Treaty of 1909 including technical and secretarial support of the International Joint Commission (IJC) and its Boards of Control, Committees, and various study boards. Activities are centered supporting the principles and mechanisms to help resolve disputes and to prevent future ones, primarily those concerning water quantity and water quality along the boundary between Canada and the United States.

CONFERENCE AMOUNT FOR FY 2013: \$15,187,000 2/

BUDGETED AMOUNT FOR FY 2014: M:\$ O: \$11,367,000 T: \$11,367,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0

FRM: \$11,367,000- See attached table for breakdown by state.

Specific LRD activities within the Great Lakes region include technical support for the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data; International Superior Board which includes the monthly regulation of Lake Superior; International St. Lawrence River Board which includes the weekly regulation of Lake Ontario and lake level forecasting on a weekly and monthly basis; International Niagara Board which includes the monitoring and oversight of the Lake Erie ice boom, Niagara Control Structure, and Niagara Falls flows; connecting channel depths forecasts bi-weekly; continuous monitoring of basin conditions; collection and dissemination of basin data; hydraulic modeling of the connecting channels and impact analyses due to dredging, construction or other projects; derivation of stage-discharge relationships for the connecting channels; computation of official outflows from the Great Lakes; computation of net basin supplies for the Great Lakes; water level gauging of the connecting channels; hydraulic discharge measurements and hydropower inspections to support treaty requirements and water use agreements; implementing adaptive management and, coastal process monitoring.

All of the above missions are ongoing areas of work. Upcoming efforts include: continued support for the International Upper Great Lakes Study which is looking at Lake Superior regulation; implementing adaptive management and supporting development of a new regulation plan for Lake Ontario; continued improvements to (and documentation of) forecasting operations, inclusion of new data sets and analyses techniques; continued improvements to hydraulic models including the addition of ice and weed retardation; and, more intensive monitoring of daily changes in basin hydro-meteorologic parameters.

MVD activities center around the 1925 Lake of the Woods Convention and Protocol, the 1938 Rainy Lake Convention, and the 1989 International Agreement for Water Supply and Flood Control between the U.S. and Canada. These activities include monitoring daily lake levels and outflows; monitoring and approving international apportionment of water; forecasting lake levels and river flows during periods of high or low water; participating in Board and public meetings; collecting, analyzing, and maintaining hydrometeorologic data, including post-flood reports; monitoring flood operations; assisting in transboundary dispute resolution; and preparing and disseminating information to the public

NWD activities include funding District work associated with IJC activities for the Kootenay Lake Board of Control and the Osoyoos Lake Board of Control. Work includes preparation of Annual Reports, monitoring Kootenay Lake and basin conditions for compliance with the 1938 IJC Order on Kootenay Lake, preparing for and attending Board and public meetings, and responding to miscellaneous issues and questions raised by the public, agencies, the Boards, and the IJC. A multi-year study is addressing technical, political, legal, environmental and societal issues, and trade-off analyses that will support a recommendation by the U.S. Entity to the State Department before 2014 as to whether the Columbia River Treaty should be continued, modified, or terminated after Sept. 2024

NAD activities include efforts in conjunction with the International St. Croix River Board of Control. In accordance with Boundary Waters Treaty of 1909 and 2000 revised directive to the International St. Croix River Board of Control from the International Joint Commission, the NAE District Engineer is U.S. Section member of the Board of Control. A member of the Planning Branch of the New England District serves as the Secretary of the U.S. Section. Periodic meetings, including public meetings, take place on both the American and Canadian sides.

OTHER INFORMATION:

Many stakeholders exist in the basin and are regularly served by these missions including: commercial navigation (i.e. Lake Carriers Association); hydropower production; recreational boating; shoreline property owners; academic and research institutions; other Federal agencies; state and local agencies; non-governmental organizations; environmental interest groups; and private citizen groups

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TABLE BREAKDOWN BY STATE

MSC	STATE	AMOUNT
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, IL	706
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, IN	135
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MI	2653
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MN	351
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, NY	590
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, OH	249
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, PA	103
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, WI	540
MVD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MN	111
MVD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, ND	32
NAD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, ME	25
NWD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, OR	5794
NWD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, WA	78
	TOTAL	\$11,367,000

O&M JUSTIFICATION SHEET

PROJECT NAME: Removal of Aquatic Growth

AUTHORIZATION: River and Harbor Act of 1899, as amended.

LOCATION AND DESCRIPTION: This national program provides annual mission essential prevention, control and removal of nuisance aquatic vegetation impacting, obstructing or threatening navigation in the Federal navigation channels in the Gulf Coast. This includes several hundred miles of channel with approximately 675,000 surface acres. Operational priority is given to controlling floating nuisance vegetation in order to keep the principal navigable waterways and locks open for navigation. Additionally, this vegetation displaces native species, changing community structure and altering ecological functions potentially impacting threatened and endangered species including the Everglades Snail Kite, Okeechobee gourd and the wood stork. These invasive species also interfere with operation and maintenance of levees and canals and compromise the integrity of the navigation and flood control structures.

CONFERENCE AMT. FOR FY 2013: \$3,700,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$3,700,000 O: 0 T: \$3,700,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$3,700,000- The primary purpose of these operations is to control floating nuisance vegetation in order to keep the principal navigable waterways and locks open for navigation in the listed Federal Navigation projects. The program consists of maintenance control operations to control vegetation in the Gulf Coast, including St. Johns, Kissimmee, Withlatchoochee, Crystal and Ocklawaha Rivers in addition to the Okeechobee Waterway and Lake Okeechobee. Maintenance control is defined as keeping target vegetation at the lowest feasible levels to protect navigation interests. Anticipate controlling approximately 15,000 – 17,000 acres of vegetation in FY 2014. In addition the Corps will conduct educational outreach activities for our customers, conduct pre- and post-treatment surveys, ensure safety of our staff and the public and conduct an environmentally compatible program. Coordination between the Corps and other Federal, state, and local agencies is conducted on a continual basis. The Florida Wildlife and Conservation Commission is the principal state agency involved in project coordination. See table below in Other Information for breakdown by state.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION:

FY 2014 REMOVAL OF AQUATIC GROWTH

REMOVAL OF AQUATIC GROWTH, FL	\$ 3,500,000
REMOVAL OF AQUATIC GROWTH, LA	\$ 200,000
TOTAL	\$ 3,700,000

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Remaining Items - Investigations

APPROPRIATION TITLE: General Investigations – Fiscal Year 2014

	Allocation in FY 2013 2/ \$750,000	Budgeted Amount for FY2014 1/ \$750,000	Increase Over FY14 and FY13 \$0
Access to Water Resource Data			

AUTHORIZATION: Water Resources Development Act 2007; Section 2017.

The U.S. Army Corps of Engineers (USACE) Civil Works Strategic Plan presents a bold initiative for the USACE to manage our Nation's public water resources in collaboration with others through a watershed approach. The watershed approach recognizes that physical, chemical, and biological processes are intertwined and must be managed in an integrated manner. The USACE advocates a holistic view to sustainable water resources solutions in partnership with other Federal agencies, Tribes, State and local governments, and non-governmental organizations. America faces real water challenges — such as deteriorating infrastructure, increasing demands for water resources functions, competing water uses, and serious environmental challenges — in a climate of diminishing fiscal resources and fragmented responsibilities. Successful implementation of these strategic goals requires that the USACE provide access to water resources data and related water quality data to the public and all stakeholders for integrated water resources decision making.

Funds are requested to implement “Water Quality Data Management Implementation Plan” which calls for the Development of standard business processes, procedures and database models to manage water quality and quantity data generated by the full range of Corps water resources activities in conjunction with EPA, USGS and NOAA Water Control and Water Quality Programs. This may include water quality/quantity information associated with stream gages, water quality gages and other monitoring devices and water resources model and analytical tool output. These data include variables such as precipitation, water chemistry, temperature, evaporation, sedimentation, biological and habitat data, riverine discharges and stages, reservoir storage, inflows and outflow. This will include developing QA/QC processes and criteria for collected data. Water quantity and water quality data will be made available to the public through a standard web interface in a downloadable format as soon as quality assurance/quality control has been conducted by the USACE.

PROPOSED ACTIVITIES FOR FY 2014:

- Continue to provide public access to Water Control Data and publish standard operating procedures for Districts to follow in managing their water quality data.
- Develop policy and guidance regarding public access to Corps water quality and water management data.
- Make data on the permits issued under the authority of the USACE (Clean Water Act and Rivers and Harbors Act) available to the public
- Coordinate with Other Federal Agencies and solicit feedback on management and implementation strategy.
- Develop tools and processes for making it easier to pull water control/quality data into a central database.
- Develop streaming technologies to synchronize water management data at the national level between water management national backup systems and EGIS servers.
- Develop long term strategy and funding needed to sustain public access to USACE Water Resources.

ACCOMPLISHMENTS IN PRIOR YEARS:

- Published District Water Control Data into a single database structure allowing for easy access by public
- Developed a systematic approach for visualization of realtime reservoir metadata and visualization via the Corps Water Management System and database
- Established a management system for capturing realtime reservoir data streams from individual USACE districts, enabling water managers with tools for updating and monitoring publicly available data streams.

Division HQUSACE and ERDC

Access to Water Data

APPROPRIATION TITLE: General Investigations – Fiscal Year 2014

- Executed survey of District offices to capture current Water Control/Quality Management Activities
- Finalized “Water Quality Data Management Implementation Plan”
- Published District water quality data through EPA Water Quality Exchange for non-time series water quality data and the Corps Water Management System for time-series Water Quality data.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
Committee on the Marine Transportation System (CONTINUING)	\$100,000 <u>2/</u>	\$100,000 <u>1/</u>

AUTHORIZATION: The Committee on the Marine Transportation System was established as directed by the President in the *Ocean Action Plan – The Administration’s Response to the U.S. Commission on Ocean Policy* – 17 December 2004.

JUSTIFICATION: The Committee on the Marine Transportation System (CMTS) was elevated to an interagency Cabinet-level committee by the President’s Ocean Action Plan, December 2004. The CMTS held its first meeting in July 2005 and continues to meet 2-3 times per year. The Assistant Secretary of the Army (Civil Works) has been named as the Department of Defense (DOD) representative to the CMTS. The Chief of Engineers was selected to be the initial chair of the CMTS Coordinating Board, which advises and implements directives of the CMTS. An interagency Executive Secretariat supports the day-to-day activities of the CMTS on behalf of the Coordinating Board. The Corps is providing a full-time GS-15 liaison to the CMTS Executive Secretariat. This position reports to the Chief of Operations, HQUSACE, and HQ Operations has had the lead in CMTS coordination. The Corps has also been tasked by the CMTS to lead an interagency team to conduct an Assessment of the Current and Future State of the U.S. Marine Transportation System. With support from the Deputy Commanding General for Civil and Emergency Operations, this Assessment effort was redirected into a new action team to form a consolidated CMTS response to the National Ocean Policy Task Force Report and other key maritime issues requiring interagency coordination. The need to support CMTS activities will continue annually as the Corps assumes the leadership role of the Ocean Policy Response Team. Dedicated funding to support Corps participation in the CMTS is essential if the Corps and DOD are to be full participants with other Cabinet Departments and agencies in Committee activities and initiatives. Corps participation in CMTS is a priority for the ASA(CW), the Chief of Engineers and the Deputy Commanding General for Civil and Emergency Operations.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested in FY 2014 will be used to continue interagency coordination and to support the DOD share of other initiatives requested by the Committee, including MTS Data and Information Portal, and MTS R&D Needs. The newly-established Infrastructure Investment Integrated Action Team will be used to advance work between DOT and Army to align transportation infrastructure investments. A recently-established e-Navigation Integrated Action Team will enact implementation plans and provide reports to describe the application of e-Navigation integration. Co-lead the Integrated Action Team for MTS R&D Needs. Coordinate with other Departments and agencies participating in CMTS and provide support for studies and initiatives requested by the Cabinet-level CMTS (National Export Initiative, etc).

ACCOMPLISHMENTS IN PRIOR YEARS: Activities in FY 2013 include the completion of the e-Navigation National Strategy, efforts of Integrated Action Team for a consolidated CMTS response to the National Ocean Policy Task Force Report. Establishment of two new IATs (Investment IAT and e-Navigation IAT), providing follow-up work associated with the 2nd biennial CMTS/TRB MTS Research & Development Conference, “Diagnosing the Marine Transportation System: Measuring Performance and Targeting Improvement”. Support to senior leaders and ASA(CW) participation in CMTS cabinet-level and Coordinating Board meetings and activities. Participation in interagency working groups and reviews.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

1. Surveys

Coordination with Other Federal Agencies, State, and Non-Federal Interest Other Coordination Programs

The CALFED request is \$100,000 1/ 2/ which is a portion of the CALFED coordination funds cited in section 103(f)(4)(A) of PL 108-361, the CALFED Act. The funds will be used to continue program support, coordination, and USACE representation efforts in the Federal and State CALFED process in Fiscal Year 2014. The CALFED Record of Decision named the Corps and State of California as implementation co-managers of the CALFED Levee System Integrity program. As stated in section 103(f)(4)(A) of PL 108-361, the CALFED Act, the Corps requests funds for program management, oversight, and coordination. Activities stated in the Act include: program support; program-wide tracking of schedules, finances, and performance; multi-agency oversight and coordination of program activities to ensure program balance and integration, development of interagency cross-cut budgets and a comprehensive finance plan to allocate costs in accordance with the Record of Decision; coordination of public outreach and involvement, including tribal, environmental justice, and public advisory activities in accordance with the Federal Advisory Committee Act; and development of annual reports.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

1. SURVEYS

e. Cooperation with Other Federal Agencies, States, and Non-Federal Interests

(5) Chesapeake Bay Program. The amount of \$75,000 ^{1/} is requested to continue, increase, and invigorate activities initiated under Special Investigations. The Chesapeake Bay Program (CBP) is an interagency program, initiated by the US Environmental Protection Agency (EPA), for the protection and restoration of the Bay's natural resources. These natural resources have tremendous environmental and economic significance to the Northeast and to the Nation. Following extensive Corps of Engineers investigations and EPA studies in the 1970's and early 1980's, it became increasingly clear that the Chesapeake Bay system was under intense pressure from development and overuse and was undergoing degradation in water quality, living resources and other ecological indicators. With the funds requested, the Baltimore District will continue participation and provide leadership involvement in the CBP Implementation Committee; the Federal Agencies Subcommittee; the Living Resources, Monitoring, Modeling and Toxics Subcommittee; and numerous workgroups addressing various subjects such as regional sediment management, wetlands, submerged aquatic vegetation, and land stewardship.

ASA (CW) was a signatory on a Special Tributary Strategy for Federal Lands in the District of Columbia agreement that commits the Corps to develop stormwater pollution prevention and nutrient management plans. The Baltimore District will play a key role on this Special Tributary Strategy as well as initiate activities to enhance stewardship of Corps -owned land within the Bay watershed. Many of these actions affect Corps authorized missions in the Chesapeake Bay.

The District participated in development of Executive Order (E.O.) 13508: Chesapeake Bay Protection and Restoration, signed by President Obama on 12 May 2009, which uses the Chesapeake Bay as a pilot for other "national treasures." The District is also involved in the Federal Leadership Committee for the Chesapeake Bay, Agency Action reports in support of the E.O., and on Goal Implementation Teams. All of these efforts require extensive consultation and collaboration to achieve successful shared leadership, planning, accountability, and restoration of the largest estuary in the United States of America.

^{1/} Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0.

Coordination Studies With Other Agencies

	Allocation In FY2013		Budget Amount For FY2014	
Other Coordination Programs (Continued)	\$500,000	2/	\$500,000	1/

(c) The Coordination with Other Water Resources Agencies budget amount is \$500,000. This account provides funds to enable coordination with other Federal agencies. These include cooperation with the Department of Agriculture (USDA) under the Watershed Protection and Flood Prevention Act of 1954 (Section 5 of PL 566-83), as amended; the Flood Control Act of December 22, 1944 (Section 1 of PL 534-78), as amended; and the National Environmental Policy Act of 1969 (PL 91-190). The Corps is also required by Section 102 (2)(c) of the National Environmental Policy Act of 1969 to review the environmental impacts that would result from installation of USDA project features. Cooperation with the Bureau of Reclamation of the Department of the Interior includes preparation of estimates of flood control requirements, and benefits, and reservoir operating criteria for storage reservoirs to be constructed with Federal funds, in accordance with Sections 1 and 7 of PL 534-78 and Section 7 of PL 984-84, as amended. Studies made by the Bureau of Reclamation of the flood control features of proposed reclamation projects are submitted to the Corps of Engineers for review and determination of the flood control benefits. Corps representation is required for cooperation with Federal and state agencies such as River Basin Compact Commissions; Interstate River Basin Compacts; and Regional Planning Commissions in authorized, but unfunded investigations. Funds are also used to support Corps participation in the North American Waterfowl Management Program. These funds will be used to continue cooperation with Federal and State agencies, and non-Federal interests in support of the NAWMP administered by the Department of the Interior, Fish and Wildlife Service. The NAWMP is an international program designed to reverse downward trends in North America's waterfowl populations by protecting and improving waterfowl habitats nationwide, particularly in 34 areas within the United States identified as being critical to meeting NAWMP goals and objectives. Department of the Army support to the NAWMP is set forth in an agreement signed with the Department of the Interior on January 23, 1989. Funds are also used to support participation in the National Estuary Program. These funds will be used to participate with Federal and State agencies in the National Estuary Program (NEP) administered by the Environmental Protection Agency under the Water Quality Act of 1987 (Section 320 of PL 100-4). The NEP is an interagency planning program to develop management plans for nationally significant estuaries designated by the EPA. Because of extensive Corps involvement with Federal water resources projects in the nation's estuaries and other responsibilities in waters of the U.S., the Corps participates on the management and technical advisory committees of those NEP estuaries being studied. The requested funds would be used to cover costs of Corps field office meeting attendance, field reconnaissance, and data transfer. These funds will also be used for district staff to represent USACE at Regional Planning Bodies (RPBs) under the auspices of the National Ocean Council and work with our state and local partners to assure that their concerns are addressed at these meetings. Districts included are New England District for the Northeast Region, Jacksonville District for the Caribbean, Honolulu District for the Pacific Islands, and Alaska District for the Alaska/Arctic Region.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

The Gulf of Mexico Program (GMP) request is \$100,000 ^{2/} to continue the Corps' participation in the GMP. Funds will be used to support participation by Corps personnel from Gulf districts/divisions in the execution of the Corps' effort to advance the Regional Sediment Management (RSM) and Community Awareness components of the Gulf of Mexico Alliance - Governor's Action Plan II. The GMP/Coastal America partnership uses a cross-cutting collaborative approach to formulate and implement creative, place-based, non-regulatory solutions to economic and environmental issues with Gulf-wide and national implications. Funds will also be used to support participation by Corps personnel from the Gulf districts and ERDC in the execution of the Ocean Action Plan: Gulf of Mexico Alliance - Governor's Action Plan II as follows: 1) refining/calibrating sub-Gulf coast regional sediment models in support of producing a set of Gulf regional sediment management models that; 2) will be used in conjunction with the Gulf Regional Sediment Management Technical Framework Final Report, dated – December, 2010, to formulate recommendations and guidelines for implementing Gulf regional sediment management to be included in the Gulf Regional Sediment Management Master Plan (GRSMMP); and, 3) engage in addressing Community Resilience (CR). The bulk of the requested funds will be used to execute specific Corps commitments found in the Gulf of Mexico Alliance Action Plan II in support of the Alliance's GRSMMP and CR efforts. Funds will also be used to: 1) coordinate with Corps district, Engineer Research Development Center, and Institute for Water Resources personnel to advance RSM and CR efforts, and 2) manage the requested funds. The total dollars estimated to be carried in from prior appropriations for use on this study is \$0. This amount, together with the "Budget for FY 2014" shown above, will be used to perform the FY2014 study activities.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Allocation in FY <u>2013</u>	Budgeted Amount in FY <u>2014</u>
\$ 500,000 <u>2/</u>	\$ 500,000 <u>1/</u>

Interagency and International Support
Interagency & International Support Division, Headquarters USACE

The Interagency and International Support request is \$ 500,000 to allow the U.S. Army Corps of Engineers (USACE) to support other Federal agencies, international organizations and foreign governments to address problems of national significance to the United States under the authority of Section 234, Water Resources Development Act (WRDA) 1996 and to collaborate with other countries and international organizations on water resources and related matters. The 2012 Intelligence Community Assessment “Global Water Security” concluded that “During the next 10 years, many countries important to the United States will experience water problems...that will risk instability and state failure, increase regional tensions, and distract them from working with the United States on important US policy objectives.” The Corps of Engineers has widely recognized expertise and experience in water resources, infrastructure planning and development, and environmental protection and restoration. Other Federal agencies, particularly the Department of State (DOS), the U.S. Agency for International Development (USAID), and international organizations such as the World Bank and the United Nations often request USACE involvement in interagency and international task forces, training courses and workshops to provide technical assistance in their strategic interactions with other nations. Recent Quadrennial Reviews for Department of Defense, DOS, and USAID have emphasized whole-of-government approaches, and water security is a recurring theme in these reports. Through these interactions, the Corps’ abilities to perform its civil works mission and promote national security interests, especially those related to stability objectives, are also enhanced.

Fiscal Year 2013 funds are being used to support the following activities:

(1) USACE plans to continue its multilateral engagement with the United Kingdom, the Netherlands, Japan, Brazil, China and other nations by the sharing of technical knowledge on: flood risk management methods and tools, approaches for integrated water resources management (IWRM) at the river basin level, and incorporating water resources adaptation strategies for climate change as applied to water management and systems operations.

(2) Support through the Corps’ International Center for Integrated Water Management (ICIWaRM), under the auspices of UNESCO. Activities include:

(a) Technical coordination and management of the US National Committee for the UNESCO International Hydrological Programme (IHP), of which USACE is an agency member, and through which it collaborates with other Federal agencies such as USGS and NASA on IHP activities.

(b) scientific interaction with UNESCO’s global and regional water centers, including those for which the Corps has Memorandums of Understanding (MOU’s): Center for Arid and Semi-Arid Zones in Latin America and the Caribbean (CAZALAC); Institute for Water Education (IHE); International Centre for Water Hazard and Risk Management (ICHARM), Centre for the Sustainable Management of Water Resources in the Caribbean Island States, and other UNESCO water centers and IHP initiatives. Activities in FY 2013 will tentatively include

* a joint workshop with CAZALAC in the Dominican Republic on the US of the Corps’ drought management program ICI-Raft; and

* a joint meeting on Ecohydrology, Biotechnology and Engineering: Harmony between Biogeosphere and Society in collaboration with the European Regional Centre for Ecohydrology, under the auspices of UNESCO.

APPROPRIATION TITLE: Investigations, FY 2014

(c) Support of USG interests by providing training and capacity development for water managers and technical assistance for water security in developing and emerging nations, with focus-area initiatives in Africa, Latin America & the Caribbean, the Middle East and Asia. . Activities in FY 2013 will tentatively include a workshop on HEC models with CAZALAC in the Dominican Republic and/or Argentina.

(d) Global Technical Secretariat for UNESCO's semi-arid regions water program "G-WADI"; many of the world's trouble spots are in arid or semi-arid regions. G-WADI and UNESCO are co-organizing a two-part meeting in July 2013 (-3-5 JULY) to discuss Hydrologic applications, data challenges and remote sensing opportunities as part of the UN International Year of Water Cooperation (2013), for which UNESCO is the lead. The meeting will discuss strengthening and integration of UNESCO products within the framework of G-WADI and the International Drought Initiative.

(e) Support to Department of State Lower Mekong Initiative : Workshop on Alternative Decision Making Process for Water Resource Management in the Nam Kam River Basin. A team, organized by USAID, assisted the Thai National Mekong Committee in a three-day training workshop held in northeastern Thailand, on November 5-7, 2012. The workshop discussed plausible scenarios for water supply, demand and quality for the Nam Kam River Basin and how these might impact different stakeholders. A key participant in the workshop was the Nam Kam River Basin Committee. USACE jointly facilitated the event with Rajapat University and Kasetsart University, Sakon Nakhon, and the Thai National Mekong Commission. Follow-up workshops to the Thailand Workshop on Strategic Scenario Planning: a scoping mission, probably in late March, targeting a national scenario planning workshop for Cambodia in June 2013. There are two possible watersheds to be used for as a case study: The 4P watershed in Mondulkiri and the Strung San is in Kampong Thom. Both of these are potential Mekong ARCC sites so we will have complementary climate change data.

(2) Collaboration with the Netherlands Rijkswaterstaat (RWS) to continue to gain knowledge from the Dutch in a number of areas. This exchange, initiated in FY 2005, has been particularly useful in the wake of our coastal hurricanes. Thrust areas that have been mutually identified include: Dredging, Coastal Zone Management, Risk and Reliability and Navigation.

(3) Corps water resources technical exchange of information with Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLITT). Under the terms of the 2008 agreement on cooperation (to be extended in 2013). USACE and MLITT alternate with formal annual visits to each agency in addition to other periodic interactions. The agreement has not only fostered the exchange of water resources technical and management information, but also may be considered part of the growing relationship on cooperation on addressing large scale disasters, improving water conditions that lead to country stability, and the overall US-Japan relationship so important to our security interests in Asia.

(4) World Water Council (WWC). The Corps is on the Board of Governors of the World Water Council, which was established in 1996 in response to increasing concern from the global community about world water issues. Several International WWC meetings are held each year culminating in a World Water Forum (WWF) held every three years. USACE has a leading role in the planning already underway for the 7th World Water Forum scheduled for 2015 in Korea.

(5) Support to the Department of State on engagements related to the Mekong (S.E. Asia), Nile (Africa), Tigris-Euphrates (Middle East), Indus (Central Asia) and other international river basins as requested.

(6) Support to the Department of State with technical assistance for water resources development in Pakistan, Yemen and Syria.

(7) Efforts to establish a USACE technical support agreement with the Panama Canal Authority

APPROPRIATION TITLE: Investigations, FY 2014

(8) Alliance for Global Water Adaptation (AGWA): Water management is the principal medium through which projected impacts of climate change will be felt and ameliorated and guidance is needed for engineers and planners that are required to make decision now about an uncertain future. The AGWA project seeks to advance a practical approach to guide international and domestic engineers and planners in decision making under uncertainty for water resources management. ICIWaRM provides technical leadership to the following AGWA working groups: (1) economic and finance, (2) hydro climate, and (3) engineering and ecology.

(9) U.S. Water Partnership. ICIWaRM has been a core partner within the US Water Partnership - for which the State Department was one of the five founding members. We have provided in-kind services of a senior water professional (approximately 20%) to provide guidance in the development of their IWRM and informational programs. We also lead two of the three "signature initiatives" chosen by the USWP for implementation.

(10) A new Africa Initiative, to bring US Government agencies, universities and international organizations together to solve flood and drought challenges in Africa. Africa, like much of the world, suffers greatly from floods and droughts. Unlike many regions, the ground-based network of precipitation, soil moisture and stream gauges in Africa are generally sparse, making the prediction and monitoring of hydrologic extremes highly difficult. In addition to helping develop tools to address this challenge, ICIWaRM is also sponsoring an Embassy Fellow in 2013 to work on developing programs for Lake Chad. Along with USACE, five other US Government agencies—NASA, NOAA, USAID, NSF and the State Department—have contributed to one or more of these sub-initiatives.

Fiscal Year 2014 funds will be used for continuation of the activities listed above and the following proposed activities:

(1) ICIWaRM proposes to hold its second, mandated Advisory Board meeting.

(2) Thai and Cambodian workshop on Strategic Scenario Planning. Follow-up workshops to the Thailand and proposed Cambodian workshops on Strategic Scenario Planning in the Lower Mekong. This is in support of USAID and the State Department's Lower Mekong Initiative.

(3) Indonesia Integrated Water Resources Development (IWRD): In partnership with the Coordinating Ministry of Economic Affairs, Republic of Indonesia, USACE proposes to assist the Government of Indonesia with Integrated Water Resource Development (IWRD) to support further implementation of key components of Law No.7/2004 on Water Resources. In particular, USACE can support the Government of Indonesia, which visited the United States in May 2012 as part of the U.S. Water Partnership Program, overcome current and future water resource challenges through Shared Vision Planning (SVP) and Integrated Water Resource Management (IWRM) practices.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0 . This amount will be used to perform work on the study as follows: N/A .

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Coordination Studies With Other Agencies

	Allocation In FY2013		Budget Amount For FY2014	
Other Coordination Programs (Continued)	\$955,000	2/	\$955,000	1/

(f) The Interagency Water Resources Development budget amount is \$955,000. Funds are included for Corps of Engineers district activities, not otherwise funded that require coordination effort with non-Federal interests. These activities include items such as meeting with City, County and State officials to help them solve water resources problems when they have sought advice or to determine whether Corps programs are available and may be used to address the problems. This will also cover costs of meeting with potential study sponsors before studies are budgeted to insure they understand study cost sharing and to obtain an indication of their interest in participating in a future study. Funds are included to provide support to the American Heritage Rivers program based on Executive Order 13061, dated 11 September 1997 and to provide support to the Coastal America Partnership. Funds are also included facilitate regional interagency coordination, including funds to sustain the benefits of the Great Lakes Habitat Initiative to continue multi-jurisdictional coordination, enhance decision-support capability, improve and advance monitoring..

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0.

2/ There 2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Coordination Studies with Other Agencies

Other Coordination Programs (Continuing)

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
National Dam Inventory	\$ 400,000 <u>2/</u>	\$ 400,000 <u>1/</u>	\$ 0

AUTHORIZATION: Section 215 of the Water Resources Development Act of 1996 (Public Law 104-303) authorized \$500,000 to be appropriated each fiscal year for the maintenance and publication of the National Inventory of Dams (NID). This authorization was continued in the Dam Safety Act of 2006 (Public Law 109-460).

The Inventory was initially compiled in 1975 has been periodically updated to reflect construction of new dams, changes in ownership, major modifications to existing dams, decommissioning and removal of dams, and improvements in the data accuracy and completeness. The current database includes 83,897 dams, and focuses on current internet technology to improve the ease of use, accuracy, and accessibility of the data. Annual funding is used to implement improved information flow and data quality control processes, to greatly enhance the state of knowledge management for dam safety. The importance of continued maintenance and publication of the NID has increased. The inventory is now required for use by the Secretary of Homeland Defense and the National Dam Safety Review Board in the allocation of dam safety program assistance funds to the various states in proportion to the number of dams in the state. Inventory data is also included in the biennial report to Congress on the National Dam Safety Program. The Inventory also plays an important role in the identification of infrastructure in risk due to terrorist activities. The ongoing maintenance and publishing of the NID is a coordinated effort involving data from the federal and non-federal dam safety community in cooperation with the Interagency Committee on Dam Safety and the Association of State Dam Safety Officials.

PROPOSED ACTIVITIES FOR FY 2014: These funds will be used for continued maintenance and publication of the NID. During 2014, a request will be made to the state and federal dam safety agencies to provide their entire dam inventory using the web-based application. During FY2014, the inventory web site will continue to be improved utilizing the Geographic Information System (GIS) interface, and integration with other dam and levee safety resources. The web-based NID submittal tool will also be improved and modified to allow greater ease of updating the national dam information from federal and nonfederal dam safety agencies.

ACCOMPLISHMENTS IN PRIOR YEARS: An updated inventory was published during 2013 based on the condition assessment data provided by the state and federal agencies during 2012. As a result of this data collection, more than 60 percent of the high hazard potential dams included in the NID contain an assessment of the dam based on the last inspection. Routine maintenance continued on the inventory along with providing an internet based, search-able inventory available to all federal, state, and local government agencies and the public. During calendar 2012 there were over 1,000,000 internet inquiries to the inventory, more than 1,800 account requests and an average of 15 users per day accessing the site.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

1. Surveys

Coordination With Other Federal Agencies, State, and Non-Federal Interest Other Coordination Programs

The Corps' FY 2014 request for Lake Tahoe is \$100,000 ^{2/}. This funding is required to continue work associated with the Lake Tahoe Federal Interagency Partnership as directed in Executive Order 13057. The Federal Interagency Partnership is working with state and local agencies and public interest groups to arrest further deterioration of Lake Tahoe while maintaining a viable economic climate. FY2014 activities will include:

- \$100,000 for full active participation in Partnership Activities (includes working with local and state agencies, public advisory committees, Southern Nevada Public Lands Management Act (SNPLMA) program participation, and staff work to support District, Division and HQ executive level involvement).

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Coordination Studies with Other Agencies

Other Coordination Programs (Continued)

(k) The Pacific Northwest Forest Case Study request is \$10,000 2/.

The Northwest Forest Plan (NFP) is an interagency program, initiated by the White House's Council of Environmental Quality, for ecosystem management of the public lands in the Pacific Northwest within the range of the Northern Spotted Owl. In FY 1999, the Corps of Engineers (Corps) became an official signatory agency to the NFP Memorandum of Understanding. The NFP institutes an interagency approach for restoring and protecting animal and plant species on public lands and provides for economic assistance to impacted communities. With the funds requested, the Corps will continue partnership with Mt. Baker-Snoqualmie and Olympic National Forests, other Federal agencies, local Watershed Councils, and state and tribal forums and workshops; and participate on the Provincial Advisory Committees for the two National Forests. The Corps will provide technical support for a report describing the feasibility and time requirements for collecting study data, and initiate a summary report on the Engineered Log Jams (ELJ) constructed by the US Forest Service. NFP funding will enable the Corps to continue to work cooperatively with its other Federal NFP partners (USDA Forest Service, Bureau of Land Management, US Fish and Wildlife Service, National Marine Fisheries Service, National Park Service, Environmental Protection Agency, Bureau of Indian Affairs, and Natural Resource Conservation Service) and the State of Washington. NFP participants are presently concentrating on the development of coordinated Implementation Monitoring and Effectiveness Monitoring Programs while continuing to refine and implement its watershed ecosystem management strategies. The NFP presents the best opportunity for the Corps to expand its involvement with the other agencies of the Federal and State communities to use all of our engineering and environmental capabilities to address many of government's missions.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Coordination Studies with Other Agencies

Other Coordination Programs

	Allocation in FY 2012	Allocation in FY 2013	Budget Amount for FY 2014
Study Name: Special Investigations	\$1,368,000	\$1,350,000 2/	\$1,350,000 1/

AUTHORIZATION: : Investigations of limited scope, in replying to requests from sources outside the Corps of Engineers, for information relating to unauthorized projects and other activities which have no funds, and which are not accomplished with a view toward determining whether a project can be developed. Also included is work specifically authorized by the Chief of Engineers; the review of reports and Environmental Impact Statements requested by other agencies, unless otherwise provided for; and attendance at meetings of local interests and other agencies during the preliminary stages of project investigations.

PROPOSED ACTIVITIES FOR FY 2014: Funds will be used to support efforts on requests from sources outside the Corps of Engineers, for information relating to unauthorized projects, flood risk management business line tasks and other unfunded activities, attendance at meetings of local interest and other agencies during the preliminary stages of a project .

ACCOMPLISHMENTS IN PRIOR YEARS: Funds were used to respond to various special requests by local interests for investigating flooding, erosion, and potential ecosystem restoration at multiple locations and attendance at meetings of local interest and other agencies during the preliminary stages of a project.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
FERC Licensing	\$ 200,000 <u>2/</u>	\$ 200,000 <u>1/</u>	\$ 0

AUTHORIZATION: The Corps of Engineers conducts reviews of Federal Energy Regulatory Commission (FERC) preliminary permit and license applications for development of hydroelectric power at Corps of Engineers and/or non-Corps projects. This work was funded under a different budget line item until 2012.

The Corps of Engineers conducts reviews of applications for Federal Energy Regulatory Commission (FERC) preliminary permits and licenses, under the authority of the Federal Power Act. Review of applications for preliminary permits and licenses filed with FERC for development of hydroelectric power at Corps of Engineers projects or at non-Corps projects to ascertain potential impacts on Corps of Engineers' responsibilities and mission. Also, the Corps reviews applications for surrender or termination of licenses to ascertain impacts on Corps' responsibilities and mission. Funds are used for the various Districts to review several applications per year and to prepare the response to the Division and Headquarters at the end of each fiscal year. Every year request for funding has been consistently increasing for this work effort.

PROPOSED ACTIVITIES FOR FY 2014: These funds will be used by various Districts of the Corps of Engineers for review of several FERC licenses applications. Approximately, 100 applications will be reviewed at the District levels that provided valuable services to UASCE multipurpose projects and meet the Nation's sustainability goals of meeting its energy needs from renewable resources.

ACCOMPLISHMENTS IN PRIOR YEARS: These funds were provided to various Districts of the Corps of Engineers for review of several FERC licenses applications. Approximately, 80 applications were reviewed at the District levels that provided valuable services to UASCE multipurpose projects and meet the Nation's sustainability goals of meeting its energy needs from renewable resources.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Coordination Studies with Other Agencies

	Allocation in FY 2012	Allocation in FY 2013	Budget Amount for FY 2014
Study Name: Planning Assistance to States	\$5,284,000	\$4,000,000 2/	\$4,000,000 1/

AUTHORIZATION: Section 22 of the Water Resources Development Act of 1974, as amended, which authorizes the Secretary of the Army to assist States, local governments, Indian tribes, and other non-Federal entities in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. The studies are cost-shared on a 50% Federal, 50% non-Federal basis. The program can encompass many types of studies dealing with water resources issues, including environmental conservation/restoration, wetlands evaluation, water supply and demand, water quality, flood damage reduction, flood risk management, coastal zone management, navigation, and dam safety. This program provides a means of working with partners on broad water resources matters of interest to them and outside planning and authorization for site-specific studies and projects. It is a primary resource for the interagency Silver Jackets teams. Use of the Planning Assistance to States program to achieve common interagency and inter-governmental flood risk management goals optimizes the use of our and our partners' resources, providing the best risk reduction possible with available funds.

JUSTIFICATION: The Planning Assistance to States program has continued to evolve into a highly effective tool for providing technical and planning assistance to states, local governments, and Indian tribes. As more states develop and update hazard mitigation plans, watershed plans and floodplain management plans, this program provides the opportunity for the Corps to provide expertise. This program supports the initiative to facilitate pre-disaster and post-disaster assistance and Executive Order 11988. This program has been used to develop erosion control designs that a region continues to use today, which has improved water quality, helped with flood damage reduction and conserved significant water and related resources. The states, local governments, and Indian tribes recognize the need to develop locally directed solutions to their water resources problems, and this program continues to be a valuable resource.

PROPOSED ACTIVITIES FOR FY 2014: The FY 2014 amount will enable the Corps to provide much needed planning and technical assistance to assist in a wide variety of water resource efforts, including watershed activities benefitting environmental restoration, flood risk management, and other watershed resources. Program funds are distributed across the country for each of the Corps' Major Subordinate Commands (MSC) to assess, prioritize, and fund the needs of the MSC region

ACCOMPLISHMENTS IN PRIOR YEARS: In fiscal year 2012, the Corps of Engineers spent more than \$8.3 million on 180 studies in most States, in the Pacific region and Caribbean Islands, and with Federally-recognized Indian tribes. These studies provided technical and planning assistance for a full range of water resources issues. Significant efforts involved studies to assist local communities in addressing their flood risk through flood hazard information reports, restoring urban river environments, and accomplishing wetlands identification and mapping studies. Efforts were undertaken to assist states and local governments in flood damage reduction, ecosystem restoration, drinking water supply and demand, and water quality.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A
The total unobligated dollars estimated to be carried into FY 2014 is 0. Description of work to be completed: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY11	Allocation in FY12	Allocation in FY13	Budgeted Amount in FY14
Project Name: Automated Information Systems Support - Tri-Service CAD/GIS Technology Center	\$ 349,000	\$ 335,000	\$ 350,000 2/	\$ 350,000 1/

Engineer Research and Development Center

JUSTIFICATION: All Corps districts use CAD and GIS computer systems for Civil Works engineering, design, mapping, planning, and facility management. Many now use BIM as an engineering and O&M tool. All engineering drafting tables have been replaced with CAD platforms or computer mapping systems and most Corps environmental and natural resource analysis are being performed on GIS platforms. The geospatial data standard efforts of the Center were coordinated with the American National Institute of Standards to develop a National GIS Standard that was approved in November 2001 and includes civil works and homeland defense features. Standards and productivity enhancement tools developed by the Center are used for both in-house and contractor produced drawings, maps and analyses, which assure that all Corps offices have the ability to exchange their work among themselves and with others, including the private sector. The Center is actively coordinating its A/E/C CAD Standard with the National Institute of Building Sciences' U.S. National CAD Standard, thus reducing the redundancy with the private sector, and reducing cost for both government and the private sector. In 2006, the Center began coordination and developmental support for the U.S. National BIM Standard. The BIM standard addresses the latest building information model technology within the US building and construction industry. The Center ensures that the Corps obtains the maximum return on its investment in BIM, CAD, and GIS by coordinating development efforts and distributing products to Corps offices. The BIM, CAD, and GIS systems at field offices achieve maximum productivity when they take advantage of the economies of scale offered by sharing the development and use of common data standards, procedures, and applications. This sharing is accelerated through a concerted effort by the Center, working with various field-working groups, to draw from field expertise and dissemination of this knowledge in the form of lessons learned and standards to benefit all Corps users. Comprehensive data standards supported by the Center permit government and industry users to produce equivalent designs, maps, and analysis on a variety of computer systems using commercial off-the-shelf BIM, CAD, and GIS software.

The \$350,000 requested for FY 2014 will support over 2,400 users of BIM/CAD/GIS and facility management technologies for Civil Works projects.

PLANNED ACCOMPLISHMENTS FOR FY 2014

- Publish SDSFIE 3.1
- Publish SDSFIE 3.1 USACE adaptation
- Update USACE How-to Manual and Training 4. Phase 1 of USACE SDSFIE 3.x implementation
- Develop correlation matrix tool for A/E/C CAD Standard and SDSFIE
- Develop system architecture to host BIM models in a Cloud computing centralized repository
- Develop phase two of Building Information Modeling (BIM) Primer – “Life-Cycle” Process and Technology Innovation
- Publish USACE BIM Road Map Updates for Civil Works.

Division: Engineer Research and Development Center

Automated Information Systems Support - Tri-Service
CAD/GIS Technology Center

- Enhance BIM design templates to include modeling content to support Civil Works projects
- Publish AEC CAD Standard. Includes: (1) adapting the standard to incorporate changes in CAD technology, incorporate enhancements from the U.S. National CAD Standard, and needs of field users; (2) Updating DGN Library files, border files, and template drawings as necessary to support Civil Works engineering design mission

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Allocation in FY11	Allocation in FY12	Allocation in FY13	Budgeted Amount in FY14
\$ 6,186,000	\$ 957,000	\$ 1,000,000 2/	\$ 1,000,000 1/

Project Name: Coastal Field Data Collection

Engineer Research and Development Center

SCOPE: The Coastal Field Data Collection program systematically measures, analyzes, and assembles long-term coastal data that field offices use to accomplish the Corps mission in coastal navigation and storm damage reduction. These are critical, high quality data sets, nationwide or regional in scope, which support multiple projects, but which no single project would have the mandate or funding to collect.

AUTHORITY: The basic authority for the Coastal Field Data Collection Program is 33 USC 426a which originated with the River and Harbor Act of 1945, which originated in the River and Harbor Act of 1930. The latest Engineering Regulation governing the program is ER 1110-2-1406 dated 1990.

JUSTIFICATION: Inaccurate and insufficient observation data results in project design errors for coastal navigation and storm damage reduction. For example, wave data with a 20% error that are used to design a coastal rock structure will yield a 70% error in the stone size used to build the structure. Oversized stone makes initial construction costs much higher and undersized stone results in early failure and higher than necessary life cycle repair costs. Similarly, a 5-10 degree error in wave direction can result in an error, or even reversal, in predicted sediment transport, compromising the success of a regional sediment management strategy. Cost-effective mission accomplishment in the coastal zone requires accurate and complete data. Long-term data are required to determine climatic changes that may impact Corps projects. Lack of available high-quality observation data was highlighted as a critical issue by the Coastal Working Group of the Hydraulics, Hydrology and Coastal community of Practice in a Corps-wide survey on data requirements in 2009 and reinforced in 2012.

Field Research Facility, a long-term Coastal Observatory: Critical to measuring, analyzing and providing useful coastal data products for Corps districts is the collection of long-term, high-resolution data for improving project design and performance. The *Field Research Facility* (FRF) in Duck, North Carolina (<http://frf.usace.army.mil>), is a real-world coastal facility that collects a comprehensive suite of wave, current, meteorological, bathymetric, and topographic data, typically required, but often unavailable at a Corps project site. The facility is used to: evaluate oceanographic measurement techniques and equipment, collect high-resolution data during storms, and collect spatially and temporally-intensive long-term measurements required to better understand complex coastal processes and coastal climate. Collected data are made available online in real time to engineers and scientists in the Corps, other agencies (NOAA, NSF, Navy, USCG, USGS, etc.), universities, and the private sector. They are used for coastal research and for developing coastal engineering tools that predict wave environments and sediment movement affecting coastal projects, navigation safety, and dredging quantities. In addition the facility is serving as a testbed for evaluating and developing coastal numerical models (many models exist, but few have been rigorously evaluated).

Recent activities at the FRF have included the development and deployment of state-of-the-art lidar and radar systems for monitoring beach and nearshore changes in real-time including during storms; allowing highly accurate, temporally detailed observations. CLARIS, *the Coastal Lidar And Radar Imaging System*, is a mobile system for rapidly mapping the beach, both alongshore and offshore. RIOS, the *Radar Inlet Observation System*, is a radar-based system for remotely

Engineer Research and Development Center

Project Name: Coastal Field Data Collection

mapping evolving inlet shoals in real-time for navigation safety and dredging activities. A permanently mounted Terrestrial Lidar system, which continuously maps the beach and breaking waves, captured the first ever hour by hour record of wave run-up and beach changes during Hurricane Irene as it passed Duck, NC in 2011.

As a unique coastal observatory, the FRF is a significant Corps contribution to the Integrated Ocean Observing System (IOOS) as specified in the President's Ocean Action Plan and authorized in the Integrated Coastal and Ocean Observation System Act of 2009 (PL No. 111-11).

PROPOSED ACTIVITIES FOR FY 2014:

Continue the long-term data collection program and support the data requirements of the real-time model test bed. This will be the 35th year of observations. These observations include maintaining the unique cross-shore array that extends from very shallow water offshore to -26m which is providing data to advance coastal wave modeling technology and coastal inundation predictions

- Continue the long-term morphologic survey program
- Operationalize CSHORE-C15 (or another morphologic model) to evaluate its performance in real-time using the IMEDS toolkit, developed by ERDC, to refine morphology evaluation metrics and model performance.
- Expand and continue to develop the applicability and software analysis tools for real-time, advanced coastal mapping techniques of dune, beach, and nearshore using radar and topographic lidar sensing techniques.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
Environmental Data Studies (CONTINUING)	\$75,000 <u>2/</u>	\$75,000 <u>1/</u>

The Environmental Data Studies program includes general national or regional environmental data collection; support of field offices in the use of innovative information system technology, including geographic information systems to demonstrate the relationship between project-funded environmental activities with national or regional environmental issues. Environmental data includes biological, physical, and/or cultural resource components. The access to data systems that house information is both intra- and interagency, involving all concerned Federal agencies, notably the US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, US Geological Survey, USDA Forest Service, Natural Resources Conservation Service, Environmental Protection Agency, as well as State fish and wildlife and natural resource agencies, and non-governmental organizations like NatureServe. Coordination with other USACE data systems (e.g., CorpsMap) will ensure compatibility of uses.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested in FY 2014 are to continue the Environmental Data Studies Program and to improve the efficiency with which District staff assemble and analyze environmental information for Civil Works projects. Funds will be used to support the access and sharing of environmental information for national and regional inventories and assessments and train field personnel in its access and use. Query links between the environmental data system and integrated Budget Evaluation Tool (iBET) will be developed to provide seamless, efficient flow of information to support programmatic decisions. The aim is to reduce costs, avoid duplication, improve procedures for complying with environmental statutes, and focus on environmental issues of national and/or regional significance.

ACCOMPLISHMENTS FOR FY 2013: Activities in FY 2013 included the development of a geospatial data system and its transition to full deployment. Training and support to Districts on environmental data were provided.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
Flood Damage Data Program (CONTINUING)	\$220,000 <u>2/</u>	\$220,000 <u>1/</u>

AUTHORIZATION: Section 904, WRDA 1986 (P.L. 99-662); Section 308, WRDA 1990 (P.L. 101-640)

The Flood Damage Data Program is required to facilitate the collection and maintenance of basic flood damage data to support Corps field offices in accomplishment of flood damage reduction studies. Planning and evaluation of flood damage reduction projects requires knowledge of actual damages caused to various types of properties. The relationships between flood depth, flood duration and velocity, value and type of property, and the amount of damage are essential to making accurate and supportable estimates of the value of projects. The distributions of damages resulting from the various factors involved are needed for the risk analysis framework adopted for water resource studies. Damage data are obtained in rare instances when a damaging event occurs and funded studies are underway. However, in most instances when flooding occurs there are no current studies in the area or other funding mechanism to collect the requisite data to be used in future analysis or to report and accurately record the damages incurred and account for the effect of the factors that caused the damages. Previously no centralized flood damage data source existed which retrieved basic data for research efforts and for specific project studies. The major purpose of the program is to improve the technical quality and accuracy of flood damage data, to improve the understanding of the interrelationships of the characteristics of flooding on property damage, to improve the formulation of flood damage reduction projects, and reduce the costs of feasibility studies. Coastal damage data collection will be needed to adapt to new coastal protection policies and to respond to concerns from the Office of the Assistant Secretary of the Army (Civil Works) in the review of recent coastal protection projects. The activities of the program are to: (1) conduct actual flood damage surveys following flood events for riverine and coastal events; (2) develop, maintain, and improve the economic database for flood damage reduction projects; (3) calculate flood depth-damage functions for riverine and coastal flooding based on actual damage data; (4) collect data and derive damage relationships for roads, public building and facilities, and other public costs of flooding; (5) develop and maintain a floodplain inventory application that would be used to apply flood damage estimation models to feasibility, reconnaissance, and continuing authority studies; and (6) provide information to communities of hazard mitigation plans and grant applications.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested in FY 2014 for Flood Damage Data would be used to update and maintain data collection survey forms and data collection techniques, to collect post-flood damage data, to employ the flood damage database to estimate National models where regional or local flood characteristics can be specified to estimate flood damage relationships, to update and maintain a geospatial computer application for floodplain inventory data. A model for estimating residential and nonresidential structure values would be field tested and expanded. Funds would also be used to facilitate the collaboration in collecting and sharing of flood damage data within the Corps and between other agencies. The results of damage function calculations would be particularly useful to communities applying for FEMA mitigation grants. Generic damage functions from the Flood Damage Data Collection Program are now imbedded in the FEMA Benefit/Cost Analysis Program for common use for grant applications. Funds would also be used to refine functions for estimating cleanup and relocation costs. Finally, funds could be used to develop and refine depth-damage curves for coastal areas, which is sorely lacking at present.

ACCOMPLISHMENTS IN PRIOR YEARS: Activities in FY 2013 include the collection of post-flood damage data, programming of a new version of IWR-GeoFIT that incorporates new structure valuation and depreciation procedures, providing technical support for IWR-GeoFIT, quantifying the statistical properties and variation in USACE estimated discount replacement values, performing a statistical comparison of inventory sources (RS Means and Marshall & Swift's Depreciated Replacement Costs) as well as techniques, releasing nonresidential damage functions, providing technical support for flood damage analysis, and beginning to develop damage functions for coastal properties.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Collection and Study of Basic Data

	Allocation in FY 2012	Allocation in FY 2013	Budget Amount for FY 2014
Study Name: Flood Plain Management Services	\$9,110,000	\$9,500,000 2/	\$9,500,000 1/

AUTHORIZATION: Section 206 of the 1960 Flood Control Act (PL 86 645), as amended, which authorizes the Secretary of the Army to acquire, compile and disseminate data on floods and flood damage potential and to provide guidance in their use in flood related planning to State and local agencies.

JUSTIFICATION: This information and guidance has long supported planning and implementing actions that reduce flood risk through wise use of flood plains. The lessons of the gulf coast disasters and the concerns about the Sacramento levees have heightened concern and interest in increasing our focus on flood risk management and increasing and improving the Nation's awareness and understanding of actual flood risk exposure. As we better understand the risks we face, the need to provide accurate and timely flood risk information, interpretation, and guidance for coping with these risks is an ongoing challenge. Meanwhile, our local, State, Tribal and Federal partners continue to address similar issues, often independently. Program execution is efficiently leveraging existing intergovernmental State Silver Jacket teams to support State and local flood plain management priorities. Use of Flood Plain Management Services (FPMS) funds to achieve common interagency goals optimizes the use of our and our partners' resources, providing the best risk reduction possible with available funds. This program supports Executive Order 11988 as the federal governments' guidelines for pursuing activities that may impact the nation's flood plains. This program also fills a critical need as one of the few ways that small communities can access the expertise of the Corps. The Corps participates with the Federal Emergency Management Agency and local governments in the conduct of pre disaster hurricane evacuation and preparedness studies for mobilizing local community responsiveness to natural disasters in high hazard coastal areas.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested for FY 2014 will enable the Corps to provide critical information and guidance to states and local communities in their application of flood plain management measures, optimizing use of our and our interagency partners' resources. It will provide site-specific flood and flood plain data and assistance; assist with efforts to identify flood hazards in communities under growth pressures; facilitate special studies that concentrate on the prevention of future flood damages, giving increased emphasis to the application of non-structural measures; communicate the existing risk and alternatives to address the risk; and enable critical pre-disaster hurricane evacuation and preparedness studies for states and counties along the Atlantic and Pacific Oceans, the Gulf of Mexico, and US islands in the Caribbean and Pacific. This FPMS program for FY 2014 includes \$3,000,000 to evaluate the potential for and encourage the use of nonstructural alternatives and actions on our Nations' major rivers during post-disaster recovery. The initiative would focus on two components related to implementation of nonstructural alternatives for managing flood risks: 1) assessing the potential for non-structural opportunities in our nation's watersheds and recommending incentives for increasing the use of non-structural alternative approaches in the development of new flood risk management projects and implementation during post-disaster recovery of flood risk management systems; and 2) use existing authorities within the Flood Plain Management Services program to provide technical assistance to non-federal, State and local agencies to assist and enable their development and implementation of a broader range of nonstructural actions to manage and reduce their flood risks. The Silver Jackets teams will be used to provide selected technical services and support to assist States and communities in the development and implementation of nonstructural alternatives and actions to reduce flood risks initiative.

The FY 2014 FPMS program also includes \$1,000,000 for Systems Approach to Geomorphic Engineering (SAGE) Initiative. The purpose of the SAGE initiative is to (1) coalesce existing scientific knowledge and engineering experience on (a) "green" or "soft" or "living shorelines" solutions and (b) "SAGE" or "hybrid" combinations of "green" and "gray" solutions; (2) develop hybrid solutions for the different coastal landscape/ecosystems that contribute to good

flood plain management in the coastal zone on a regional scale; (3) propose field tests to be conducted through the Section 2038 authority of WRDA 07 to demonstrate the viability of proposed solutions and other research in both flood risk management and ecosystem restoration research programs; and (4) document the effectiveness of pilots and demos funded by other authorities. This SAGE effort will be accomplished in close collaboration with other agencies (especially NOAA and FEMA), non-governmental organizations (especially The Nature Conservancy and The Conservation Fund), academic institutions, and private sector firms.

ACCOMPLISHMENTS IN PRIOR YEARS: In FY 2012, \$4.4 million was utilized for the base program of Corps district offices responding to requests for information in a timely manner. Another \$6.3 million was utilized for 95 Flood Plain Management Studies and special programs in response to requests from Federal and non-Federal agencies, communities, Tribes and individuals for flood-related information, interpretation, and guidance. The requests continue to number into the tens of thousands and involve property valued at billions of dollars. Through 18 inter-agency Silver Jackets projects ongoing in FY 2012 at a cumulative Corps cost of \$1.5 million, the Corps supported 18 states' flood risk management priorities within a shared responsibility approach that leveraged other federal and state resources and resulted in the provision of actionable flood risk information and implementable options to reduce flood risk. Collaborative accomplishments included flood forecast inundation mapping for communities at risk, development of flood response and warning plans, hazard communication and outreach assistance, hydraulic structure failure analysis, data development to support sustainable land use planning, and evacuation planning. Fifteen are expected to lead to actions by those who have the authority to manage flood risk and/or demonstrate that they will tangibly reduce or manage flood risk. Of the 18, 8 are expected to reduce future expenditures related to flooding and flood risk. The Corps participated in pre-disaster hurricane evacuation and preparedness studies for high-hazard areas in coastal states and territories; provided support for updating and improving mathematical models of flood plain hydrology and hydraulics; developed training programs in flood plain hydrology and hydraulics; and prepared flood-proofing studies.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A
The total unobligated dollars estimated to be carried into FY 2014 is 0. Description of work to be completed: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
Hydrologic Studies	\$ 250,000 <u>2/</u>	\$ 250,000 <u>1/</u>	\$ 0

AUTHORIZATION: The scope of activities under this item is determined annually based on the requests from USACE Commands and Laboratories to meet high priority needs. These items are not covered under regular Civil Works GI and O&M funding programs. Major activities to be undertaken in the program generally include the collection of basic hydrologic data and the studies of these data for major storm events or certain special hydrologic processes. The information to be derived from this program will improve hydrologic engineering techniques for the planning, design, construction, and operation of water resources projects. The program consists of four sub items: Storm Studies, General Hydrologic Studies, Sedimentation Studies, and Stream Flow and Rainfall Data.

PROPOSED ACTIVITIES FOR FY 2014: 1. Storm Studies: The Storm Studies Program is a continuing investigation of major storms for the purpose of accumulating comprehensive rainfall data. These data are used to refine the regional hydrometeorological information throughout the nation. The up-to-date hydrometeorological information is essential for design of new projects as well as for safety assessment of existing projects. We have substantial need for hydrologic data for initiation and completion of water resources studies. These data are required in the evaluation of flood producing potentials of river basins, and constitute the major portion of the basic data used in probable maximum precipitation determinations. Funds in the amount of \$50,000 will be required in FY 2014 to work on several storm studies. The need and capability in this area exceeds the requested budget amount. 2. General Hydrologic Studies: Studies under this sub item include needed improvement in the analysis of rainfall runoff relationships, flood frequency, snowmelt studies, hydrograph development and routing at selected watersheds, model calibrations in urban areas, analyses of past floods, methods for the hydraulic analysis of non-gaged streams, and other studies of related hydrologic nature. Also included are planned upgrades to the internal Corps system of accounting for gages used largely both of control of water resources projects and also for studies of major hydrologic events. Studies of new techniques to improve the accuracy of hydrologic modeling require additional resources. New radar applications in rainfall-runoff forecast is an ongoing need. Funds in the amount of \$100,000 in FY 2014 will be required to continue this sub item at a level to insure proper and orderly progress. The need and capability in this area exceeds the requested budget amount. 3. Sedimentation Studies: The program is a continuing effort in which funds are used for conducting non project sedimentation studies, and for the Corps share of an interagency sediment investigation program. The sedimentation studies include: promoting and supporting the standardization and development of equipment, criteria and methodology for the collection, analysis of suspended and bedload sediment characteristics of natural streams; and laboratory studies. An amount of \$50,000 in FY 2014 is required to continue the interagency sediment investigation program, regional sedimentation studies for high priority areas, develop database using all completed sediment survey in support of regional sedimentation studies. The need and capability in this area exceeds the requested budget amount. 4. Streamflow and Rainfall Data: This is a continuing program in which funds are used for installation and operation of hydrometeorology gages of non project nature that are needed by the Corps in addition to the stations in the cooperative programs conducted by the U.S. Geological Survey and the National Weather Service for the Corps. Additionally, gages are needed to observe historical high water marks for validation of hydrologic models. An amount of \$50,000 in FY 2014 is required to continue the establishment and operation of these special purpose gages, and to determine historical flooding in urban sites. The need and capability in this area exceeds the requested budget amount

ACCOMPLISHMENTS IN PRIOR YEARS: 1. Storm Studies: During the period, the Corps has helped lead an effort to develop Extreme Storm Data to assist both the Corps and other federal agencies to meet design criteria for federal projects. Corps offices have gathered data on several major storms, reviewed the scope and interim results of ongoing studies by NWS on development of standard project and probable maximum storms at various basins throughout the United States and territories. 2. General Hydrologic Studies: Examples of some of the more important studies accomplished under this program are: determination of rainfall runoff relationship in urban areas; general hydraulic model calibration; snow cover surveys; and adaptation of hydrologic programs to CADD equipment. Work was completed on the regional frequency studies for Hawaii and data collection was initiated for the State of California. Significant work was also accomplished in assessing the effects of debris in hydrological modeling, particularly in the fire-prone western states. 3. Sedimentation Studies: All of the funds allotted to this sub item assisted in financing the Corps share of the cooperative Interagency Sedimentation Project at the Hydraulics Laboratory, Waterways Experiment Station. In addition, coordination with cooperating agencies was completed. 4. Streamflow and Rainfall Data: Stations funded under this sub item are generally established and operated several years prior to anticipated authorization for project type activities, in order to provide a background of observed data on which to base the planning and design of projects. Progress continued at these gage sites to collect hydrometeorological data in flood prone areas to document historical flood and calibration of hydrologic models.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
International Waters Studies	\$ 200,000 <u>2/</u>	\$ 200,000 <u>1/</u>	\$ 0

AUTHORIZATION: The Boundary Waters Treaty of 1909, the Niagara River Treaty of 1950, the Columbia River Treaty of 1961, and other less formal agreements between the Governments of the United States and Canada are concerned with the regulation, control, and use of boundary waters. Under the Boundary Waters Treaty of 1909, the International Joint Commission (IJC) was established and empowered to establish local boards, which conduct investigations and assure adherence to orders of approval pertaining to use of boundary waters issued by the Commission. Corps of Engineers representatives serve on and chair the U.S. Sections of the following IJC Boards: Saint Croix River, Champlain Richelieu, Lake Champlain, St. Lawrence River, Niagara, Lake Superior, Lake of the Woods, Rainy Lake, Souris Red Rivers Engineering, Souris River Control, Kootenay Lake, and Osoyoos Lake. Under separate treaties, Corps representatives serve on and chair the U.S. Sections of the Columbia River Treaty Permanent Engineering Board, the Permanent Engineering Board Committee, the Columbia River Treaty Entities, the Columbia River Treaty Operating Committee, the International Niagara Committee, and the International Lake Memphremagog Board. These Boards and Committees hold joint meetings, review report drafts and correspondence, make field inspections, obtain, collect, and analyze hydrologic and hydraulic data, and report their findings to the establishing parties. The degree of study activity varies depending upon the requirements of the Commission or Treaty under which they were established. These efforts assure better control, use, and orderly development of the jointly controlled water resources, and are of importance in attempting to meet water demands resulting from an expanding economy along the United States Canadian border. Studies are closely related to the Corps of Engineers' Civil Works program and are summarized in the Assistant Secretary of the Army for Civil Works' Annual Report.

PROPOSED ACTIVITIES FOR FY 2014: The amount requested for FY 2014 will fund Corps of Engineers participation in assisting the U.S. Government meet its obligations under provisions of boundary water treaties and other international agreements between the United States and Canada. CELRD provides support for implementation of the Niagara Treaty of 1950 that governs the split of Niagara River Waters between the U. S. and Canada, and between the uses of the waters.

Northwestern Division engages in activities associated with implementation of the Columbia River Treaty and the Kootenay Lake and Osoyoos Lake Boards of Control. CENWD, together with Bonneville Power Administration and British Columbia Hydro annually develop the Assured Operating Plan and the Detailed Operating Plan for the Columbia River Treaty storage projects. Funds also are used to support the work of the Columbia River Treaty Permanent Engineering Board, including publication of its annual report to the Governments. North Atlantic Division is engaged in support of the Saint Croix River Board of Control and the Gulf of Maine Council on the Marine Environment. Work in the Saint Croix R. Basin involves retrieval and analysis of water data to assure compliance with IJC rules and annual inspection of dams and fish passage facilities.

The Corps will continue to carry out its multiple responsibilities to the various IJC Boards of Control and to the several Treaty entities, boards and committees. During FY 2014, additional flow data will be obtained and used to update the rating curve used to verify compliance with Niagara Treaty requirements. In addition, pursuant to the October 1999 Plan of Study for Lake Ontario regulation improvements, the IJC established the

Lake Ontario-St. Lawrence River Study Board. Investigations are continuing as the fifth year of a 5-year effort. A Plan of Study for evaluating the Lake Superior regulation criteria outflows is being developed for approval by Governments. A basin-wide hydrologic and regulation model will be implemented. Special studies related to international impacts of evaluation of endangered species compliance related to Columbia River Treaty projects will be continued by CENWD. CENAD will continue normal work in support of the Saint Croix Board of Control and the Gulf of Maine Council on the Marine Environment. Discussions are ongoing with the IJC on expansion of the IJC's mission to include environmental objectives, as described in the report entitled "The IJC and the 21st Century". The Corps will be supporting the IJC as it executes the reference from the governments regarding investigating the feasibility of establishing a demonstration watershed board and its implementation of the reference on diversion, consumption and transfer of international waters. The need and capability in this area exceeds the requested budget amount.

ACCOMPLISHMENTS IN PRIOR YEARS: The Corps Division and District commanders and their staffs met all of their many and diverse responsibilities in representing the United States on the previously listed IJC Boards of Control and Treaty entities, boards and committees. The IJC-sponsored special flood damage reduction study of the Red River Basin was closed without completing the full scope of the planned work because of lack of funds from the United States. CEMVD worked with the International Red River Board on the biota assessment for the Devils Lake basin and also supported an interagency modeling and review effort on the Red River of the North mainstem. CELRD has been very active in multiple Great Lakes IJC boards. CENWD continues to coordinate operations of Libby Dam under the 2001 Libby Coordination Agreement. CENWD participated as part of the U.S. Entity to prepare all Columbia River Treaty required Assured Operating Plans (AOP) and resultant Determinations of Downstream Power Benefits (DDPB). The U.S. Entity finalized the annual Detailed Operating Plan (DOP) that may produce results more advantageous to both countries for the current operating year.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
Precipitation Studies (National Weather Service)	\$ 225,000 <u>2/</u>	\$ 225,000 <u>1/</u>	\$ 0

AUTHORIZATION: This is the Hydrometeorological Studies Program conducted for the Corps of Engineers by the National Weather Service (NWS). The Corps transfers funds to NWS who performs analyses of storm rainfall and other meteorological data required to develop hydrologic criteria for use by the Corps in planning, design and water control management of flood control and water resources development projects, and in floodplain management studies.

PROPOSED ACTIVITIES FOR FY 2014: The scientific services provided by the National Weather Service under this program consist of: (1) review of the meteorological aspects of storm data compiled under the Hydrologic Studies Program conducted by the Corps; (2) precipitation depth-duration-frequency estimates for regions and the nation; (4) development of meteorological parameters pertaining to hurricanes, northeasters and other wind phenomena; and (5) other studies necessary to accomplish the Corps mission. Funds in the amount of \$225,000 will be required in FY 2014 to continue the program at a level consistent with Corps needs. The entire cost of the Corps hydrometeorological studies program is funded under this budget item.

With the technology and systems for updating precipitation frequency demonstrated, we now stand ready to update precipitation frequency estimates for the rest of the U.S. and its dependencies. With expected funding of \$225K, efforts in FY 2015 will be to continue the update and revision of the precipitation frequency estimates for the portion of California not already included in NOAA Atlas 14 Volume 1 and continue studies for the U.S. Pacific Islands, Southeastern states, Midwestern states, and Alaska. Additionally, the NWS will be producing areal reduction factors for the U.S. and maintains the Precipitation Frequency Data Server web portal and prepares an annual report on nationwide flooding.

ACCOMPLISHMENTS IN PRIOR YEARS: With funding of \$225,000 in FY12 and 13, the NWS completed the update of precipitation frequency estimates for the some states and initiated updates and revision of precipitation frequency estimates for the State of California, U.S. Pacific Islands, Southeastern states, Midwestern states, and Alaska Also, the Precipitation Frequency Data Server (PFDS) web portal was maintained with high availability. The annual report on nationwide flooding and associated assessment of damages was prepared and delivered.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Appropriation Title: General Investigations – Fiscal Year 2014

Collection and Study of Basic Data

	Allocation FY2013 2/ \$75,000	Budgeted Amount for FY 2014 1/ \$75,000	Increase over FY14 and FY13 \$0
Remote Sensing/GIS Support			

AUTHORIZATION: Various authorities including Public Law 110–114. These efforts are necessary to provide remote sensing and geospatial data for efficient management of Congressionally authorized projects, to meet the performance requirements of the Presidents Management Agenda (PMA), to supply data for programs that are rated by the Program Assessment Rating Tool (PART), as well as to respond to specific public laws, including the National Levee Safety Program, the Government Paperwork Elimination Act (GPEA) and Clinger-Cohen/IT Management Reform Act.

This item supports the overall technology transfer requirement of the Corps Civil Works Program for Remote Sensing systems, which is the responsibility of the Engineer Research and Development Center (ERDC), through its Remote Sensing/Geographical Information Systems (GIS) Center of Expertise. The Remote Sensing/GIS Center is the USACE Center of Expertise for Civil Works Remote Sensing and GIS technologies, providing mission essential support to Civil Works programs. The Center provides cost-effective centralized management and support through technology transfer and applications development for Corps mission responsibilities in all business practice areas: navigation, flood and coastal storm damage reduction, hydropower, regulatory, environment, emergency management, recreation, water supply, and work for others. An enterprise GIS approach is an essential component of this support. Continuing interaction with other researchers and practitioners throughout the USACE, government, the private sector, and academia assures that state-of-the-art and state-of-the-practice knowledge of evolving trends that are relevant to USACE activities are available, and that duplication of effort is avoided.

Declines in manpower require working smarter, better, and faster. Contributing to this effort, the Center develops approaches for the integration of data from the disparate sources necessary for comprehensive and collaborative land and water resources management including: basin-wide studies; water control; support to emergency management; and compliance with the attendant environmental regulations and related policies. The Center promotes state-of-the-art sensors, data collection, analysis, and storage systems, building on commercial software, and integrating these with operational technologies which are then delivered to the USACE divisions, districts, and other agencies' activities. The Center provides guidance and technical support to the USACE Geospatial Community of Practice (CoP), including no-cost support to USACE elements having problems that can be solved in less than 3 days. The Center also provides supports to other CoPs requiring geospatial or remote sensing information, including the remote sensing, hydrology, hydraulics and coastal, levee safety and emergency management sub-CoPs. This ensures that appropriate linkage to the geospatial technologies is available.

The existence of the Center ensures that the necessary support can be rapidly directed toward solving operational problems that require specialized expertise. The PROSPECT training program in remote sensing and GIS, managed by Center staff, provides another avenue for the transfer of knowledge to those who are, or soon will be, using these technologies. Training also is conducted in the field through workshops, conferences, and distance learning. White papers, pilot projects, USACE and other publications, including Engineering Letters, Circulars, and Manuals, and the Internet, also are used to transfer procedures and lessons learned to end users.

PROPOSED ACTIVITIES FOR FY 2014:

- As the Center of Expertise, serve as key resource and technology point of contact for the Corps of Engineers for Civil Works remote sensing and GIS.
- Continue to expand GIS and remote sensing capabilities to maintain technical leadership for critical USACE programs such as the National Levee Database and HQ Unified Operating Center (UOC) during emergencies.

Division: HQUSACE and ERDC

Remote Sensing Systems Support

Appropriation Title: General Investigations – Fiscal Year 2014

- Provide guidance and technical support to the USACE Geospatial Community of Practice (COP),
- Support one-stop service requests from USACE districts and divisions related to remote sensing and GIS.
- Provide technical support to USACE district offices for the development of implementation plans for geospatial data, including water control and closer coordination with other agencies.
- Provide leadership and technical support to strategic and enterprise USACE geospatial initiatives.

ACCOMPLISHMENTS IN PRIOR YEARS:

- As the Center of Expertise, served as key resource and technology point of contact for the Corps of Engineers for Civil Works remote sensing and GIS.
- Provided guidance and technical support to the USACE Geospatial Community of Practice (COP) and provided leadership to the remote sensing, hydrology, hydraulics and coastal, levee safety and emergency sub-COPs, which have technical issues that are related to the geospatial technologies.
- Supported one-stop service requests from Corps districts and divisions. For example, the high-profile National Levee Database and the Levee Inspection System were built on Center experience and knowledge.
- Provided leadership and technical support to strategic and enterprise USACE geospatial initiatives: District and Division E-GIS support; Missouri River Restoration Project; Corps Water Management System; Geospatial Operations and Maintenance Business Interlink (gORM) development and implementation; Real Estate Management Information System; National Inventory of Dams; Corps Project Notebook; Access to Water Data; Emergency Management Remote Sensing, GIS, and Modeling Group; Watershed Investment Decision Tool; and Hydrology and Hydraulics modeling software development and support team member.
- Provided technical support to Corps District offices for the development of implementation plans for geospatial data management including development of enterprise of geospatial data approaches. Conducted frequent geospatial technology web-seminars for Corps offices. This support includes discussions with district personnel concerning current and desired approaches, consideration of what is occurring in all divisions in the district, and enterprise issues.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Allocation in FY11	Allocation in FY12	Allocation in FY13 2/	Budgeted Amount in FY14 1/
\$ 50,000	\$ 48,000	\$ 50,000	\$ 50,000

Project Name: Scientific and Technical Information Centers

Engineer Research and Development Center

SCOPE:

Five information analysis centers (coastal engineering, cold regions engineering, concrete technology, hydraulic engineering, and soil mechanics) located at the U.S. Army Engineer Research and Development Center provide the major interface between the Corps of Engineers and the public and private sectors to gather and disseminate information as required by PL 99-802, Federal Technology Transfer Act of 1986. The function of each center is to acquire, examine, evaluate, summarize, and disseminate newly published scientific and technical information generated within the Corps of Engineers and other activities in the U.S. and abroad.

JUSTIFICATION:

Public Law 99-802, Federal Technology Transfer Act of 1986, requires technology transfer from Federal agencies to the private sector. In addition, both the Department of Defense and the Department of the Army have objectives of supporting the information needs of engineers and scientists and eliminating unnecessary duplication of R&D. The specified information centers, supported by their host laboratories, critically evaluate and summarize the technical validity and merits of published and unpublished research and technical publications on design, construction, or other technology utilization. User communities have been well established and distribution lists for technology transfer are continuously updated. Electronic media including the World Wide Web are used where appropriate. The effectiveness of activities and services is evaluated on a continuing basis, and technology transfer products and methodology are revised when appropriate. Priority for services will be given to deployed troops, Corps of Engineers staff, and other government personnel.

These centers are a major technology transfer resource between the public, the US scientific and engineering community, and academia for results of over 75 years of research results conducted by the ERDC laboratories in the fields of soil mechanics and foundation engineering, cold regions engineering, concrete technology, hydraulic engineering, and coastal engineering. Each center is supported by multi-disciplinary technical staff and has a comprehensive library of materials that have been published over the years. In a typical year, each Center responds to hundreds of information requests on subjects within its purview. These services are free to the users. In addition, services such as literature research, information synthesis, publication location, research reviews, and methodology comparisons on subjects of mutual interest to ERDC laboratories and other interested parties are available on a cost-reimbursable basis.

PROPOSED ACTIVITIES FOR FY 2014:

- Respond to several thousand technical inquires via various internet and personal contact actions. Inquires are received from Federal, state, and local government activities, universities, private sector engineers and scientists, and citizens.
- Provide technical expertise in the form of copies of reports, arranging to speak with an expert, furnishing generalized technical advice, or giving updates on technical developments.
- Digitize older ERDC research reports of significant technical value and place them on the internet for ready access by the public.
- Distribute reports, technical notes, computer programs, GIS data, abstracts, information bulletins, and other scientific and technical information to the Defense Technical Information Center (DTIC), Corps libraries, depository libraries, and identified user communities to ensure wide circulation and availability.

<u>Information Analysis Centers</u>	<u>FY 2014</u>
Coastal Engineering	\$ 10,000
Cold Regions Engineering	10,000
Concrete Technology	10,000
Hydraulic Engineering	10,000
Soil Mechanics	<u>10,000</u>
	\$ 50,000

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
Stream Gaging (U.S. Geological Survey)	\$ 550,000 <u>2/</u>	\$ 550,000 <u>1/</u>	\$ 0

AUTHORIZATION: The Corps of Engineers cooperates with the U.S. Geological Survey in this effort, and contributes funds for all or part of the cost of the operation and maintenance of about 2,500 stations that are of special importance to the Corps mission. The Corps established this continuing, cooperative program in March 1928, so that streamflow data would be available to meet special needs concerning the Corps water resources responsibilities.

PROPOSED ACTIVITIES FOR FY 2014: The Corps of Engineers makes extensive use of streamflow records in the planning, design, construction, and operation of water resources projects. The Basic network of stream gaging stations operated by the Geological Survey under its normal functions without support from the Corps is inadequate to meet all the special needs of the Corps water resource development responsibilities. Accordingly, a cooperative program was established under which funds are transferred to the Survey to cover, partially, the cost of operating specific stations. In the optimum development and management of water resources, it is essential that continuous records of streamflow be maintained at specific sites over a long period of years to provide a reliable measure of water resources available for various uses. This budget item targets the non-project portion of the cooperative program. To continue the operation of stations of special interest to the Corps, an estimated total of \$17,500,000 will be required by the U.S. Geological Survey during FY 2014, exclusive of funds received from other cooperative sources. The operation and maintenance cost of these stations will be financed from two sources, as follows: (1) \$600,000 from this budget item for stations not directly attributed to the Corps projects; and (2) approximately \$17,000,000 from Corps funds budgeted elsewhere for authorized projects and studies. The basic program will remain at the same level as in previous years. The need and capability in this area exceeds the requested budget amount.

ACCOMPLISHMENTS IN PRIOR YEARS: Records for the streamflow stations supported by transfer of funds are used primarily to operate Federal flood reduction projects. In the past ten years these projects have reduced flood damages by an average of \$23 billion annually. Not only are these gages used by the Corps, but 100 percent of the data are used by the National Weather Service as the basis for its public flood forecasts. In addition, the data are published on the Internet by the Corps and/or in a regular series of reports by the U.S. Geological Survey and provide valuable information for many Federal and state agencies and the public.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
Transportation Systems Program (CONTINUING)	\$950,000 <u>2/</u>	\$950,000 <u>1/</u>

AUTHORIZATION: Section 904, WRDA 1986 (P.L.99-662); Section 334, WRDA 1992 (P.L.102-580) Section 230, WRDA 1996 (P.L. 104-303)

The Transportation Systems Program supports Corps Districts and Headquarters in accomplishing navigation project planning and evaluating responsibilities through the provision of information and technical support. The process of planning improvements for waterway and harbor navigation projects necessitates consideration of needs, opportunities, benefits, and economic costs of project improvements in the context of the project-specific areas as well as the overall national transportation system. The Transportation Systems Program is managed by CECW-P through CEIWR and is a continuing effort to ensure the development of viable and practical analytical techniques, sources of information, tools and methods including the development of deep draft and shallow draft vessel operating and replacement cost data; provision of timely information regarding world deep draft vessel fleet, commodity, and cargo flow forecasts; the publication of reports documenting the results of research associated with the Transportation System Analysis Program; the provision of technical services and support to District and Division offices and Headquarters personnel. Goals include: (1) to improve the technical quality, accuracy and consistency of navigation planning studies and procedures; (2) to improve the strategic planning of navigation improvements; and (3) to reduce the costs of individual navigation studies through shared data and methodologies. The funding requested for FY 2014 will allow the program to conduct essential ongoing nationwide navigation studies.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested in FY 2014 for Transportation Systems will be used to update deep and shallow draft vessel operating costs (VOCs). In addition, funds will be used to develop, review and distribute Great Lakes and oceangoing barge VOCs. Funds will also be used to estimate transportation cost reductions or efficiencies (i.e., benefits) for Corps navigation studies, retain trade and transportation forecast subscription services from Information Economics and Global Insight, and develop customized port-level trade forecasts through Global Insight's Trade Navigator service, as well as technical support from CEIWR staff for District and Division planners and economists to conduct navigation studies, and strengthen the Deep Draft PCX. In addition, there has been an urgent need to certify and standardize navigation models.

ACCOMPLISHMENTS IN PRIOR YEARS: Activities in FY 2013 include updating and distributing shallow and deep-draft vessel operating costs guidance including investigation of life-cycle hull asset costing procedures and practices; updating bunkerage costs with posting to HQUSACE homepage; analyzing load factor inputs and developing and certifying various navigation models.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Project Name: Research and Development

Engineer Research and Development Center

Allocation in FY12 \$	Allocation in FY13 \$ 2/	Budgeted Amount in FY14 \$ 1/
18,025,000	16,143,000	16,143,000

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

The Corps must pursue an aggressive R&D effort to take advantage of rapidly developing technologies and techniques that will promote significant monetary savings and greater reliability, safety, enhanced efficiency, and environmental sustainability in planning, design, construction, operations and maintenance of civil works activities.

The Civil Works R&D program is formulated to directly support the established Business Lines of the Civil Works Program including: flood and coastal storm damage reduction, inland and coastal navigation, environment (including natural resources, compliance, mitigation, restoration, and stewardship), water supply, hydropower, recreation, emergency management, and regulatory. The Civil Works R&D needs and requirements are identified based on the USACE Campaign Plan, Civil Works Program Strategic Plan, Corps SES and General Officer Steering Committee, division and district input, and the existing WRDA authorities. Corps R&D also must address the challenges facing the Corps' portfolio of water resources infrastructure; aging structures, changing demands, changing environmental conditions, and constrained budgets. Corps R&D examines new ideas, develops approaches, techniques, and technology to solve problems, and transfers field-ready products. The request for \$16,143,000 of General Investigations funds for the FY 2014 program is focused on the very highest priority R&D needs. Additional high priority requirements identified above the base program by practicing District and Division technical experts and by HQUSACE proponents are incorporated into the program as funding becomes available. The FY 2014 program continues efforts started in FY 2013 that will lead to better management of water resources projects, promote public safety, reduce risk, improve operational efficiencies, sustain the environment, and position our water resource systems to be managed as systems and to be adaptable due to the implications of climate change. The Program also proposes in FY 2014 to begin a focused science and technology effort to address needs for resilient water resources infrastructure.

Results of the Corps' GI R&D are directly incorporated into practice within the Civil Works Program through revisions or additions to Engineer Regulations, Engineer Manuals, Technical Guidance Manuals, Engineer Technical Letters, or Guide Specifications. Numerous other means of technology transfer are also used such as training courses, workshops, demonstrations, technology availability in commercial tools and services, and other professional contacts. The Corps Civil Works R&D Program provides essential Product Lines with field ready end products and a high return on investment for the Corps, other Federal agencies and the Nation.

AUTHORIZATION: Authorization for ERDC to conduct R&D is codified in 10 U.S.C. 2358 ("The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that are necessary to the responsibilities of such Secretary's department in the field of research and development.")

Engineer Research and Development Center

Research and Development

COORDINATION:

The Corps conducts Civil Works R&D through the U.S. Army Engineer Research and Development Center (ERDC) and the Institute for Water Resources (IWR). The ERDC consists of seven research laboratories:

- Coastal and Hydraulics Laboratory, Vicksburg, MS
- Cold Regions Research and Engineering Laboratory, Hanover, NH
- Construction Engineering Research Laboratory, Champaign, IL
- Environmental Laboratory, Vicksburg, MS
- Geotechnical & Structures Laboratory, Vicksburg, MS
- Information Technology Laboratory, Vicksburg, MS
- Topographic Engineering Center, Alexandria, VA

The IWR is located in Alexandria, VA, and it's Hydrologic Engineering Center (HEC) in Davis, CA. Policy guidance and executive oversight are provided by the Civil Works R&D Steering Committee co-chaired by the Director of Research and Development and the Deputy Director of Civil Works and comprised of CW division chiefs. The Director of Research and Development is responsible for developing the annual program. The Directors of ERDC and IWR are responsible for execution of the CW R&D program.

In order to most effectively use the limited R&D resources and to avoid unnecessary duplication of research effort, the Civil Works R&D Program maintains external technical exchange and technology transfer efforts with other Federal and major water resource agencies including the TVA, Bonneville Power Administration, Western Area Power Administration, EPA, NSF, Department of Agriculture (NRCS), Park Service, NOAA, DOI (USBR, Forest Service, FWS, USGS, DHS (USCG, FEMA, US Border Patrol), DOT (FHWA, FAA, MARAD), NASA, International Boundary Water Commission, International Joint Commission, DOE (NRC, FERC), the Navy, and state and local governments.

Corps researchers also maintain contact with the research activities of universities and industry through regular membership in such organizations as the American Society of Civil Engineers, the Civil Engineering Research Foundation, the American Concrete Institute, the American Society of Testing and Materials, the International Conference on Coastal Engineering, the American Association of Port Authorities, the American Society for Photogrammetry and Remote Sensing, Society of Environmental Toxicology and Chemistry, the Coastal Society, the Offshore Technology Conference, International Society of Soil Mechanics and Foundation Engineering, U.S. Society of Dams, and International Committees on Large Dams, the International Association for Hydraulic Research, the Association of American Geographers, Western Dredging Association and the International Navigation Association. The Corps also participates extensively with the Transportation Research Board, the Water Science and Technology Board, and the National Research Council in coordinating and leveraging research activities.

The proposed FY 2014 R&D Program directly supports the Civil Works Business Lines, their mission requirements, and established performance objectives at project, watershed, or river basin scales. The technical foundation of the R&D program includes:

- a. Navigation (including Hydropower)
- b. Flood and Coastal Storm Damage Reduction (including Emergency Management, Water Supply, and Recreation)
- c. Environmental (including Regulatory)

Engineer Research and Development Center

Research and Development

Navigation (including Hydropower)

The Corps provides inland and coastal navigation critical to the national economy and defense. Navigation research delivers environmentally sustainable products that improve efficiency, reliability, and capacity of this complex, aging transportation/power network. The research framework integrates infrastructure engineering, power physics, economics, innovative construction, coastal and riverine hydrodynamics and processes, monitoring and sensing technologies, operations research, environmental solutions, and emerging technologies to create effective solutions in concert with the multiple demands, requirements, and constraints of real world commodity transport and power production problems. Research efforts target navigation channels, locks, jetties, breakwaters, harbors, dams and power plants to optimize among life-cycle and reliability trade-offs, assure defensible economic assessment, and provide better investment decision tools for predicting performance and deterioration with time, and for scheduling and prioritizing maintenance and repairs balanced with the consequences of delays. Essential to this effort is the development of tools for determining the condition of infrastructure components to make risk-based prioritizations for funding. R&D efforts for development of condition index products include: Developing a standardized method and associated computer program for life-cycle engineering analysis of coastal rubble mound breakwaters, Improved Condition Indexing for Coastal Structures, Monitoring of Concrete Navigation Structures, Inspection and Condition Assessment of Steel Hydraulic Structures, and Condition Monitoring and Predictive Maintenance for Infrastructure. Significant investment has also been directed toward developing improved navigation economic technologies that can be used to support better-informed decision analyses and management of the United States inland and deep-draft navigation system.

Flood and Coastal Storm Damage Reduction (including Emergency Management, Water Supply, and Recreation)

Corps projects across the Nation prevent flooding and storm damage. In the daily and seasonal operation of hundreds of Corps projects, national requirements for water supply and opportunities for recreation and environmental stewardship are also balanced. The Nation expects the Corps to guarantee that its existing projects maximize efficiency and effectiveness, and that new projects incorporate the most advanced knowledge and capabilities in planning, design, construction, operation, and maintenance. Through R&D, the Corps develops technology that optimizes daily operations of water resources projects to meet multiple objectives, including water supply and environmental stewardship. The Corps' R&D creates new solutions to challenging infrastructure engineering problems in building, maintaining, upgrading, and operating the Nation's water resources infrastructure such as dams, locks, spillways, channels and levees. Through R&D, the Corps provides guidance and tools to understand the natural setting of water resource projects, to incorporate environmental & economic objectives, to manage flood risk, to assess alternative solutions, and to make optimal decisions. The technological requirements of emergency management are addressed to make possible the most rigorous planning and preparedness and the most efficient and effective response and recovery.

Environmental (including Restoration, Regulatory and Stewardship)

The Corps has ecosystem restoration and environmental stewardship and management responsibilities on more than 11 million acres of land and water resources. Due to the enormous scope of this mission, it is imperative that Corps field personnel be able to apply the latest technologies for ecosystem restoration and natural resource inventory. The scale of these activities ranges from large projects such as the Florida Everglades down to much smaller, local wetlands/stream restoration projects. The broad scope of these environmental activities (as well as the frequent changes to the legislative mandates that govern them) demands sound research and development to address these critical needs. The goal of this R&D is to provide cost-effective/innovative technologies for project planning, design, engineering/construction, and operation/maintenance. Product lines include Ecosystem Restoration, Ecosystem Functional Assessment (with an emphasis on Environmental Assessment and Evaluation), Environmental Stewardship, and Management. Products include concise, how-to guidance documents that provide rapid/low-cost technologies and methods for high priority field needs as well as sophisticated ecological process assessment models that are critical to the success of the Corps' Ecosystem Restoration business line.

PROJECTED CIVIL WORKS R&D FUNDING ALLOCATIONS (FY 2014)

<u>BY RESEARCH AREA</u>	<u>FY 2014 ALLOCATION</u>
a. Navigation (including Hydropower)	\$ 6,328,000
b. Flood and Coastal Storm Damage Reduction (including Emergency Management, Water Supply, and Recreation)	\$ 5,508,000
c. Environmental (including Regulatory)	\$ 4,307,000
	<u>\$ 16,143,000</u>

a. Commercial Navigation

Allocation in FY12	Allocation in FY13	Budgeted Amount in FY14
\$ 7,991,000	\$ 6,328,000	\$ 6,328,000

JUSTIFICATION:

The Corps' commercial navigation mission facilitates navigation through investments in waterborne transportation systems (channels, harbors, and waterways) that are cost-effective and environmentally sustainable. The U.S. Marine Transportation System (MTS) consists of over 300 ports, 1,000 harbor channels, and 25,000 miles of navigation channels. The MTS is already operating at near-full capacity in many areas and is being challenged by new vessel designs and traffic loads that exceed its channel, harbor, and lock capacities. Over 50 percent of the Corps' 191 lock sites (240+ locks) have been in service for more than 50 years. Research and Development (R&D) can help reduce the costs associated with delays due to closures for both scheduled and unscheduled repairs, as well as reduce the risk of catastrophic failure of a major infrastructure component.

This R&D area provides advanced and innovative tools and technology for the Corps to improve navigation functional performance, reduce unit costs, and improve safety. The Corps is expected to apply robust, reliable, and comprehensive capabilities to assess all impacts of alternative plans for projects and to select the most balanced and sustainable solutions. R&D delivers efficient and effective capabilities to plan, design, construct, operate, maintain, and upgrade transportation projects in inland and coastal locations and in all climates, from warm to ice-affected. Capabilities to improve system reliability are needed in an asset management framework to extend project life and reduce life cycle costs. Engineering and environmental aspects are integrated in the development of processes and design models, decision support software, infrastructure condition assessment techniques, risk frameworks, infrastructure and design guidance, and innovative monitoring, operation and maintenance technologies.

PROPOSED ACTIVITIES FOR FY 2014:

- **Keep the IMTS Locks Reliable and Resilient** R&D efforts to determine the condition, extend the life, and enable rapid repair of aging IMTS infrastructure.
 - Research, develop, adapt, and test composite materials for appropriate navigation infrastructure applications.
 - Enhance finite element modeling capabilities of locks and approach walls
 - Expand Non-Destructive Testing capabilities for steel & concrete

\$2.3M

- **Keep the Coastal Navigation Structures Reliable and Resilient** R&D efforts to determine the condition, extend the life, and enable rapid repair of aging and storm-impacted infrastructure.
 - Develop a nationwide consistent navigation structure risk-based functional condition assessment
 - Transition from expert elicitation condition index assessments with science and engineering based analysis capabilities and tools

\$650K

- **Create new Engineering With Nature concepts and practice** Develop new science and engineering tools that support the synergy required to maximize the simultaneous production of environmental and economic benefits connected to navigation infrastructure and its operation.
 - Design tools so that environmental benefits are “automatically” or most efficiently produced
 - Develop the ability to design and predict performance of environmental features and enhancements that increase the resilience and performance of navigation infrastructure systems.

\$1.2M

- **Connect Navigation Data with Data from Other Agencies** Develop a navigation data integration framework that sustains data lifecycle use and management of the range of data used for project operation and maintenance decision support
 - Design and develop a distributed, service oriented architecture, including standards and data formats and protocols.
 - Develop web based tools and capabilities to support and deploy the DIF.

\$380K

- **Design an Efficient National Coastal Marine Transportation System** Create a new paradigm comprised of major ports, feeder ports, and regional intermodal freight movement. Develop a risk-based capability that incorporates coastal hazards and supply chain dynamics to predict regional scale navigation channel shoaling, navigation structure condition, dredging, and project maintenance requirements.
 - Develop engineering and science-based tools incorporating sediment, flood, and wind hazards to predict future conditions
 - Consider an economic tool that supports risk calculations.
 - Design a framework of models and tools to support calculations and to couple models, communicate risk and visualize results.

\$1.8M

ACCOMPLISHMENTS FOR FY 2013:

- **Keep the IMTS Locks Reliable and Resilient**
 - Researched, developed, adapted, and tested composite material for rapid repairs.
 - Enhanced finite element modeling capabilities of locks and approach walls
 - Expanded Non-Destructive Testing capabilities for steel & concrete

- **Keep the Coastal Navigation Structures Reliable and Resilient**
 - Initiated development of a nationwide consistent navigation structure risk-based functional condition assessment
 - Initiated transition from expert elicitation condition index assessments with science and engineering based analysis capabilities and tools
 - Enhanced quantitative risk-based structure condition assessments

- **Create new Engineering With Nature concepts and practices**
 - Designed tools so that environmental benefits are “automatically” or most efficiently produced
 - Developed the ability to design and predict performance of environmental features and enhancements that increase the resilience and performance of navigation infrastructure systems.

- **Connect Navigation Data with Data from Other Agencies**
 - Designed and developed a distributed, service oriented architecture, including standards and data formats and protocols.
 - Developed web based tools and capabilities to support and deploy the DIF.

- **Design an Efficient National Coastal Marine Transportation System**
 - Developed engineering and science-based tools incorporating sediment, flood, and wind hazards to predict future conditions
 - Considered an economic tool that supports risk calculations
 - Designed a framework of models and tools to support calculations and to couple models, communicate risk and visualize results.

b. Flood and Coastal Systems

Allocation in FY12 \$	Allocation in FY13 \$	Budgeted Amount in FY14 \$
5,631,000	5,508,000	5,508,000

JUSTIFICATION:

The Corps of Engineers is responsible for more than 600 dams, operates over 400 major lakes and reservoirs, maintains 8,500 miles of levees, and has over 100 coastal storm-damage reduction and related projects associated with its Flood and Coastal Storm Damage Reduction mission. Flooding that occurs in the United States costs about \$4 billion annually. Without the Nation's investment in flood and coastal storm damage reduction infrastructure through the Corps, that cost would be many times higher. Over the years, Corps flood protection projects have prevented an estimated \$706 billion in damages, most of that within the last 25 years. The cumulative cost of building and maintaining these projects to date is \$119 billion; therefore, every dollar spent on flood protection has prevented more than six dollars in damage. Despite this protection, annual damages in flood plains continue to rise due to changes in land use and urban development. In addition, the 2000 census showed that more than 50% of the U.S. population lives within 50 miles of a coast and is therefore vulnerable to dangerous coastal storms and costly flooding. Consequently, over the past several years, Federal shore protection expenditures increased to more than \$100 million per year to protect the public and related economic investments.

The Corps manages existing water resources projects around the country to maintain a flood-protection infrastructure for the public's welfare. Simultaneously, the Corps balances requirements for hydropower, water supply, environmental stewardship, and recreation. As enabling technologies are developed, the Corps must upgrade and improve water resource projects, use the most advanced capability to assess the risk of alternative operational scenarios, and apply robust, reliable, and comprehensive capabilities to assess the economic and environmental effects of alternative plans for projects and to select the most balanced and sustainable solutions. R&D delivers efficient and effective capabilities to plan, design, construct, operate, maintain, and improve water resource projects in all climates and settings, from warm to ice-affected, and from inland to coastal.

Capabilities that prevent loss of life, minimize property damage, and reduce the life-cycle costs of projects are critical. These capabilities include advanced processes and design models, economic models and decision support software, infrastructure condition and risk assessment tools, infrastructure design guidance, innovative operation and maintenance technologies, flood-alert instrumentation and expedient emergency response capabilities, and the capability to take advantage of new real-time data sources (e.g. precipitation radar) to accurately forecast real-time flow and stages.

This R&D component provides advancements in hydrologic and hydraulic simulation, water resources project optimization, tools for effective alternative analyses for solutions, infrastructure safety, structural design and performance, and assessment of the risk and uncertainty associated with project designs. This R&D component also improves the technology available to emergency managers for emergency planning, preparedness, response, recovery, and assessment.

PROPOSED ACTIVITIES FOR FY 2014:

- **Emergency Management and Critical Infrastructure** R&D efforts to enhance national interoperable systems for use in emergency operations during floods and coastal storms
 - Continue efforts in data acquisition, analysis, and reporting capability for improved early warning
 - Create tools to aid USACE National Response Plan missions and contingency operations.
 - On-going assessment of water resources infrastructure projects technologies.

\$1.6M

- **Coastal Systems** R&D efforts to support the Corps and stakeholder roles in sustainable coastal management
 - Further research into critical physical, social, and ecological processes unique to coastal and estuarine systems

- Improve prediction of coastal storm physical processes and affects on coastal systems, including tools for risk assessment and design parameter characterization.
 - Develop tools to implement Engineering With Nature principles to mitigate the effects of storm surge and waves
- \$1.0M
- **Optimize Alternatives Analysis and Assess Project Risk and Uncertainty** R&D efforts to develop water resources project collaborative planning, risk assessment technologies, and decision support tools.
 - Improve decision support framework to evaluate alternatives with regard to system response to loadings, failure, and consequences (economic, social, and environmental).
 - New expedient methods for estimating damages prevented for flood risk management and coastal storm damage projects, life loss computation capabilities

\$300K
 - **Hydraulics and Hydrology and Integrated Water Resource Management Tools** R&D efforts to develop and enhance H&H tools in support of project planning, design and risk assessment
 - Enhance tools for planning and implementation of flood risk management and ecosystem restoration projects in highly urbanized watersheds.
 - Enhance models for integrated hydraulic, hydrologic, sedimentation, water quality and ecologic processes
 - Continued improvement of tools for multi-purpose project planning and implementation

\$1.1M
 - **Water Resources Infrastructure** R&D efforts to determine the condition, extend the life, and enable probabilistic analysis of aging infrastructure.
 - Continue efforts to determine the condition, extend the life, and enable probabilistic analysis of aging infrastructure.
 - Test and further development of methodology to account for seepage related events such as piping and internal erosion of earthen structures.

\$1.5M

ACCOMPLISHMENTS FOR FY 2013:

- **Emergency Management and Critical Infrastructure**
 - Real-time or near real-time data acquisition, analysis, reporting capability via integrated data management systems for improved early warning
 - Technologies and tools to more effectively and efficiently implement USACE National Response Plan missions and contingency operations.
 - Rapid assessment of water resources infrastructure projects technologies.
- **Coastal Systems**
 - Researched critical physical, social, and ecological processes unique to coastal and estuarine systems
 - Reduced uncertainty of prediction of coastal storm physical processes and affects on coastal systems, and improved storm synthesis and analysis tools for risk assessment and design parameter characterization.
 - Linking or coupling of coastal, estuarine, and upland/riverine models and decision support tools for comprehensive multipurpose project planning and implementation.
 - Methodology and integrated framework of tools for comprehensive risk assessment of highly urbanized coastal floodplains including characterization of the hazard, failure, and consequences.

- Techniques and guidance for evaluating the mitigating effects of storm surge and waves using natural features
- **Optimize Alternatives Analysis and Assess Project Risk and Uncertainty**
 - Stochastic methods and decision support framework to evaluate project alternative measures with regard to system response to loadings, failure, and consequences (economic, social, and environmental).
 - Life loss computation capabilities for levee breaches
 - Expedient methods for estimating damages prevented, improved performance metrics and risk based performance metrics for flood risk management and coastal storm damage projects.
 - Evidence-based coastal storm damage functions and improved depreciated replacement values.
 - Determination of structure content values from secondary sources
 - Probabilistic lifecycle cost analysis methods and tools.
 - Hydraulic and hydrologic parameter analysis tools for risk and uncertainty assessment of H&H projects.
 - Enterprise coastal storm database and standard storm processing toolbox for planning, design, and emergency management.
- **Hydraulics and Hydrology and Integrated Water Resource Management Tools**
 - Engineering tools to address comprehensively pluvial, riverine, and coastal flooding for planning and implementation of flood risk management and ecosystem restoration projects in highly urbanized watersheds
 - Development/enhancement of 1-, 2- and 3-D models to simulate integrated hydraulic, hydrologic, sedimentation, water quality, and ecologic processes at various spatial and temporal scales.
 - Improvement of data management, integration frameworks, and decision support tools in support of multi-purpose project planning and implementation
- **Water Resources Infrastructure**
 - Effects of vegetation on levee performance
 - Guidance for application of in situ non-destructive and remote monitoring of earth structures, particularly levees.
 - Development of methodology to account for seepage related events such as piping and internal erosion of earthen structures.
 - Tools to adequately evaluate I-wall performance in differing environments
- Development of fundamental improvement to wave model physics using an unstructured and highly scalable wave model framework
- Development of a generalized code for optimizing application of joint probability analyses of coastal storm waves, water levels and winds for project design and risk assessment; extended the development of a proof-of-concept storm database and visualization tool to include storm analysis and simulation tools, and modeled storm data; provided linkage to FEMA databases allowing for data mining, plotting and analysis.
- Demonstrated baseline reservoir sedimentation assessment methodologies and provided improved guidance for reservoir sediment management.
- Published guidance document on prediction of risk-based project lifecycle performance for coastal projects
- Developed tool for conducting probabilistic lifecycle cost analyses for coastal projects.
- Developed risk-informed shore protection project performance metric to assess project performance in the context of actual damages and risk of future or expected damages prevented.
- Initiated development of methods and guidance for the quantification of hydraulic and hydrologic model uncertainty of existing and future flood risk management projects with a risk analysis approach based on changing physical, socio-economic and environmental conditions.
- Released improved hydraulic and hydrologic modeling tools for simulation of critical physical processes, including sediment transport, in integrated water

- resource management applications
- Initiated development of detailed procedures, technologies, and methods for remote sensing and non-destructive testing of earthen water resources infrastructure
- Initiated research on the impacts of woody vegetation on the safety and performance of earthen levees
- Initiated development of soil-structure interaction database and tools for complete analyses of I-wall performance in a variety of environments
- Initiated development of procedures and guidance for risk-based assessment of embankment and foundation seepage and piping in earthen water resources structures.
- Developed mobile smart phone application for emergency response and management

c. Environmental

Allocation in FY12	Allocation in FY13	Budgeted Amount in FY14
\$ 4,403,000	\$ 4,307,000	\$ 4,307,000

JUSTIFICATION:

Since the Water Resources Development Act of 1986, there have been dramatic increases in authorized ecosystem restoration studies, projects, and programs. At the same time, the Corps has continued to operate and maintain 25,000 miles of inland and coastal navigation waterways, 5,500,000 surface acres of reservoirs, 237 navigation locks, over 1300 ports and harbors, 75 hydropower projects, 879 flood control projects, and thousands of acres of adjacent lands as part of its water resource mission. Wide-ranging environmental compliance, management, and restoration efforts have become crucial parts of the Corps water resource management mission. The Corps must consider environmental issues related to the operation and maintenance of its existing water resources projects as well as the restoration of degraded ecosystems; e.g., Chesapeake Bay, Everglades, Gulf Coast, Bay Delta, Great Lakes, Puget Sound, Columbia River, Missouri River, Upper Mississippi River and Hudson-Raritan Estuary. In addition, the Corps must proactively address potential negative environmental impacts resulting from proposed activities. This research area addresses the Corps' highest priority environmental issues through the development and application of state-of-science, cost-effective, time-saving technologies including: 1) Maximizing value of ecosystem restoration projects; 2) Restoring Ecological Integrity and Sustainability; 3) Urban Stream Restoration and Management; 4) Coastal Ecosystem Restoration; and 5) Threatened and Endangered / Invasive Species Impacts on Ecosystem Restoration Projects. These user-oriented products will provide scientifically defensible and field validated solutions to the Corps' highest priority environmental problems. They will also reduce unnecessary regulatory burdens, provide environmental benefits, and maintain a high return on taxpayer investment.

Quantifying the environmental benefits and ecological outputs of proposed Corps ecosystem restoration projects is essential for decision makers to be able to select those projects that will yield the highest social, economic and environmental services. The scientific community has criticized current state-of-the-science assessment approaches regarding the underlying model assumptions, oversimplified relations, excessive data requirements, complexities in integrating impacts, and the lack of meaningful metrics to permit biologically-effective decisions. Moreover, current assessments are static and frequently insensitive to important system dynamics, not applicable across multiple scales, and incapable of predicting future conditions. Corps decision makers need robust assessment tools that: incorporate modern ecosystem principles, are easy to apply, offer significant user flexibility to meet individual project requirements, and that provide quantifiable output relevant to the Corps' Performance Measures. These tools will be provided in brief user-focused technical guidance documents, web-based decision

support systems, webinars (interactive web presentations between R&D Scientists and Engineers and Corps Practitioners), classroom and internet based training, and product technical support as required. Additional high priority research and investments in developing Ecosystem Planning Models and in Submerged Aquatic Vegetation research will be conducted as funding becomes available.

PROPOSED ACTIVITIES FOR FY 2014:

- **Maximize Value of the Corps' Aquatic Ecosystem Restoration Program to the Nation** Advance the Corps' capabilities to maximize beneficial socio-ecological outcomes of aquatic ecosystem restoration at regional and national level

 - Analytical tools, models, and framework to use ecosystem services to quantify and evaluate ecosystem service benefits
 - Enhance field capability to perform planning level environmental assessment

\$790K

- **Ensure Ecological Integrity and Sustainability of Aquatic Ecosystem Restoration Projects** Develop new science and engineering tools to substantially improve and apply hydro-geomorphic and biotic components of ecosystem restoration projects and to promote ecosystem integrity and sustainability of Corps ecosystem restoration projects.

 - Further upgrades to EFM / Geo-EFM to design and forecast dynamic response trajectories of selected ecosystems at a watershed scale
 - Initiate 2nd phase in evaluation of ecological outcomes and performance (success) of past Corps ecosystem restoration projects

\$450K

- **Improve Capabilities to Design and Implement Aquatic Ecosystem Restoration in Urban Settings** Develop ecological engineering tools and capabilities to maximize restoration benefits, including multi-purpose benefits, in urban settings

 - Develop and field test beta tools for successful and sustainable urban stream and other aquatic ecosystem restoration projects
 - Developed a framework, toolkit and web portal for urban stream and other aquatic ecosystems restoration and management
 - Developed protocols for monitoring and adaptive management of urban projects

\$860K

- **Enhance Resilience and Reliability of Coastal Ecosystem Restoration** Developed tools, guidelines, and capabilities to incorporate risk and uncertainties associated with climate change and sea level rise on coastal ecosystem restoration and multi-purpose projects that include restoration and coastal flood damage reduction.

 - Provide capability to characterize and evaluate coastal wetland response to alternative sediment and nutrient flux, climate change and SLR
 - Develop measures for estimating and promoting mineralogical sediment processes in coastal wetland environments
 - Provide tools that support efficient planning and engineering practices, promote beneficial uses of dredged materials, and contribute to more sustainable coastal projects

\$1.3M

- **Impact and Relationship of Species (Threatened, Endangered, and Invasive) on Ecosystem Restoration** Advance the Corps' capabilities to detect, monitor, and evaluate key species that significantly influence restoration activities.

 - Develop tools and techniques for assessing and improving fish passage connectivity in streams and rivers
 - Provide capability to identify ecological responses to changes in hydrology resulting from restoration projects
 - Develop management capabilities to reduce impact of invasive species on restoration activities

\$900K

ACCOMPLISHMENTS FOR FY 2013:

- **Maximize Value of the Corps' Aquatic Ecosystem Restoration Program to the Nation**
 - Evaluated available and emerging models, analytical tools and techniques, and potential data sources that address ecosystem service benefits that accrued from Corps ecosystem restoration at project through program levels.
 - Developed tools and guidelines to support USACE Planning modernization for ecosystem restoration projects
 - Beta tested ecosystem 'significance' criteria for use in budget ranking process for national ecosystem restoration program (Establishing Significance for ER – Pruitt)
 - Enhanced field capability to perform nutrient modeling using HEC-RAS to predict transport of nutrients from watersheds to aquatic resources as a result of Corps ecosystem restoration projects

- **Ensure Ecological Integrity and Sustainability of Aquatic Ecosystem Restoration Projects**
 - Completed phase 1 evaluation of ecological outcomes and performance (success) of past Corps ecosystem restoration projects
 - Provided environmental benefits modeling and forecasting guidebook (with case studies and training modules) for more effective ecosystem restoration
 - Upgraded EFM / GeoEFM model to design and forecast dynamic response trajectories of selected ecosystems at a watershed scale

- **Improve Capabilities to Design and Implement Aquatic Ecosystem Restoration in Urban Settings**
 - Developed conceptual models, metrics, and evaluation tools to design urban stream and other aquatic ecosystem restoration projects and incorporate risk probabilities and trade-offs for multi-purpose projects.
 - Provided engineering techniques and protocols for successful and sustainable restoration projects in urban settings

- **Enhance Resilience and Reliability of Coastal Ecosystem Restoration**
 - Provided capability to assess project performance to include potential impacts from Climate Change and Sea Level Rise (SLR)
 - Evaluated the effects of SLR on salt-water intrusion and ecological shifts
 - Provided capabilities to estimate wetland primary productivity as a means of offsetting SLR
 - Developed measures for promoting sediment accretion and the deposition of materials as a means of offsetting SLR

- **Impact and Relationship of Species (Threatened, Endangered, and Invasive) on Ecosystem Restoration**
 - Improved modeling capabilities for critical species, e.g., oysters in the Atlantic and Gulf Coast

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
National Flood Risk Management Program (CONTINUING)	\$2,850,000 2/	\$5,000,000 1/

SCOPE: The Nation faces a growing flood risk crisis with extensive existing development and new development locating in flood prone areas, often behind aging levee systems not intended to protect large populations. Furthermore, through ongoing updates to Federal flood insurance rate maps and the development of the National Levee Database, many communities are learning that they are situated behind inadequately maintained levees no longer providing the levels of flood risk reduction for which they were designed. Confronted with both immediate and future risks to human safety, public infrastructure and private investments, states and communities are seeking and expecting Federal assistance to manage their flood risks. The National Flood Risk Management Program (NFRMP), supported by this line item, makes the most of existing Federal agency programs and funding to assist states and communities in identifying and addressing flood risks by leveraging agency resources, identifying opportunities to jointly implement complementary programs, sharing data and knowledge, and eliminating duplicative or conflicting activities or policies. The NFRMP also supports these same types of coordination activities between Federal agencies and non-Federal flood risk management agencies in order to ensure that federally funded mitigation activities are coordinated with and complement State and local programs and policies that affect flood risks through their influence on land use choices and adoption of flood risk mitigation measures.

JUSTIFICATION: Nationwide, States and communities urgently seek Federal assistance in addressing a growing flood risk crisis. Extensive existing development and newly developing areas are located in flood prone areas, many behind aging levee systems not intended to protect large populations. Furthermore, through ongoing updates to Federal flood insurance rate maps and the development of the National Levee Database, many communities are learning that they are situated behind inadequately maintained levees no longer providing the levels of flood risk reduction for which they were designed. At a time of historic demands on Federal resources, USACE, FEMA and other Federal agencies with a role in managing flood risks, recognize the need to pool their expertise and leverage their resources to more cost-effectively assist states and communities in developing near-term interim risk reduction measures. Such efforts are also yielding long term Federal cost savings as Federal and non-Federal agencies coordinate programs to establish a foundation for future state and local capability to implement long term flood risk management strategies that will ultimately reduce reliance on Federally funded disaster assistance and investments in new, large scale flood control works. Through the National Flood Risk Management Program (NFRMP), Federal and non-Federal partners have already experienced several successes cooperatively developing flood risk mitigation solutions by leveraging agency resources, identifying opportunities to jointly implement complementary programs, sharing data and knowledge, and eliminating duplicative or conflicting activities or policies. These accomplishments are described below.

PROPOSED ACTIVITIES FOR FY 2014: The NFRMP establishes partnerships at the Federal, regional, and state levels through which regular and sustained coordination occur. Fiscal Year 2014 funding and beyond will build on these successful collaborative partnership efforts to reach communities nationwide. Specifically, the range of continuing activities involved in this effort includes

- At the national level, sustaining the work of the Federal Interagency Floodplain Management Task Force (FIFM-TF). The FIFM-TF, co-chaired by USACE and FEMA, is a national level task force of agency representatives from Federal agencies with major water resource programs. The task force is responsible for updating and maintaining a Unified National Program for Floodplain Management; coordinating Federal agency policies for flood risk management; and identifying, developing, and recommending actions and policies by the Federal government necessary to reduce losses due to flooding and protect the safety of flood plain residents. Quarterly meetings of the FIFM-TF provide an opportunity for FEMA and USACE leadership to coordinate flood risk management programs, policies and activities with other federal agencies to improve federal program implementation for the flood risk management community. In between the quarterly meetings the FIFM-TF Working Group composed of senior staff from the member agencies implements the FIFM-TF Work Plan activities. Additionally, the FIFM-TF provides an opportunity for key stakeholder groups representing the non Federal perspective, including the Association of State Floodplain Managers (ASFPM) and the National Association of Storm and Floodwater Management Agencies (NAFSMA), and the Association of State Dam

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

- Safety Officials (ASDSO) to provide both agencies direct feedback on specific policy and implementation issues faced at the state and local level.
- At the regional level, sustaining the activities of the existing Upper Mississippi Regional Flood Risk Management Team and the ongoing flood risk management regional intergovernmental partnerships in the West and Northwest regions to address ongoing flood risk management activities to assess and implement system improvements and environmental and cultural concerns in a sustainable way. USACE-led Regional Flood Risk Management teams provide a venue for interagency and intergovernmental coordination at the regional level to manage flood risks by integrating pre-flood mitigation with a long-term strategy to plan and implement pre- and post-flood emergency actions, while developing promising nonstructural alternatives and other flood risk mitigation actions.
- At the state level, providing direction and oversight to the Silver Jackets program to establish intergovernmental teams in each state in order to leverage and coordinate federal and state programs to address state flood risk management and hazard mitigation priorities. Silver Jackets teams bring together Federal agency representatives at the state level to develop and implement solutions to state flood risk management priorities by assisting state agencies and local communities in leveraging information and resources, improving public risk communication, and creating a mechanism to collaboratively solve flood risk management issues and implement initiatives at the State and local levels.
- Developing and initiating a management framework to improve internal communication between USACE's HQ and Districts and FEMA's HQ and Regions on flood risk management policy, practices and guidance.
- Developing tools and methods for communicating flood risk and encouraging public involvement in flood risk management planning.

Priorities across the multiple activities included in this scope will be set by the USACE Senior Executive National Flood Risk Management Program Steering Committee and FEMA. Input from key stakeholder groups, such as the Association of State Floodplain Managers (ASFPM), the National Association of Flood and Storm Water Management Agencies (NAFSMA), and the Association of State Dam Safety Officials (ASDSO) will be taken into consideration when setting these priorities.

ACCOMPLISHMENTS IN PRIOR YEARS:

- Cooperating with FEMA, other Federal agencies, and states to start up a Silver Jackets program, with intergovernmental teams initiated in 33 states and ongoing development of an additional 17 teams. By establishing state level teams including representatives of multiple Federal and State agencies, the Silver Jackets program has created the opportunity for optimized delivery of Federal flood plain management and mitigation services through leveraging information and resources, resulting in increased and improved public risk communication, and combined efforts to address flood risk management challenges in States and communities. Specific interagency examples include data sharing across agencies to support mapping studies, combined and coordinated use of models, gage data and databases housed in different agencies to create a flood inundation model allowing for more effective flood response and mitigation, synthesis of existing studies and knowledge from different agencies to develop a comprehensive flood risk mitigation plan for a community without requiring any new study effort, and community recovery through short and long term mitigation strategies focused on nonstructural approaches and planning assistance.
- Establishing a permanent, standing Upper Mississippi Regional Flood Risk Management Team (RFRMT) to facilitate interagency coordination at the regional level to integrate long-term flood risk mitigation planning with pre- and post-flood emergency actions. The team has focused, in particular, on identifying nonstructural alternatives to reduce flood risk with the region. Examples of team successes include the elevating or removal of USACE lease cabins incurring repetitive losses and claims on the National Flood Insurance Program and the development of a non-structural alternative to a proposed structural repair by combining the use of different agency programs.
- Established the Mississippi River and Missouri River Interagency Flood Recovery Task Forces to facilitate interagency coordination at the watershed levels on the Mississippi and Missouri Rivers during the recovery and repair of flood damage reduction systems resulting from the FY2011 historic flooding in these watersheds.
- Co-leading the Federal Interagency Floodplain Management Task Force (FIFM-TF) to provide a forum for Federal coordination of agency programs and policies for flood risk management and develop a common approach among Federal agencies when implementing water resource authorities and programs, and to harmonize communication messages and strategies.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

- Improved coordination of the USACE nation-wide levee inventory and assessments, improvements to the USACE levee inspection program, USACE emergency response policies, and USACE levee certification policies with FEMA's levee accreditation policies and nationwide RiskMAP program implementation.
- Convened policy discussion forums involving experts in flood risk management from the private sector as well as Federal and non-Federal agencies and leading in the development of new policy and guidance to address institutional, policy and planning barriers to effective flood risk management.
- Initiated work to improve flood risk communication and ensure public involvement in flood risk management planning, working in coordination with Federal and non-Federal flood risk management partners.
- Working with communities to identify options to remediate deficient levees or otherwise address the resulting public safety hazards in a comprehensive flood risk management planning context.
- Participating in the development of a levee risk screening methodology and tool to conduct risk screenings on levees in the Corps levee safety program. Additionally, developed a Life Safety Hazard Index screening tool to assist in identifying and prioritizing planning studies that provide risk reduction to areas with high life loss flood risks.
- As requested by the Administration, acted as lead federal agency in developing a report to present the results of an intensive Federal interagency effort initiated to assess the status of the efforts of each major Federal agency actively addressing the flooding in the area of Devils Lake, North Dakota and options for additional near-term actions within existing authorities.
- Completed the "Improving the Corps of Engineers' Contribution to Flood Risk Management" report that presents preliminary policy and program recommendations that would allow the U.S. Army Corps of Engineers (Corps) to be more effective in sharing responsibility with other federal agencies, non-federal governments, and stakeholders in the management of flood risk.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATIONS TITLE: General Investigations, FY 2014

Total Estimated Federal Cost	Allocation in FY13	Budgeted Amount in FY14
\$300,000	\$300,000 ^{2/}	\$300,000 <u>^{1/}</u>

Independent Peer Review

SCOPE:

Funds will be used to implement the independent (external) peer review (EPR) requirements as authorized in Section 2034 of the Water Resources Development Act (WRDA) of 2007 (PL 110-114). EPR requirements apply to pre-authorization feasibility studies and various other applicable studies as defined in WRDA 2007, the Information Quality Act, and associated Corps guidance. EPR costs are 100 percent Federal and generally will not exceed \$500,000 per review. EPR is required for studies that will recommend projects exceeding \$45 million in total costs, as well as studies where there is substantial risk to public safety, which employ novel methods, engender controversy, or meet other conditions as described in the legislation and regulations.

JUSTIFICATION:

Independent (or External) Peer Review is a statutory requirement.

^{1/} Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY14 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A.

^{2/} At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
National Shoreline (CONTINUING)	\$675,000 <u>2/</u>	\$675,000 <u>1/</u>

AUTHORIZATION: The basic study was authorized by Section 215 of WRDA1999. Work on the regional changes to the coast was authorized in Section 816 of WRDA 1986.

SCOPE: The study is an interagency effort to describe the extent and cause of shoreline erosion and accretion on all the coasts of the United States and describe the regional economic and environmental impacts of that erosion and accretion. The study will analyze and recommend the appropriate level of Federal and non-Federal participation in shore protection and beach nourishment, and the advisability of using a systems approach to sediment management for linking the management of all (shore protection, navigation channel dredging, and environmental restoration and preservation) projects in the coastal zone so as to conserve and efficiently manage the effects of erosion. The basic study was authorized by Section 215 of WRDA1999. Work on the regional changes to the coast were authorized in Section 816 of WRDA 1986.

PROPOSED ACTIVITIES FOR FY 2014: FY 2014 funding would continue work on this study. The Fiscal Year 2014 efforts would include:

1. \$250,000 for completing Great Lakes Regional Assessment, working on South Atlantic and Pacific North West Regional Assessments.
2. \$175,000 for Coastal Systems Portfolio Initiative pilots for Virginia & North Carolina and for expanding the National Coastal Data Bank.
3. \$250,000 for the Rising Oceans and Changing Coasts to develop pilot strategies for the most vulnerable regions within the Pacific Northwest & Alaska.

ACCOMPLISHMENTS IN PRIOR YEARS: The study was initiated with FY2002 funding. Accomplishments in prior years include:

- 1) The detailed assessment of the California Region will be completed and reviewed by the Corps and many stakeholders during FY 2013 and the finalized version will be published in FY 2014.
- 2) The study continued to support Corps participation in the systematic approach to sediment management reflected in the Corps Regional Sediment Management (RSM) process, regional coastal coalitions from which coastal policies are evolving and emerging, and Corps studies and participation in USGS and NOAA studies describing the state of the Nation's shores, describing systematic movement of sand along the Gulf Coast, and incorporate of the shoreline metadata into the National Coastal Databank. This effort is focused in the mid-Atlantic and California.
- 3) The quick overview assessment of the eight regions was completed in FY 2012, with a set of tentative conclusions about the future of shore protection and sediment management, as a starting point for engaging the states and other Federal agencies in a new dialogue about coastal protection and systems approaches. FY 2013 will see the engagement with NOAA and FEMA on coastal management challenges.
- 4) A complete Technical Review of Coastal Projects: Shore Protection, Navigation, and Ecosystem Restoration for all coastal districts will be produced in 2013, and then be available for programmatic updates beginning in 2014.
- 5) Working closely with USGS and NOAA, the study will continue detailed Regional Assessments of the Hawaii and Great Lakes shorelines.
- 6) The Rising Oceans and Changing Coasts initiative began in 2012 with a review of how the Pacific Ocean is changing and during 2013, the Corps, NOAA, USGS, and FEMA are working with Hawaii and California to develop appropriate strategies for adapting on a regional scale, given the realistic prospects for coastal change.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

FOA: Institute for Water Resources

National Shoreline

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Allocation in FY13	Budgeted Amount in FY14
\$4,000,000 ^{2/}	\$4,000,000 ^{1/}

Planning Support Program (PSP)

SCOPE: The U.S. Army Corps of Engineers Civil Works Program requires a strong planning program to address the full range of complex water resource problems within its mission responsibilities and to better serve the Nation now and in the future. The Planning Support Program (PSP) was established in FY08. This program integrates various initiatives in response to Section 216 recommendations, Corps reform initiatives, and the Corps' Campaign Plan. The program has retained its priority but has received only limited funding (from various sources). The PSP strengthens the capabilities of the Planning Community of Practice (PCoP) to deliver approvable decision documents to Congress in response to identified water resource priorities. The PSP is a vital link to developing the world-class public engineering organization and technical leadership envisioned for the Corps in its Campaign Plan and the Civil Works Strategic Plan.

Congress recognized the need to maintain a strong planning program when it stated in the Water Resources Development Act (WRDA) of 1986 (P.L. 99-662, Sec. 936): "The Secretary shall study and evaluate the measures necessary to increase the capabilities of the United States Army Corps of Engineers to undertake the planning and construction of water resources projects on an expedited basis and to adequately comply with all requirements of law applicable to the water resources program of the Corps of Engineers."

In WRDA 2000, Section 216, Congress asked the National Academies to review Corps' planning and project review practices. In its recommendations, the National Research Council (NRC), parent organization of the National Academies, recognized the many challenges and water resource planning and management controversies facing the Corps. The NRC recommendations are shaping the Corps today and the PSP is critical to moving the Corps and the PCoP forward in response to those recommendations.

WRDA 2007, Section 2033(e) allowed establishment of Centers of Specialized Planning Expertise within the Corps that would provide technical and managerial assistance for project planning, development, and implementation; peer reviews of new major methods, models, or analyses used infeasibility studies; and support independent peer review panels. Section 2033(e) authorization endorsed and accentuated the importance of the six national Planning Centers of Expertise (PCX) established by the Director of Civil Works in August 2003. With the added emphasis of the WRDA, each of the PCXs has a key role in maintaining and strengthening the core competencies of the PCoP.

The ASA(CW) sent a memorandum to the DCG CEO on February 24, 2009 counseling about the considerable variation in the quality of decision documents, feasibility reports and Chief's reports resulting from inconsistent understanding of basic planning and policy among MSC and RIT

members. The ASA(CW) was clear that technical and process consistency must be restored. The ASA(CW)'s views continued support to Corps' planning and policy training and to leadership development "as key commitments that pay valuable dividends", specifically citing the Planning Associates Program as an example. PCXs are also crucial resources for providing technical and process consistency.

JUSTIFICATION: The PSP has three major components, which together provide necessary support to improve the long term capabilities of the PCoP. The three components--planner capability and training; specialized planning centers; and planner resources. This request will fund these components described below.

1. Planner Capability and Training. The PCoP is a hub of learning for its practitioners who are now no longer limited by geography. The expertise of the community is bound in its members who share best planning practices, test innovative solutions, and coach and mentor as a Learning Organization. Development of a capable workforce to execute the mission today and in the future is a top priority of the PCoP leadership.

2. The Planning Associates (PA) Program is an advanced training program for journeyman level water resource planners in the Corps. The program has a long history, but was reinvented in 2003 to include 20 instructional units held at various locations and extending over 1-3 week increments for 11 months. The goals of the program are to broaden the planners' competencies in solving complex water resources problems; to strengthen their leadership skills; and to retain critical planner capability as they progress toward expert planner. Since 2003, 85 planners have completed this rigorous training and 12 more are enrolled in current class. This request will centrally fund a class of up to 12 students and support instructor and other field related expenses necessary to deliver this demanding and rigorous program.

3. In August 2003, the Director of Civil Works designated six national PCXs to enhance Corps planning capability for inland navigation, deep draft navigation, ecosystem restoration, coastal and storm damage reduction, flood damage reduction, and water management and reallocation. The Centers have key roles in maintaining and strengthening the core competencies of the PCoP; providing technical assistance, conducting or managing peer review; transferring the latest technology or methodologies and sharing lessons learned and best practices throughout the planning community. The Centers focus planning expertise to improve product quality and corporate accountability and will also be instrumental in implementation of new approaches or methods resulting from the Corps' Campaign Plan. The PCXs are essential to preparation of the Water Resource Priorities Report directed by Section 2032 of WRDA 2007. Fully functional PCXs are indispensable resources in developing planning process improvements; establishing feasibility study benchmarks; and, modifying regulations for calculation of benefits and costs for flood damage reduction projects, and formulation and evaluation of alternatives as required by Section 2033(b), (c), (d) and (f). In a memorandum to the DCG CEO dated March 12, 2009, the ASA(CW) reemphasized how critical the PCXs are to the Corps' planning capability and to the success of the independent peer review described in Section 2034 of WRDA 2007. This request will centrally fund the PCXs key roles of maintaining and strengthening the core competencies of the PCoP; providing technical assistance, conducting or managing peer review; transferring the latest technology or methodologies and sharing lessons learned and best practices throughout the planning community.

PROPOSED ACTIVITIES FOR FY 2014:

The funds appropriated for the PSP for FY 2014 will be used to support the Planning Associates Program and enable the National PCXs to fulfill their key roles.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY14_ from prior appropriations for use on this effort is \$_0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Total Federal Cost FY2005-FY2011	Allocation for FY 2012	Allocation for FY 2013	Budget Amount for FY 2014
\$10,700,000	\$957,000	\$500,000 ¹	\$1,000,000 ²

Tribal Partnership Program (Sec. 203, WRDA 2000; Sec. 2011, WRDA 2007); this is a continuing nationwide program.

AUTHORIZATION: Section 203 of WRDA 2000, reauthorized in Section 2011 of WRDA 2007, authorizes the study of flood damage reduction, environmental restoration, the preservation of cultural and natural resources, water-related planning activities, watershed assessments, and “such other projects as the Secretary, in cooperation with Indian Tribes and the heads of other Federal agencies, determines to be appropriate.” Projects follow the standard Civil Works planning process – a reconnaissance report, fully federally funded, and a feasibility report, cost shared 50/50 with in-kind contributions allowed. The WRDA 2007 version added watershed studies that are cost shared 75/25. Separate authorization and appropriations are required from Congress for a project to proceed to PED and construction. The authorization applies to all federally recognized Indian Tribes, including those in the State of Oklahoma and Alaska Native villages. Note: in FY 07 and before, funds were in the Construction account. Beginning in FY08, funding has been through the Investigations account.

JUSTIFICATION: Section 203 was enacted to provide the Corps opportunities to partner with federally recognized Tribes. It is the only authority reserved expressly for federally recognized Tribes, nationwide. As such, it partially fulfills USACE’s Trust responsibility to Tribes. The Trust responsibility establishes that the federal government has a legal relationship with Tribal Nations, as first put forth in the US Constitution, Articles I and VI. Priorities for allocation of Section 203 funds are: 1) continuation and completion of ongoing studies and termination of negative studies where appropriate; 2) initiation of studies requested by Tribes; 3) engagement of additional Corps Districts with Tribal governments to build strategic partnerships. Priorities for 203 ensure that a range of studies throughout the Nation are funded. Because the scope of the authority is so broad, various studies may be considered – floodplain mapping, water control management, self-reliance and economic capacity building, technical capacity building, erosion control, cultural resources, comprehensive planning, emergency management, water quality, water supply, community infrastructure, hazardous and toxic waste assessment and clean up, and a host of other projects. With the growing awareness of the program, an increasing number of Tribes have begun to approach the Corps to participate in these studies. Importantly, 203 is a first step to familiarize Tribes with USACE. Its success leads to the use of other authorities and more complex projects. Currently, 35 Tribes are participating in the program.

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

2/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 is 0. Description of work to be completed: N/A.

PROPOSED ACTIVITIES FOR FY 2014: The following activities will be undertaken with the budgeted amount of \$1,000,000: Los Angeles District will continue feasibility studies with the Torres-Martinez Desert Cahuilla Indians (CA), and the Augustine Band of Cahuilla Indians (CA). It will also complete reconnaissance studies for the Tohono O'odham Nation (AZ), Hopi Polacca Wash (AZ), and the Gila River Indian Community (AZ). Albuquerque District will finish a reconnaissance study with the Pueblo of Acoma, and continue feasibility studies with the Pueblos of Santa Clara, San Felipe, Acoma and Santa Ana (all NM). New England District will continue a reconnaissance study with the Wampanoag of Gay Head (Aquinnah) (MA) and begin a feasibility study with the Penobscot (ME). Detroit District will begin a reconnaissance study with the Forest County Potowatomie (WI). If there is enough funding, Seattle District will begin reconnaissance studies with the Quinault Tribe (WA), Kootenai Tribe (ID), Coeur d'Alene Tribe (ID), and Stillamaguamish Tribe (WA). Omaha District will begin a reconnaissance study with the Crow Tribe (MT).

ACCOMPLISHMENTS IN PRIOR YEARS: Early in its enactment, the majority of Section 203 funds went to Alaska to study the feasibility of moving coastal villages inland. The program was budgeted at a consistently high level (\$4,000,000 to \$2,400,000) through FY 2007 to accommodate Alaskan concerns. Villages with the greatest need included (and still include) Newtok, Shishmaref, Kaktovik, Kivalina and Unalakleet. A major coastal erosion study and technical assistance to several Alaskan Villages were also funded in part by Sec. 203 monies. In FY 2007, the program was also targeted by other Districts and special legislation was included for specific Tribes in New Mexico and Idaho. The funding level dropped to \$1,000,000 in FY 2008, and has never regained its former level of funding. In FY 2013, only \$500,000 was budgeted, but the following activities were completed: LRE completed reconnaissance studies for the Stockbridge Munsee Indian Community (WI) and the Nottawaseppi Band of Huron Potowatomie Indians (MI). Kansas City District finished a reconnaissance study with the Kickapoo Tribe (KS), and Walla Walla District began a reconnaissance study with the Nez Perce Tribe (ID). Two FCSAs were completed by the Los Angeles District with the Torres-Martinez Desert Cahuilla Indians (CA) and the Augustine Band of Cahuilla Indians (CA). Albuquerque District signed WACSAs with the Pueblos of San Felipe, Acoma and Santa Ana (all NM). The first WACSA was signed in FY11, between Albuquerque and the Pueblo of Santa Clara (NM).

Other Districts that have utilized Section 203 funding include Sacramento, Omaha, and Buffalo. Reconnaissance reports on various topics were prepared by the Corps for the Penobscot Tribe (ME), Little River Band of Ottawa Indians (MI), Bad River Band of Chippewa (WI), Cheyenne River Sioux Tribe (SD), Lower Brule Sioux Tribe (SD) St. Regis Mohawk Nation (NY), Seneca Nation of Indians/Cattaraugus Creek (NY), Tuscarora Nation (NY), Oneida Tribe of Indians of WI, Onondaga Nation (NY), Kickapoo Tribe (KS), Lower Brule Sioux Tribe (SD), Houlton Band of Maliseets Indians (ME), the Passamaquoddy Tribe (ME), the Fond du Lac Band of Lake Superior Chippewa (WI), Soboba Band of Luiseno Indians (CA), Havasupai Tribe (AZ), Tohono 'Oodham Nation (AZ), Hopi Tribe (AZ), Augustine Band of Cahuilla Indians (CA), Gila River Indian Community (AZ), and the Torres-Martinez Band of Cahuilla Indians (CA). Not all reconnaissance studies proceeded to feasibility studies.

In the past, the Albuquerque District received special legislation for reconnaissance studies with the Pueblos of Santa Ana, San Juan, San Ildefonso, Santa Clara, and Zuni, Jicarilla Apache Nation (NM), and the Sacramento District received specific legislation for studies of the Washoe Tribe of NV and CA, and the Shoshone-Bannock Tribes of ID. Many Tribes have stated that even if a project does not proceed to feasibility, the program is still valuable because the resulting report pulls together enough information to proceed should additional funding become available, or if the Tribe decides to move forward using other funds.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation	Budget
	FY 2013	Amount
		FY 2014
Water Resources Priorities Study (New Start)	\$0 ^{2/}	\$1,000,000 ^{1/}

AUTHORIZATION: This investigation is authorized by Section 2032 of the Water Resources Development Act of 2007, which calls for an assessment of the Nation's vulnerability to flooding, and for recommendations for improving existing programs and strategies to better manage flood risks.

SCOPE: This investigation will develop a baseline assessment of the nation's flood risks at both a regional and national scale. Through an evaluation of the comparative flood risks across the nation, their key drivers, and their effects, this assessment will reduce costs and serve as a foundation for informed choices at the Federal, State, and local levels about existing programs, authorities, policies, roles, and activities. The investigation will be divided into two elements. The first element will focus on a technical analysis, which will provide background and a basis for the second element, which will result in the public policy recommendations of the report.

The technical section will examine the risks to human life and property from flooding faced in different regions of the United States. The technical analysis will start with a synthesis of existing work related to assessing national flood risk to ensure this effort fully utilizes and builds upon existing knowledge. The technical analysis will provide examples to explain why the risks are greater in some floodplains and some coastal locations than in others, why and how the risks may be changing over time. It will assess existing information on: (1) the number of people who live or work in places where they are potentially at risk; (2) the value of the property that is potentially at risk; and (3) actual flood-related losses (e.g., the frequency and magnitude of large losses, where such losses have been occurring, and the incidence of repetitive losses), in order to identify possible nationwide trends. It will evaluate the existing state of knowledge relating to the drivers of inland and coastal flood risks, including social, economic and climate conditions, as well as the loss of natural flood retention ecosystem services and the effects of changes in these drivers over time. It will also evaluate the uncertainties associated with our current understanding of the way that inland and coastal flood risks could change in the future, both at a regional and at a national scale. This section of the report will also explore the extent to which existing programs and strategies may be encouraging development or other forms of economic activity in flood-prone areas or may otherwise be contributing to flood risks, and their effects on the resiliency and natural functions of floodplains and coastal areas. It will address the full range of effects and tradeoffs associated with current approaches to provide a basis for considering how best to achieve flood risk management goals in concert with other societal objectives.

The second element of the investigation will focus on public policy. Drawing on the knowledge developed through the baseline assessment of national flood risks, it will assess the extent to which existing programs operate successfully (individually and together), and identifies where they may be working at cross-purposes. The report will look at not only programs of the Corps of Engineers, but at a broad array of Federal, state, and local programs and strategies, such as flood insurance, emergency response and recovery, disaster assistance, environmental, land management, and economic development programs and related activities.

This part of the report will include an exploration of the respective and appropriate roles of Federal, state, and local programs, and of their ability to work together. Its purpose is to develop a basis for identifying better ways to approach flood risk management priorities, including ways to reduce

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

costs by improving the effectiveness, efficiency, and accountability of existing programs and strategies. Finally, the report will include specific recommendations and propose a strategy to implement them.

JUSTIFICATION: This investigation addresses the critical need for a baseline assessment of the nation's flood risks at both a national and regional scale, as well as an analysis of the effects of the existing portfolio of programs, authorities, policies, roles, and activities. A large body of evidence suggests the nation is facing growing flood risks. There is currently a lack of adequate information at a national and regional scale about the magnitude and source of those risks, as well as the effectiveness, efficiency, accountability, and impacts of existing programs and strategies. This investigation addresses the critical need for an analytically sound assessment of existing programs, which will provide a basis for significant recommendations on ways to better manage flood risks at the national, regional, state, and local levels. It will provide an understanding of the key drivers and magnitude of flood risks, as well as the net effect that the existing portfolio of Federal and non-Federal programs and policies has on those flood risks. Specifically, this study will provide a baseline assessment of the nation's vulnerability to flooding from a national and regional perspective and identify key drivers of flood risks, including those drivers expected to change over time. Additionally, this study will assess the combined effects of the existing portfolio of Federal and non-Federal programs and policies on choices that impact flood risk, including the choice to develop in flood-prone areas. This knowledge will provide a foundation for recommending improvements to existing programs, authorities, policies, and roles to better manage flood risks in coordination with states and localities.

PROPOSED ACTIVITIES FOR FY 2014:

- Assembling and synthesizing the existing body of knowledge relating to the assessment of national flood risks and related policies and programs. This would entail an inventory of all federal agency work relating to mapping and characterizing flood risks. The inventory and resulting report would provide a basis for determining whether and how existing efforts might be built upon to accomplish the objectives of this study. Additionally, the report would provide a basis for comparing and contrasting efforts, looking for opportunities to combine knowledge, and identifying commonly shared data limitations that could inform data development priorities.
- Drawing on this knowledge, developing scopes of work and methodological approaches for both elements of the effort.
- Assembling an interagency working group to acquire input on direction of the study on an ongoing basis to ensure full utilization of the knowledge and technical expertise each can offer.
- Initiating work on the technical element, to include establishing a conceptual definition of risk, including hazard, exposure, vulnerability and resilience, identifying determinants of each of these elements of risk and the availability of data required to evaluate such determinants, collecting and organizing spatially referenced data describing the determinants of risk in order to provide the baseline assessment of national and regional scale flood risks.
- Initiating work to describe and evaluate the full range of Federal and non Federal programs and strategies that affect flood risk to provide an understanding of how they are currently functioning and affect the full range of flood risks and other societal objectives.

ACCOMPLISHMENTS IN FY 2013: No funds appropriated in FY13.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Remaining Items – Construction

Environmental Projects

Aquatic Ecosystem Restoration (CAP Section 206)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	\$4,034,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	\$6.100,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 206 of the Water Resources Development Act of 1996 (PL 104-303), as amended, authorizes up to \$50,000,000 annually to carry out aquatic ecosystem restoration projects that will improve the quality of the environment, are in the public interest and are cost-effective.

JUSTIFICATION: Ecosystem restoration projects that will improve the quality of the environment are in great demand by local communities and the general public at large. Non-Federal interests shall provide 35 percent of the cost of construction including provision of all lands, easements, rights-of-way, and necessary relocations. Non-Federal interests pay 100 percent of the cost of operation, maintenance, replacement and rehabilitation. Not more than \$5,000,000 in Federal funds may be allocated to a project at a single locality.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

Environmental Projects

Beneficial Uses of Dredged Material (CAP Section 204)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	\$4,995,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	\$5,000,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 204 of the Water Resources Development Act (WRDA) of 1992 Public Law (PL) 102-580, Section 207 of PL 102-580, and Section 145 of WRDA of 1976 (PL 94-587), as amended by Section 933 of PL 99-662, Section 35 of PL 100-676, Section 207 of PL 102-580, Section 217 of PL 106-53, and Section 111 of PL 106-541.

JUSTIFICATION: Section 204 authorizes projects for the protection, restoration, and creation of aquatic and ecologically related habitats, including wetlands, in connection with dredging for construction, operation, or maintenance of an authorized navigation project. Section 204 total program limit is \$15,000,000. Non-Federal interests share in a minimum of 25 percent of the project cost. Section 207 modified Section 204 by authorizing disposal in any manner for which the environmental benefits outweigh the added costs.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

Flood Risk Management Projects

Flood Control (CAP Section 205)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	\$4,978,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	\$7,900,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 205 of the Flood Control Act of 1948 (PL 80-858), as amended, authorizes up to \$55,000,000 annually for construction of flood control projects where such construction is not already specifically authorized by Congress.

JUSTIFICATION: Each year, small communities are faced with localized flooding and these communities can be helped with this program. Projects are designed to provide the same complete project and same degree of protection provided under regular authorization procedures. Each project selected must be economically justified and complete within itself. Federal cost participation is limited to \$7,000,000 per project at a single locality.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

Environmental Projects

Project Modifications for Improvement of the Environment (CAP Section 1135)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	\$5,249,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	\$9,500,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 1135 of the Water Resources Development Act of 1986 (PL 99-662), as amended authorizes review of Corps water resources projects to determine the need for structural or operational modifications for the purpose of improving the quality of the environment in the public interest; to determine if the operation of such projects has contributed to the degradation of the quality of the environment; and to carry out a program of such modifications that are feasible and consistent with authorized project purposes.

JUSTIFICATION: The post construction operation of Corps projects may encounter unforeseen environmental impacts as a result of those projects. This program allows the Corps to study and implement a structural or operational modification to a project that can be undertaken to improve overall environmental quality. Up to \$40,000,000 may be appropriated annually. The non-Federal share of the cost of any modifications will be 25 percent. Not more than \$5,000,000 in Federal funds may be expended on any single modification or measure pursuant to Section 1135.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

Navigation Projects

Navigation Mitigation Projects (CAP Section 111)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	\$4,806,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	\$500,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 111 of the River and Harbor Act of 1968 (PL 90-483), as amended, authorizes the construction of projects for the prevention or mitigation of shore damages attributable to Federal navigation works.

JUSTIFICATION: The cost of installation is cost shared in the same manner as the costs for the project causing the shore damage. The cost of operation and maintenance is borne by the non-Federal sponsor. Projects first cost shall not exceed \$5,000,000 without specific authorization.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

APPROPRIATION TITLE: Construction – Flood Risk Management – Remaining Item

PROJECT: Dam Safety and Seepage/Stability Correction Program (Continuing)

LOCATION: The Dam Safety and Seepage/Stability Correction Program provides for studies and modification of completed Corps of Engineers dams. The studies are located in various states (except Hawaii and Maine).

DESCRIPTION: There are 708 dams under the Corps jurisdiction. While no Corps dams are in imminent danger of failure, some have been identified as having a higher risk of a dam safety incident than originally anticipated based on new data, including the likelihood of extremely large floods and seismic events. The Corps has implemented a Portfolio Risk Analysis program and has completed screening 100% of the Corps dams. The evaluation studies funded under the Dam Safety and Seepage/Stability Correction Program are for dams identified with very high risks of a dam-safety incident (Dam Safety Action Classification (DSAC) I or II). Dam modification work is proceeding under existing authorities on projects where cost effective risk reduction measures have been identified in accordance with national priorities.

AUTHORIZATION: Water Resources Development Act of 1986; Dam Safety Act of 2006; Executive Order of the President; and the Federal Guideline for Dam Safety

SUMMARIZED FINANCIAL DATA:

	Program Total	<u>1/</u>
Allocation for FY 2011	\$ 49,100,000	
Allocation for FY 2012	\$ 37,155,000	
Allocated Carry-In Funds for FY 2013	\$ 505,000	
Conference Amount for FY 2013	\$ 47,750,000	<u>2/</u>
Total Allocation during FY 2013	\$ 48,255,000	
Estimated Carry-In Funds	\$ 0	<u>3/</u>
President's Budget for FY 2014	\$ 45,000,000	

1/ The project is an annual program (data is not accumulative)

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

PHYSICAL DATA: The Corps of Engineers has a portfolio of 708 dams located in 48 of the states and Puerto Rico. Each dam has a Dam Safety Action Classification based on a risk analysis. This project provides an Initial Evaluation Study (IES) and Dam Safety Modification Studies (DSMS) for the highest risk dams.

JUSTIFICATION: The Federal Guidelines for Dam Safety (FEMA 93) issued by Executive Order of President Carter require each Federal agency with responsibility of the operations and maintenance of dams to have a dam safety program to include dam safety modification. The Dam Safety and Seepage/Stability Correction Program provides for studies and modification of completed Corps of Engineers dams. There are 708 dams under the Corps jurisdiction. While no Corps dams are in imminent danger of failure, some have been identified as having a higher risk of a dam safety incident than originally anticipated based on new data, including the likelihood of extremely large floods and seismic events. The Corps has implemented a Portfolio Risk Analysis program and has completed screening 100% of the Corps dams. The evaluation studies funded under the Dam Safety and Seepage/Stability Correction Program are for dams identified with very high risks of a dam-safety incident (DSAC I or II). Dam Safety Assurance modifications are made because of new data on the project's ability to provide for passage of the maximum probable flood (PMF), based on changes in the climate or hydrology of the area or because of new data on seismic risks. Other dam safety modifications are designed to insure that the dam retains the reservoir during and after a major earthquake. Some seepage problems at USACE dams are related to increases in pressure arising from reservoir levels above the previous pool of record at a dam. Other seepage problems arise due to water seeping through the contact between the dam and bed rock. Static instability generally involves movement that starts at a slow rate and could result in massive displacement of large volumes of material if not corrected. Seepage/stability correction projects are classified as major rehabilitations for dam safety. Dam modification work is proceeding under existing authorities on projects where cost effective risk reduction measures have been identified in accordance with national priorities.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows (includes \$ 505,000 of unallocated FY 2012 funds):

Dam Safety Evaluation Studies	\$ 37,505,000
Post Evaluation Work	\$ 10,750,000
Total	\$ 48,255,000

FISCAL YEAR 2014: The budget amount of \$45,000,000 plus carry-in funds of \$0 will be applied as follows:

Dam Safety Evaluation Studies	\$30,000,000
Post Evaluation Work	\$15,000,000
Total	\$ 45,000,000

PROPOSED ACTIVITIES FOR FISCAL YEAR 2014: The \$45,000,000 requested for Fiscal Year 2014 will be used (1) for high priority studies (\$30,000,000) and (2) to continue post-evaluation work (\$15,000,000) on high risk dam safety assurance, seepage control, and static instability correction projects, once their evaluation reports are approved.

Evaluation Studies: \$30,000,000 is requested. The Corps Screening Portfolio Risk analysis has identified 55 Dam Safety Action Class I and II projects for studies and evaluations which will be conducted during Fiscal Year 2014. These 55 dams are the highest priority projects where detailed studies have not been completed in prior years. A list of Evaluation Studies is provided below.

Post Evaluation Work: \$15,000,000 is requested. Based on current evaluation study schedules and planned activities, there are 10 DSAC I & II projects anticipated to have approved DSMR's in late FY13 and FY14, and will require WEDGE Funds for Post Evaluation (PED) Activities. A list of Post Evaluation Work is provided below.

Evaluation Studies

Ball Mountain Dam, VT
Beach City Dam, OH
Beach City Dam, Brewster Levee, OH
Big Creek Diversion Dam, IA
Blakely Mountain Dam, AR
Bolivar Dam – Magnolia Levee, OH
Canyon Lake, TX
Carbon Canyon Dam, CA
Cecil M Harden Lake Dam, IN
Cherry Creek Dam, CO
Delaware Dam, OH
Denison Dam, Cumberland Dikes, OK
Dexter Dam, OR
Edward MacDowell Dam, NH
F.J. Sayers Dam / Howard Levee, PA
John Martin Dam– Fort Lyon, CO
FWR Structure Site No. 47, MS
Gathright Dam, VA
Green Peter -Foster Dam, OR

Hammond Dam, PA
Herbert Hoover Dike, FL
Hidden Dam, CA
Hills Creek Dam, OR
Hop Brook Dam, CT
J. Percy Priest Dam, TN
J. Edward Roush Dam, IN
Keystone Dam, OK
Keystone Dam, Cleveland Levee, OK
Lake Shelbyville Dam, IL
Lopez Dam, CA
Mansfield Hollow Dam, CT
McNary (Kennewick) Levees, OR
McNary (Pascoe) Levees, OR
McNary (Richland) Levees, OR
Mill Creek Diversion Dam, WA
Orwell Reservoir Dam, MN
Paint Creek Dam, OH

Paint Creek Dam, Little Pond Dam, OH
Patoka Lake Dam, IN
Prado Dam, Housing Dike, CA
Prado Dam, Treatment Dike, CA
Robert S. Kerr Lock & Dam, OK
San Antonio Dam, CA
Santa Fe Dam, LACDA, CA
Santa Rosa Dam, NM
Saylorville Dam, Big Creek Str, IA
Stillhouse-Hollow Dam, TX
Tappan Dam, OH
Terminus Dam, CA
Town Bluff Dam, TX
Trinidad Dam, CO
Union Village Dam, VT
Upper Appleton Dam, WI
Waterbury Dam, NY
Whittier Narrows Dam, LACDA, CA

Post Evaluation Work

Addicks Dam (Buffalo Bayou), TX
Barker Dam (Buffalo Bayou), TX
Dover Dam, Zoar Levee, OH

Isabella Dam, CA
Lewisville Lake Dam, TX
Moose Creek Dam, AK

Martis Creek Dam, CA
Mohawk Dam, OH
Pine Creek Dam, OK
Rough River Dam, KY

NON-FEDERAL COST: The cost of the Evaluation Study Phase is 100% Federal Costs. The non-Federal cost of the Post Evaluation Work varies from dam to dam and is calculated in the various DSMR's in accordance with either the Water Resources Development Act of 1986 as amended or the Reclamation Safety of Dams Act (P.L. 98-404) as amended.

STATUS OF LOCAL COOPERATION: To Be Determined during Post Evaluation Work from the various DSMR's.

COMPARISON OF FEDERAL COST ESTIMATES: N/A

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: NEPA documentation will be or has been included in the various DSMR's.

OTHER INFORMATION: A Dam Safety Investment Plan (DSIP) has been developed for the correction of current deficiencies. The current estimated cost to bring all dams to tolerable risks levels is \$26,000,000,000.

Employees Compensation (Payments to the Department of Labor)

Budget Amount for FY 2013 ^{2/}	\$23,726,000
Budget Amount for FY 2014	\$19,000,000

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

GENERAL: Public Law 94-273, approved April 21, 1976, 5 USC 8147b, provides that each agency shall include in its annual budget estimates a request for an appropriation equal to costs previously paid from the Employees Compensation Fund on account of injury or death of employees or persons under the agency's jurisdiction.

BUDGET REQUEST: The \$19,000,000 for Fiscal Year 2014 represents the total estimated cost of benefits and other payments made from the Employees Compensation Fund during the period July 1, 2011, through June 30, 2012, due to injury or death of persons under the jurisdiction of the Corps of Engineers civil functions and also includes \$1,200,000 for the investigation of fraudulent claims for workers' compensation benefits.

APPROPRIATION TITLE: Construction – Navigation – Remaining Item

PROJECT: Inland Waterways Users Board (CONTINUING)

LOCATION: National

AUTHORIZATION: The Inland Waterways Users Board was established by Section 302 of the Water Resources Development Act of 1986, (PL 99-662) and pursuant to the Board's charter, approved by the Secretary of the Army on March 3, 1987. The Board is an advisory committee subject to the requirements of the Federal Advisory Committee Act (PL 92-463, as amended).

SUMMARIZED FINANCIAL DATA:

	Program Total	
Estimated Annual Cost	\$ 895,000	<u>1/</u>
Allocation in FY 2013	\$ 860,000	<u>3/</u>
Estimated Carry-In Funds	\$ 0	<u>2/</u>
President's Budget for FY 2014	\$ 860,000	

PHYSICAL DATA: N/A

JUSTIFICATION: The \$860,000 requested this Fiscal Year will allow the Corps to fulfill its Congressionally authorized support role for the needs of, and activities associated with, the Inland Waterways Users Board (the Board).

(1) Funds in the amount of \$60,000 are requested to meet the estimated expenses of the eleven-member Board for its travel, meeting, and other needs to meet the requirements of the charter. Board member travel expenses have increased from prior years due to inflation, primarily for airfares.

(2) Funds in the amount of \$800,000 are requested for Corps of Engineers expenses related to its responsibilities as an advisory committee sponsor and to provide objective analyses related to the financial structure of the Inland Waterways Trust Fund, and in support of efforts to increase revenue to support a substantial increase in spending for inland waterway modernization and major rehabilitation, and for the Inland Marine Transportation System (IMTS). The Deputy Commanding General for Civil and Emergency Operations has been designated Executive Director to the Board, and he has designated staff members to provide continuing Board support. Corps expenses will include personnel costs for administrative Board meeting support, including staff travel, clerical, printing, and related materials. Additionally, increased resources are needed to support the ongoing reevaluation of the financial basis of the Inland Waterways Trust Fund, which falls under the advisory purview of the Board. The trust fund balance is depleted and is now only sustained by annual revenue flows. In September 2011, the President proposed a user fee that would provide revenue to augment the current Inland Waterways fuel tax. This proposal and alternative proposals will require intensive coordination with the Board and stakeholder groups.

ACCOMPLISHMENTS FOR FISCAL YEAR 2013: The FY 2013 appropriations included \$860,000 for these activities. FY 2013 activities include Corps personnel costs to coordinate, attend, and provide analytical support for three scheduled meetings of the Board pursuant to their charter.

Support also included Board meeting logistics, including staff travel, clerical, printing, and related materials, as well as analyses conducted at the request of the Board.

FISCAL YEAR 2014: The budget amount of \$860,000 plus carry-in funds of \$0 will be applied as follows:

Board Member Meeting Support	\$60,000
Board Activities	\$800,000
Total	\$ 860,000

PROPOSED ACTIVITIES FOR FISCAL YEAR 2014: Proposed activities include Corps personnel costs to coordinate, attend, and provide analytical support for three meetings of the Board pursuant to their charter. Includes funding necessary to conduct analyses of the IMTS requested by the Board, reevaluation of the financial basis of the trust fund and related proposals, and coordination with the Board and stakeholder groups.

NON-FEDERAL COST: N/A

COMPARISON OF FEDERAL COST ESTIMATES: N/A

1/ The project is an annual program (data is not accumulative)

2/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is \$0. This amount will be used to perform work on the project as follows: N/A

3/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT: Estuary Restoration Program (Title I of P.L. 106-457) (Continuing)

AUTHORIZATION AND PROGRAM DESCRIPTION: The Estuary Restoration Act of 2000, Title I of P.L. 106-457, as amended, authorizes the Secretary to carry out estuary habitat restoration projects recommended for implementation by the Estuary Habitat Restoration Council—which consists of representatives of the National Oceanic and Atmospheric Administration (NOAA), Environmental Protection Agency, Department of the Interior (U.S. Fish and Wildlife Service), Department of Agriculture, and the Department of Army. . Each project must address restoration needs identified in an estuary habitat restoration plan, be consistent with the estuary habitat restoration strategy developed under the Act, include a monitoring plan that is consistent with the standards for monitoring developed under the Act and include satisfactory assurance from the non-Federal interests proposing the project that the non-Federal interest will have the capability to carry out items of local cooperation, including maintenance. Except when innovative technology is involved the Federal share may not exceed 65 percent of the cost of the project. Non-Federal interests shall provide lands, easements, rights-of-way and relocations and are responsible for all costs associated with operating, maintaining, replacing, repairing, and rehabilitating the projects.

SUMMARIZED FINANCIAL DATA:

Allocation for FY2012	\$1,960,000
Conference Allowance for FY2013	\$1,000,000 ^{1/}
Estimated FY 2014 Unobligated Carry-In Funds	\$ 0 ^{2/}
President's Budget for FY2014	\$1,000,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

2/ Estimated Unobligated Carry-in Funding: NA

ACTIVITIES: As of September 2012, six projects have completed construction, two others have nearly completed construction and three more are about to start construction. Nine additional projects are in the preconstruction phase.. The Corps proposes to use a cooperative agreement to implement the majority of these projects, which should expedite implementation. Examples include removal of invasive species and re-vegetation with native species in Florida estuaries; restoring oysters off the Texas, Mississippi, and North Carolina coasts; restoring more natural flow to a tidal creek in Massachusetts; and restoring previously diked tidal areas in several locations in California. As funds are available new solicitations for projects are announced. Healthy estuaries play an important role in the life cycles of many aquatic species with high commercial value from blue crabs to salmon. Healthy estuarine wetlands contribute to improved water quality and may aid in the reduction of flood risks. There is a growing awareness of the need to develop restoration projects responsive to sea level change and that will be considered in the selection of new projects to fund. Restoration of estuary restoration projects will contribute to efforts towards achieving more sustainable estuarine ecosystems.

FISCAL YEAR 2013: A solicitation for new project proposals has been announced and the carry in funds not committed to ongoing projects and any fiscal year 2013 appropriation will be committed to fund new projects resulting from this solicitation.

FISCAL YEAR 2014: The Budget amount plus any uncommitted carry-in funds will be applied as follows:

Continue estuary habitat restoration by funding new projects	\$1,000,000
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OTHER INFORMATION: NA

Remaining Items – Operations and Maintenance

O&M Justification Sheet

PROJECT NAME: IPET/HPDC Lessons Learned Implementation to Improve Operation and Maintenance

AUTHORIZATION: Various authorities including River and Harbors Act & Flood Control Act of 1948, Section 102 of the Rivers and Harbors Act of 1962, Section 216 of the River and Harbor and Flood Control Act of 1970, Section 731 of the Water Resources Development Act of 1986, Section 729 of the Water Resources Development Act of 1986, specific project and purpose authorizations, and Executive Order 13514.

LOCATION AND DESCRIPTION: O&M Remaining Item, Nationwide. The IPET-HPDC Lessons Learned Implementation Team provides a systems- and risk-based approach that captures the impacts of incremental changes from natural, dynamic processes and human activities throughout the lifecycle, combined with more comprehensive review of projects, is required for USACE to more fully address risks due to extreme events, especially as we increase emphasis on aligning federal, state, and local projects, programs and authorities for risk management; on making decisions collaboratively; and on improving communication about residual risk. The work being accomplished by multiple national teams producing specific product outcomes related to four major components: comprehensive systems approach, risk management and communication, professional and technical competence, and improved water management. USACE is incorporating the new methods in programs and activities that enhance the operation, safety and sustainability of our built infrastructure based on those lessons learned.

CONFERENCE AMOUNT FOR FY 13: \$ 7,000,000 2/

BUDGETED AMOUNT FOR FY 14: \$8,125,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 14:

N: N/A

FRM: \$8,125,000 will be used to continue building on work accomplished to respond to critical needs identified in the wake of recent extreme events. Specifically, FY 2014 funding will be used to continue work in the following program components:

Comprehensive Systems Approach (\$3,450,000)

Emphasizes an integrated, comprehensive and systems based approach incorporating anticipatory management to remain adaptable and sustainable over the project life cycle, placing the highest priority on protection of public health and safety. Improve the effectiveness of post-authorization evaluations and assessments of physical, social, and institutional change over time. Update existing and develop new tools to provide analyses and decision support on a system basis; provide methods and guidance to incorporate adaptive management into decision making to account for dynamic processes such as sea level rise and climate change; implement a nationwide datum and subsidence standard consolidate and expand policies, methods, and technologies to achieve long-term sustainability of USACE infrastructure.

Risk Informed Decision Making and Communication (\$1,700,000)

Emphasizes integrated risk management through implementation of risk and reliability concepts to operations and major maintenance. Update methods, models guidance to assess engineering and operational reliability of local protection systems; fully develop risk analyses concepts, including social and environmental impacts; update levee certification guidance; apply innovative modeling methods used in IPET to identify failure causes due to soil conditions for other regions with levees of concern; develop capability to model the risk and reliability effects of surge and

overtopping including any dynamic effects. Emphasizes clear and candid communication of risk both internally and externally, supporting risk-informed decision making over the project life cycle. Improve ways to characterize and communicate public health and safety for our built infrastructure. Conduct detailed review and revision of existing engineering and operations guidance to include risk communications. Apply new framework for existing projects that incorporates public involvement in risk reduction strategies.

Professional and Technical Competence (\$525,000)

Emphasizes professionalism and technical competence to provide responsible and competent public service professionalism with life safety as a fundamental driver. Operating and maintaining USACE's aging infrastructure requires unique skill sets that differ from those needed for the planning and engineering of new projects. The O&M portion of this theme will include investments that will better equip staff competencies in the key areas of life-safety based programs as well as normal project operations.

Improved Water Management (\$2,450,000)

Concentrated program to enhance the operational decision making for floods, droughts, operations planning and real-time operations. Advance the implementation of the Corps Water Management System (CWMS) nationwide, including developing the hydrologic and hydraulic models required for a watershed approach to effectively meet authorized purposes. Data collection, data dissemination, and modeling and analysis capabilities will be addressed on a national level. Funds from this account will be targeted for the most critical watersheds that have not yet moved into the CWMS environment. Establish a National Enterprise Water Management System with continuity of operations capabilities that fully supports the water management mission and complies with US Army Corps of Engineers and Department of Defense Corporate Information Assurance and Security requirements.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Incorporation of lessons learned and new information is crucial for an engineering organization that provides services whose performance can be tested by extreme events, such as floods, droughts, and coastal storms. The program objective is to improve the public safety and performance of USACE's built infrastructure based on gaps, weaknesses and lessons learned from events such as the 2012-13 drought, Superstorm Sandy, the greater Mississippi River Basin flood of 2011, the Nashville flood of 2010, and other extreme events dating back to Hurricane Katrina and its lessons learned efforts (the Interagency Performance Evaluation Taskforce – IPET, and the Hurricane Protection Decision Chronology- HPDC). An integrated, comprehensive, sustainable, and systems-based approach that places the highest priority on protection of public health and safety is the most effective way for USACE to provide safe, reliable projects working together as a system with increased economic and environmental benefits. Incorporating updated and improved methods to estimate, assess, manage, and communicate risk are critical to planning, design, operation, and management of water resources infrastructure to meet the Nation's evolving needs. Recent extreme events have highlighted the need to implement state-of-the-art systems-based water management tools consistently across the nation, to optimize operation of our reservoirs to maximize benefits, including flood risk management and public safety, water supply, and water quality. A comprehensive system analysis that considers a total risk framework for managing and communicating risk, and that incorporates standardized water management will benefit the entire USACE portfolio of projects, including aging critical infrastructure.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Aquatic Nuisance Species Research

AUTHORIZATION: The Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990 (PL 101-646). The National Invasive Species Act of 1996 (PL 104-332) reauthorized and amended the Non-indigenous Aquatic Nuisance Prevention and Control Act.

CONFERENCE AMT. FOR FY 2013: \$690,000 2/

BUDGETED AMT. FOR FY 2014: \$690,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

According to a journal article published in 2005 by David Pimentel, et al, invasive species cost the public over \$138 billion annually. The National Invasive Species Council estimates that over 100 nuisance species are introduced into U.S. annually –which may adversely impact operations and maintenance on Corps' facilities and threaten valued natural resources. Zebra mussel impacts alone cost the public over \$1 billion annually states the National Invasive Species Council. Methods of prevention and more effective, inexpensive methods of control of invasive species must be developed to prevent impacts to public facilities and protect valuable natural resources.

Research efforts have been expanded under the Aquatic Nuisance Species Research Program (ANSRP) to address invasive aquatic species that impact the nations' waterways infrastructure and associated resources. Methods for prevention, control, and restoration of natural resources will be developed. Control strategies are being developed for: (a) navigation structures, (b) hydropower and other utilities, (c) vessels and dredges, and (d) water treatment, irrigation, and other water control structures.

The ANSRP provides Corps managers and operational personnel with innovative technologies regarding risk assessment, prevention strategies, species life history/ecological data, and cost-effective, environmentally-sound options for managing aquatic nuisance species (ANS). Program research focuses on: 1) The evaluation of potential control/barrier methods to prevent the transfer of Asian carps and other ANS between the Mississippi River and Great Lakes Basins; 2) New techniques for control of zebra and quagga mussels moving westward past the 100th meridian; 3) Improved control methods for harmful algal blooms through new chemicals and life cycle sensitivity analysis; 4) Corps personnel training in recognition and control methods of ANS on Corps lands/waters; 5) Web-based regional lists of aquatic invasive species on Corps projects; and 6) Methods that reduce invasive species impacts to threatened and endangered species and provide restoration of natural habitats.

PROPOSED ACTIVITIES FOR FY 2014:

- Complete field validation studies to evaluate the effectiveness and use patterns of an invasive mussel biopesticide.
- Develop operational guidance for a new, bacterial-based biopesticide product (application strategies and dosing requirements) for controlling invasive biofouling mussels that minimize impacts to non-target species.
- Evaluate the feasibility of alternative management and harvesting options for minimizing impacts of Asian carp populations.
- Developed a risk-based decision framework to assist with prevention and management of invasive *Dreissenid* mussel species.
- Assess the ecological impacts of invasive gastropod species (e.g., channeled apple snail and Chinese mystery snails, New Zealand mud snails) on native invertebrate and plant populations.
- Evaluate the potential use of environmentally benign surfaces to resist bioadhesion of invasive mussels on Corps infrastructures.
- Provide aquatic invasive species technology transfer in the form of technical assistance, guidance documents, and webinars to COE Districts and Divisions.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	\$677,000
Allocation for FY12	\$669,000
Conference Allowance for FY13	\$690,000
Allocations through FY13	\$690,000 2/
Estimated FY14 Carry-In Funds	\$0
President's Budget for FY14	\$690,000 1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

Asset Management Program supporting USACE Infrastructure Strategy

CONFERENCE AMOUNT FOR FY 2013: \$4,750,000 2/

BUDGETED AMOUNT FOR FY 2014: \$4,750,000 1/

AUTHORIZATION: EO 13327, "Federal Real Property Asset Management," Feb 2004; DOD (ASD (C3I)) memorandum, 10 Jul 95, Selecting the FEM System as a DoD migration system for Computerized Maintenance Management System [CMMS]. US Army Corps of Engineers Campaign Plan, Action 2d.1: USACE Infrastructure Strategy.

JUSTIFICATION:

The Corps of Engineers is responsible for managing a portfolio of water resources infrastructure consisting of more than 4000 assets and projects valued at over 239 billion dollars. This diverse infrastructure provides a broad range of critical services supporting the Nation's economy, security, and quality of life. As the service life of this aging infrastructure continues to extend beyond its design life, it is imperative to develop an integrated national strategic plan for assessing those assets through a lifecycle portfolio analysis to improve reliability, minimize risk, and meet the current and projected needs of the Nation. These assets and projects must also be analyzed through a comprehensive watershed, or systems, lens. This entails adaptively developing watershed infrastructure requirements that meet today's needs as well as those of the future; strategically planning to link current and future Corps projects with other federal and non-federal project objectives and investments at the watershed or system level. Another vital aspect of this strategy is to evaluate and employ alternative financing options through public-private partnerships (P3). This effort will involve working within our existing authorities to expand our available financing options, learning from the P3 experiences of other agencies as to the authorities and processes that provided them the most benefit, and working with our stakeholders to fully understand and leverage their investment interests through partnerships that can enable desired infrastructure/system outcomes. Finally, the Corps will make a focused effort to communicate effectively and strategically with our partners, stakeholders, and the public to insure this is a joint effort.

The USACE Infrastructure Strategy (UIS) is one of the four pillars of the CW Transformation (CWT) initiative and is fully aligned with the CW Strategic Plan and the USACE Campaign Plan. The UIS sets the foundation for future water resources infrastructure through effective lifecycle portfolio management that applies the principles of integrated water resources management in a watershed/system context. The end state goal of the UIS: USACE CW infrastructure is relevant, resilient, and reliable utilizing IWRM strategies to address water resources need sustaining communities, energy, water, and land resources.

The Asset Management Program is an integral part of UIS and further supports the Corps in managing the Real Property initiative (EO 13327) to ensure that property inventories are maintained at the right size, cost, and condition to deliver Corps missions.

In support of the lifecycle portfolio analysis, the Corps has deployed the Facilities and Equipment Maintenance (FEM) system (a DoD standard) as its computerized maintenance management tool. FEM provides on-line interactive information for managing the day-to-day maintenance activities and costs of assets, facilities, equipment, and parts and is an integral enabler to asset management. The Corps has also begun deployment of a standard condition assessment methodology to better inform the prioritization of maintenance management processes, and is piloting portfolio analysis tools and processes to prioritize investments in terms of benefits and risk to maximize the effectiveness of resources.

PROPOSED ACTIVITIES FOR FY14

N: \$1,583,000

FRM: \$1,583,000

RC: N/A

H: \$1,584,000

EN: N/A

WS: N/A

UIS "Core" Team:

1. Develop charter and establish team including AM as an integral function.
2. Develop and implement overall UIS Program Management Plan (PMP).
3. Engage all Civil Works missions/functions to guide/accomplish the following major efforts.

Lifecycle Portfolio Management:

1. Continue development and implementation of an operational condition assessment methodology for Corps of Engineers infrastructure.
2. Continue development of the Water Infrastructure Systems Data Manager (WISDM) to organize and display Corps portfolio information.
3. Continue addressing operation and critical maintenance performance measures in the Facilities and Equipment Maintenance (FEM) system.
4. Complete initial assessment of data compiled by the Op Order.

Comprehensive Watershed Analysis:

1. Continued development of analytical tools for project assessments (to include WISDM, Asset Management Portfolio Analytics (AMPA), and Integrated Budget Evaluation Tool (iBET))
2. Continue to provide dedicated assistance to the watershed budget pilot projects including collaborative techniques, mapping of Corps and non-Corps projects, and options for investigating project linkages.

ACCOMPLISHMENTS:

1. Developed first ever national inventory of Corps assets and projects
2. Completed Asset Management Portfolio Analytics (AMPA) case study and additional demonstrations using FY14 budget work packages
3. Completed Maintenance Management Improvement Plan (MMIP) pilots with report, and implemented Phase 1 – Critical Assets
4. Begun analysis of alternative financing options:
 - a. Completed first White Paper on options
 - b. Holding third working meeting with private firms on investigations of options
 - c. Completed one watershed pilot partnering with SPD on successful budget process.
 - i. Developed initial decision support software WISDM and iBET
 - ii. Initiated collaborative processes for watershed process
5. Developed initial process to complete condition assessments for Corps assets.
6. Continued data QA/QC in the real property information database and system to meet annual FRPP requirements.
7. Continued development of baseline operational condition assessment and risk processes for FRM, Coastal navigation structures, Hydropower and Recreation.
8. Trained MSC teams and began implementing OCAs at selected representative FRM and coastal projects. Implemented condition assessment and risk and consequence methodologies across

portfolio of infrastructure assets for inland navigation which will feed future budget work packages.

9. Integrated results to date from condition and risk processes for USACE infrastructure and Maintenance Management Improvement Plan into FY15 Budget Guidance.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Budget Management Support for OM Business Programs

Performance Based Budgeting Support Program

Recreation Management Support Program

Stewardship Support Program

Optimization Tools for Navigation (OTN) Program

AUTHORIZATION:

Performance Based Budgeting Support Program: The Government Performance and Results Act of 1993 (GPRA) and under general authorities contained in various laws.

Recreation Management Support Program: This program is conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

Stewardship Support Program: This program is conducted under the authority of ER 1130-2-540, Chapter 7.

Optimization Tools for Navigation (OTN) Program: Efforts are necessary to provide practical quantitative and predictive tools and data for minimizing and optimizing the costs of dredging of Federally-sponsored navigation projects. The objective is to be able to identify more efficient and effective management strategies for existing navigation infrastructure and to improve the analysis of proposals to deepen and widen channels. These efforts will help lead to an improvement of channel design criteria across the Corps, for the U.S. Navy, and other government/academic institutions.

LOCATION AND DESCRIPTION: These are national programs.

CONFERENCE AMOUNT FOR FY 2013: \$7,042,000 2/

BUDGETED AMOUNT FOR FY 2014: \$7,042,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

ALL: Performance Based Budgeting Support Program. \$4,000,000 will provide enhanced continuing support of Civil Works O&M integrated business line information systems; centrally distributed performance measures, outputs and system inventory information; and evaluation of new measures through the Performance Based Budgeting Support Program. FY 2014 funds will also support enhanced development of cross business output-result oriented performance measures of the incremental return on investment in Corps Civil Works program area including the investigation, acquisition and integration of decision-making software. The funding provides enhanced support for all business lines but with an increased focus for flood risk management, water supply, environmental restoration for the data entry modules and integration: The President's management agenda and GPRA requires that the Corps implement performance based budgeting for Civil Works Operations and Maintenance. The Performance Based Budgeting Support Program addresses this requirement by the collection, management and distribution of data; seeking new methods for linking performance to annual budget requests; and for analyzing the potential economic impacts on service to customers of varying budget levels.

a. Civil Works Business Function Information: Provides critical data and information related to Civil Works project inventories, outputs and performance measures; and for the operational and strategic management of Corps' projects, programs, budget development and studies that directly support the Navigation, Hydropower, Recreation, Environment (Stewardship, Compliance, and Restoration), Water

Organizations: Headquarters and Institute for Water Resources Budget Management Support for OM Business Programs

Supply and Flood Risk Management Business Line missions. This information supports the Corps O&M program and is the sole source for the Corps, other Federal agencies, partners, stakeholders, and public. These funds include supporting the collection, database management, integration, standardization, operation, enhancement, quality control, user assistance, training, compliance with security requirements and ACE-IT services. The IT activities are also reported under OMBIL-Plus in ITIPS and the annual OMB 300b submittal accounting for \$1,423,741 of the overall OMBIL-Plus costs. Funding for this program increases the Corps' ability to produce efficient, effective, and timely performance measures for budgeting, management and the prioritization of capital investment decisions.

b. Civil Works Performance Measurements: Work includes improvement and integration of business line performance measurements to be incorporated into the budget decision-making process; support for the Office of Management & Budget's performance driven initiatives; and support for the future Corps budget preparation process. Efforts focus on the refinement of corporate performance principles; and program and project level performance measures that focus on anticipated performance and output at different levels of funding. Aligns and integrates with the O&M business processes - navigation, hydropower, flood risk management, recreation, water supply and environment. These measurements, at different organizational levels, provide the analytical basis to identify the incremental return on investment in Corps programs at various funding levels and to make adjustments in priorities both at the program and project levels concerning efficiency of facilities or services. Comparison of across business lines measurements among projects at all levels helps focus management attention on the priorities of programs and projects related to capital investments principles.

c. Civil Works Business Analysis: This task analyzes data using statistical and other analytical techniques and tools to uncover relationships among budget, expenditures and performance within and between Corps business line processes. The relationships and statistics drawn from the data will provide evidence to support capital investment priorities and decisions increasing the Corps ability to delivery business line service in the most efficient and effective manner. This task will also develop effective products to explain relationships found in the data and allow decision-makers to visualize cause and effect. This task links the data gathering, collection and distribution, and use of data in the decision-making process.

N: Optimization Tools for Navigation. \$392,000 will be used for the Optimization Tools for Navigation (OTN) Program to continue the deployment and maintenance of the National Navigation Operation & Management Performance Evaluation Assessment System (NNOMPEAS) capabilities and methodology and further its use as a budgeting tool and general project evaluation tool. Funding will also be used (to the extent available) for continued maintenance of the Channel Analysis Design Evaluation Tool (CADET) and development of a vessel lines library to allow use of CADET without proprietary hull line information and to complete technology transfer to USACE so that USACE can independently support general update and maintenance of the algorithms integral to CADET. Funds will also in part be applied in support of continued compilation of dredging cost and quantity data at the channel segment level through implementation of changes to the Resident Management System (RMS) database and to implement changes to NNOMPEAS deemed critical by field analysts to more efficiently facilitate project evaluation and analysis for O&M and new work where applicable.

To maintain the Nation's Federal navigable coastal and inland waterways, nearly 230 million cubic yards of material are dredged in the U.S. annually. In addition, these quantities are likely to increase under proposals for deeper and wider channels to support emerging commercial cargo vessel designs. This initiative will enable the Corps to provide a more credible and informed evaluation of maintenance requirements, based on the economic return. The Corps is developing metrics that would help demonstrate the incremental return-on-investment (ROI) from an increase or decrease of dredging funds and associated maintenance at any specific location. NNOMPEAS is being developed to demonstrate whether such a metric can be provided across all coastal deep-draft harbors and waterways. This tool

uses domestic and foreign trade data to determine and analyze the loaded or immersed drafts and related utilization of vessel cargo-carrying capacity for all recorded cargo vessel calls for individual harbors and channels. The system in turn can provide for the estimation of incremental transportation cost benefits foregone with reduction or absence of maintenance for waterway depth, and of the transportation cost savings with a limited increase in depth. This could offer the potential to optimize maintenance dredging requirements for individual channel reaches and across much of the overall USACE dredging program. A companion tool being developed under the OTN program is CADET, which will allow sophisticated vessel hull modeling not previously available. IWR is conducting this modeling activity jointly with the USACE Engineering Research and Development Center (ERDC) and the U.S. Naval Surface Warfare Center (NAVSEA-Carderoc). CADET will render advanced technologies for methods of analysis and compilation of new physical and numerically-generated data sets descriptive of vessel movement and response within confined waterways and offshore channel areas subject to significant wave climate.

FRM: N/A

RC: Recreation Management Support Program. \$1,650,000 will support the implementation of the Recreation Strategic Plan which will guide many of the support activities performed this FY particularly in the areas of efficiency evaluation, communication and partnerships. The Recreation Budget Evaluation System (Rec-BEST) will be refined to increase the capability to monitor and report Recreation performance measures and evaluate and prioritize budget submissions in response to OMB guidance, also to better link with the Asset Management and risk informed budget process. The Recreation module of the Natural Resource Management Gateway will be further developed to address high priority needs. Demonstrations will be conducted to identify and communicate the benefits of the Corps recreation program and improve effectiveness in addressing the needs of ethnic minority visitors. Emphasis will be placed on improving recreation use monitoring procedures that will be incorporated into recreation performance measures. Customer satisfaction survey methods and benchmarking capabilities will be refined and fully integrated into program performance measures. Technical support will be provided to field staff to implement improved procedures. Support will be provided to standing Natural Resource Management (NRM) committees and task forces including: Partnership Advisory Committee, Ranger CoP, Water Safety, Career Development etc. Support will be provided to Headquarters Recreation program staff regarding strategic planning, development of program evaluations, staffing evaluation and other high priority Headquarters initiatives. Provides resources for evaluation tasks associated with the implementation of the National Recreation Program Road Map.

The recreation program serves almost 370 million recreation visitors and generates about \$40 million in revenue annually. Visitors spend over \$16 billion annually to engage in recreation at Corps projects; over 270,000 full and part time jobs are associated with this spending.

The RMSP supports the recreation program through the conduct of focused management studies to improve operational efficiencies and the provision of technical assistance, to include technology transfer and technology support and maintenance for recreation specific automated information systems. The RMSP supports strategic planning for and performance monitoring of the Corps recreation business program, subject to the Government Performance and Results Act (GPRA).

The RMSP has 3 major components, which together provide comprehensive support to the Corps Recreation Business Program:

1. Focused Management Studies. RMSP provides focused management studies and reports to acquire and analyze information about recreation trends, accessibility, emerging issues, user conflicts, visitor diversity, use fee impacts and similar elements affecting the Corps recreation program. Analyses are

conducted to support the recreation area modernization program, implementing facility and service standards, and in similar product delivery improvement efforts. Information and technology transfer pursuant to these studies is funded by the RMSP. Ongoing trends analysis provides valuable data on which to base decisions about necessary short and long term adjustments to the program to meet public needs.

2. Management/Technical Assistance. RMSP provides technical assistance to the Recreation Community of Practice in the development of management tools, which quantify recreation program outputs and relate them to customer needs and budget allocations for the purpose of measuring performance. This includes gathering and analyzing information about customer satisfaction with the Corps recreation program. RMSP assures the field workforce is equipped with "state-of-the-art" skills and knowledge to deal with a rapidly changing public. RMSP provides technical support and maintenance of performance based budgeting tools, visitation monitoring and analysis systems, fee collection and reporting, economic analysis, facility inventory and condition assessment, and similar automated information programs. RMSP provides short-term assistance to projects in solving specific technical problems.

3. Support to Recreation Program Strategic Planning. Funding to support the activities of the Recreation Leadership Advisory Team (RLAT) is included in this program. The RLAT is composed of representatives from the division, district and project levels of the Corps natural resources management program. It provides input, advice and support to the Corps strategic planning for the recreation business program.

H: N/A

EN: Stewardship Support Program. \$1,000,000 will conduct focused management action studies and recommend guidance to address high priority program efficiency and effectiveness concerns, including responses to new protocols for asset and risk management, regulation changes and administration priorities through the Stewardship Support Program (SSP). Efforts will continue in support of performance based budgeting including further development of performance measures, development of strategies to improve program outputs and outcomes, and refinement of E-S BEST and related guidance to monitor program performance and risk analysis. Progress in recent years on developing standards, published protocols and web-based data entry programs have resulted in improvements in advancing completion of the inventories and will result in expanded data from national GIS analysis to prioritize work during declining or flat budgets. Increased technical support to the field will provide training and guidance to assist in revision to performance measures during 2014, as needed to meet new Civil Works transformation implementation and recent new High Priority Goals of OMB. The SSP will also continue support of the Environment-Stewardship Community of Practice (CoP) including further development of the NRM Gateway for information and technology exchange. These activities will provide benefits in increased program effectiveness through implementation of assessment recommendations. Improved program performance will be facilitated through increased CoP access to best practices and policy guidance, and effective development and execution of performance based budgets.

The Stewardship Support Program (SSP) was established by regulation in FY 02 to provide broad support to Environment-Stewardship function at operating projects by assisting in the identification of national program needs, the development of new national program activities, strategic program planning, and the recommendation of national stewardship program funding priorities. Support will be provided in refining the Environment–Stewardship business program strategic plan and goals, and budget processes, to address the targeted outcomes of the overall Corps CW Strategic Plan, using input from the Stewardship Advisory Team, other associated Corps business programs and stakeholders. Goals and

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objectives have been refined, and actions will be identified to achieve them. Funding this program from a single source reflects the nationwide application and supports standardization in program direction and outputs. The program will continue to meet business line needs involved with the Corps Civil Works Transformation, initiating asset management and risk assessment along with additional changes in the administration focus on the America's Great Outdoors (AGO) Initiative and long term sustainability. The SSP supports the Environment–Stewardship program by addressing issues or initiatives that have a broad applicability to many USACE Civil Works projects.

The three basic components of the SSP are:

- (1) Focused Management Actions and Studies. These activities are to implement a course of action or practice within field office activities, a region, or nationwide. Examples of management actions might include developing/ assembling an array of management practices for establishing riparian habitat, or creating a forum to share common experiences, build teams, and disseminate information. Examples of management studies might include geospatial tools for use at the projects or conducting studies on management of threatened and endangered species and meeting biological opinion requirements
- (2) Policy Guidance and Management Support. Such activities relate to the development and/ or implementation of guidance. Examples of policy guidance included facilitating cooperative agreements with stewardship non-governmental organizations, or amending the annual Budget Engineer Circular to provide emphasis on new environmental threats or nationally significant resources. Mapping stewardship performance and adjusting to more integrated watershed and asset management will be a focus for FY 14. Funding to support the activities of the Stewardship Advisory Team (SAT) is included in this program. The SAT is composed of representatives from the division, district and project levels of the Corps Environmental Stewardship Program. It provides input, advice and support to the Corps strategic planning for the Environment-Stewardship business program.
- (3) Information Exchange. These activities are designed to build, integrate, and share our knowledge base to support greater understanding of the environment and the impacts of program work.

WS: N/A

OTHER INFORMATION:

ACCOMPLISHMENTS IN PRIOR YEARS:

Performance Based Budgeting Support Program. Included were newly fielded centralized natural resource, water supply collection system and user's training in OMBIL Plus data entry and access. The One-stop access for much of Civil Works budget performance information was expanded for budget submittals in lieu of separate data calls. An integrated data set for all business lines was created with data for FY1999-2011 providing trend information for analysis. Performance data was merged with P2 for use in the navigation budget development process eliminating data calls and providing nationally standardized information. The inclusion of asset management and capital investment principals were considered.

Recreation Management Support Program. Recent accomplishments include conducting an evaluation of NRM Staffing levels, support for the Recreation Strategic Planning team, development and implementation of a national survey of Park Rangers, refinement of the OMBIL Recreation module and development of platforms to market the CE recreation program on social media websites, (i.e. FaceBook and YouTube). Other past products include Recreation Budget Evaluation System (RecBEST), visitation estimation methodology and data collection and reporting tools, economic impact methodology and analysis tools, customer satisfaction survey and benchmarking tools implemented at all CE projects, studies on recreation preferences of ethnic groups including cross-cultural communication issues, and

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support for development of a strategic context as a foundation for transitioning to a performance based environment, to include performance based budgeting. The Natural Resources Management Gateway was developed as a knowledge management tool for the NRM community and is compatible with other Corps KM and Community of Practice initiatives. The Corps Lakes Gateway was developed and provides information to millions of visitors annually on recreation opportunities at Corps projects (in FY10 over 45 million page views). The Corps Lakes Gateway also delivers Corps recreation information to the interagency RecreationOneStop project in support the Administration's E-GOV initiative. Guidance and appropriate tools were developed to improve interpretive services associated with the CE recreation program that advance the public's understanding of the environment and the Corps Environmental Operating Principles. Support to Headquarters was provided to refine the recreation business program strategic plan, utilizing input from the RLAT and stakeholders. Goals and objectives were refined, and actions identified to achieve them. Innovative partnership approaches were developed and field guidance prepared to improve stakeholder participation. Stakeholder outreach was conducted to develop partnerships for strategic initiatives.

Stewardship Support Program. The allocation of project operations and maintenance funds to conduct specified nationwide (multiple project) activities to improve the efficiency and cost effectiveness of the Environment-Stewardship business program has been employed, with subcommittee staff knowledge and concurrence, since the late 1990s for activities similar to those identified for FY 2014. Past products of the Stewardship Support Program include the initial set of Environment-Stewardship program performance measures, which are in accord with the Government Performance and Results Act and used to measure and monitor priority program outputs and outcomes; the Stewardship module of the Operations and Maintenance Business Information Link (OMBIL), which receives and stores selected data concerning the stewardship of project natural resources, and which provides for retrieval of that information by all levels of the Corps; the pilot version and subsequent refinements of the Environment-Stewardship Budget Evaluation System (E-S BEST) used to assist in developing budget scenarios and ranking budget proposals. Components of the Environment-Stewardship portion of the Natural Resources Management (NRM) Gateway, a knowledge management tool for the NRM community, have been completed and others are underway. Support to Headquarters was provided to develop and refine; the Environment-Stewardship business program objectives and budget criteria, the program management plan for the Environment-Stewardship Community of Practice, and the revision of the Environment-Stewardship program regulation. Formulation of program decision tool to evaluate the threats to, and significance of CE managed natural resources was initiated in FY 13 and will continue into FY 14

Optimization Tools for Navigation. Funds in FY 13 will allow maintenance of the core CADET vessel hull modeling effort in conjunction with ERDC with reduced support from NAVSEA-CARDERO, and the initiation of work and requirements to develop a deep-draft self-propelled vessel lines library. Work will continue on the NNOMPEAS initiative with updating vessel transportation and vessel operating cost data for additional years through the latest year of data availability, increasing or expanding vessel transportation trips and costs to over 115 to 120 coastal harbors nationwide, initial software development to link foreign trade databases with vessel characteristics and vessel movement databases, initiating second-phase modifications to the RMS database for collecting dredging costs and quantities for discrete channel segments, and continued deployment of the modified RMS database through training sessions for coastal District operations staff. Continued(ing) use of NNOMPEAS for further development of efforts to measure incremental transportation costs and benefits, and development of relative rankings based on ROI for major coastal harbors under ongoing initiatives for Value-to-the-Nation (VTN) and for HQUSACE O&M program budgeting input. Currently NNOMPEAS is also being employed for evaluation of vessel calling patterns and supporting load factor analysis (LFA) critical to coastal deep-draft studies, and the evaluation of vessel diversion for offshore wind farm development. Correspondingly, efforts for CADET

will involve deployment and training for use on coastal waterway projects through FY 13 which will support better evaluation of depth needed in offshore environments with simultaneous objectives of minimizing related dredging costs.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Coastal Inlets Research Program

AUTHORIZATION: Authorization for the Corps of Engineers' Engineer Research and Development Center (ERDC) to conduct R&D is codified in 10 U.S.C. 2358: "The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that are necessary to the responsibilities of such Secretary's department in the field of research and development."

CONFERENCE AMT. FOR FY 2013: \$2,700,000 2/

BUDGETED AMT. FOR FY 2014: \$2,700,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The Corps operates and maintains more than 1000 coastal navigation projects that cover 13,000 miles of coastal navigation channels, with a limited O&M budget. Coastal inlet navigation channels must be maintained in a complex environment of waves, tidal and wave-induced currents, sediment transport, and vessel-induced flow and wake. In FY 2010, the Corps spent approximately \$1.2 billion in maintenance dredging of 202 million cubic yards from Federal navigation channels. Adjusted for inflation, dredging costs have increased approximately \$12.8 million/year (from \$1.53 to \$4.62 per cubic yard) from FY 1963 through FY 2010¹. Dredging costs are likely to increase in the future because of increasing fuel, mobilization, and demobilization prices. Additionally, to remain competitive, harbors and ports must deepen and widen navigation channels to accommodate larger vessels; however, deeper and wider channels are more efficient sediment traps, therefore increasing shoaling and O&M costs. Modifications to coastal inlet channels and jetties can have a profound effect on the integrity of the navigation structures, adjacent beaches, estuaries, ecosystems and regions. Demand for regional sediment management practices and mitigation for engineering activities includes innovative creation of nearshore berms with dredged sediment intended as a source to nourish neighboring beaches. Renewable, cost-effective placement sites for dredging must also be designed such that sand moves onshore, fine sediments are dispersed offshore, and re-deposition into the navigation channel is minimized. Such projects require characterization of hydrodynamics, wave forcing, sediment transport, and morphology change, as well as geomorphologic approaches. Thus, navigation project O&M, structure integrity and implications of ongoing and future dredging actions must be considered within a sediment-sharing inlet system. The Corps needs to advance knowledge and tools to better predict future channel shoaling, and to make transparent and uniform decisions on prioritization of funding. This applied research and development is necessary to provide quantitative and practical predictive tools and data to reduce the cost of dredging for Federal navigation projects, maintain inlet jetties, identify potential unintended consequences, mitigate for engineering activities related to navigation channels, prioritize maintenance options within budget constraints, and support national security efforts to protect waterways and ports. The Coastal Inlets Research Program provides tools to engineers and decision makers for developing reliable solutions and practices to reduce the cost of maintenance and operation of Federal navigation projects.

PROPOSED ACTIVITIES FOR FY 2014:

Structures and Navigation Focus Area

- Continue development of the Channel Portfolio Tool (CPT), especially formal, seamless linkages to other Navigation Business Line tools, applications, and databases such as Automated Identification System (AIS) vessel transit data, tide and wave buoy data, and HydroSurvey bathymetric data. Produce documentation of conceptual framework and how-to guidance in online help and technical notes. Continue maintaining the public version of CPT. Provide

¹ <http://www.iwr.usace.army.mil/ndc/dredge/ddhisMsum.pdf> .

support to the FY16 Civil Works budget development cycle to include multiple business lines via an optimization approach developed through the Asset Management initiative.

- Through application of CPT and the Coastal Structures Management Analysis and Ranking Tool (CSMART), quantify and document the role of waterborne transportation within the broader intermodal freight system. Direct annual waterway maintenance actions in terms of overall supply chain performance and availability of alternate modes of transportation. Formulate systems optimization strategies that allocate limited O&M funds according to overall, national performance objectives, rather than project-based metrics.
- Continue supporting USACE Structure Asset Management and Navigation Channel Asset Management via CSMART and CPT, respectively.
- Rollout a statistical analysis package and data mining capability for the vast archive of AIS data presently being maintained by the U.S. Coast Guard as well as by the Corps via the Lock Operations and Management Application (LOMA). This application will enable Corps personnel to quickly analyze and visualize the manner in which commercial vessels maneuver through navigation projects. The large amounts of available data enable quantifiable measures of project functional performance, such as effectiveness of breakwaters at suppressing wave action, presence of adverse currents before and after dredging activity, and possible early-detection of shoaling and other channel obstructions.
- If pilot study initiated in FY13 was successful, continue advancing application of the Channel Analysis and Design Evaluation Tool (CADET) to calculate vessel underkeel clearance and AIS data for use in CPT. Wave and current forcing from the Coastal Modeling System (CMS), vessel types and dimensions from AIS, 3D Channel Framework and recent bathymetry data feed CADET which calculates the underkeel clearance and viability of vessel transit given the shoaled depths for use in CPT.
- Develop and release beta version of GeoDat, a web-based data access and analysis tool to facilitate selection, evaluation, manipulation, generation of report-quality figures, and re-formatting of geospatial data for import to numerical models. GeoDat will access existing online geospatial data sources (bathymetry, shoreline position, 3D channel framework, port and harbor infrastructure, reefs, land elevation, building footprint), facilitate viewing and processing online and downloading to the Surface-water Modeling System (SMS) for use in model applications.
- Complete applied studies with the Coastal Modeling System (CMS) at multiple sites in support of USACE Districts.

Sediment Management Focus Area

- Release version 2.0 of the web-based Tidal Analysis Toolbox to provide time-series analysis of tidal data including harmonic analyses, tidal prediction, data interpolation, data filtering, and principal component analysis. Conduct webinar for District employees to transfer technology.
- Release version of enhanced CMS-2D in the Surface Water Modeling System (SMS). The enhanced CMS-2D includes semi-analytical representations of vertical velocity (due to wind, bottom friction, helical flow, and Coriolis) and sediment concentration profiles (due to vertical mixing and settling) resulting in additional dispersion terms which significantly improve nearshore hydrodynamics and sediment transport. Document operation of the enhanced CMS-2D in a Technical Report.
- Release version 2.0 of the Nearshore Berm Calculator (NBC), a planning-level tool to aid in logistics, placement (cross-shore and alongshore), and preliminary design of dredged sediments that are placed in the nearshore for the purpose(s) of providing a wave break to protect nearshore beaches, engineering with nature to allow finer sediments to move out of the system while moving beach-quality sand onshore, and/or migrate onto the beach providing additional storm protection. Because sediment for nearshore berms most commonly is dredged from adjacent navigation channels, location of the berm relative to the inlet is critical to avoid re-handling dredged sediment. Version 2.0 will update empirical guidance with data from field monitoring and modeling with the CMS.

- Release version 2.0 of the 3D Sediment Resource Tool (3DSRT), an ArcGIS module that facilitates calculating volume, location, and extent of sediment resources for use in dredging operations and shore protection. Version 2.0 will upgrade operation of the 3DSRT based on feedback from users as well as the expanding sediment database as users populate 3DSRT.
- Conduct webinars and workshops demonstrating the NBC and 3DSRT.
- Release Version 3 of the regional shoreline and inlet shoal evolution model, GenCade with upgraded channel infilling and shoal evolution processes. Document application in wiki User's Guide. Update the previous User's Guide published in 2012 with recent upgrades, including regional variability in parameters; cross-shore, channel infilling, and shoal evolution processes. Conduct a webinar short-course to teach recent upgrades.
- Upgrade the Channel Shoaling Toolbox with additional historical dredging data; document validation of methods in an online technical note.
- Extend the National Coastal Engineering Index Report Card in development by the Joint Airborne Lidar Bathymetric Technical Center of Expertise (JABLTCX) to forecast future conditions.
- Develop a Regional Model Linkage, Archival and Sediment Budget Calculator to import calculations from GenCade and the Coastal Modeling System (CMS) and create cells and fluxes based on the calculations. This tool will be able to save and transfer fluxes from one region (calculated from either GenCade or CMS) to the next, therefore facilitating a regional planning tool for decision support. The tool archives data, previous model set ups and allows formulation of a calculated regional sediment budget, and is applied to evaluate different engineering alternatives that incorporate forcing from the results of other regions within the domain.
- Update the web-based Inlets Portal with new web tool releases and updated databases for inlet photographs, nearshore berms, and inlet geomorphology.
- Conduct quarterly short-course webinars to teach updates to CIRP products and technology. Conduct in-person workshop at a District office. Continue transferring knowledge and updates through quarterly eNewsletters. Continue supporting the Coastal Inlets Research Program website: www.cirp.usace.army.mil

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	\$2,944,000	
Allocation for FY12	\$2,620,000	
Conference Allowance for FY13	\$2,700,000	2/
Estimated Carry-In Funds	\$0	
President's Budget for FY14	\$2,700,000	1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Coastal Ocean Data System (CODS) (Formerly Coastal Data Information Program (CDIP))

AUTHORIZATION: Authorization for the Corps of Engineers Engineer Research and Development Center (ERDC) to collect coastal field data is 33 USC 426a which originated with the River and Harbor Act of 1945, which originated in the River and Harbor Act of 1930. The latest Engineering Regulation governing the program is ER 1110-2-1406 dated 1990.

CONFERENCE AMT. FOR FY 2013: \$3,000,000 2/

BUDGETED AMT. FOR FY 2014: \$3,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The integration of the work described below is producing a transformational waves capability for the Corps and Nation. Ocean observations are used to validate numerical hindcast models that calculate wave information over 30 to 50 year periods on the Atlantic & Pacific coasts, Gulf of Mexico and Great Lakes. This wave climate information is combined with storm wave information producing validated long-term and storm waves that drive our next generation risk-based coastal models.

Ocean waves deliver energy to the coast and impact Corps projects and operations. Wave information is imperative for products for operational guidance of USACE dredging, navigation, maintenance, and emergency operations. Wave observations are used in the development and validation of new hindcast wave models and for storm analysis and new wave products are transforming how the Corps, other Federal Agencies, States, Academia, Public, and the Nation use and access accurate wave information. High quality wave information is required for the design of storm protection and navigation projects; to implement Regional Sediment Management (RSM) strategies; and as boundary conditions for all coastal modeling. Inaccurate and insufficient coastal wave data can result in project operation and design uncertainty. Long-term (multiple decades) wave and storm information are also required to determine how climatic changes and extreme events will impact Corps' facilities, projects and mission operations.

Availability of high quality, long-term coastal wave observations varies nationwide with gaps in critical regions, notably the coastal Gulf of Mexico and the mid-Atlantic. For example, when Hurricane Katrina made landfall, there were no high quality directional coastal wave measurements along the central Gulf coast, which hampered post-Katrina forensic efforts. The mid-Atlantic—home to many authorized Corps projects—has been underserved, but this program has improved that situation such that during the passage of Hurricane Sandy in 2012, 10 CODS supported wave gauges (many cooperatively funded) provided real time wave information. The importance of available wave information was highlighted as a critical issue by the USACE's Coastal Working Group of the Hydraulics, Hydrology, and Coastal Community of Practice in a survey on data requirements back in 2009. A request echoed again in 2012.

Besides using data collected by the Corps, our engineers depend on observations collected by others. Because of the Corps interest and expertise in waves, this program has been involved in the global effort to test and evaluate various wave-measuring systems. Evidence indicates that differences in the quality of wave parameters depend on the platform/sensor combination being used, with the potential that during extreme storm scenarios, there could be as much as a 50% over-estimation in the significant wave height from commonly used platforms. This activity is guided under the international Intergovernmental Oceanographic Commission (of UNESCO), and the World Meteorological Organization.

The over-arching objective of the Coastal Ocean Data System (CODS) is to provide high-quality long-term coastal wave information along with storm-event data nationwide, to develop and provide tools for using wave and other data for managing coastal sediment, and to support sustainable coastal and navigation projects under a changing climate.

Coastal Ocean Data System activities include: 1) Wave Observations, 2) Wave Information Studies, 3) Comprehensive storm-event data sets, and 4) Participation in the Integrated Ocean Observing System (IOOS).

Wave Observations: Observation efforts are conducted in partnership with the NOAA National Data Buoy Center (NDBC, www.ndbc.noaa.gov) and through the state of California, the Scripps Institution of Oceanography that maintains a network of shallow-water coastal gauges under their Coastal Data Information Program (CDIP, <http://cdip.ucsd.edu>). These observations are high resolution and of appropriate accuracy for use in Corps wave information hindcast efforts for validation. The data are automatically provided to national data servers of NOAA and are publically available. The popularity of the program is evident from the usage statistics, typically 320,000 hits per day (during 2010) and over 4 gigabytes of daily data downloads. Usage has been increasing 20-30% per year. While CDIP observations have been concentrated in California, recent additions have expanded the coverage nationally including locations relative to major US ports. Much of the recent CDIP expansion has occurred through collaborating with the regional associations of IOOS, where they purchase, deploy, and maintain a buoy, leveraging the Corps investment. In 2009, the Interagency Ocean Observation Committee (IOOC) finalized the first *National Operational Wave Observation Plan* developed by the USACE in collaboration with the NOAA IOOS program office. This was a science-based assessment of the nation's wave observation requirements that identified observation gaps and for the first time, defined a measurement accuracy requirement sufficient to satisfy the directional resolution required by the Corps and others. The plan has already led to national improvements. An update to the Plan began in FY12 and is a milestone requirement of the National Ocean Policy (NOP). The update includes a re-assessment of the number, location, and priority for new locations; tighter integration between wave observations and wave modeling; and strategic recommendations for new products to meet national needs for wave information.

Wave Information Studies. The objective of the *Wave Information Studies* is to provide high-quality coastal wave information, wave analysis products, and decision tools nationwide. The focus is to integrate measurements with model results so that the Corps has access to all available wave information (real-time observations, model hindcasts, and long-term archives) to perform their mission. Wave hindcasts use high quality wind fields and the latest wave modeling technology. To satisfy the Corps requirement for risk-based designs, at least 20-30 years of continuous wave climatology data are required. Hindcast datasets provide hourly wave information for locations every few miles along the coast. Because of this coverage, the Corps, the coastal engineering community, and the public for coastal studies routinely use these datasets. The long-term hindcast wave data are accessible through a website that receives over 16,000 monthly requests for data downloads (<http://wis.usace.army.mil/>). Available observations are used to confirm and validate the hindcast/model data, for quantifying actual conditions, and for understanding long-term wave climatology. Under this activity, wave data users are able to access either hindcast or observed wave data transparently and select powerful analysis products and tools for wave climate and extreme event planning and for decision making using either observations or model estimates, or both.

Storm Event Data Sets. Corps project designs require estimates of the extreme conditions that define and quantify an acceptable level of risk. Because project life cycles can be 50-100 years, it is desirable to extend the extreme event climatologies to be as long as possible, much longer than the maximum wave observation record, which is only ~35 years. This also suggests going back in time, defining extreme events (meteorological, and/or hydrodynamic), develop the wind forcing, and perform wave hindcasts. The wave climatology (similar to that now used by FEMA) based on storm events could be extended over possibly 60 to 70 years. Storm event data of interest besides waves include storm track, wind fields, atmospheric pressure, surge levels, wave runup and beach/channel response.

The Integrated Ocean Observing System Participation: CODS data, including the CDIP observations are a Corps contribution to the *Integrated Ocean Observing System* (IOOS). They support the Coastal Hazards topic under the National Ocean Policy. IOOS is an interagency activity with NOAA as the lead agency. Participating agencies pool, share and coordinate their ocean observations for the benefit of all. To facilitate this coordination, the Corps participates in IOOS workshops, regional associations, and

meetings. The Corps has also established a liaison with the IOOS program office.

PROPOSED ACTIVITIES FOR FY 2014:

- Continue to support the activities of IOOS by participating in the Interagency Ocean Observation Committee (IOOC). Promote the involvement of Corps District and Division offices in their local IOOS regional associations through meetings and workshops. Continue to serve on the IOOS Quality Assurance of Real-time Oceanographic Data (QUARTOD) Board of Advisors and other IOOS committees. \$1.4M
- Sustain the directional wave measurements presently conducted by the NOAA NDBC and Scripps Institution of Oceanography (SIO) for the Corps under the Coastal Data Information Program. Continue the intra-measurement evaluations conducted under the Joint Oceanographic Commission of Oceanography and Marine Meteorology (JCOMM). Coordinate upgrades of NOAA NDBC directional measurement capabilities; collaborate with SIO, NOAA NDBC to leverage the Monterey Bay Buoy Farm (site for intra-measurement evaluations). \$1.2M
- Release of beta version (limited data set/basin specific) of model and measurement databases to CSTORM-DB. Continue to expand the product portfolio based on interaction with Corps field offices (via Coastal Working Group and selected staff elements). \$200K
- Continue development of the Corps Navigation and Coastal Databank and data integration framework to ensure Corps data are available to the coastal community. This includes waves, tides, channel surveys, regional coastal mapping products, and a range of related data produced by the Corps and needed by the Corps, other Federal Agencies, and the public. \$100K
- Continue investigation of measurement gap filling based on model results. \$100K

ACCOMPLISHMENTS IN FY 2013

- Continued to support the activities of IOOS by participating in the Interagency Ocean Observation Committee (IOOC). Promoted the involvement of Corps District and Division offices in their local IOOS regional associations through meetings and workshops. Continued the 50% Corps liaison to the NOAA IOOS program office that started in FY10
- Finalized the update to the *National Operational Wave Observation Plan* as required by National Ocean Policy (NOP). Continued coordination with the international wave measurement community under the governing body of the Joint Oceanographic Commission on Oceanography and Marine Meteorology (JCOMM, <http://www.jcomm.info/wet>). With NDBC, CDIP and Environment Canada, analyzed new observations comparing different platform/sensor configurations (Monterey Bay Buoy Farm). Increased the inter-operability of the WAVE EvalTools (used for intra-measurement evaluations) and established sensor performance metrics for the national and international wave measurement communities.
- Sustained the wave observation program including the directional wave measurements presently conducted by the NOAA NDBC and Scripps Institution of Oceanography for the Corps under the Coastal Data Information Program
- Updated the Atlantic and Gulf of Mexico wave hindcast products through 2010; updated Lakes

Superior, Ontario and Huron (1980 through 2009). Procured updated wind fields for all domains through 2012 to initiate the annual hindcast update.

- Initiated the merging of the wave databases (model and measurement) into CSTORM-DB. Increased the number of products to perform desktop analysis of long-term wave estimates and extreme storm event scenarios.
- Investigated using model results to fill gaps in measurement results to provide improve the completeness of the long-term wave observations in order to better quantify extreme storm event conditions.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	\$0	
Allocation for FY12	\$4,369,000	
Conference Allowance for FY13	\$3,000,000	
Allocations through FY13	\$3,000,000	2/
Estimated Carry-In Funds	\$0	
President's Budget for FY14	\$3,000,000	1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Responses to Climate Change at Corps Projects

AUTHORIZATION: Various authorities including Section 216 of the River and Harbor and Flood Control Act of 1970, Section 731 of the Water Resources Development Act of 1986, specific project and purpose authorizations, and Executive Order 13514.

LOCATION AND DESCRIPTION: O&M Remaining Item, Nationwide. The Responses to Climate Change Program provides planning and engineering guidance along with the supporting tools required so that future infrastructure is designed to be sustainable and robust to climate changes, such as changes in temperature, precipitation, and sea level, increased variability of floods and droughts, increases in very heavy precipitation event, changes in the form of precipitation (snow vs. rain), and altered storm intensity, frequency, and track. Because climate change and water availability and quality are so closely linked, climate change has the potential to affect almost all the missions of the U.S. Army Corps of Engineers (USACE), particularly the operations and water management control activities associated with the existing capital stock of USACE water projects. Continued effective and efficient water operations in both the short (5-10 years) and longer term (10—100 Years) require nationally consistent and regionally tailored water management adaptation strategies and policies. The Responses to Climate Change Program is partnering with other Federal science and water management agencies, and other stakeholders, to develop and implement practical, nationally consistent, and cost-effective approaches and policies to reduce potential vulnerabilities to the Nation's water infrastructure resulting from climate change and variability. These policies balance authorized project purposes project operations and water allocations with changing water needs and climate-driven changes, working in close coordination with a wide variety of intergovernmental stakeholders and partners

CONFERENCE AMOUNT FOR FY 13: \$ 5,000,000 2/

BUDGETED AMOUNT FOR FY 14: \$5,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 14:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: \$5,000,000 will be used to continue development and implementation of methods for risk-based decision making that incorporate future climate uncertainty into USACE decisions with specific application to ecosystem restoration, flood risk management, and water management. Support integrated water resources management frameworks, including integrated flood and drought risk management and adaptive management, as outlined in the National Action Plan Priorities for Managing Freshwater Resources in a Changing Climate. Provide practical guidance and policies for planners and engineers to deal with hydrologic frequency analysis under changing conditions. Continue vulnerability assessments of existing portfolio of USACE Civil Works systems and projects; assess vulnerability of ecosystems impacted by USACE projects and systems. Conduct additional pilot studies on river basin systems and coastal regions in coordination with other Federal agencies and state and local stakeholders to assess vulnerability and adaptation strategies. Support regional climate change adaptation efforts that include

collaboration among other Federal agencies, states, tribes, local governments, and other stakeholders.

WS: N/A

OTHER INFORMATION: USACE is coordinating with other Federal and State agencies on adaptations to climate change for water resources and coastal management, including the U.S. Geological Survey (USGS), U.S. Bureau of Reclamation (Reclamation), National Oceanic and Atmospheric Administration (NOAA), the Environmental Protection Agency (EPA), the Federal Emergency Management Agency (FEMA), the U.S. Department of Transportation (USDOT), and other Federal, state and local agencies. The activity provides resources to support the development of consistent policies among Federal agencies toward climate change.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Cultural Resources (NAGPRA/Curation)

AUTHORIZATION: The Native American Graves Protection and Repatriation Act (NAGPRA), P.L. 101-601, enacted on 16 November 1990 contains data gathering, reporting, consultation, repatriation, and permitting provisions that have near-term and long-term implications for Civil Works programs and projects.

LOCATION AND DESCRIPTION: This nationwide project encompasses all civil work districts with the goal of ensuring USACE compliance with the reporting requirements of NAGPRA and the federal curation regulation, 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections.

CONFERENCE AMOUNT FOR FY2013: \$4,500,000 2/

BUDGETED AMOUNT FOR FY2014: \$4,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The Native American Graves Protection and Repatriation Act (NAGPRA) addresses the recovery, treatment, and repatriation of Native American and Native Hawaiian cultural items by Federal agencies and museums. As defined by the Act, cultural items are human remains, associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony. In FY 1994, the Corps began the process of inventorying human remains and associated funerary objects and completing summaries as mandated by the legislation. In addition, the Corps is responsible for curation of cultural resource materials collected from its water resources development projects. A Mandatory Center of Expertise (MCX), located at the St. Louis District, provides overall management of the Corps NAGPRA programs and serves as an information source and a centralized base for curation compliance and contracting. The MCX will facilitate the assurance of consistent nationwide NAGPRA program implementation and operation. The Corps is responsible for the curation of at least 46,255 cubic feet of artifacts collected from its water resources development projects and at least 3,511 linear feet of associated records. Curation of these materials, the largest volume of all federal agencies responsible for this activity, is required by a number of public laws with implementing guidance in 36 CFR Part 79. Corps collections represent over 80 percent of the total DoD collections. These extensive collections are located in hundreds of curation facilities across the nation. The costs are to accomplish NAGPRA work and to fund MCX curation support to the districts. Associated with efforts to complete NAGPRA and because of the fragile nature of many of the artifact and record collections, the MCX is seeking to accelerate the process of effectively managing the Corps curation effort with a project (i.e., Veterans Curation Project) that provides disabled veterans with training and additional job skills in archaeological collections management, while providing for the rehabilitation of the fragile collections. Funding this item will ensure full USACE compliance with NAGPRA legislation and expedite collection stabilization, proper storage, and curation support to all Districts.

PROPOSED ACTIVITIES FOR FY 2014: The MCX and Corps Commands will continue the process of inventorying Native American and Native Hawaiian human remains and associated funerary objects and complete summaries of unassociated funerary objects, sacred objects, and objects of cultural patrimony as mandated by the legislation. Information will be made available to interested individuals and groups through notices in the Federal Register. Through MCX-provided funding, districts will continue to be engaged in formal consultation with tribes for the legislated purpose of repatriating cultural objects for which there are legitimate claims. The MCX will continue to fulfill its chartered activities in support of other military services and DoD and lead in the implementation of an agency-wide, long-term plan for the curation of USACE archeological collections (heritage assets). The MCX will implement the initial phases of the curation task plan, which involves addressing the rehabilitation needs of USACE's most critical archeological collections and continuing the Veterans Curation Project; however, due to increasing costs, the staffing of veterans and the rehabilitation of at-risk archaeological materials and associated records will be reduced in FY 2014. The MCX will also continue to work closely with USACE commands on the implementation of final guidelines and procedures for field collection of archeological materials and the long-term treatment of those collections. In this regard, the MCX will act as a source of expertise for

O&M Justification Sheet

processing and rehabilitation of USACE collections. Finally, the MCX will provide leadership in the development of a training curriculum on the treatment of heritage assets and working in consultation with all stakeholders and take initial steps to make this training available to USACE and other appropriate DoD managers and decision makers.

OTHER INFORMATION: A Mandatory Center of Expertise (MCX), located at the St. Louis District, was established to provide overall management of the Corps NAGPRA programs and has served as an information source, a centralized base for curation compliance and contracting. The MCX has facilitated the assurance of consistent nationwide program implementation and operation. The MCX, in providing NAGPRA inventories, has assisted in establishing the extent of Corps holdings. Associated with efforts to complete NAGPRA, the MCX began the process of effectively managing the Corps curation efforts. A phased task plan for curation has been developed and is being implemented on at-risk collections. In addition, the MCX supports and leads the Veteran's Curation Project, whereby disabled veterans receive training in proper identification and curation of artifacts. The project gives them additional qualifications for employment after military service and rehabilitates at-risk archaeological collections.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

Dredge McFARLAND Ready Reserve

SUMMARIZED FINANCIAL DATA:

Budget Amount for FY 2014	\$11,857,000 1/
Allocation for FY 2011	\$11,776,463
Allocation for FY 2012	\$11,642,400
Budget for FY 2013	\$11,840,000 2/

AUTHORIZATION: Section 2047(a) of the Water Resources Development Act (WRDA) of 2007, Federal Hopper Dredges, which amends Section 563, Hopper Dredge McFARLAND, of WRDA 1996, contains a provision requiring the Corps Hopper Dredge McFARLAND to be placed in a Ready Reserve status not earlier than 1 October 2009, and not later than 31 Dec 2009. Directs the Secretary to periodically perform routine underway dredging tests of the equipment, limit any scheduled hopper dredging work, perform any repairs necessary to maintain the vessel in a ready reserve fully operational conditions, and place the vessel in active status for dredging only under specified conditions

JUSTIFICATION: Prior to FY 2010, the total costs of operating the Hopper Dredge McFARLAND were charged to projects funded from the Operation and Maintenance appropriation, and were eligible for full reimbursement from the Harbor Maintenance Trust Fund. The Hopper Dredge MCFARLAND was placed in a Ready Reserve status in December 2009 as required by Section 2047 of WRDA 2007. \$12M of annual operating costs that was previously paid by project funds after December 2009 is now required to be provided by this allocation.

PROPOSED ACTIVITIES FOR FY 2014: The Hopper Dredge McFARLAND will not be assigned any scheduled hopper dredging work other than 70 days to perform routine underway dredging tests of the equipment that will be completed in the Delaware River and Bay. These exercises/tests maintain the skills of the crew, and ensure that the McFARLAND remains in a fully operational state, ready to respond to any emergent or urgent dredging requirements. The Hopper Dredge McFARLAND will remain at the dock, with sufficient crew to respond within 72 hours when directed by higher authority for urgent and emergency purposes. The dredge will be placed in an active status in order to perform work in those instances when private industry fails to submit a responsive or responsible bid for advertised dredging, or where industry has failed to perform under an existing contract or other urgent or emergency requirements as determined by the Secretary.

ACCOMPLISHMENTS IN PRIOR YEARS: The Hopper Dredge McFARLAND performed 140 days of "active" dredging work along the East and Gulf Coasts moving in excess of 2 million cubic yards of dredged material in FY 2009. The Dredge McFARLAND was fully funded annually through FY 2009 using O&M funding for which the vessel worked. In FY 2010, her first year in Ready Reserve, the McFARLAND completed her scheduled training exercises in the Delaware River and on two separate occasions, the dredge was deployed under Ready Reserve by USACE Headquarters for a total of 96 days of ready reserve dredging on the Mississippi River's Southwest Pass. The vessel completed her 70 days of training in FY2011 in the Delaware River. The vessel was not called out for ready reserve in FY2011 but did complete a 6 month major shipyard overhaul scheduled around her training exercise schedule. In FY 2012 the vessel was called out for a 30-day ready reserve assignment for Wilmington District at Morehead City, NC and completed the 70 scheduled training days in the Delaware River. In FY 2013 the vessel was called out for a 30-day ready reserve assignment for Wilmington District at Morehead City, NC and is scheduled to complete the 70 scheduled training days in the Delaware River.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

Dredge Wheeler Ready Reserve

SUMMARIZED FINANCIAL DATA:

Allocation for FY 2013	\$12,000,000 2/
Allocation Requested for FY 2014	\$12,000,000 1/

AUTHORIZATION: Section 237 of the Water Resources Development Act of 1996 (WRDA '96) contained a provision requiring the Corps Hopper Dredge WHEELER to be placed in a ready reserve status effective 1 Oct. 1997.

JUSTIFICATION: Section 237 requires that no individual project funds may be used to fund the dredge in its ready reserve status unless the dredge is specifically used in conjunction with a project. Prior to Fiscal Year (FY) 1998, the costs for operation of the WHEELER were charged to projects funded from the Operation and Maintenance appropriation, and were eligible for reimbursement from the Harbor Maintenance Trust Fund. In FY 1998, the WHEELER was placed in a ready reserve status as required by the above referenced section of WRDA '96. Maintenance and repairs costs have risen as the vessel ages.

PROPOSED ACTIVITIES FOR FY 2014: The Hopper Dredge WHEELER, will remain in ready reserve status, and will not be assigned any scheduled hopper dredging work other than 70 days of maintenance dredging that will be completed in conjunction with training exercises to maintain the skills of the crew, and ensure that the WHEELER remains in a fully operational state, ready to respond to any emergent dredging requirements. The Hopper Dredge WHEELER will remain at the dock, with sufficient crew to respond within 72 hours when directed by higher authority. The dredge will be placed in an active status in order to perform work in those instances when private industry fails to submit a responsive or responsible bid for advertised dredging, or where industry has failed to perform under an existing contract.

ACCOMPLISHMENTS IN PRIOR YEARS: The Hopper Dredge Wheeler has been maintained in a fully operational state and periodically performed routine dredging operations to test equipment and keep the crew trained and prepared. In every year but one, since being placed in Ready Reserve status in FY 1998, the WHEELER was called out to perform urgent dredging to assist industry dredges in restoring navigation channels and waterways. During FY 2011 while in Ready Reserve, the WHEELER completed 133 days of dredging through a combination of training exercises and multiple deployments by USACE Headquarters to perform urgent dredging on the Mississippi River, Southwest Pass. During FY 2012, the Wheeler completed 128 days of dredging through a combination of training exercises and multiple deployments by USACE Headquarters to perform urgent dredging on the Mississippi River, Southwest Pass. The vessel is being repowered at a Gulf coast shipyard during the first and second quarters of FY 2013. The Wheeler is scheduled to perform 70 days of maintenance dredging in FY 2013 that will be completed in conjunction with training exercises to maintain the skills of the crew, and ensure that the WHEELER remains in a fully operational state, ready to respond to any emergent dredging requirements. The first training exercise of FY 2013 is scheduled to begin 30 April in the Mississippi River, Southwest Pass.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Dredging Data and Lock Performance Monitoring System

AUTHORIZATION: The authority for the U.S. Army Corps of Engineers to collect data on vessel operations and cargo transiting navigation locks is contained in 33 C.F.R Part 207.800 Collection of Navigation Statistics (b)(2)(F)(3)(iv). These data are necessary to provide dredging and lock data for efficient management of Congressionally authorized navigation projects, to meet the OMB performance requirements, to supply data for analysis and modeling, as well as to respond to specific public laws, including PL 96-269 (Minimum Dredge Fleet), PL 100-656 (Small Business Set-Aside), for meeting the Government Performance and Results Act (GPRA), the Government Paperwork Elimination Act (GPEA) and Clinger-Cohen/IT Management Reform Act.

LOCATION AND DESCRIPTION: This is a national system.

CONFERENCE AMOUNT FOR FY 2013: \$1,150,000 2/

BUDGETED AMOUNT FOR FY 2014: \$1,150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$1,150,000 will continue to support the Corps Navigation responsibilities and be responsive to changing data needs by maintaining the Lock and Dredging information systems and data warehouse; providing essential upgrades, security and user support; developing additional data warehouse reports to support emerging data requirements for the performance based budget; working closely with the Lock Operators Management Application (LOMA) team to develop and deploy new capabilities for the navigation information portal for Corps and industry; and work with the Inland Marine Transportation System (IMTS) to monitor performance as implementation progresses. Through the Navigation Data Integration Framework effort coordinate and share data with other navigation information databases such as Dredging Quality Management (DQM), Asset Management and Resident Management System (RMS) to reduce data redundancy and provide more robust information. Continue tracking forecasts for the world vessel fleet, commodities and trade; expand voyage ports-of-call information for containerships; and continue analyses of marine transportation system current and future channel and infrastructure requirements for coastal harbors and inland waterways. Provide dredging and lock analytical, technical, and data support for Corps HQ, division and district offices.

The dredging and lock data collection and processing programs provide baseline navigation information and analysis to support operational and strategic management decisions, is used in the budget formulation process and performance measures for the Corps navigation projects and program. This includes, lock operations on the inland waterways; the operation and maintenance of federally authorized navigation channels; performance measures to determine the quality of service and meet OMB performance measures; supports the projections of capital investments, justification and validation of future national navigation needs. Information includes Corps performed and contracted dredging (location, quantity, cost etc.); all lock activities (barges and tons of commodities, chamber unavailability, processing times, delays etc.), and physical descriptions of all the Corps owned/operated locks. The funds support the database management, operation, quality control, user assistance, training, compliance with security requirements and ACE-IT services. Both systems are the sole source of dredging and lock data/information for the Corps, Federal government and industry. These databases are transactional systems within the Corps centralized Operations and Maintenance corporate information system. They are reported under OMBIL-Plus in ITIPS and the OMB 300b submittal accounting for \$611,917 of the overall OMBIL-Plus costs for FY 2014.

FOA: Institute for Water Resources

Dredging Data & Lock Performance Monitoring System

Technological change in the shipping industry is a continual process requiring ongoing analytical efforts to estimate the nation's future maintenance dredging needs. Update of current and future vessel characteristics, channel dimensions, commodity origins-destinations, vessel cost parameters, and other shipping data are needed to support the Corps maintenance dredging program. Tasks include tracking world trade and vessel fleet forecasts; analyses of current and projected trade patterns; assessing capability of planned and underway channel improvements to meet current and future demand, and the collection and associated analysis of dredging information and performance data in support of Civil Works navigation program decisions and budget priorities.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION:

ACCOMPLISHMENTS IN PRIOR YEARS: For this continuing program provided lock and dredging data and information critical for navigation performance measures, budget preparation and prioritization, the assessment of dredge bidding competition, national and regional trends in dredging costs and quantity, the annual small business reports for Small and Disadvantaged Business Utilization (SADBU), and lock availability and performance. Integrated two separate lock data input schemes into a single data input process. Performed operations, maintenance, system upgrades, security and user support for dredging and lock data systems. Initiated and deployed a program to automatically collect real-time lock data of timing events to significantly improve data quality while providing the lock operator improved situational awareness, more flexibility in his ability to manage workload and more time to perform the primary function of safely locking vessels. Conducted in-depth review of Dredging Information System and implemented changes in response to the GAO study of benefits and effects of the Corps dredge fleet. Modified the Dredging Information System to meet a HQ requirement to track ARRA funded dredging projects and the capture of the beneficial use of dredged material. An assessment of the value of different commodities moving in domestic waterborne inland, intracoastal and Great Lakes waterborne commerce was initiated, and assistance was provided to the National Research Council's Marine Board to conduct an MTS Research & Technology Seminar. World trade and vessel fleet forecasts were updated. Technical and analytical assistance was provided on channel and navigation infrastructure needs to HQ and Corps offices.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Dredging Operations and Environmental Research (DOER) Program

AUTHORIZATION: The Clean Water Act; the Marine Protection, Research and Sanctuaries Act; and Water Resources Development Acts from 1986 and following contain numerous requirements and provisions addressing contaminated sediments in navigation channels, dredged material management, and beneficial uses of dredged sediments that focus the continued need for innovation and technology development.

CONFERENCE AMT. FOR FY 2013: \$6,300,000 2/

BUDGETED AMT. FOR FY 2014: \$6,450,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The Dredging Operations and Environmental Research (DOER) program is the only research program in the Federal government that addresses the science, engineering, and technology needs related to dredging and managing between 200 and 300 million cubic yards of sediment that must be removed from navigation channels, ports, and harbors in the United States every year. The risks and opportunities related to 1) contaminated sediments in navigation channels and harbors, 2) optimizing dredged material management, and 3) beneficial uses of dredged sediment to restore habitat, ecosystems, and coastal recreational services mandate a continuing need for developing and applying innovative practice and technology. Contaminant detection limits are now so low that sub-trace levels of toxic substances are identified. High profile contaminants continue to plague numerous Federal and permitted dredging projects. Traditional upland disposal areas have reached or are rapidly approaching capacity with few opportunities for new facilities. Aquatic placement of dredged material, which can provide both economic and environmental benefits, must be performed in a sustainable manner that addresses and manages the risks associated with contaminant exposures, the presence of threatened and endangered species, and other uses of the water body. Innovative management practices are required to ensure that environmental standards can be achieved for dredging operations in a way that minimizes costs while maximizing sustained environmental benefits from using dredged material to accomplish habitat and ecosystem restoration and produce recreational benefits. Existing knowledge gaps in relevant physical, chemical, biological, and engineering processes lead to inefficient operations, higher management costs, and limited management and beneficial use options. Performance standards and guidance for existing and improved practices are critical needs. Risk-based assessment and management practices are needed to ensure both the economic and environmental viability of navigation dredging operations. Beneficial use/reuse of dredged material is a priority and environmental resource protection is a mandate; however, costs are increasing due to the constraints noted above. Continued economic viability and security of the Nation will depend upon our ability to remove, manage and beneficially reuse dredged material in a cost-effective and environmentally responsible manner. Continued engineering and environmental innovation will be essential to managing costs and risks.

The DOER Program is an integral and highly beneficial component of the Corps' navigation dredging and environmental protection missions. Dredging and dredged material management must be accomplished within a climate of increased dredging workload, fewer placement sites, increased environmental constraints, and decreasing fiscal and manpower resources. Balancing environmental protection, restoration opportunities and critical economic needs, while maintaining and enhancing navigation infrastructure, presents significant technical challenges. The DOER program has validated innovative technologies for managing high profile contaminants and developed risk-based assessment and management practices that will significantly reduce costs for all navigation projects, ports, and harbors. Advancing the assessment and management practices used by the U.S. Navigation Program is critical to sustaining the economic and environmental benefits produced by the USACE dredging program.

Major focus areas of DOER include: (1) sediment and dredging processes, (2) environmental resource management, (3) dredged material management, and (4) risk management.

PROPOSED ACTIVITIES FOR FY 2014:

Sediment and Dredging Processes: The SDP Focus Area will 1) demonstrate sediment budget methods for regions that include navigation channels to improve environmental assessments and increase efficiency of operations, 2) refine models for assessing contaminant and nutrient release during dredging operations, 3) develop tools to optimize beneficial use, including shallow water placement and open lake placement, 4) identify and enhance technologies to reduce channel infilling and the associated need for dredging, 5) evaluate sedimentation processes in coastal wetlands to improve wetland creation projects achieved through beneficial use of dredged sediments, 6) provide engineering guidance to support use of nautical depth in channels with fluid mud bottoms to ensure safe, reliable navigation and efficient dredging project management. Specific FY14 products include:

- Publish demonstration results for regional sediment resuspension budgets
- Publish improved model for nutrient and contaminant release
- Develop and publish new model for engineering near-shore placement of sediment for beneficial use
- Publish methods for reducing channel in-filling and dredging volumes
- Improved description of sedimentation processes in wetland environments to support beneficial use engineering
- Demonstrate and publish results of fine-scale sedimentation methods
- Publish engineering guidance for implementing nautical depth approach for U.S. Navigation Program

Environmental Resource Management: The ERM Focus Area will 1) initiate development of ecologically based design for beach nourishment with dredged sediments, 2) enhance modeling and analysis tools to define costs and alternative management practices for seasonal restrictions on dredging (i.e., environmental windows), 3) develop new technologies for detecting and managing risks to large aquatic species (e.g., marine mammals and turtles), 4) complete research and model development to reduce costs and constraints related to Interior Least Tern birds, 5) publish online database documenting Engineering With Nature projects and practices, 6) develop and publish guidance on underwater noise produced by dredging operations in relation to impacts on sensitive aquatic species and 7) document environmental and fisheries benefits from open-water placement of dredged sediments. Specific FY14 products include:

- Publish model for evaluating effects of dredging activity on population status of endangered Interior Least Terns
- Publish findings related to new technologies for managing risks for large aquatic species during dredging operations
- Publish results documenting fishery resource use of dredged material placement sites
- Publish new simulation model for predicting exposures of fish eggs and larvae to sediment suspended by dredging operations
- Publish guidance on environmental risks associated with underwater noise produced by dredging operations
- Document opportunities for new aquatic beneficial use alternatives for dredged material
- Publish online Engineering With Nature database

Dredged Material Management: The DMM Focus Area will: 1) develop data tools to expedite and improve operational design and management, 2) incorporate enhanced hydrodynamic model for improved sediment transport modeling, 3) develop tools to support placement of dredged material in nearshore and wetland conditions for the purpose of building land or enhancing habitat, 4) publish improved particle tracking model for dredging operations design, 5) develop and publish new continuous

and discrete discharge model for efficient dredged material management, 6) initiate GIS tool development for identifying beneficial use opportunities. Specific FY14 products include:

- Publish Dredging Portal system to optimize dredging operations
- Publish results demonstrating enhanced long-term fate model
- Publish results of new open water dredged material placement models for continuous and discrete flows
- Publish study results demonstrating nearshore beneficial use projects for building land or enhancing habitat
- Develop design for GIS planning tool for beneficial use projects

Risk Management: The RM Focus Area will 1) develop new risk models for environmental evaluations of dredged material, 2) publish demonstrations of decision modeling to optimize dredged material management, 3) document innovative treatment methods that can be applied to dredged material to reduce costs associated with managing contaminated sediments, 4) initiate development of next-generation toxicity tests to increase the cost-efficiency of environmental assessments of dredged material, 5) publish guidance on life cycle analysis for dredging projects to reduce long-term costs, 6) develop guidance for monitoring environmental conditions and benefits associated with sediment management. Specific FY14 products include:

- Publish new spatial bioaccumulation model for assessing risks from contaminated dredged material
- Publish case examples of decision modeling to guide efficient environmental management of dredged material
- Develop cost-effective treatment technologies for contaminated dredged material
- Publish method to apply life cycle analysis to the U.S. dredging program
- Publish descriptions of new toxicity testing methods for dredged material
- Design requirements for environmental monitoring metrics

LNG Demonstration: Convert an existing floating plant to run on LNG to demonstrate the viability and measure the reduction in emissions. The intent is to determine the feasibility and costs of the conversion and operations.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	\$6,870,000	
Allocation for FY12	\$6,114,000	
Conference Allowance for FY13	\$6,300,000	2/
Estimated Carry-In Funds	\$0	
President's Budget for FY14	\$6,450,000	1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Dredging Operations Technical Support (DOTS) Program

AUTHORIZATION: Authorization for the Corps of Engineers Engineer Research and Development Center (ERDC) to conduct R&D is codified in 10 U.S.C. 2358 ("The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that are necessary to the responsibilities of such Secretary's department in the field of research and development.")

CONFERENCE AMT. FOR FY 2013: \$2,820,000 2/

BUDGETED AMT. FOR FY 2014: \$2,820,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

Maintenance of the nation's navigation infrastructure requires compliance with numerous complex environmental statutes and Presidential Executive Orders. The Dredging Operations Technical Support (DOTS) Program fosters a "one-door-to-the-Corps" clearinghouse for access to comprehensive information on technology related to navigation O&M functions, including technology demonstrations and training essential to all stakeholders involved in Federal and permitted navigation projects. DOTS is structured as a centralized source for technology transfer that maximizes cost effectiveness and facilitates expeditious and consistent implementation of national policies and laws based on complex technical requirements. The DOTS Program fosters application of state-of-the-art technologies and ongoing research results for high priority problems identified by field offices. Emerging environmental concerns often cause uncertainty and unanticipated difficulties in the administration of the Corps' navigation dredging program. The DOTS program's technology transfer function provides access to an extensive, up-to-date, consistent technology base whereby timely, proactive responses to technical issues can be made as they emerge. This approach promotes networking and solutions to common problems confronting the navigation dredging community. DOTS supports knowledge-based exchange of information throughout the interagency coordination process. Short-term work efforts to address generic Corps-wide technical problems encountered during maintenance of navigable waterways and infrastructure are major features of the DOTS Program. Technology transfer and demonstration of new techniques with potentially high returns on investment for management of Corps navigation maintenance projects are critical DOTS functions. By disseminating technically sound knowledge to field offices constrained by staff reductions and limited resources, the DOTS Program will continue to perform a critical technology transfer role in support of all O&M navigation projects. DOTS fosters productive, collaborative relationships with other federal and state agencies with missions relevant to navigation, particularly the US Environmental Protection Agency, and academic institutions, including the National Academy of Sciences.

PROPOSED ACTIVITIES FOR FY 2014:

- The Dredging Innovations Group (DIG) within DOTS will continue to provide tools and support to Districts, Divisions, and Headquarters to optimize overall navigation system performance. Continued optimization of the National dredging program requires improved tools, methodologies, and practices to formulate the most efficient and nationally coordinated program. This effort supports a dredging innovation group to bring ERDC, District, and industry expertise together and create new capabilities, tools, and methodologies supporting national planning and implementation. For example, this effort contributes to further development and implementation of Dredging Quality Management technologies, which provides real time dredging process data to Districts, fostering efficient operations. The DIG also supports dredging project scheduling optimization with software tools capable of performing sensitivity analyses to obtain cost savings.

Engineer Research and Development Center

Project Name: Dredging Operations Technical Support Program

The DIG also develops enhanced risk assessment tools for quantifying uncertainties associated with dredging processes.

- Expand support for technical responses to field offices encountering problematic navigation issues. Whereas DOTS has historically concentrated on dredging and dredged material placement, the program's resources have been increasingly requested by personnel engaged in many other navigation-relevant activities (e.g., safe inland navigation lock operations, coastal inlet sedimentation issues, navigation structure performance, etc.). Increasing demand for rapid technical advice continues to be constrained by available funding.
- Continue critical support of ongoing efforts to resolve expensive, controversial conflicts between navigation O&M activities and protection of Threatened and Endangered Species through effective interagency coordination and collaboration with credible, independent third parties. One example is sponsoring the American Bird Conservancy to mediate and determine most effective recovery strategies for the endangered Interior Least Tern. Separately, ongoing engagement with multiple agencies seeking improved management practices for protection of endangered sea turtles yielded progress toward more flexible environmental windows and potentially substantial cost savings across multiple NAD, SAD, MVD, and SWD Districts. These efforts, which have high probabilities of long-term substantive cost savings to the O&M budget, require expanded short-term investments. Likewise, emerging issues related to protection of species proposed for federal listing (e.g., Atlantic sturgeon) are best addressed through proactive exchange of knowledge pertaining to dredging and other navigation O&M processes in order that informed decisions be integrated into mandated protection measures upon listing.
- DOTS continues to support standardized reporting to the US Fish and Wildlife Service of Endangered Species Act compliance costs affecting O&M navigation projects as mandated by Congress. Prior to implementation of the DOTS-sponsored system, costs were estimated using arbitrary methods.
- Continue coordination with the Transportation Research Board of the National Academy of Sciences with regard to navigation-relevant issues.
- Expand support of mandated reporting to other Federal and international agencies with regard to dredged material placement in oceanic waters and costs of compliance for navigation projects with the Endangered Species Act. DOTS developed standardized, faster, accessible, and accurate web-based tools for satisfying these requirements. Ongoing efforts will refine these tools for expedited use by field office users.
- Expand investment in training of Corps and regulatory agency staff in dredging and other navigation mission processes. Existing training materials that have become outdated need to be revised. New opportunities for regional training exercises will be sought. Training of newly recruited Corps and regulatory agency personnel show significant payback in the form of conflict avoidance and project execution delays stemming from unfamiliarity with basic dredging processes and misperceptions. Education of personnel engaged in navigation project planning, implementation, operation, and maintenance is a critical limitation as demographics in the regulatory agencies change through pulses of retirement and recruitment.
- Continue expansion of web-based tools and access to existing knowledge pertaining to the broad navigation mission. This activity was given a major emphasis in order to keep pace with rapid advances in information sharing technologies and growing dependence on internet resources.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	\$1,963,000
Allocation for FY12	\$2,736,000
Conference Allowance for FY13	\$2,820,000
Allocations through FY13	\$2,820,000 2/
Estimated Carry-In Funds	\$0
President's Budget for FY14	\$2,820,000 1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Earthquake Hazards Reduction Program.

AUTHORIZATION: This program is being conducted under the authority of PL 101-614, November 1990, National Earthquake Hazards Reduction Program Re-Authorization Act.

LOCATION AND DESCRIPTION: Nationwide Program. The purpose of this program is to respond to the requirements of PL 101-614, National Earthquake Hazards Reduction Program (NEHRP) and Executive Order 12941, Seismic Safety of Existing Federal Buildings. This Executive Order directs all Federal departments and agencies to develop an inventory of their owned and leased buildings and to estimate of the cost of mitigating unacceptable seismic risks in their buildings. The objective of PL 101-614 is to establish and initiate, for buildings and lifelines, a systematic approach designed to reduce the loss of life, reduce injuries and to reduce the economic costs resulting from earthquakes occurring in the United States. Lifelines are defined as public works systems and utility systems.

CONFERENCE AMOUNT FOR FY 2013: \$ 270,000 2/

BUDGETED AMOUNT FOR FY 2014: \$ 270,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: Continued development and refinement of the SSAC or Seismic Safety Action Classification System. This program provides evaluation and mitigation procedures for seismically deficient buildings while ranking them in order of greatest risk. This program will meet the executive order requirements and the legal concerns, while continuing to develop technical seismic building evaluation and mitigation procedures. USACE has a legal opinion that indicates that once we have identified seismically vulnerable structures we are legally responsible to develop a plan to mitigate these vulnerabilities. As part of this program, seismic evaluation personnel will be identified and appropriately trained. Continue to develop and refine guidance on the seismic evaluation and risk mitigation procedures of lifeline facilities, this includes publishing material such as EM 6057, Seismic Lifeline Evaluation for Hydropower Components. Continue to provide assistance to Districts and Divisions in the development of mitigation concepts and designs and to provide required support to HQUSACE. In addition, funds from this program helps to maintain technical seismic expertise, develop guidance for additional lifeline systems not previously covered in commercially available standards or existing USACE guidance, and to develop guidance for operations personnel. This program will also continue to fund the publication of new criteria and the updating of existing seismic criteria. Example publications are ER 1806 and ER 8161, 'Earthquake Design and Evaluation of Civil Works Projects' and 'Seismic Design of Civil Works Buildings'.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 12,000 owned buildings and powerhouses have been inventoried. Seismic screenings of over 700 buildings in all seismic regions have been accomplished. Seismic

evaluations have been performed on over 200 buildings and powerhouses in various geographic regions, primarily in high and moderate seismic regions. Reports have been developed for FEMA to be forwarded to Congress on buildings and powerhouses. Criteria has been developed and published for the evaluation and mitigation of buildings and lifelines. In addition, building evaluation criteria, powerhouse evaluation criteria and lifeline criteria for intake towers, navigation locks, and powerhouses have all been developed. Seismic evaluation and mitigation seminars have been conducted for District and Division personnel. Technical support has been provided to the districts and divisions in accomplishing evaluations. Over 30 rehabilitation case studies and over 25 rehabilitation cost estimate studies for structural or nonstructural powerhouse deficiencies have also been accomplished.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Facility Protection

AUTHORIZATION: The Energy and Water Development Appropriations Act, 2002 (PL 107-66), Consolidated Appropriations Resolution 2003 (PL 108-7), Energy and Water Development Appropriations Act 2004 (PL 108-137), Consolidated Appropriations Resolution 2005 (PL 108-447), Energy and Water Development Appropriations Act 2006 (PL 109-103).

CONFERENCE AMOUNT FOR FY 2013: \$5,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$5,500,000 O: \$0 T: \$5,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: The requested funding will support the following FY 2014 activities to be executed through the U.S. Army Corps of Engineers (USACE) Critical Infrastructure Protection & Resilience (CIPR) Program: USACE's 2014 implementation of a Consequence-Based Top Screening (CTS) methodology for systematic screening and consistent prioritization of high-consequence (critical) dams and navigation locks; implementation of regional resilience efforts supporting the development of integrated regional strategies incorporating public and private stakeholders within a region to help identify, analyze, assess, and enhance regional preparedness and disaster resilience using multi-jurisdictional discussion-based activities; development of consequence analysis studies and system-based interdependency assessments at Corps civil works critical projects through USACE's Modeling, Mapping, and Consequence Estimation Production Center of Expertise; development of advanced modeling and simulation studies for critical infrastructure, and; collaborate in the implementation of a systematic approach and risk-mitigation strategy for evaluation and comparison of security risks across USACE's critical infrastructure portfolio (e.g. Common Risk Model for Dams) and identify requirements for risk mitigation to manmade threats. In addition, it will also support additional requirements associated with a surge in security risk reduction measures at USACE critical projects due to increased threat levels.

The USACE CIPR program goal is to achieve a more secure and more resilient civil works critical infrastructure by enhancing its protection in order to prevent, deter, or mitigate the effects of manmade incidents and improve preparedness, response, and rapid recovery in the event of an attack, natural disaster, and other emergencies. The CIPR program supports the National Infrastructure Protection Plan and the National Response Framework, and it is directly aligned with the Dams Sector-Specific Plan. The objectives of the CIPR program include assessing and prioritizing Corps civil works critical infrastructure by implementing a portfolio-wide risk assessment framework. The CIPR program focus is not necessarily facility specific, as it addresses portfolio-wide resilience-enhancing efforts. This holistic, integrated framework is facilitated through the implementation of system-wide and asset-specific integrated actions for enhanced protection and resilience at USACE critical infrastructure facilities. The goals of the CIPR program are to develop, implement and sustain an integrated risk-based assessment & management framework for Corps civil works critical infrastructure; to assess and prioritize Corps civil works critical infrastructure by developing and implementing a portfolio-wide risk assessment approach; and, to improve the risk profile of Corps civil works critical infrastructure. These goals will be attained by developing solutions, methodologies, and tools to address key vulnerabilities to manmade incidents, implementing effective programs to minimize consequences, improving the response and recovery capabilities using an all-hazards approach, and prioritizing life-cycle investments.

O&M Justification Sheet

FRM: \$5,500,000

OTHER INFORMATION: In FY 2013, the USACE CIPR program implemented the 2013 Consequence-Based Top Screening (CTS) methodology screening and prioritization efforts at USACE projects whose potential failure, damage, or disruption could lead to the most significant consequences at the national/regional level (critical impacts to the Nation's public health and safety, economic, and/or national security). The CTS methodology represents a consistent sector-wide process to identify and characterize high-consequence facilities, and provides the initial step of the security risk assessment and management framework implemented by USACE. Additional accomplishments in FY 2013 include: collaborated in the development of web-based capabilities (Dams Sector Analysis Tool) consolidating analysis tools and data collection mechanisms supporting the screening, prioritization, and characterization of critical assets; provided oversight and support to the development consequence analysis and system-based interdependency assessment of Civil Works projects supporting critical infrastructure screening efforts; supported MSCs in the implementation of a systematic approach for security risk assessment (e.g. Common Risk Model for Dams risk assessments at USACE critical projects; developed targeted summaries (Comprehensive Facility Reports) of key information on selected dams and locks of regional or national significance to facilitate quick regional impact assessment reporting for natural hazards and manmade incidents; conducted blast damage assessment pilot studies using ATPlanner-Dams at selected number of critical projects; continued improvement of simplified blast damage assessment tools (ATPlanner-Dams) of water-backed embankment dams from explosive loading using data from full-scale and reduce-scale experiments; conducted small- and large-scale experiments using embankment, concrete dams and navigation lock models to evaluate blast-induce damage under crest- and water-side attack scenario, and; continued interagency collaboration with the DHS designated Dams Sector-Specific Agency and other Dams Sector stakeholders on the coordination and implementation of critical infrastructure protection and resilience initiatives. In addition, funding supported additional requirements associated with a surge in security risk reduction measures at USACE critical projects due to increased threat levels.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$1,000,000. This carry-over amount is a reserve to be used to fund unexpected emergency requirements associated with a surge in security risk reduction measures at USACE critical projects due to increased threat levels.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

FERC Hydropower Coordination

SUMMARIZED FINANCIAL DATA:

President's Budget for FY 2013	\$ 3,000,000	2/
Budget for FY 2014	\$ 3,000,000	1/
Change in FY 2014 from FY 2013	\$	0

BACKGROUND: The Corps Engineering Regulation 1110-2-1454 states in part, "When a non-Federal hydropower plant is licensed by the Federal Energy Regulatory Commission (FERC) for construction at a Corps project, the licensee will be required to reimburse the Corps directly for all reasonable costs associated with the Corps review and approval of the final design, construction, plans, specifications, and inspection of the construction." As a consequence of this guidance, the Corps has been collecting and expending funds for many years for these activities from FERC licensees who have built, owned and operated hydropower facilities at Corps projects. However, in June 2006, the Office of Counsel, HQUSACE, advised that the Federal Power Act, as amended, does not provide the necessary authority for the Corps to expend funds received directly from FERC licensees. The Office of Counsel went on to say that the Corps must instead, deposit the funds in the Treasury's Miscellaneous Receipts account and must rely on annual appropriations to carry out its responsibilities under the Federal Power Act.

JUSTIFICATION: The Office of Counsel, HQUSACE, determination in June 2006, that the Corps did not have the legal authority to expend funds received directly from FERC licensees, has resulted in the Corps relying on the annual budget process and annual Congressional appropriations for the funds necessary to carry out its responsibilities under the Federal Power Act.

PROPOSED ACTIVITY FOR FY 2014: FY2014 funding will continue coordination activities with FERC permit holders and licensees in Corps districts. These coordination activities will provide support to FERC permit holders and licensees to ensure that all Corps statutory requirements are met and that there will be no infringement upon the Corps' authorized purposes by the proposed non-Federal development.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Fish & Wildlife Operating Fish Hatchery Mitigation

AUTHORIZATION: Public Law 111-85

LOCATION AND DESCRIPTION: This is a recurring national program. In 2008, Congress authorized the U.S. Fish and Wildlife Service (USFWS) to seek reimbursement from the Corps of Engineers for O&M costs incurred by the National Fish Hatchery System for mitigation of certain Corps dam projects which typically predated the National Environmental Policy Act. Subsequent congressional direction as well as concurrence by OMB and ASACW has resulted in a specific line item authorization in the Corps FY10-14 budgets to meet the Corps mitigation requirements.

CONFERENCE AMOUNT FOR FY 2013: \$4,300,000 2/

BUDGETED AMOUNT FOR FY 2014: \$4,700,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

EN: \$4,700,000 The 2014 funding will be transferred to the USFWS for National Fish Hatchery (NFH) for their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams. This amount meets the 100 percent of Corps fish mitigation as determined by 2008 Fish and Wildlife Service estimate.

PREVIOUS YEAR ACCOMPLISHMENTS:

FY 2012: \$3,800,000 to be transferred to the USFWS for National Fish Hatchery (NFH) toward their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams.

FY 2013: \$3,800,000 transferred to the USFWS for National Fish Hatchery (NFH) toward their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2013 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Great Lakes Tributary Model, IL, IN, MI, MN, NY, OH, PA, WI

AUTHORIZATION: Section 516(e), Water Resources Development Act of 1996, as amended by Section 334, WRDA of 2000 and Section 5013, WRDA of 2007

CONFERENCE AMT. FOR FY 2013: \$1,080,000 2/

BUDGETED AMT. FOR FY 2014: \$600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

There are 137 Federal navigation projects within the Great Lakes, including deep-draft commercial harbors and shallow-draft harbors. Sedimentation within these navigation channels requires periodic dredging and the amounts of sediments to be dredged and the levels of pollutants in these sediments are determined by decisions made throughout the watersheds that drain into these navigation channels. Under this authority, the USACE is developing sediment transport models for tributaries to the Great Lakes that discharge to Federal navigation channels or Areas of Concern (AOCs). These models and related tools are being developed to assist state and local resource agencies evaluating alternatives for soil conservation and nonpoint source pollution prevention in the tributary watersheds. The ultimate goal is to provide tools that support state and local measures to reduce the loading of sediments and pollutants to navigation channels and AOCs, and thereby reduce the costs for navigation maintenance and sediment remediation.

This program is being implemented in coordination with several other Federal agencies, the eight Great Lakes states, and over 200 soil and water conservation districts in the Great Lakes watershed. This program has developed models and related watershed planning tools for over 25 tributaries that discharge to Federal navigation channels. Models are being utilized by state and local governments to support prioritization of soil conservation practices and non-point pollution actions that will reduce loadings sediments and levels of contaminants in Great Lakes harbors. This program directly supports the objectives of the Administration's Great Lakes Restoration Initiative as well as the recommendations of the Interagency Ocean Policy Task Force.

PROPOSED ACTIVITIES FOR FY 2014:

- \$1,080,000 will be used to continue or complete development of models at the following tributaries (Calumet River, IL; Black Creek, NY; Oatka Creek, NY; Upper Blanchard River, OH; River Raisin, MI; Fox River, WI; Upper East River, WI) and continue the enhancement and utilization of Internet-based modeling tools by local agencies and stakeholders for sub-watershed evaluations. Districts will provide technical support and training to state and local partners that are using models developed under this program to reduce loadings of sediments and contaminants to Great Lakes tributaries, thereby reducing future dredging requirements at Federal navigation channels and promoting the restoration of beneficial uses at Great Lakes Areas of Concern.
- Additional funding of \$420,000 could be used to expedite the completion of models at selected tributaries and conduct additional training for state and local land management agencies on these and other tools to enhance soil conservation and nonpoint source pollution prevention.

ACCOMPLISHMENTS IN FY 2013

- FY 2013 funds are being used to continue or complete development of models at the following tributaries (Calumet River, IL; Oatka Creek, NY; Canaseraga Creek, NY; Tiffin River, OH; Upper Blanchard River, OH; Jordan River, MI; Swartz Creek, MI; River Raisin, MI; Fox River, WI; Upper East River, WI) and continue enhancement and utilization of Internet-based modeling tools by local agencies and stakeholders for sub-watershed evaluations. Districts are providing technical

support and training to state and local partners that are using models developed under this program to reduce loadings of sediments and contaminants to Great Lakes tributaries, thereby reducing future dredging requirements at Federal navigation channels and promoting the restoration of beneficial uses at Great Lakes Areas of Concern.

- Models and related watershed planning tools have already been completed for over 25 tributaries to Federal navigation channels and Areas of Concern in the Great Lakes (Waukegan River, IL; Grand Calumet River, IN; Trail Creek, IN; Burns Waterway, IN; Battle Creek, MI; Saginaw River, MI; St. Joseph River, MI; Clinton River, MI; Grand River, MI; Rouge River, MI; Nemadji River, MN/WI; Knowlton Creek, MN; Buffalo River, NY; Cayuga Creek, NY; Eighteenmile Creek, NY; Genesee River, NY; Niagara River, NY; Cattaraugus Creek, NY; Oak Orchard, NY; Grand River, OH; Upper Auglaize River, OH; Blanchard River, OH; Black River, OH; Cuyahoga River, OH; Mill and Cascade Creeks, PA; Manitowoc River, WI; Menomonee River, WI; Siskiwit River, WI; Whittlesey Creek, WI). In addition, Internet based tools have been developed in cooperation with Michigan State University, Purdue University, and the U.S. Forest Service to support decision making on: agricultural and forestry practices; development of Total Maximum Daily Loads (TMDLs) for nonpoint source pollution control; prioritization of conservation practices; management of urban development, and; design of stream restoration projects.
- This program continues to enhance the capabilities of state and local governments to manage programs that reduce the loading of sediments and levels of contaminants in tributaries to the Great Lakes. Many of the models and tools and all of the experience gained from this program are transferrable to other watersheds outside the Great Lakes.

SUMMARIZED FINANCIAL DATA:

Allocation for FY2011	\$ 1,200,000
Allocation for FY2012	\$ 1,048,410
Conference Allowance for FY2013	\$ 1,080,000 2/
Allocations through FY2013 2/	\$12,957,780
Estimated Carry-In Funds	\$ 0
President's Budget for FY2014	\$ 600,000 1/

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2013 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Inland Waterway Navigational Charts

AUTHORIZATION: PL 85-480, approved 2 July 1958, authorizes the Commander, US Army Corps of Engineers (Corps) to publish information pamphlets, maps, brochures, and other material on river and harbor, flood control, and other civil works activities, including related public park and recreation facilities that may be of value to the general public.

LOCATION AND DESCRIPTION: Nationwide Remaining Item -- The U.S. inland navigation system consists of 8,200 miles of rivers maintained by the US Army Corps of Engineers in 22 states and includes 276 lock chambers with a total lift of 6,100 feet. The highly adaptable and effective system of barge navigation moves over 625 million tons of commodities annually, which includes coal, petroleum products, various other raw materials, food and farm products, chemicals, and manufactured goods. The shallow draft waterways have many unique characteristics which make it difficult to navigate. Challenges in these confined waterways include river levels that change by over 30 feet in a seasonal cycle, navigation channels that shift significantly within the river banks, and shifting river currents. Electronic chart systems offer significant benefits to vessels by providing accurate and real-time display of vessel position relative to waterway features. This information can be used for voyage planning and monitoring, training tools for new personnel, and integrated display in river charts, radar, and Automatic Identification Systems.

Following recommendations by the National Transportation Safety Board, the National Academy of Science and the American Waterways Operators, Congress directed the Corps of Engineers to develop and publish electronic charts for the inland waterways. Development of IENCs to cover the Mississippi River and tributaries began in 2001 with pilot projects on the Atchafalaya River in Louisiana and Lower Mississippi River near Vicksburg, Mississippi. These projects, which involved a combination of in-house and contract activities, were the first efforts to collect and convert inland waterway data, commonly used for river and channel maintenance, into the international S-57 hydrographic data exchange. This highly structured data format is commonly used for electronic chart applications and being used in IENC.

CONFERENCE AMOUNT FOR FY 2013: \$3,420,000¹

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$3,000,000

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

FRM: This effort provides Corps' Electronic Navigational Chart (ENC) data for all inland waterways and other federal navigation channels maintained by the Corps to be used by commercial Electronic Chart Systems (ECS), which, when combined with the existing Differential Global Positioning System (DGPS), will improve the safety and efficiency of marine navigation in both inland and coastal waterways of the United States. (www.agc.army.mil/echarts) On inland waterways, the Corps will collect more accurate survey and mapping data than is currently on its paper charts, and produce Inland Electronic Navigation Charts (IENCs) in accordance with navigation users and ECS vendors. When combined in the commercial ECS, the technology will greatly improve the safety and efficiency of navigation. This will allow safe navigation through bridge openings during fog and other bad weather conditions as well as during heavy traffic situations, and provide an accurate display for other systems such as radar and

¹ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Automatic Identification Systems. The Corps will use the S-57 international data format, the electronic data transfer standard prepared by the International Hydrographic Organization committee. The S-57 format is consistent with electronic chart products produced by the National Oceanic and Atmospheric Administration (NOAA) and foreign countries and the chart products produced by the two agencies will be coordinated for compatibility in adjoining areas. The Corps will also coordinate with the U.S. Coast Guard for aids to navigation information and collaboration on rules for chart carriage by waterway users. In coastal and Great Lakes areas, the Corps will produce standardized channel condition chart products that will provide consistent and reliable information to NOAA for chart updates, in accordance with Water Resources Development Act of 2000, Section 558. Similar channel chart products will be provided to navigation users, and these coastal and Great Lakes channel condition chart products will also follow the S-57 format. Such ENC development and publication activities are in accordance with National Transportation Safety Board recommendations to the Corps, and subsequent commitments made by the Chief of Engineers. All IENC data is available on CorpsMap in addition to the web site (see link above).

PROPOSED ACTIVITIES FOR FY 2014: Update features for all existing IENCs. Continue to maintain all 106 IENCs in Inland ENC standard (over 7,400 miles). Continue chart error reporting development from public; development of IENCs for dynamic navigation areas; completion of location of bridges and bridge piers using Lidar technology; completion of bridge clearances in coordination with US Coast Guard; further enhancements of charts by adding attribution to features such as lights and daymarks; complete channel condition reports procedure for NOAA charts, investigate addition of new features and technology including AIS test bed for IENC data.

ACCOMPLISHMENTS IN FY 2013: Updated features for the Allegheny, Arkansas, Atchafalaya, Black Warrior-Tombigbee, Cumberland, Green, Illinois, Kanawha, Mississippi, Missouri, Mobile, Monongahela, Ohio, Red and Tennessee Rivers – over 6,200 miles. Completed conversion of all 106 IENC cells from S-57 product specification to Inland ENC product specification. Contributed to low water and rock pinnacles analysis at Thebes, Illinois area of Mississippi River by providing interpretation and buoy locations. Continued chart production will include Alabama – 304 miles and White 300 miles and will be produced to the Inland ENC standard. Completed channel framework of coastal and Great Lakes areas; established standard for paper charts; continued data reporting and compilation process with U.S. Power Squadron, showcased chart development and production at several national and international meetings. Develop web mapping service for downloading charts from mobile devices. Refine ESRI Nautical Solution for paper and electronic chart production. Participate in Amazon Web Services pilot project for distribution of data on the “cloud”. Continue USCG buoy program for inclusion on charts. Completed Inland Electronic Navigational Chart manual (EM 1110-2-6055).

FRM: \$0

N: \$3,000

RC: \$0

H: \$0

EN: \$0

WS: \$0

OTHER INFORMATION: This project is a Corps-wide Inland Electronic Navigational Chart program managed by the Army Geospatial Center with data contributions from 15 inland districts and the US Coast Guard.

O&M Justification Sheet

PROJECT NAME: Inspection of Completed Federal Flood Control Projects, Remaining Item

AUTHORIZATION: Section 221 of the Flood Control Act of 1970, as amended (84 Stat. 1831, 42 U.S.C. 1962d-5b), requires that a written agreement be executed between the Secretary of the Army and the non-federal sponsor to identify the "items of local cooperation" for US Army Corps of Engineers (USACE) projects, including operation and maintenance requirements. It also authorizes USACE to "undertake performance of those items of cooperation necessary to the functioning of the project for its purposes, if USACE has first notified the non-federal interest of its failure to perform the terms of its agreement and has given such interest a reasonable time after such notification to so perform." To determine whether the non-federal sponsor is performing as it has agreed, USACE undertakes inspections of completed projects. Engineer Regulation 500-1-1, Emergency Employment of Army and Other Resources, Civil Emergency Management Program, Chapter 5, Rehabilitation and Inspection Program in conjunction with related policies for the USACE Levee and Dam Safety Programs establishes the policy for the inspection of federal flood risk management projects which have non-federal sponsors responsible for operation, maintenance, repair, replacement, and rehabilitation as specified in formal agreements based on Section 221 of the Flood Control Act of 1970 or other legislation. More recently, Section 100226 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) enacted on July 6, 2012, calls for USACE and the Federal Emergency Management Agency (FEMA) to establish a task force to develop recommendations that improves alignment between the two agencies, specifically identifying data collected by USACE under the Inspection of Completed Works (ICW) Program.

LOCATION AND DESCRIPTION: Due to potential life safety consequences, federally authorized levee systems are the priority for this program. The reservoirs that are USACE constructed and operated by others are typically inspected under each individual state dam safety programs. The number of miles of federally authorized/locally operated and maintained levees within the USACE Levee Safety Program is approximately 11,750 miles with a total population at risk of over 10 million people. Channel projects associated with levee systems are also included under the Levee Safety Program. Many of these projects are adjacent to highly urbanized areas, and all of them require continued maintenance after construction in order to ensure the project will function as intended, as well as, preserve the value of the federal investment. This work represents part of the USACE Levee Safety Program Initiative, a strategic plan to complete the initial collection of baseline information on levees within a USACE authority, including screening level risk assessments and periodic inspections, within three years. This is the second year. At the end of the third year, funding for this remaining item will be adjusted to reflect amount needed to manage the ICW Program.

CONFERENCE AMOUNT FOR FY 2013: \$30,603,000 2/

BUDGETED AMOUNT FOR FY 2014: T: \$30,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: The USACE Levee Safety Program has the mission to work with stakeholders to assess, communicate, reduce and then manage the risks to people, the economy, and the environment associated with the presence of levee systems. With this in mind, the basic objectives of the USACE Levee Safety Program are (1) to develop balanced and informed assessments of levees; (2) to evaluate, prioritize and justify levee safety decisions, and (3) to make recommendations to improve life safety associated with levee systems. One of the main activities includes inspections of federally authorized projects operated and maintained by a non-federal sponsor. The purpose of the inspections is to determine if the levee system will perform as expected; identify deficiencies or areas which need monitoring or immediate repair; identify any changes over time; and collect information in order to be able to make informed decisions about future actions. Inspection and inventory information serve as the foundational elements of the Levee Safety Program, because the information collected allows for implementation of other activities including screening levees to rank them in order of risk; conducting initial risk assessments in order to answer key questions regarding priorities, urgency of action, and type of action; and coordinating Levee Safety Program efforts with stakeholders and other agencies to build the foundation for shared responsibility to develop risk reduction measures.

Division: HQUSACE

District: HQUSACE

ICW, Remaining Item

N: \$0

FRM: \$30,000,000. USACE will continue partnering activities including public release of screening level risk assessment results, advising on interim risk reduction measures, and coordinating with other agencies on developing policies. Also, the Corps will continue close coordination and collaboration of policies with FEMA and other federal agencies on the National Levee Database and their complementary federal programs, such as the RiskMAP program. USACE intends to finalize the Levee Safety Program comprehensive guidance document containing details on implementing each activity in the portfolio risk management process. USACE will move forward on recommendations by the task force as required by Section 100226 of MAP-21. USACE will complete an additional 300 levee risk screenings and 125 periodic inspections.

RC: \$0

H: \$0

EN: \$0

WS: \$0

OTHER INFORMATION: This project (remaining item) is an agency-wide project that is directed by HQUSACE. Note that districts will continue to budget individually for routine ICW activities.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Monitoring Completed Navigation Projects (MCNP)

AUTHORIZATION: Authorization for the Corps of Engineers Engineer Research and Development Center (ERDC) to conduct R&D is codified in 10 U.S.C. 2358 ("The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that are necessary to the responsibilities of such Secretary's department in the field of research and development.")

CONFERENCE AMT. FOR FY 2013: \$3,920,000 2/

BUDGETED AMT. FOR FY 2014: \$6,920,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

These monitoring efforts, governed by Engineer Regulation 1110-2-8151 (Monitoring Completed Navigation Projects), are essential for providing data for efficient and effective management of critically important Federal shallow- and deep-draft navigation projects and infrastructure for both national economic and military sealift security reasons. The Corps operates and maintains more than 1,000 navigation projects encompassing more than 25,000 miles of waterways. The Corps requires a national program to identify the best navigation project practices, and to use them to improve all other navigation projects' performance. Optimizing Civil Works navigation infrastructure performance requires that they be monitored upon completion, evaluated against preconstruction and present needs, and lessons learned translated into proactive operations management and design guidance for Corps Districts. Information gained from the MCNP program, including changes in sediment transport, water levels, currents, waves, flushing, river flows, ice, structure deterioration, and other coastal and river hydraulic phenomena with associated marine transportation and environmental impacts, will be used to verify design expectations, determine benefits, and identify operational and maintenance efficiencies. Information collected will significantly improve projects' performance, and optimize opportunities for marine transportation and environmental enhancement. The MCNP program collects valuable navigation data, documents successful designs, disseminates data and lessons learned on projects with problems, and provides upgraded field guidance for solutions that will reduce life-cycle costs on a national scale.

The MCNP program includes development of a real time monitoring capability of the navigation system through River Information Services, to improve inland navigation reliability and address the Administration High Priority Performance Goal for USACE Navigation which calls for decreasing unscheduled navigation lock closures on the inland waterway. Additionally, MCNP enhances research and development specific to Navigation Structures, to link the knowledge gained through navigation project monitoring with emerging technology, materials, and monitoring tools to reduce unscheduled repairs and increase system efficiency and reliability. No other programs in the USACE or Federal sector address these critical requirements.

Shallow- and deep-draft navigation projects located in ports, harbors, rivers, reservoirs, lakes, estuaries, and in the coastal zone are included in this program. Projects that provide maximum cost savings are identified, and those that best address high-priority life-cycle O&M project cost savings are selected for monitoring and evaluation. The Corps districts and the Engineer Research and Development Center develop monitoring plans jointly.

Coordination between the Corps and other Federal, state, and local agencies and with industry is essential for proper accomplishment of this program. In addition to satisfying Corps' requirements, the data are made available through publications and electronic technology transfer, and will be of great value to local, State, and other Federal agencies with navigation management policies. Results are communicated immediately to other member agencies of the Marine Transportation System (MTS).

PROPOSED ACTIVITIES FOR FY 2014:

Periodic Inspection of Navigation Structures (\$.48M)

- Ground-based vertical and horizontal movement of stone and concrete breakwater and jetty armor units will be conducted of selected high-priority navigation structures with great commercial importance using both existing and new technologies, for direct comparison to previous aerial LIDAR and photogrammetric data collection.
- Newly developing technologies using computerized analyses will be proof-tested for making highly accurate quantitative profile measurements with high-quality digital photography and video.
- Ground-based LIDAR centimeter-accuracy will be used to produce overlapping data subsets of high-priority deep-draft navigation structures for Operational Condition Assessment (OCA) of USACE Asset Management.

Marmet Locks and Dam: lock guide walls, approaches, filling system, and control valves (\$.48M)

- All field prototype data pertaining to (a) time-lapse videos and forces of down-bound tows impacting upstream guide wall, (b) upper and lower lock approaches to predict rate of erosion and deposition, (c) inspection of lock filling system intake, culverts, discharge outlet, and Stoney Gate valves to determine concrete deterioration and/or valve cavitation damage, and (d) LOCKSIM evaluation of lock performance will be finalized, and an ERDC Technical Report will be published. Study will be completed at end of FY14.

Gulfport Ship Channel, MS: fluid mud and nautical depth (\$.48M)

- After USACE ERDC ship simulator validation, Gulfport pilots will conduct runs under various operating conditions (e.g., varying under-keel clearance, different ship hulls and propulsion parameters, different fluid mud characteristics, etc.), and will rate respective degree of difficulty (acceptable, marginal, unacceptable). (Acceptance of nautical depth criteria by the pilots is fundamental because navigation safety is critical in successful implementation.)
- Guidance documentation on use of nautical depth criteria, methodologies, and tools will be made available for implementation of nautical depth in the Gulfport ship channel as well as establishing core components of a paradigm for implementing nautical depth on a USACE-wide basis.

John T. Myers Locks & Dam Trunnion Rods: breakage of rods inside dam concrete piers (\$.48M)

- Field verification of trunnion rod monitoring system at John T. Myers L&D will continue. Refinements to monitoring system will be performed in preparation for permanent installation at John T. Myers L&D.
- Workshop will be held at John T. Myers L&D to demonstrate monitoring system to other Corps offices, and to solicit input for permanent system.
- Specifications for permanent anchor trunnion rod tension assessment monitoring system will be developed for Corps District offices.
- ERDC and Louisville District personnel will initiate development of a concept trunnion rod repair or replacement design.

River Information Services (RIS): enhancing inland waterway and traffic info to users (\$1M)

- Will continue development of real-time monitoring capability of navigation system through RIS to improve inland navigation reliability and address the Administration High Priority Performance Goal for USACE Navigation, which calls for decreasing unscheduled navigation lock closures on the waterways.
- Will expand partnership with other inland navigation industry partners and government agencies.
- Will develop additional RIS for delivery as web services and other means (e.g., wireless waterway networks).

Innovative Techniques for Navigation Lock Operations and Extending Useful Service Life (\$.25M)

- Conduct testing of emerging or innovative commercial off-the-shelf equipment, techniques, products, or methods to determine applicability to increasing reliability, efficiency, or safety of navigation locks. These may include de-icing products, steel and concrete coatings, nano-particles, and/or micro-robotics, to name a few possibilities.

- ERDC Technical Reports, referred journal articles, and technical presentations to Corps infrastructure personnel will be used to transfer test results and conclusions to inland waterway Corps Districts.

Navigation Lock Culvert Valves: excessive forces and vibrations on lock reverse tainter gate valves (\$.25M)

- 3-dimensional computational fluid dynamics (CFD) model development will be completed, and results will be validated by physical model laboratory data. Capabilities of the computational model will be documented in a refereed journal paper.
- Optimum lock culvert valve design will be developed and described in an ERDC Technical Report for Corps District application. This design will update the hydraulic design criteria and guidance presently given in EM 1110-2-1610 "Hydraulic Design of Lock Culvert Valves".

Fiber Reinforced Polymer (FRP) Composites for Rapid Repair of Navigation Structures: repairs at reduced costs and greater durability (\$.25M)

- Results from prototype gate investigation using FRP composites will be developed into an ERDC Technical Report.
- An equally important focus will be on repair of deteriorating concrete lock walls using advanced FRP composite technologies.

Hydraulic Steel Structure Rapid Repair Design: fatigue & fracture repairs using FRP strips (\$.25M)

- Finite Element Modeling (FEM) bond-slip algorithms will be developed to implement finite element solution to fatigue and fracture using Fiber Reinforced Polymer (FRP) strips.
- Publish ERDC Technical Report regarding parametric analysis of repairs to hydraulic steel structures using FRP strips under controlled laboratory settings.

Water Resources Infrastructure Technology (\$3M)

The goals of this research are to develop enabling technologies for more economic repair methods, improve operational efficiency, extend useful life, improve resiliency, adapt for changing conditions and demands, improve public safety, increase performance, and assure environment sustainability. This effort will focus on the science and technology required to address the following areas:

- Detection, measurement, and monitoring of structure or component condition to assess its stability and performance capacity. **(Monitoring)**
- New knowledge to advance capabilities and understand the challenges and requirements for extending the life of infrastructure. **(Phenomenology)**
- Predict infrastructure performance, risk analysis and potential consequences related to mission demands or natural forcing functions. **(Decision Support)**
- Cost effective and sustainable techniques for incorporation into designs, rapid repair, and alternative construction methods. **(Rehabilitation technologies)**
- Methods to analyze, portray, and communicate information regarding existing and newly developed technologies to support planning, engineering, construction, operation and maintenance decisions for USACE Infrastructure **(Technology Support)**

ACCOMPLISHMENTS IN FY 2013:

Periodic Inspection of Navigation Structures

- Broken armor unit surveys of Manasquan Inlet jetties and Cleveland Harbor breakwater were conducted to (1) correlate recent damaged units with extreme storms in the regions, (2) support Operational Condition Assessment (OCA) of USACE Asset Management, and (3) evaluate new data collection equipment for effectiveness of use specific to Corps needs.
- Data were post-processed and uploaded to Enterprise Coastal Inventory Database (ECID).
- Centimeter-accuracy needed for 3-point individual armor unit movement data was demonstrated through use of ground-based LIDAR.

Marmet Locks and Dam, WV: lock guidewalls, approaches, filling system, and control valves

Engineer Research and Development Center

Monitoring Completed Navigation Projects

- Navigation conditions were monitored in upper lock approach using 3 time-lapse video systems. Systems focused on upstream long-span thin-walled guide wall to determine how tows use the wall under various river conditions, to evaluate excessive forces by down-bound tows.
- Upper and lower lock approaches were surveyed, and compared to surveys taken in FY12 to determine extent of scour or deposition.
- Underwater remotely operated vehicle used to inspect lock filling system intake, culverts, discharge outlet, and Stoney gate valves to determine concrete deterioration and/or valve cavitation damage. Video collected of each, and compared to video obtained in FY12 to ascertain changed conditions.
- Used numerical simulation model LOCKSIM to evaluate lock performance.

Gulfport Ship Channel, MS: fluid mud and nautical depth

- USACE ERDC ship simulator was integrated with hydraulic coefficients from Flanders Hydraulic Research Institute, Antwerp, Belgium (based on tow-tank results from previous project) to simulate effects on vessel maneuverability in presence of fluid mud.
- Gulfport ship channel was surveyed with state-of-the-art fluid mud survey system, and fluid mud sampling and analyses were conducted to determine suitability of hydraulic coefficients relative to design hull configurations used in simulator. Gulfport pilots conducted runs to validate simulator.
- Hydrographic surveys were collected during dredging to establish nautical depth, reduce dredging frequency, and maintain a safe and efficient channel. (Achieved by identifying and dredging sediment that actually impedes navigation, and not dredging inconsequential muddy water.)

John T. Myers Locks and Dam Trunnion Rods, IN: breakage of rods inside dam concrete piers

- Corrosion protection materials (grease or grout) was inserted into anchor trunnion rod sleeves in full-scale prototype-size test facility to determine response of acoustical signals. The response of both bolted end and grip-nut lock was evaluated. Best performing non-destructive testing (NDT) technique with associated data acquisition and processing instrumentation will be taken to John T. Myers Locks and Dam for field verification.
- ERDC Geotechnical and Structures Laboratory continued repair and replacement research to develop best long-term solution for damaged trunnion rods.

River Information Services (RIS): enhancing inland waterway and traffic information to users

- RIS Center in Pittsburgh, PA, was further developed to include participation by other partners from navigation industry and government agencies, including Port of Pittsburgh Commission. Initial services such as waterway information, traffic information, and traffic management decisions will be refined through testing and made operational in coordination with RIS partners and stakeholders. Additional services will be identified and added or developed through research and testing, and transmitted via Automatic Identification System (AIS) through the Lock Operations and Management Application (LOMA).
- Developed position description for RIS Director as permanent government position at RIS Center.
- Began delivering RIS externally via web services to navigation industry and other inland waterway stakeholders.
- Began prototype of industry portal for automatic electronic reporting of navigation information from industry to government.

Sealing Techniques for Quoin Block Backing Material: reducing navigation lock downtime to replace quoin contact block backing materials

- Constructed prototype-size model of quoin blocks, miter blocks, and steel channels in controlled laboratory environment. Allowed parameters related to surface preparation, gap size, liquid viscosity and density, and head pressure to be varied during testing.
- Initiated laboratory investigation of sealing techniques for selected quoin block backing materials similar to epoxy grouting compound.

Navigation Lock Culvert Valves: excessive forces and vibrations on lock reverse tainter gate valves

- Conducted laboratory experiments on a 1:15-scale physical model of lock reverse tainter gate valve designs commonly used on USACE navigation locks. Data included forces and vibration tendencies of various gate valve designs.
- ERDC Technical Report was published on field experiences regarding lock culvert valve deficiencies, compiled from District Operations Divisions data.
- Initiated development of 3-dimensional computational fluid dynamics (CFD) model of lock culvert valves.

FRP Composites for Rapid Repair of Navigation Structures: repairs at reduced costs and greater durability

- Guidance was completed for use of composite lumber as replacement of treated timber on lock guide walls and miter gates.
- Investigation was initiated regarding the use of Fiber Reinforced Polymer (FRP) composites to replace steel or wood gates and valves. Prototype gate was installed for testing.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	\$1,766,000
Allocation for FY12	\$3,804,000
Conference Allowance for FY13	\$3,920,000 2/
Estimated Carry-In Funds	\$0
President's Budget for FY14	\$6,920,000 1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National (Levee) Flood Inventory

AUTHORIZATION: The main complementary authorizations for this work includes 1) Section 221 of the Flood Control Act of 1970, as amended (84 Stat. 1831, 42 U.S.C. 1962d-5b) and other legislation authorizes the US Army Corps of Engineers (USACE) to ensure items of cooperation necessary to the functioning of the project for its purposes; 2) Title IX of the Water Resources Development Act (WRDA) 2007, cited as the National Levee Safety Act of 2007 (the Act), authorized the development of National Committee on Levee Safety (NCLS) to make recommendations for a national levee safety program, in addition to, maintaining a national levee database and performing inventories and inspections of levees in the nation; 3) 33 U.S.C. 701n (PL 84-99), provides for, among other things, the repair and restoration of flood risk reduction projects, such as levee systems; and 4) project specific authorities that include levee systems.

LOCATION AND DESCRIPTION: In 2006, USACE created its Levee Safety Program with the mission to assess the integrity and viability of levees and recommend courses of action to make sure that levee systems do not present unacceptable risks to the public, property and environment. Under the Levee Safety Program, USACE launched a major effort to create a National Levee Database and develop a methodology for performing technical risk assessments of existing levee infrastructure. Additionally, since the start of this effort, on November 8, 2007, the Water Resources Development Act (WRDA) of 2007 was enacted into law. Title IX of WRDA 2007 complemented this effort by providing USACE the authority to collect information on levees outside of a current USACE authority. This work represents part of the USACE Levee Safety Program Initiative, a strategic plan to complete the initial collection of baseline information on levees within a USACE authority, including screening level risk assessments and periodic inspections, within three years. This is the second year. At the end of the third year, funding for this remaining item will be adjusted to reflect amount needed to manage and sustain the Levee Safety Program to include maintaining and updating of the National Levee Database.

CONFERENCE AMOUNT FOR FY 2013: \$10,000,000 2/

BUDGETED AMOUNT FOR FY 2014: T: \$10,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: It is realized that levees are abundant and integral to reducing risk in many communities, including many highly urbanized areas, in the United States. Yet, the total number and location and condition of all the levees in the US are currently unknown and the public often have only a limited understanding of levees and the risks associated with them. USACE has specific authorities to inspect and assess only levees within one of its authorities which total about 14,500 miles nationwide. Collection of this information has served as the foundational element for many key levee safety program activities, such as risk assessments. However, there have been estimates that there could actually be up to an additional 100,000 miles of levees nationwide. Title IX of WRDA 2007 requires USACE to inventory all the Nation's levees and make publically available their location and condition. It is important to understand how levees are expected to perform and to identify and be prepared for potential consequences in the event of non-performance in order to identify actions that need to be taken in order to reduce risk to life safety.

N: \$0

FRM: \$10,000,000. USACE will continue efforts to expand the information in the National Levee Database by working with states, focusing initially with those with existing levee databases. USACE will also continue to solicit feedback from users of the database and implement upgrades and software revisions when accommodations can be made. USACE will continue to implement portions of the NCLS recommendations under current authorities, such as further develop tolerable risk guidelines for levees, build upon the USACE Levee Safety Action Classification process to develop a process to quickly identify and prioritize leveed areas with limited information, and work with FEMA to move forward on communicating risk as part of a levee awareness program. In addition, USACE will continue to

Division: HQUSACE

District: HQUSACE

National (Levee) Flood Inventory

aggressively complete initial periodic inspections and screening level risk assessments as part of the Levee Safety Program Initiative.

RC: \$0

H: \$0

EN: \$0

WS: \$0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

sustainable acquisition, electronics stewardship, waste reduction/recycling, and greenhouse gas accounting and reporting requirements of Executive Orders 13423 and 13514. Funding this as a nationwide activity allows USACE to reduce costs and improve performance by implementing standardized compliance and sustainability policies, procedures, and tools for auditing, data management, metrics, reporting, and management review at USACE facilities without transferring funds from each project to a central source.

a. Energy Independence and Security Act (EISA 2007) Section 432 energy and water evaluations (audits) at USACE Covered Facilities (\$1.3M Estimated).

b. Energy and sustainability data management, tracking and reporting; energy management technical and contracting support for audits, advanced/enhanced metering, and alternative financing (\$1.2M Estimated).

c. Energy Policy Act (EPA 2005) Section 103 advanced metering for electricity, natural gas and water utilities at USACE Covered Facilities and other facilities that trigger the Federal Energy Management Program advanced metering threshold (\$1.1M Estimated).

d. Environmental Compliance and Sustainability (ECS) Career Assignment Program. Covers TDY costs for two, 5-month developmental assignments at HQ USACE supporting USACE Environmental Compliance, EMS and EO 13514 Sustainability requirements (\$0.1M Training Estimated).

N: \$2,743,000

FRM: \$950,000

RC: \$0

H: \$0

EN: \$0

WS: \$0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National Coastal Mapping Program

AUTHORIZATION: These efforts are essential to providing data for efficient and effective management of critically important National water resources. Regional Sediment Management (RSM) activities are authorized by Section 516 of WRDA 96.

LOCATION AND DESCRIPTION: Nationwide Program.

CONFERENCE AMOUNT FOR PY-1: T: \$6,300,000 2/
BUDGET FOR PY: M: \$ O: \$ T: \$6,300,300 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS:

N: \$6,300,000 - The National Coastal Mapping Program is the only Federal coastal mapping program that produces regional, operational data along the coast of the U.S. on a re-occurring basis. Regional Sediment Management requires regional measuring and monitoring to provide engineering, environmental, and economic data and information for decision makers and managers. No other program in the Corps (or other Federal agencies) provides consistent, re-occurring, regional data to characterize physical, environmental, and economic conditions along the shoreline, and their changes over time. Quantification of regional conditions and changes will lead to improved management practices of entire regions and projects within those regions. Without these data, the Corps cannot fulfill its goal of a systems approach to coastal management, including navigation and coastal flood damage reduction projects.

The National Coastal Mapping Program continues evolution of technologies for regional characterization and change detection of engineering, environmental, and economic conditions along the shoreline. CZMIL advances the state-of-the-art in data exploitation workflows, algorithms, hardware, and software, and provides a sustained focus and collaboration among academia, industry, and the federal government to constantly review, refine, and expand our capability to produce a wider range of engineering, environmental, and economic data over a broader range of operating environments.

In FY12, the National Coastal Mapping Program collected data along the Great Lakes shorelines of Erie, Huron, and Michigan for the second time, including over 50 USACE coastal navigation projects, 9 USACE coastal flood damage reduction projects, and over 300 USACE coastal structures. Data collected for the East Coast in 2009 and 2010 were compared to data collected in 2004 and 2005 to provide valuable information about the changing physical, environmental, and economic conditions along this coastline. The CZMIL project fielded a new sensor suite, and in collaboration with Optech Incorporated and the University of Mississippi, tested it in a variety of environmental conditions to fully document its improved technical capabilities and operational requirements.

In FY13 the National Coastal Mapping Program will map the major Hawaiian Islands. This will be the first opportunity for comprehensive assessment of coastal resources on the islands using the new techniques developed under the CZMIL effort. The bathymetry data collected under this effort can be compared to data collected by a joint USACE/NAVOCEANO/NOAA project in 2000 and 2001 to identify areas of erosion along the shoreline and among the coral reefs. Topographic data and hyperspectral imagery can be compared to data collected by a joint USACE/FEMA project in 2007 to identify changes in elevation, infrastructure and habitat. All of this will support the development of sediment budgets for implementation of regional sediment management practices. Products quantifying shoreline, sediment volume, infrastructure, and habitat changes will be generated from repeat datasets on the Great Lakes (2007/2008 to 2011/2012). Development under the CZMIL effort will focus on automating techniques for identification of critical habitats and geomorphological features of importance for coastal management. Hardware evolution will reduce weight and power consumption while software advancements will improve the data fusion processing required to accurately delineate benthic habitat and characterize water quality parameters.

FRM: \$0

RC: \$0

ERDC

National Coastal Mapping Program

1 May 2013

RIO - 59

H: \$0

EN: \$0

WS: \$0

OTHER INFORMATION: Since 2004, the NCMP has collected re-occurring data in the eastern Gulf of Mexico (4 surveys, 2 of which are post-hurricane), on the southeast Atlantic coast (3 surveys, 1 of which is post-hurricane), and on the northeast Atlantic and Great Lakes coasts (2 surveys each). Second surveys of the West Coast and Western Gulf Coast are scheduled for 2014-2016. The data collected during these surveys have been developed into products that are widely used by the USACE for regional sediment management, regulatory, flood damage reduction, asset management, emergency operations, and environmental stewardship in the coastal zone, and by other agencies: for the FEMA RiskMap modeling efforts; the USGS Coastal and Marine Geology Program's National Assessment of Shoreline Change and extreme storm studies; and NOAA nautical chart production. The data are made available to the public through NOAA's Digital Coast website. State and local agencies use the data for shoreline management, environmental permitting, emergency management, marine spatial planning, and planning for resilient communities. The CZMIL effort has resulted in new airborne technologies and supporting software that improves operational efficiency, decreases time between data collection and final decision-support product, expands the variety of products derived from the basic datasets in a data fusion approach, improves performance in very shallow and turbid waters, improves navigation hazard detection, and improves data accuracy.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National Dam Safety Program – Portfolio Risk Assessment

AUTHORIZATION: Dam safety legislation PL 92-367 and PL 99-662, and the National Dam Safety Program Act (Section 215 of PL 104-303), the Dam Safety and Security Act of 2002 (Public Law 107 - 310) and the Dam Safety Act of 2006 (Public Law 109-460).

LOCATION AND DESCRIPTION: Nationwide Program - The Federal Guidelines for Dam Safety provide a framework for safe construction, operation, and maintenance of Corps dams. Dams must be constructed, operated, and maintained in accordance with sound engineering practices to prevent failure and avoid potential loss of life and destruction of property. This National Dam Safety Program (NDSP) account consists of two parts: (1) operation of the NDSP including participation with other agencies; and (2) implementation of a risk analysis program for all Corps dams, including recurring mapping and interim risk reduction work. Corps has 708 Dams that are located at 557 projects. The number of dams includes appurtenant structures (saddle dams, levees, dikes) that have different consequences downstream from the main dam.

(1) The NDSP was established to enhance national dam safety. These funds support the activities under the NDSP, in the interests of the Corps and the citizens of the Nation. The National Dam Safety Program Act strengthens the NDSP, whose purpose is to reduce risks to life and property from dam failure in the United States. The Act also codified the Interagency Committee of Dam Safety (ICODS) to coordinate the Federal actions under the NDSP. The Chief, Engineering and Construction, Directorate of Civil Works (USACE, Dam Safety Officer), or his representative, represents the Department of Defense as a member of ICODS. The Corps also provides a representative on behalf of the Secretary of Defense to the National Dam Safety Review Board. The National Dam Safety Program Act expanded the scope of previous dam safety legislation and the requirements for ICODS participation with various states to improve dam safety in the United States. Through ICODS, the NDSP provides support in development of federal guidelines for dam safety, promotion of public awareness programs, publications, training materials, workshops, and post dam failure forensic team participation. The Act also provides for archival research that is supported by Federal dam owning agencies through ICODS and the National Performance of Dams Program.

(2) While no Corps dams are in imminent danger of failure, many of them have high dam-safety risks during extremely large floods or seismic events, with particular concern for seepage and piping related problems. The need to prioritize budget activities requires that the Corps uses risk assessment as a central part of the decision-making process to direct funding to those dam safety issues presenting the greatest risk and to those rehabilitation actions that result in the greatest risk reduction for their cost. For each dam in the portfolio, the risk assessment provides estimates of the probability of failure and consequences by each initiating event. In addition, risk reduction measures are formulated and their cost and effectiveness estimated. The results arrayed by risk level and risk reduction cost effectiveness allow risk informed decision making. The portfolio risk assessment (PRA) process has demonstrated its value starting in Fiscal Year 2005 by identifying a number of dams with high risks. The initial screening of all Corps projects was completed in Fiscal Year 2012. The requested Fiscal Year 2013 funding will be used to perform detailed risk analysis on the highest risk dams in the portfolio and identify appropriate studies and corrective actions necessary to meet the Corps dam safety responsibilities.

CONFERENCE AMOUNT FOR FY 2013: \$10,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: \$0 O: \$10,000,000 T: \$10,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: \$0

FRM: \$10,000,000 will be used (1) for the effective coordination of dam safety activities across the various regions of the Corps and provides for Corps participation at national dam safety events. The account also provides for District participation on the National Dam Safety Steering Committee and Policy and Procedures Team, which advises the Corps Dam Safety Officer and Special Assistant for Dam and Levee Safety. The NDSP supports Corps membership and participation in various national and international dam organizations including the Association of State Dam Safety Officials (ASDSO), the US Society on Dams (USSD) and the Dam Safety Interest Group (DSIG). The USSD along with its international counterpart, the International Committee on Large Dams (ICOLD) supports technical knowledge concerning the benefits, engineering, design, and construction of dams. The DSIG is an international group of dam owners involved in dam engineering. Participation with the DSIG allows the Corps to leverage limited Civil Works policy development funds;

(2) for the direction and management of the Corps-wide Portfolio Risk Assessment (PRA) efforts by the Risk Management Center. Additional effort is needed to make the evaluation process more effective and sustainable along with integrating the inspections and evaluations with the asset management program. Dams are dynamic and degrade at varying rates, so continuing efforts are needed to assure best use of limited future investments. Recurring assessments at 10-year intervals will be continued on the portfolio and will improve the understanding of project risks that were initially identified with the screening level PRA's. The districts are responsible for collecting appropriate project data, assisting in the analysis of data gaps, using expert judgment to estimate for missing parameters, coordinating meetings, correspondence, and site visits, if required, updating essential plan, studies, or reports, and participating in training on risk analysis and probability methods. The national cadres, under the direction of the Risk Management Center, will lead risk analysis; evaluate the effectiveness of interim risk reduction measures, and identify project specific follow-on actions. The results of the detailed PRA's will be used at the national level to further formulate study plans for inclusion in the regular budget cycles, identify appropriate corrective actions, and determine the urgency of such actions. Common risk methodologies for dam and levees will be further developed. Work will begin to update the Dam Safety Investment Plan (DSIP), with the ultimate goal of determining short and long term construction strategies for modification and repair of all high risk dams in the portfolio. This investment plan will be used to demonstrate how these strategic investments reduce the overall risk of our national portfolio in the most efficient and cost effective manner. This investment Plan will also provide short and long term budget forecasting requirements for requesting both WEDGE funds and Construction General (CG) funding as part of the normal budgeting cycle. The database of information from the PRA will be linked to the existing Dam Safety Program Management Tools (DSPMT) and the Operations & Maintenance Budget Information Link (OMBIL) to maximize the use of the information developed. Additional emphasis will be placed on the completion of inundation mapping at all DSAC I, II, and III dams to further improve emergency preparedness which decreases potential life safety consequences; and

(3) Other advancements are being made in technical areas related to dams such as investigations of dam internal erosion, filtering materials, seepage and piping incidents, dam grouting, spillway systems reliability, dam instrumentation, and hydrologic methodology development. The NDSP account allows for updating of USACE technical manuals (Engineering Manuals, Engineering Circulars, etc.) such as cutoff wall construction, dam foundation grouting, and drilling through embankments.

RC: \$0

H: \$0

EN: \$0

WS: \$0

OTHER INFORMATION: This project is a Corps wide Dam Safety Program directed and managed by the Dam Safety Team at HQUSACE and the Risk Management Center.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2104 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National Emergency Preparedness Program (NEPP)

AUTHORIZATION: Executive Orders 10480 and 12656 and the Department of Homeland Security (DHS), Federal Emergency Management (FEMA) under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 USC 5121 et seq. are the basis of the National Response Framework.

LOCATION AND DESCRIPTION: N/A

CONFERENCE AMOUNT FOR FY 2013: \$6,200,000 2/

BUDGETED AMOUNT FOR FY 2014: \$6,750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

The budget will continue implementation of the National Emergency Preparedness Program to include training, participation in and conducting national level exercises, interagency and intergovernmental coordination, catastrophic disaster planning and updating and exercising continuity of operations plans. We will continue to play a key role in national security planning such as supporting Homeland Security strategic planning efforts, development of the National Capitol Region Response Plan, National Disaster Recovery Framework (NDRF), update to the National Response Framework, catastrophic hurricane and earthquake responses, and other man-made contingencies with national implications.

Completing/updating plans and regional readiness workshops for National Level Exercise (NLE) Capstone event under the revised National Exercise Program (NEP) and NEP I-Plan, in conjunction with DHS/FEMA.

The FY 2014 budget of \$6.75 million is an increase of \$550,000 from the latest estimate \$6.2 million presented to Congress (FY 2013). These funds will support preparedness activities as national level preparedness plans and related work, and minimal manning of Emergency Operation Centers.

This program requires that the Corps is ready to provide rapid response to disaster, whether caused by natural phenomena or man-made disaster or acts of terrorism and support continuity of operations and government; assure the availability of a work force capable of shifting from routine missions to crisis operations; and have the organizational command and control structure(s) necessary to provide a coordinated comprehensive response in the critical early stages of a catastrophic disaster. Preparedness activities include development of national level preparedness plans, train employees, conduct national level training exercises, to include support to Federal Emergency Management Agency (FEMA) exercises, coordinate within DOD, other Federal agencies, and state and local governments. NEPP also provides USACE with the ability to engage and coordinate readiness with other agencies at the National level on programs of Federal primacy or interests.

The Corps provides engineering and construction support to state and local governments in response to catastrophic natural/technological disasters. Our divisions also have a key role in the planning, coordination and operational control of multi-district response(s) and the integrated preparedness effort required for accomplishing this response. Preparation also includes the Headquarters sponsored Corps-wide programs necessary to provide the capabilities and operational command and control required by Corps field commands in order to accomplish their NEPP responsibilities, both routinely and in specific emergency response situations.

NEPP is complementary to the Flood Control and Coastal Emergencies (FCCE) appropriation. Although both programs are related to emergency situations, there is a distinct separation of responsibilities. NEPP responsibilities are described in above paragraphs. FCCE, on the other hand, provides preparedness and response related to emergency flood fighting, post-flood repair and restoration of flood and shore protection works damaged or destroyed by floods, hurricanes or wave action and Corps preparedness associated with National Response Plan/Framework mission requirements.

OTHER INFORMATION: ACCOMPLISHMENTS IN PRIOR YEARS-- In FY 2013, the focus will be to build up to the National Level Exercise Capstone in FY 14 and develop objectives and corresponding scenarios. The Combined Response Mission Exercise will be conducted in conjunction with the Northeast Express Exercise and the state of New York with likely involvement from the states of New Jersey, Connecticut and corresponding FEMA Regions. This exercise will be used to prepared national water, ice, emergency power, infrastructure assessment, enterprise emergency response and other planning and response teams.

FY 2012 NLE examined the Nation's ability to coordinate and implement prevention, preparedness, response and recovery plans and capabilities pertaining to a series of significant nation security cyber vents with physical impacts. It examined the National Response Framework (NRF) Cyber Incident Annex and the National Cyber Incident Response Plan. Lessons learned from NLE-12 prompted preparatory measures to real-world events such as the formation of a Cyber Threat Working Group to maintain a constant focus. Additional efforts focus on continuing to strengthen COOP readiness including in response to a cyber attack. Exercises, involving federal, state and local officials, have contributed to a more timely and effective execution of Corps responsibilities during disasters that have national impacts. Urban Search and Rescue (US&R) Training was conducted to recertify cadre members to advanced Structures Specialists. Seminars, workshops, and exercises, such as mentioned above, have strengthened partnerships and promoted mutual understanding of the roles, responsibilities and interests of USACE, FEMA, other Federal agencies, and State and local governments involved in natural disasters and terrorists' responses.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 1M. This amount will be used to provide initial activation/manning of UOC, Divisions/District EOCs, and RSC and Cadre members to response to natural or catastrophic disasters.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National Portfolio Assessment for Reallocations

AUTHORIZATION: Specific project authorizations, Section 216 of the River and Harbor and Flood Control Act of 1970.

LOCATION AND DESCRIPTION: This is a national program.

CONFERENCE AMOUNT FOR FY 2013: \$571,000 2/

BUDGETED AMOUNT FOR FY 2014: \$571,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN:

WS: Assessment of Data. \$286,000 will be used to finalize the National Portfolio Assessment of Data for Reallocations: Status and Challenges for USACE Reservoirs. The report will leverage data gathered and analyzed as part of the National Portfolio for Reallocations and from other collaborative efforts. Ultimately, the goal of the data assessment includes developing a project by project projection of water supply availability and sustainability over the next 10, 20 and 50 year periods, the ability to roll the developed data up into basin and regional projections which can support watershed based efforts and developing a program to keep the data current.

The National Portfolio Assessment for Reallocations was a two year appraisal, initiated in FY 2008, to develop a portfolio of existing Corps of Engineer multipurpose projects to be used as a screening tool to identify the best candidates for opportunities for operational changes and/or reallocation opportunities. This effort resulted in (1) the development of a portfolio of Corps projects that identified the best candidates for opportunities for operational changes and/or reallocation opportunities to ensure existing Corps reservoirs contribute to enhance economic and ecosystem values as water demands evolve and a better understanding of climate change issues are gained and (2) a paper on alternative funding arrangements for water supply reallocation studies. This report was transmitted to HQUSACE by the Institute for Water Resources in June 2010 and by HQUSACE to the ASA (CW) in August 2010.

During the development of the survey for the National Portfolio Assessment, the Corps was considering two other national surveys, one on the water management aspects of Corps reservoir projects and an other on sedimentation management concerns. USACE leaders recognized that combining these efforts would result in cost and time savings. This combined effort provided not only data for the Portfolio but also created a database to examine the status of Corps water management from local, regional, and national perspectives, an engineering and scientific foundation for a national adaptive management program, a baseline data set for investigating the evolution of operational water management policies, an assessment of sediment infilling, its impacts to operating purposes and management practices, and a database for sediment data collection efforts.

While water and sediment management concerns were originally incorporated to encourage efficiencies between reservoir-oriented data requests, these efforts have proven relevant to the assessment of

reallocation opportunities at multi-purpose reservoirs where any change in operation affects multiple purposes. As a result, after the initial Portfolio Report was completed, this effort was transformed into an Assessment of Data study for FY 2011 and FY 2012 and included the water supply, water management, and sediment management components as well information gained through collaboration with other USACE work efforts.

Sustainable Rivers. \$285,000 will be used to advance an ongoing effort to improve practices for evaluating evolving water demands from an environmental perspective. This includes:

- Support the definition of environmental flow needs
- Model application and development
- Implementation of operational changes to meet environmental flow needs
- Monitoring and initiation of a process to revise water control plans

Experiences at existing sites will be used to inform other efforts to modify project operations and refine the practices for evaluating evolving water demands.

The Sustainable Rivers Project (SRP) was initiated in 2002. SRP is an ongoing national partnership between the Corps of Engineers and The Nature Conservancy. The purposes of this effort are to assess ecosystem needs downstream of Corps projects, to evaluate water management opportunities for potential operational changes and/or reallocations to enhance ecosystem values while maintaining or improving primary project purposes (e.g. flood risk reduction, water supply, and hydropower), and to implement environmental flows where feasible.

The SRP involves work on 36 Corps reservoirs in 8 river basins. It is the most large-scale and comprehensive project for implementing environmental flows below Corps reservoirs. Funds from the National Portfolio Assessment for Reallocations (2010-2013) have been instrumental in the advancement of SRP, which has now defined environmental flows for 20 reservoirs and implemented environmental flows at 10, thereby affecting ecological condition for approximately 600 river miles. The Portfolio is currently the only national funding source for the SRP. Full implementation of environmental flows below Corps reservoirs would benefit an estimated 50,000 river miles.

Funding from the Portfolio will be used to support a combination of national level and site specific work. National level work focuses on measuring and communicating the successes of the whole SRP. Site work will define ecological needs, model potential operational changes, and implement and monitor ecological outcomes resulting from changes to the operation of particular reservoir systems. SRP efforts complement the national portfolio assessment by demonstrating that a strategic and science-based adaptive management approach that can be used at Corps projects to maintain or enhance the benefits they provide to the nation. This Sustainable Rivers Project was combined with the National Portfolio Assessment in FY 2010 under the recommended plan.

OTHER INFORMATION:

ACCOMPLISHMENTS IN FY 2013:

The fiscal year 2013 funding of \$571,000 was a two-increment effort.

Assessment of Data. Funding in the amount of \$286,000 was used to: (a) initiate an effort to complete the compilation of Corps' projects in the Portfolio to include all our projects with irrigation storage. While repayment of irrigation costs are administered by the Bureau of Reclamation, the general physical and operating data of these projects and the knowledge of how these projects operate for irrigation is critical to complete the Portfolio of Corps projects with water supply; and (b) initiate the development of a draft report on the National Portfolio Assessment of Data for Reallocations: Status and Challenges for USACE Reservoirs.

Sustainable Rivers. Funding in the amount of \$285,000 was used to continue the efforts of described above to improve practices for evaluation water demands. These efforts included development and

Institute for Water Resources

National Portfolio Assessment for Reallocations

application of models for use at select Corps Sustainable Rivers Project sites, defining environmental flow needs, implementation operational changes to meet environmental flow needs and development of a framework to inform nationwide application of the knowledge gained through the implementation of the Sustainable Rivers Program.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is 0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Program Development Technical Support

AUTHORIZATION: The automated information system P2 has replaced the Automated Budget System (ABS) for budget development processes. The transition to P2 from ABS has aligned all Civil Works budget requests within one automated information system (AIS). Previously, the ABS supported gathering, analyzing and submitting project funding requests to respond to all authorized missions within the Corps of Engineers Operation and Maintenance program.

LOCATION AND DESCRIPTION: This is program National in scope.

CONFERENCE AMOUNT FOR FY 2013: \$300,000 2/

BUDGETED AMOUNT FOR FY 2014: \$300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: Funds will be used to continue to assist civil works program development for budget submissions and identify needed changes and recommend new analytical program development tools and procedures to support civil works program development. P2 provides the program development capability previously provided by ABS. The transition to P2 from ABS for program development began in FY 2007 and continued through FY 2011. Presently work under this activity in current and future years continues to ensure that all relevant business processes and monitoring needs are incorporated into new databases, data requirements continue to be refined, and analytical capabilities are being expanded to support the Corps' budgeting process without creating an undue administrative burden. Changes are being incorporated to support the budget development analytical and reporting needs and to continually refine the system to meet evolving objectives. The deployment of P2 and updated versions has shifted program efforts towards development of methods and procedures for setting program priorities and providing technical support for all civil works activities and analysis across the civil works program. In FY14 this project will continue to assist civil works program development for budget submissions and identify needed changes and recommend new analytical program development tools and procedures to support civil works program development. All business lines benefit from this activity.

N: \$75,000

FRM: \$78,000

RC: N/A

H: \$72,000

EN: \$75,000

WS: N/A

OTHER INFORMATION: NA

ACCOMPLISHMENTS IN PRIOR YEARS: Maintained and updated the software systems, provided new tools to generate reports, provided training and support to managers, and enhanced analytical tools to support the budget development process.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Protection of Navigation (Four Items)

Protection, Clearing, and Straightening of Channels

Removal of Sunken Vessels

Waterborne Commerce Statistics

Harbor Maintenance Tax Data Collection (formerly called Harbor Maintenance Fee Data Collection)

AUTHORIZATION:

Protection, Clearing, and Straightening of Channels - Section 3 of the 1945 River and Harbor Act (as amended by Section 915 (g) of the Water Resources Development Act of 1986) provides continuing authority for limited emergency clearing of navigation channels not specifically authorized by Congress.

Removal of Sunken Vessels - Removal of sunken vessels, or other similar obstructions, is governed by Sections 15, 19, and 20 of the River and Harbor Act of 1899, as amended.

Waterborne Commerce Statistics - The Corps of Engineers (Corps) serves as the Federal Central Collection Agency, and is the sole U.S. Government source for U.S. domestic waterborne commerce and vessel statistics in conformance with the River and Harbor Act of 1922 as amended. The Office of Management and Budget (OMB) pursuant to Title 44 U.S.C. 3509 and 3510 transferred primary responsibility for U.S. foreign waterborne transportation statistics mission from the Bureau of the Census to the Corps in 1998.

Harbor Maintenance Tax Data Collection - PL 103-182.

LOCATION AND DESCRIPTION: This is a national program.

CONFERENCE AMOUNT FOR FY 2013: \$6,146,000 2/

BUDGETED AMOUNT FOR FY 2014: \$6,146,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N:

Protection, Clearing, and Straightening of Channels. \$50,000 will be used for work undertaken as emergency measures to clear or remove unreasonable obstructions to navigation in navigable portions of rivers, harbors and other waterways of the U.S., or tributaries thereof, in order to provide existing traffic with immediate and significant benefit. The amount requested is an estimate based on historical experience. If actual requirements are more than estimated, funds will be reprogrammed to meet demonstrated needs.

Removal of Sunken Vessels. \$500,000 will be used to remove vessels as needed. Primary responsibility for removal belongs to the owner, operator, or lessee. If the obstruction is a hazard to navigation and removal is not undertaken promptly and diligently, the Corps may obtain a court judgment requiring removal, or remove the wreck and seek reimbursement for the full cost of removal and disposal. Determinations of hazards to navigation and Federal marking and removal actions are coordinated with the United States Coast Guard in accordance with a Memorandum of Understanding between the two agencies dated 16 October 1985. Removal procedures are outlined in 33 CFR 245. If removal requirements are more than estimated, funds will be reprogrammed to meet actual needs.

Organizations: Headquarters and Institute for Water Resources

Protection of Navigation

Waterborne Commerce Statistics (WCS). \$4,771,000 will be used to develop data that provide essential information for navigation project investment analyses and annual funding prioritization for operation and maintenance of existing projects; as project output information for computation of performance measures; for input into the U.S. National Accounts; and for regulatory, emergency management decisions, and homeland defense. Activities supporting this national statistics mission include: (1) collecting and reporting (includes enforcement role) of water transportation statistical data; (2) automated systems development and operation (transactional systems within Operation and Maintenance corporate information system), processing, compiling, and publishing statistical data and information on waterborne commerce and vessels moving on the internal U.S. waterways, the Great Lakes, and through all U.S. ocean channels and ports; and (3) documenting and publishing the Nation's commercial port infrastructure served by Federal channels; (4) documenting and publishing the U.S. vessels available for operation in waterborne commerce, their principal trades and zones of operation; and (5) acquiring and using software tools for program analysis, diagnostics and quality control. This item is reported under OMBIL-Plus in ITIPS and the 300b submittal accounting for \$1,645,248 of the overall total OMBIL-Plus cost for FY14.

Proposed activities for fiscal year 2014 include: Perform operations, maintenance and necessary enhancements of nation's waterborne commerce, vessel and shipper data and statistics programs. Implementation, and with continued modification of Corps automated systems, to accept new real-time domestic electronic data to improve accuracy of domestic and foreign transportation statistics. Increase project detail data requirement for budget submissions and economic justification. Acquiring and using software tools for program analysis, diagnostics and quality control. Expansion of water transportation data connection with landside movements and improve navigation architecture to support national multimodal freight policy. Collaborate with partner agencies to improve navigation data from a Federal perspective.

Harbor Maintenance Tax (HMT) Data Collection. \$825,000 will be used by the Corps to perform analyses of the Harbor Maintenance Trust Fund (HMTF). Up to \$5 million is authorized to be used annually for the administration of the Harbor Maintenance Trust Fund. Most of these funds are used by U.S. Customs and Border Protection (CBP). The Corps performs analyses of the HMTF revenues and transfers to validate the adequacy of the HMTF in light of the uncertainty over the legal and international challenges to the HMT, to document the operation of the trust fund, and to prepare and distribute the Annual Report to Congress on the Status of the Harbor Maintenance Trust Fund. Analysis of waterborne commerce shipments and vessel movement data is also needed to respond to legal questions to the HMT; to analyze alternative funding options; and to assess the economic and competitiveness impacts of other potential funding sources. The Corps is also required to collect data on foreign and domestic shippers subject to the fee. Therefore, the Corps requires a portion of the administrative funding to continue its ongoing HMTF support efforts. The General Accountability Office (GAO) issued its final report (GAO-08-321), which recommend that the CBP and the Corps improve their coordination and procedures in order to increase HMT collections by auditing domestic shippers failing to pay or under paying the HMT mandated by law. This item is reported under OMBIL-Plus in ITIPS and the 300b submittal accounting for \$346,368 of the overall total OMBIL-Plus cost for FY14.

Proposed activities for fiscal year 2014 include: Collaborate with CBP to improve CBP-Corps data communication systems to target delinquent domestic shippers for audit to increase HMT collections. Continue ongoing HMT data collection and analysis programs. Develop and implement improved data collection process systems and data analysis models and program computer enhancements to provide more complete/accurate domestic shipper information.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION:

ACCOMPLISHMENTS (WCS / HMT) IN FY 2013: For these continuing programs maintained FY 2013 data quality and completeness. Provided enhanced navigation project output data for budget formulation. Continued work with other Federal agencies and industry to implement a new modern, comprehensive automated domestic waterborne data collection system. Established partnerships and data exchanges with other Federal agencies (CBP, IRS, USCG and EPA), and industry to improve the accuracy, availability and timeliness of the data the Corps collects for managing capital investments in Corps projects. Integrated the Corps location codes into the Automated Identification System (AIS) encoding guide, enabling mariners to report the code electronically through AIS. Established a process to receive updates on location codes from USCG, improving the quality of the Corps' inventory of dock data. Continued ongoing HMT data collection and analysis programs. Improved systems to collect and process HMT data for domestic shippers. Streamlined efforts in providing domestic shipper data to CBP and follow-up research requested by CBP for HMT audits.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Recreation One Stop (R1S)

AUTHORIZATION: These programs are conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

LOCATION AND DESCRIPTION: The Recreation One Stop initiative is to enhance customer satisfaction with recreational experiences on public lands. It improves access to recreation-related information generated by the Federal government, streamlines the systems used to manage that information, and increases the sharing of recreation-related information among government and non-government organizations. At the direction of Office of Management and Budget (OMB), Recreation.gov and Volunteer.gov was combined and is now under the umbrella of Recreation One Stop, a priority E-gov initiative on the President's Management Agenda. Providing a nationwide funding source at HQUSACE for centralized procurement of these items used by all operating projects having a natural resources management program precludes the need for funds to be transferred by each project or district to a single procurement agent, a savings of from 60 to 300 transactions a year.

CONFERENCE AMOUNT FOR FY 2013: \$65,000 2/

BUDGETED AMOUNT FOR FY 2014: T: \$215,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

Recreation.gov - \$200,000 - is an interagency website providing public information about recreation opportunities on federal lands. This website provides a customer friendly recreation portal with information for planning visits to Federal recreation sites and making campground reservations. Required budgeted amount provides payment IAW Interagency Agreement NO.10-1A-11132461-167 between the National Recreation Reservation Service as managed by US Forest Service and Department of Defense. This annual funding supports the Corps responsibility of providing funds for the management and operations costs of the Recreation One-Stop initiative. Recreation.gov provides a customer friendly recreation portal with information for viewing and planning visits on over 4,000 Corps recreation sites and activities, reserve and make payment on line. Recreation.gov provides a customer friendly recreation portal with information for viewing and planning visits on over 4,000 Corps recreation sites and activities, reserve and make payment on line.

Volunteer.gov - \$15,000 is an interagency website coordinating volunteer activities among federal agencies. Provides a user-friendly, web based resource to citizens, offering a single point of access to information about volunteer opportunities nationwide. Volunteer.gov is a partner in the White House's USA FreedomCorps Network, and the site is also linked to the Recreation.gov website in which the Corps participates. Required budgeted amount provides payment to Department of Interior (DOI) as the managing partner IAW February 2000 Federal Interagency Team on Volunteerism Memorandum of Understanding. This annual funding supports the Corps responsibility of providing funds for the management and operations costs of the Recreation One-Stop initiative. Volunteer.gov provides a comprehensive clearinghouse of Corps volunteer opportunities. The public can enter geographic information about where they want to get involved and areas of interest to access volunteer opportunities offered by the Corps. Over 55,000 volunteers at Corps projects worked 1.4 million hours, providing \$29.7 million value of service in fiscal year 2011.

N: \$0

FRM: \$0

RC: \$215,000

H: \$0

Division: HQUSACE

District: HQUSACE

Recreation One Stop (R1S)

EN: \$0

WS: \$0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Reducing Civil Works Vulnerability (New Start)

AUTHORIZATION: Various authorities including Section 216 of the River and Harbor and Flood Control Act of 1970, Section 731 of the Water Resources Development Act of 1986, specific project and purpose authorizations, and Executive Order 13514.

LOCATION AND DESCRIPTION: O&M Remaining Item, Nationwide. The Reducing Civil Works Vulnerability (RCWV) program will direct and coordinate the development of comprehensive and integrated policies, guidance, tools, and actions to reduce USACE vulnerabilities and improve resilience to these challenges, including changes in demographics, land use and land cover, social values and social vulnerability, economic conditions, ecosystem habitat suitability, climate change and variability, and aging infrastructure. This requires close coordination and integration with complementary activities, including programs supporting CW mission areas and those supporting critical issues (e.g., asset management, budget transformation, planning modernization, climate change, and sustainability and energy). The RCWV program will benefit all CW programs by its comprehensive systems approach to characterizing vulnerabilities. The program will conduct regional- to national-scale vulnerability assessments to support prioritization of future actions to manage the impacts of these challenges. RCWV will build on existing collaborative mechanisms to improve our ability to foresee, understand, take action, and effectively act to mitigate adverse impacts of complex dynamic processes.

CONFERENCE AMOUNT FOR FY 13: \$ 0

BUDGETED AMOUNT FOR FY 14: \$1,000,000 1

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 14:

N: \$250,000 will be used to assess vulnerability due to impacts and interactions of dynamic changes across regions, and identify and characterize sources of uncertainty that affect decision making to reduce vulnerabilities and improve resilience of the Nation's existing marine transportation systems. Develop policies and methods supporting consistent management strategies for dealing with dynamic changes in all phases of the life cycle, building on existing tools, methods, and geospatial database systems to support assessments, reporting and access to results.

FRM: \$150,000 will be used to evaluate measures to reduce vulnerabilities and improve resilience of flood risk management systems. Improve data aggregation, integration, assessment, and visualization to better understand vulnerabilities in the context of complex and interdependent systems and watersheds with multiple purpose projects, and using established geospatial systems developed to support flood risk management. Update water management and reservoir management policies to take into account dynamic challenges to flood risk management according to strategic and priority needs, building on flexibility where it exists.

RC: N/A

H: \$500,000 will be used to will be used to assess vulnerability of hydropower projects due to impacts and interactions of dynamic changes. Identify and characterize sources of uncertainty that affect decision making required to implement measures to reduce vulnerabilities and improve hydropower resilience. Update water management and reservoir management policies to take into account dynamic challenges to hydropower according to strategic and priority needs, building on flexibility where it exists.

EN: \$100,000 will be used to assess vulnerability of ecosystems due to impacts and interactions of dynamic changes. Identify and characterize sources of uncertainty that affect decision making required to reduce these vulnerabilities. Evaluate measures to reduce vulnerabilities and improve resilience of ecosystems. Improve data aggregation, integration, assessment, and visualization to better understand vulnerabilities in the context of complex and interdependent systems and watersheds with multiple purpose projects, and using established geospatial system.

WS: N/A

OTHER INFORMATION: The Civil Works Strategic Plan identifies challenges to the Civil Works operations and missions, including changes in demographics, land use and land cover, social values and social vulnerability, economic conditions, ecosystem habitat suitability, climate change and variability, and aging infrastructure that threaten the performance of USACE projects and systems. These changes can and do interact in ways that alter or increase the vulnerability of Civil Works (CW) projects, programs, missions, and operations. Vulnerability can also occur from unintended consequences and cascading impacts due to apparently unrelated decisions. Many of these changes are interacting now and threatening performance, but there has been no single and overarching program to evaluate and minimize adverse impacts until this program. This program will also develop and initiate a strategy and policy to foster efficient and informative sharing inside USACE and to other agencies of the technical information needed to effectively reduce vulnerability and improve resiliency of the built infrastructure and the natural environment. It will also involve USACE staff at all levels and in all regions in developing methods and policies to build knowledge and capacity, guidance and approaches for effective water resources management despite emerging challenges.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

O&M Justification Sheet

PROJECT NAME: Regional Sediment Management Program (RSM)

AUTHORIZATION: Section 516 of WRDA 96 authorizes the development of long-term strategies for the management and control of sediments through studies and operational activities.

CONFERENCE AMT. FOR FY 2013: \$1,800,000 2/

BUDGETED AMT. FOR FY 2014: \$1,800,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The RSM Program objectives are to establish regional management strategies that link the sediment management actions at authorized Corps of Engineers (Corps) projects with one another, and to coordinate management activities with other Federal agencies, State, and local governments within the boundaries of physical systems including inland watersheds, rivers, estuaries, and the coast. The goal is to demonstrate short- and long-term cost savings and increased economic and environmental benefits through adaptive management of sediments from a regional perspective. The approach provides opportunities to achieve greater effectiveness and efficiency and to realize significant cost savings relative to traditional project management practices. Cost savings may be realized from reduced re-handling of material, optimized use or placement of material extended dredging cycles and combined equipment mobilization and demobilization for linked projects (e.g., dredging and shore protection). Costs may also be reduced by sharing information, improved data management, and reduced duplication of field data collection, or by reducing duplication in model and tool development and application.

PROPOSED ACTIVITIES FOR FY 2014: Continue implementation of RSM through support to Districts and Divisions to include, but not be limited to:

- The RSM National Program will continue to coordinate efforts to promote systems-based technologies and approaches to improve sediment management practices and optimize use of sediments in support of the USACE Civil Works mission. Major RSM National Program activities will include: expanding to include Engineering With Nature concepts; coordination across the USACE Districts and Divisions to share knowledge and lessons learned; sponsoring the annual RSM Workshop and In-Progress-Review to promote program goals, share knowledge and experiences, and technology transfer among RSM practitioners; participating in regional and national initiatives to promote the RSM concepts and approach; and presenting RSM Program benefits and goals to national and international audiences at major conferences.
- Continue to expand regional approaches developed for the operation and management of navigation projects to a Corps-wide capability. The improved regional approach to the navigation program assists nationally to identify common issues that are better solved on a regional basis, improve channel availability and subsequently life cycle costs and project benefits through more efficient practices, and improve regional efficiencies by engaging cross-mission objectives of the Corps (i.e., navigation, flood risk management, and environmental restoration regarding sediments).
- Outreach and apply lessons learned through the Jacksonville District. St John's, Duval, and Nassau Counties and the Tampa Bay efforts to apply regional approaches to link multiple projects (navigation, shore protection, environmental enhancement) across a region resulting in improved use of sediments, optimized operational efficiencies, increased benefits, cost savings, and collaboration with federal and non-federal partners.
- Coordinate and implement sediment management actions identified through the collaborative Delaware Estuary RSM and Engineering With Nature effort to better understand the hydrodynamic, sediment, and environmental processes; improve dredging and placement

Engineer Research and Development Center

Regional Sediment Management Program

efficiencies; identify beneficial use opportunities; and link multiple projects. Actions will be coordinated with partners and stakeholders to ensure needs are met.

- Coordinate and implement sediment management actions identified through the FY13 efforts across the Districts. Identified actions will optimize the use of sediments to improve operational efficiencies while keeping sediments in the system, reducing shoreline erosion, reducing sedimentation, and/or improve environmental habitat while reducing overall costs by linking projects, reducing timelines, and leveraging data, information, and resources. Actions will be coordinated with partners and stakeholders to ensure needs are met.
- Continue integration of Corps dredging, sediment, and monitoring related databases to provide data access and tools to assist in the management of sediment and dredging information, project information, etc to provide the capability to identify needs and opportunities to implement sediment management strategies.
- Continue development of nearshore berm guidance to address challenges with nearshore placement, modify existing numerical modeling capabilities to provide tools to assist in the evaluation, design, placement, and monitoring of nearshore berms for improved sediment management. Continue incorporation of fine-grained sediments.
- Continue development of District's regional sediment budgets, building the sediment budget repository, and enhancing the Sediment Budget Analysis System.

ACCOMPLISHMENTS FOR FY 2013:

- Expanded regional approaches developed for the operation and management of navigation projects in Philadelphia and Baltimore Districts to Mobile and Charleston Districts. The improved regional approach to the navigation program assists nationally to identify common issues that are better solved on a regional basis, improving channel availability and subsequently life cycle costs and project benefits through more efficient practices, and improving regional efficiencies by engaging cross-mission objectives of the Corps (i.e., navigation, flood risk management, and environmental restoration regarding sediments).
- Outreached and apply lessons learned through the Mobile Bay Watershed and In-Bay Disposal effort to a broader watershed perspective for sediment and related environmental management planning and implementation. By linking the watershed and coastal environments through application of RSM and Engineering With Nature concepts, we will improve our understanding of the watershed processes, environmental processes, and improve our ability to make informed, cooperative, sustainable watershed management decisions.
- Coordinated and implemented sediment management actions identified through the FY12 efforts across the Districts. Identified actions optimized the use of sediments to improve operational efficiencies while keeping sediments in the system, reducing shoreline erosion, reducing sedimentation, and/or improved environmental habitat while reducing overall costs by linking projects, reducing timelines, and leveraging data, information, and resources. Actions were coordinated with partners and stakeholders to ensure needs were met.
- Continued integration of Corps dredging, sediment, and monitoring related databases to provide data access and tools to assist in the management of sediment and dredging information, project information, etc. providing the capability to identify needs and opportunities to implement sediment management strategies.
- Established Nearshore Berm POCs and identified Corps challenges in placing material in nearshore berms. Expanded knowledge to assist in addressing Corps challenges. Enhanced

guidance to assist in the planning, design, construction, and monitoring of nearshore berms. Initiated modification of existing numerical modeling capabilities to provide tools to assist in the evaluation of nearshore berms for improved sediment management. Expansion of these capabilities to fine-grained sediments was initiated.

- Enhanced the Sediment Budget Analysis System for web-based access and data management through enterprise databases. Established Regional Sediment Budget Repository to provide a compilation, visualization, and access to Districts regional and local sediment budgets. Enhanced existing tools for developing regional sediments budgets.
- Completed sediment budgets for Lake Erie, Lake Ontario. This effort provides an understanding of the shoreline processes in order to project future conditions with predictive models and evaluate proposed alternatives to seek comprehensive solutions that meet the needs of partners and stakeholders. This improves USACE ability to forecast and plan for dredging needs within federal navigation channels; evaluate the effectiveness and efficiency of current and future dredging and placement activities; and evaluate historic changes and alternative plans to protect and restore the shoreline
- Applied regional approaches along the Atlantic Intercoastal Waterway and shoreline in the reach encompassing St. Johns, Duval, and Nassau Counties, FL to coordinate several Federal navigation and shore protection projects. Efforts were directed toward bringing together individual projects and apply adaptive management practices to reduce sedimentation and optimize use of sediments cooperatively among the navigation and shore-protection projects.
- Identified and evaluated alternatives to reduce sedimentation, reduce maintenance, and increase beneficial uses along the Gulf Intracoastal Waterway in the Galveston District
- Continued coordination of opportunities for improved use of USACE shallow draft dredges to optimize the use of sediments at USACE projects. The goal was to improve sediment management, productivity, operational efficiencies, and cost effectiveness at low use projects.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	\$1,963,000
Allocation for FY12	\$3,169,000
Conference Allowance for FY13	\$1,800,000 2/
Estimated Carry-In Funds	\$0
President's Budget for FY14	\$1,800,000 1/

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Reliability Models Program For Major Rehabilitation and Asset Management

AUTHORIZATION: This program is authorized by request from USACE nationwide to provide assistance when doing a major rehabilitation project

LOCATION AND DESCRIPTION: O&M Remaining Item, Nationwide. The purpose of this program is to respond to the needs of the Districts and Divisions that are preparing Major Rehabilitation Reports for the upcoming fiscal year. The objective of the program is to provide reliability models for project features or components of projects that are being considered for Major Rehabilitation, or to provide procedures that consider the impact of various chemical, environmental or physical processes in a reliability analysis.

CONFERENCE AMOUNT FOR FY 13: \$ 300,000 2/

BUDGETED AMOUNT FOR FY 14: \$ 300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 14:

N: N/A

FRM: The requested funds will be used to prepare reliability models and to collect data for reliability analyses anticipated to be required by the Districts. Reliability models and/or data are anticipated to be needed for the following: 1) Testing of a reliability model for seepage through embankment dams and levees, 2) Testing of a reliability model for floodwall stability, 3) Continued evaluation of data collected on the performance of dam gates and pretensioned anchor rods. This information will be used to determine performance modes and to verify load cycles used in a reliability analyses, 4) Continued evaluation of the impacts of electrical/mechanical systems on the reliability model for locks and dams. 5) Continued development of the reliability models for I-Wall's on levees. 6) Develop a reliability model for Concrete Dams considering seismic/dynamic loading. 7) Continued development and refinement of the reliability models for barge impact loads. This will also be extended to Inland Waterways 8) Continued determination of the human reliability factor 9) Development of a simplified Fault Tree Analysis for system reliability calculation for Navigation structures, and 10) Provide reliability analysis procedures for additional selected hydropower equipment. It is also anticipated that two rehabilitation workshops would be conducted. The makeup of these workshops will be determined based on the needs of the respective Districts and Divisions. Continue to provide support and consultation for development of reliability models for Asset Management for Navigation and Flood/Coastal business project lines. Continue to incorporate reliability into existing computer programs

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Many reliability models and other analytical tools have been provided in support of the Major Rehabilitation Program. Reports on numerous navigation and hydropower projects have been accomplished. In addition, 20 rehabilitation workshops have been conducted in the last 16 years to assist the Districts as they prepare their Major Rehabilitation Reports.

These workshops offer guidance in conducting reliability and risk analyses, and provide the opportunity for interdisciplinary teams from the Districts and Divisions to discuss their particular project with HQUSACE and other Districts/Divisions personnel. EM 6062, Risk and Reliability for Major Rehabilitation Studies was published. Barge Impact numerical modeling techniques have been extended to Inland Waterways. Reliability capability has been added to the Pile Group Computer Program and the Sheetpile Wall Design Computer Program. A Concrete Deterioration model for Lock Walls and the subsequent economic consequences was finalized. This model will be applied lock walls to aid in the Major Rehab Program justification. Many rehabilitation workshops have been conducted. Expert Elicitation has been conducted for the mechanical and electrical systems for navigation locks. Also, have provided consultation and review in the development of reliability models for major maintenance (as part of asset management).

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2013 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

Water Operations Technical Support (WOTS)

Allocation for FY 2013

\$500,000 2/

Allocation Requested for FY 2014

\$500,000 1/

AUTHORIZATION: These efforts are necessary to provide support for the restoration and management of Federal water resources.

JUSTIFICATION: Maintaining the high quality environmental and water quality conditions at 562 Corps reservoirs (5,500,000 surface acres), 237 navigation locks, 926 harbors, 75 hydropower projects, and 25,000 miles of inland and coastal waterways requires compliance with numerous statutes and state standards. Providing the technology and knowledge base necessary to broadly address environmental requirements in accordance with laws and regulations can best be accomplished through a comprehensive centralized program that will maximize cost effectiveness, and ensure broad dissemination and implementation of technology and information.

PROPOSED ACTIVITIES FOR FY 2014: The WOTS Program is expanding as environmental conditions at Corps project sites continue to deteriorate. The program will continue to provide effective environmental and water quality management technologies to address a wide range of issues at Corps reservoir and waterway projects, and in river systems nationwide. The program will provide technology to address: problems caused by aquatic invasive species; water quality impacts of land use, sediment and nutrient loadings, erosion, and reservoir sedimentation; tailwater fisheries concerns at pump-back hydropower projects; and project operations related to environmental and water quality issues. WOTS will provide technical support to the Corps' mission related project responsibilities, with special emphasis on the transfer of technology. The program will ensure that the technologies developed by the Corps and other Federal agencies are current and readily available to all Corps field offices. The effective use of technologies will be secured through direct technical assistance, specialty workshops, information bulletins, technical notes, executive notes, technical reports, miscellaneous papers, instruction manuals, videos, meetings, seminars, briefings, congressional testimony, and the Internet.

ACCOMPLISHMENTS FOR FY 2013:

- The program continued to provide effective environmental and water quality management technologies addressing a wide range of issues at Corps reservoir and waterway projects, and in river systems nationwide.
- The program provided technology addressing: problems caused by aquatic invasive species; water quality impacts of land use, sediment and nutrient loadings, erosion, and reservoir sedimentation; tailwater fisheries concerns at pump-back hydropower projects; and project operations related to environmental and water quality issues.
- WOTS provided technical support to the Corps' mission related project responsibilities, with special emphasis on the transfer of technology. The program ensured that the technologies developed by the Corps and other Federal agencies are current and readily available to all Corps field offices.
- The effective use of technologies were secured through direct technical assistance, specialty workshops, information bulletins, technical notes, executive notes, technical reports, miscellaneous papers, instruction manuals, videos, meetings, seminars, briefings, congressional testimony, and the Internet.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is \$ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

ERDC

Water Operations Technical Support (WOTS)

Criteria

Corps of Engineers FY 2014 Construction Performance Guidelines

To qualify, a project must be authorized for construction; have an approved Chief's report, major rehabilitation report, or Dam Safety modification report; and, where applicable, successfully completed review under Executive Order 12322.

- Project Purpose – Ongoing construction projects, including those funded in the Mississippi River and Tributaries account, are assigned based on their primary purpose to one of the three main mission areas of the Corps (flood and storm damage reduction, commercial navigation, and aquatic ecosystem restoration) or to hydropower.
- Projects funded to address dam safety assurance, seepage control, and static instability correction problems – Projects that are funded for construction to address a dam safety action classification 1 or 2 concern will receive the maximum level of funding that the Corps can efficiently and effectively spend each year.
- Projects funded on the basis of their economic return – Ongoing construction projects that are funded based on their economic return and have a benefit-to-cost ratio (BCR) of 2.5 to 1 or higher, calculated at a seven percent discount rate, are eligible for funding. Projects with a BCR below this threshold will not be funded unless they are eligible for funding under other criteria of these guidelines.
- Projects funded on the basis of their environmental return – Ongoing construction projects to restore degraded ecosystem structure, function, and process to a more natural condition are eligible for funding.
- Projects funded to address a significant risk to human safety – Flood and storm damage reduction projects that are funded to address a significant risk to human safety will receive funding to support an uninterrupted effort.
- New starts and resumptions – The start of a priority new construction project, and the resumption of work on a priority construction project, will be eligible for funding.
- Mitigation or environmental requirements – Mitigation work at ongoing construction projects, and work needed to comply with treaties or biological opinions, will be funded to meet those requirements.
- Non-structural flood damage reduction projects – Ongoing non-structural flood damage reduction projects will be eligible for funding if the project has a BCR of 1.0 to 1 or above, at a seven percent discount rate.
- Dredged Material Disposal Facility (DMDFs) for high and moderate use segments of commercial deep draft, shallow draft, and inland projects which are no longer included in O&M and should be budgeted under Construction.
- Qualifying Continuing Projects with Continuing Contracts – Projects under the original continuing contract clause.
- Coastal navigation projects – Consistent with guidance provided in the Statement of Managers accompanying the 2012 Energy and Water Development Appropriations Act, ongoing coastal navigation projects will be eligible for funding to the extent that completion of the project, separable element, or project phase would support jobs or economic activity.
- Project completions – Ongoing projects that can complete all remaining construction work during the budget year may be funded at the level needed to complete that work if the project has a BCR of 1.0 to 1 or above, at a seven percent discount rate.

Corps of Engineers
FY 2014 Operation and Maintenance (O&M) Performance Guidelines

The Corps uses objective performance-based criteria to allocate operation and maintenance funds to Corps projects. These criteria give priority to key infrastructure and consider the condition of the project and the potential consequences (e.g., economic, environmental, and public safety impacts) for project performance if the O&M activity is not undertaken in the budget year, as well as legal factors. The criteria, with an explanation of how the Corps applies them, are provided below:

- **Project Purpose** – Each proposed O&M activity at all projects that the Corps operates and maintains, including those funded in the Mississippi River and Tributaries account, is assigned to one of six program areas: commercial navigation, flood and storm damage reduction, environment, recreation, hydropower and water supply. For projects with multiple purposes, the separable activities are assigned to the program area that they serve. Joint activities are allocated among all program areas served by the project based upon a project-specific allocation formula.
- **Economic Impacts** – The benefits that will be accrued for the dollars spent to improve the level of service are considered during the evaluation. For O&M funding decisions, an informed judgment is made using performance data to estimate the economic impact of the activity. Those with a higher return on investment receive a higher priority in the budget process. For example, the evaluation for commercial navigation includes the current and five-year average tonnage (coastal) and ton-miles (inland waterways), cost per ton and cost per ton-miles, as well as other factors such as support for commercial fishing or public transportation (passenger ferries). For flood and storm damage reduction, it includes the risk of loss of life or property; for recreation, it includes visitor attendance; and for hydropower, the risk of facility closure.
- **Asset Management** – Reliability of projects is evaluated to determine a project’s ability to adequately perform its intended function in a consistent and dependable manner when field conditions allow. Condition classification guidelines are used to determine overall project condition, with component condition assessments performed to evaluate the condition of individual critical components. Consequence rating criteria are used to determine the impact (dollars, lives, etc.) of reduced availability. The results of the condition and consequence evaluations lead to a risk level based on an established matrix for each program area. The risk of not funding the proposed work is evaluated in the budget year in terms of the intended function. Cost-effectiveness measures are used to determine the lowest cost solution to improve the overall reliability of the project. These results incorporate both economic and public safety values, as well as any residual risk, which are used to help with project reliability determinations, based on those specific performance measures.
- **Public Safety** – Public safety is also a factor used in ranking O&M activities. A proposed work package is given greater consideration if its purpose is to reduce the risk of a failure that could result in loss of life. For commercial navigation, other factors include whether the harbor is a critical harbor of refuge, supports a subsistence harbor or supports other Federal requirements such as the U.S. Coast Guard search and rescue or national security requirements.

- Environment and Stewardship Concerns – O&M work to address a significant environmental concern is evaluated based on its environmental return (benefits per funding amount). Those O&M activities that reduce the risk of significant adverse environmental or cultural resource impacts are given a higher consideration for funding.
- Legal Requirements – Projects with O&M-related legal requirements are also given a higher consideration for funding, e.g., projects with requirements to address Indian tribal rights or whose operation involves ongoing mitigation needs.