

FISCAL YEAR 2015
Civil Works
Budget Details of the
U.S. Army Corps of Engineers
for
Mississippi River and Tributaries (MR&T)
Program

March 2014

### MISSISSIPPI RIVER AND TRIBUTARIES

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## Justification of Estimates for Civil Works Activities Department of the Army, Corps of Engineers Fiscal Year 2015

#### SUMMARY MISSISSIPPI RIVER COMMISSION

Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MO, MS, & TN

	FY 2014 <u>President's Budget</u>	FY 2015 <u>President's Budget</u>	Increase <u>or Decrease</u>
Investigations	\$ 9,800,000	\$ 9,646,000	\$ (154,000)
Survey Preconstruction Engineering and Design	9,800,000 0	9,646,000 0	(154,000) 0
Construction	113,094,000	83,438,000	(29,656,000)
Operation and Maintenance	156,106,000	151,916,000	(4,190,000)
Less Reduction for Savings and Slippage	0	0	0
Less Reduction for Rescission	0	0	0
GRAND TOTAL, MISSISSIPPI RIVER COMMISSION	\$279,000,000	\$245,000,000	(\$34,000,000)

### **INVESTIGATIONS**

## **ARKANSAS**

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN Continuing - Investigations, Fiscal Year 2015

Study	Total Estimated Federal Cost \$	Allocations Prior To FY 2012 \$	Allocation in FY 2012 \$	Allocation in FY 2013	Allocation in FY 2014 \$	Budgeted Amount in FY 2015 \$	Additional to Complete After FY 2015 \$
Collection and Study of Basic Data (Continuing) Memphis, Vicksburg, and New Orleans Districts	N/A	N/A	900,000	499,000	9,700,000	9,646,000 <u>1</u> /	N/A

Surveys, Gages, and Observations

Major flood events provide invaluable insight into the dynamics and management of large river systems. The flood of 2011 on the Mississippi River provided an exorbitant amount of data into how the system performed when compared to the design outlined for the Mississippi River and Tributaries (MR&T) over 85 years ago in the Flood Control Act of 1928 and subsequent Flood Control Acts. Numerous features have been constructed since the pre-MR&T levees failed in 1927 causing over 500 deaths, flooding over 26,000 square miles, leaving over 600,000 people homeless, and inflicting untold misery and financial hardship on the Nation. While the MR&T features performed adequately during the 2011 flood, the system did sustain over \$1,500,000,000 in damages while preventing over \$234,000,000,000 in flood damages in the Lower Mississippi River Basin. However, the 2011 flood also raised concerns as to whether the current MR&T project design, when repaired/completed, will provide adequate protection for the MR&T's Project Design Flood (PDF) as authorized in the 1928 Flood Control Act and subsequent acts. Scientists and engineers need to evaluate the 2011 flood data to see if the project, as currently designed, will provide the authorized level of protection for the Lower Mississippi River Basin. A reevaluation of the MR&T project was undertaken after the 1973 flood event and resulted in a revised design flowline to provide the required PDF level of protection. This reevaluation resulted in some adjustments to design, construction and operation of the project. Now, 40 years later, factors such as the flood of 2011 (which was approximately 20 percent larger than the 1973 flood) and other changes in the basin require a new reevaluation to reconfirm or revise the design flowline. Since the 1973 flood event, state of the art computer models have replaced previously used physical models with more advanced numerical and sophisticated data gathering models along with Light Detection and Ranging (LIDAR) data that provides enhanced terrain data. These new methods will allow for better predictions of the performance of the system during future events up to, and including, the authorized PDF. The entire operation of the MR&T for larger flood events hinges on whether the design/construction/operation is synchronized to work as a system during the PDF. This reevaluation will be managed by a virtual center located at the Mississippi River Commission utilizing MR&T funds. The Mississippi River Commission must have this reevaluation to make informed decisions on the MR&T project. Without this reevaluation to know how the system would respond under today's conditions, the water management and design of the MR&T project, as currently designed, may be based on data/assumptions no longer valid which could compromise the system and potentially lead to catastrophic consequences. Without a sound understanding of the geomorphology 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 as a resource for coastal restoration purposes has recently expanded the scope of sediment management. A thorough understanding of sediment trends will be essential in the development of a comprehensive and sustainable sediment management plan. Failure of levees or structures or the inability of the MR&T project to perform as designed could result in significant loss of life and property since over 4,000,000 people live within the Lower Mississippi River Basin.

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts

Collection and Study of Basic Data, AR, IL, KY, LA, MS, MO, and TN Fiscal Year 2014 funds are being used for the 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 collected will consist of information on streamflow, rainfall, floods, and other items of related hydrologic nature. Funds are also being used for collection of essential basic data; aquatic and water quality monitoring; and conduct regional review of numerous hydraulic and hydrology related issues and/or concerns that were discovered during the 2011 flood; which are necessary to assess the individual areas of concern within a regional framework. The hydraulic and hydrologic studies will determine how the MR&T system performed during the 2011 flood as well as identify needed changes in the water management of the system and revision of areas/reaches within the current 1976 Refined Project Flood Flowline. This will have short-and long-term impacts to the projects ensuring continued benefits. A regional geomorphic and potamology assessment is being initiated to provide the basis for developing and evaluating various river engineering features, rehabilitative measures, and channel modifications.

Fiscal Year 2015 funds will be used for 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 continue conducting regional review of numerous hydraulic and hydrologic related issues or concerns that were discovered during the 2011 flood; and continue conducting geomorphic and potamology assessments. The flowline effort is necessary to ensure the proper performance of the system for floods up to, and including, the PDF. The flowline effort will include Mississippi River Hydrologic Engineering Center-River Analysis System (HEC-RAS) and two-dimensional modeling for various areas/reaches of the system. The geomorphology and potamology program will focus on system-wide efforts, specific gage analysis and geometric assessment for the middle and lower Mississippi River, and a refined one-dimensional sediment transport model. Studies related to problem areas identified during the 2011 flood will be continued. There will continue to be a strong emphasis on technology transfer for decision-makers and the public dissemination of historically significant data. Investigations will address relationships between hydrologic alteration and the flood risk management system and species of concern. These are vital for the Mississippi River Commission to make informed decisions on the MR&T project ensuring proper performance of the system.

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 2015 from prior appropriations for use on this study effort are \$0. This amount will be used to perform work on the study as follows: N/A

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts

Collection and Study of Basic Data, AR, IL, KY, LA, MS, MO, and TN

## **CONSTRUCTION**

### **ARKANSAS**

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN – Construction

PROJECT: Bayou Meto Basin, Arkansas (Continuing)

LOCATION: The project is located in Lonoke, Prairie, Pulaski, Jefferson, and Arkansas Counties in east-central Arkansas.

DESCRIPTION: 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 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 onfarm storage reservoirs, conservation measures, and environmental restoration and enhancement measures. The project will provide for aquifer protection, agricultural water supply, groundwater conservation, and fish and wildlife restoration and enhancement. 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.

Mississippi River Commission Memphis District Bayou Meto Basin, AR

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2014)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contributions \$ 28,005,000 Other Costs \$221,258,000	\$450,325,000 \$249,263,000		Bayou Meto Basin	14	TBD
Total Estimated Project Cost	\$699,588,000				
Allocations to 30 September 2011 Allocation for FY 2012 Allocation for FY 2013 Allocation for FY 2014 Allocation through FY 2014 Estimated Unobligation Carry-in Funds President's Budget for FY 2015 Programmed Balance to Complete after FY 2015 Unprogrammed Balance to Complete	\$60,301,000 408,000 4,788,000 10,600,000 76,097,000 0 9,500,000	<u>1/ 2/ 3/ 5</u> / 17 <u>4</u> / 19			
after FY 2015	0				

<sup>1/\$0</sup> reprogrammed to (from) the project.

PHYSICAL DATA: The major project features for this project include four major pumping stations, 105 miles of new channels, 116 miles of improvements to existing channels and 56 channel weirs, 472 miles of pipeline, 11 check structures, 14 turnouts, 92 drop structures, 74 inverted siphons, conservation measures, 66 bridge relocations and 209 utility relocations.

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 could 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

Mississippi River Commission Memphis District Bayou Meto Basin, AR

<sup>2/\$0</sup> rescinded from the project.

<sup>3/\$0</sup> transferred to the Flood Control and Coastal Emergencies account.

<sup>4/</sup> Estimated Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$19,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this project effort are \$0. This amount will be used to perform work on the study as follows: N/A

<sup>5/</sup> PED costs of \$26,459,000 are included in this amount.

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 wetland 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 2014: The Total unobligated dollars and current year funds are being applied as follows:

Annual Danafita

Initiate and Complete		
Electrical Sub-Station, Little Bayou Meto Pumping Station No. 1	\$	4,400,000
Inlet Channel, Pumping Station No. 1		3,300,000
Planning, Engineering, and Design		2,019,000
Construction Management		900,000
Total	\$^	10,619,000

Mississippi River Commission Memphis District Bayou Meto Basin, AR

FISCAL YEAR 2015: The budget amount will be applied as follows:

Initiate and Complete

Outlet Structure and Interior Drainage, Pump Station No. 1, AR and

Canal 1000, Miles 0.0 to 2.0 5,500,000 Planning, Engineering and Design 3.000.000 1,000,000 **Construction Management** 

Total \$9,500,000

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:

> Annual Operation, Maintenance. Repair,

Payments Rehabilitation. Durina Construction And

And

Replacement

Reimbursements Costs

Requirements of Local Cooperation

Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas. \$ 58,009,000

Modify or relocate utilities, roads, bridges (except railroad bridges), where necessary for the 46,917,000 Construction of the project.

Contribute 35 percent of the non-Federal share of project costs for water supply and flood risk management and 50 percent for waterfowl management features for recreation. Includes \$116,332,000 work-in-kind credits 144,337,000

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)).

\$5,240,000

Total Non-Federal Costs \$249,263,000 \$5,240,000

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. 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. Funds to initiate construction were received in FY 2010. The PPA was amended and executed 28 December 2012 with the local sponsor to allow for work-in-kind credit and provide an updated cost estimate.

The current non-Federal cost estimate of \$249,263,000, which includes a cash contribution of \$28,005,000 and work-in-kind credit of \$116,332,000, is an increase of \$30,426,000 from the non-Federal cost estimate of \$218,837,000 submitted to Congress (FY 2014). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$24,766,000
Price Escalation on Real Estate	5,660,000

Total \$30,426,000

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$450,325,000 is an increase of \$54,988,000 from the latest estimate of \$395,337,000 submitted to Congress (FY 2014). This change includes the following items:

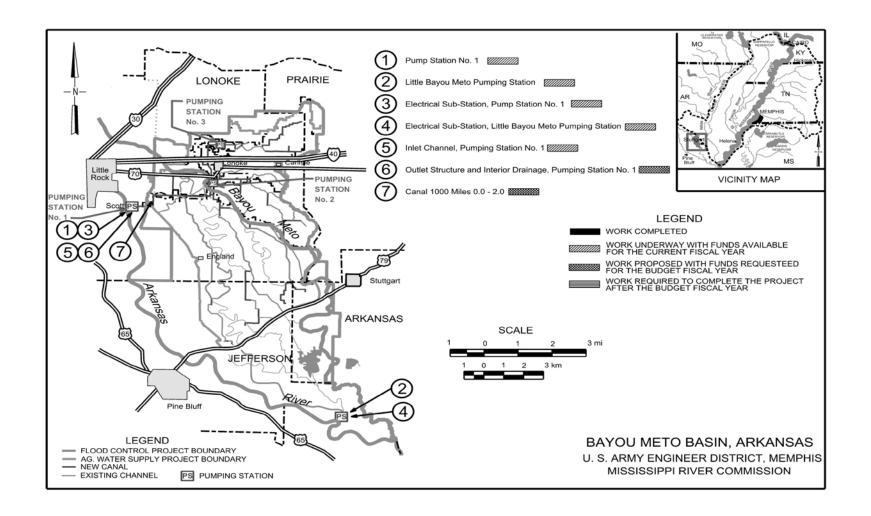
Item	Amount
Price Escalation on Construction Features	\$54,988,000

Total \$54,988,000

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.

Mississippi River Commission Memphis District Bayou Meto Basin, AR



Mississippi River Commission Memphis District Bayou Meto Basin, AR

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 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: 3.18 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 (MR&T) 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 FY 1928. The authorized comprehensive review of the MR&T 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 (1 January 2014)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contributions Other Costs	\$3,985,000,000 1,860,000 1,760,000 100,000			Entire Project	93	TBD
Total Estimated Project Cost	\$3,986,860,000					
Allocations to 30 September 2011 Allocation for FY 2012 Allocation for FY 2013 Allocation for FY 2014	3,061,172,000 49,013,000 46,041,000 58,015,000					
Allocations through FY 2014	3,214,241,000	<u>1/2/3/</u>	80			
Estimated Unobligated Carry-in Funds	0	<u>4</u> /				
President's Budget Amount for FY 2015	40,861,000		81			
Programmed Balance to Complete After FY 2015	729,898,000					
Unprogrammed Balance to Complete After FY 2015	0					

PHYSICAL DATA: The physical data for the Channel Improvement project consists of 19,135 acres of land and damages; 1,097 miles of revetments; 362 miles of dikes; and 1 pumping station.

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts

<sup>1/\$0</sup> reprogrammed to (from) the project.

<sup>2/\$0</sup> rescinded from the project.

<sup>3/\$0</sup> transferred to the Flood Control and Coastal Emergencies account.

<sup>4/</sup> Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$3,400,000 (Dikes \$2,770,000 and Revetments \$630,000). As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this project effort are \$0. This amount will be used to perform work on the study as follows: N/A

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 these 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 o

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$522,100,000,000 in 2014 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10,600,000 acres of agricultural lands, and 6,500,000 acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22,700,000 acres. The area that will be provided complete protection by the completed project is 15,100,000 acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 178,000,000 tons. The average savings per ton is \$37.00.

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 \$347,000,000. This would be equivalent to \$16,100,000,000 in damages in 2014 prices.

Mississippi River Commission

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The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10,800,000 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 19,800,000 acres would have been inundated. Total damages with existing projects in operation were \$643,000,000 (1973 price levels). Damages without projects would have been \$11,300,000,000 and total damages prevented by projects amounted to \$10,600,000,000. Expressed in 2014 prices, damages without the projects would have been \$58,400,000,000 and damages prevented would have been \$55,100,000,000.

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 \$2,800,000,000 (2011 price levels). In addition, \$1,500,000,000 damages were incurred by Federal flood protection works within the MR&T projects. Damages without projects would have been \$236,900,000,000 and total damages prevented by projects amounted to \$234,100,000,000. Households numbering more than 974,000 were saved from impacts and no known deaths occurred. Expressed in 2014 prices, damages without the projects would have been \$249,000,000,000 and damages prevented would have been \$246,000,000,000.

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
Flood Control	\$415,336,000
Navigation	109,522,000
Area Redevelopment	1,587,000
Recreation	2,645,000
Total	\$529,090,000

FISCAL YEAR 2014: The total unobligated carryover and current funds are being applied as follows:

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts

Revetments	\$47,943,000
Dikes	13,472,000
Total	\$61,415,000

#### The items of revetment work are:

#### Approximate length in feet:

Island 40, TN (Stone Bank Paving)	1,200
Island 18, MO (Stone Bank Paving)	1,000
Ludlow, AR (Stone Bank Paving)	1,600
Hardscrabble, MS	2,500
Grand Gulf, MS	5,000
Lake Concordia, MS	4,000
Reinforcement	11,280

Revetments: The planned program consists of items of work for which funds are being used as follows:

#### Continue:

Londo and Domagoo	¢ 100.000
Lands and Damages	\$ 100,000
Construction of Revetments	40,233,000
Cultural Resources	40,000
Economic evaluation of the MR&T main stem features	499,000
Planning, Engineering, and Design	6,471,000
Construction Management	600,000
Total	\$ 47,943,000

#### FISCAL YEAR 2014 (Continued):

Dikes: The planned dike work consists of the following items:

Initiate and complete	
Cottonwood Bar, LA	\$ 6,520,000
Racetrack Towhead, LA	3,892,000
Continue:	
Lands and Damages	50,000
Cultural Resources	25,000
Planning, Engineering, and Design	2,163,000
Construction Management	822,000
Total	\$13,472,000

#### FISCAL YEAR 2015: The budget amount will be applied as follows:

Revetments	\$32,791,000
Dikes	8,070,000

Total \$40,861,000

#### The items of revetment work are: Approximate length in feet:

Hickman Bar, KY	1,000
Horseshoe, AR	1,000
Ludlow, AR Stone Paving	400
Laforge, MO Stone Fill	2,500
Oldtown, AR	1,200
Arkansas City Yellow Bend, AR	3,000
Cypress Bend, AR	3,000
Reinforcement	10,280

#### FISCAL YEAR 2015 (Continued):

Revetments: The planned revetment work consists of the following items:

#### Continue

Lands and Damages	\$ 100,000
Construction of Revetments	26,186,000
Cultural Resources	40,000
Economic evaluation of the MR&T main stem features	125,000
Planning, Engineering, and Design	5,690,000
Construction Management	650,000
Total	\$ 32,791,000

Dikes: The planned dike work consists of the following items:

#### Initiate and complete:

Big Island, AR	\$3,600,000
Willow Cutoff, LA	1,887,000
Continue:	
Lands and Damages	30,000
Cultural Resources	20,000
Planning, Engineering, and Design	1,713,000
Construction Management	820,000
Total	Ф0.070.000
Total	\$8,070,000

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	\$256,000
Total Non-Federal Costs	\$1,860,000	\$256,000

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.

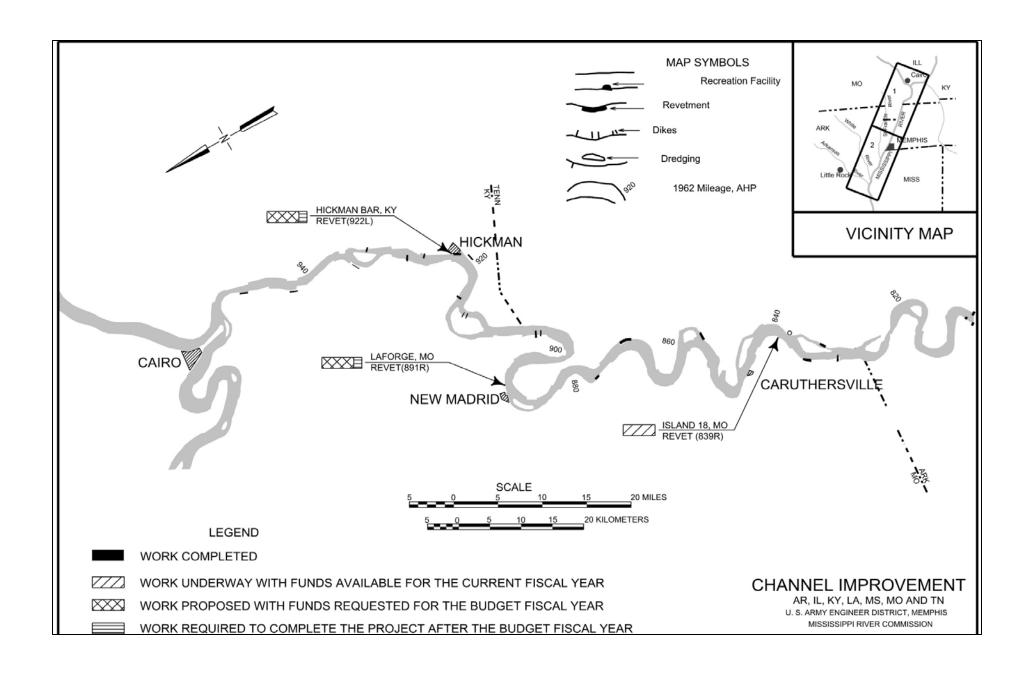
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$3,985,000,000 is an increase of \$16,000,000 from the latest estimate (\$3,969,000,000) presented to Congress (FY 2014). This change includes the following items:

Price Escalation on Construction Features \$15,584,000
Price Escalation on Real Estate 416,000

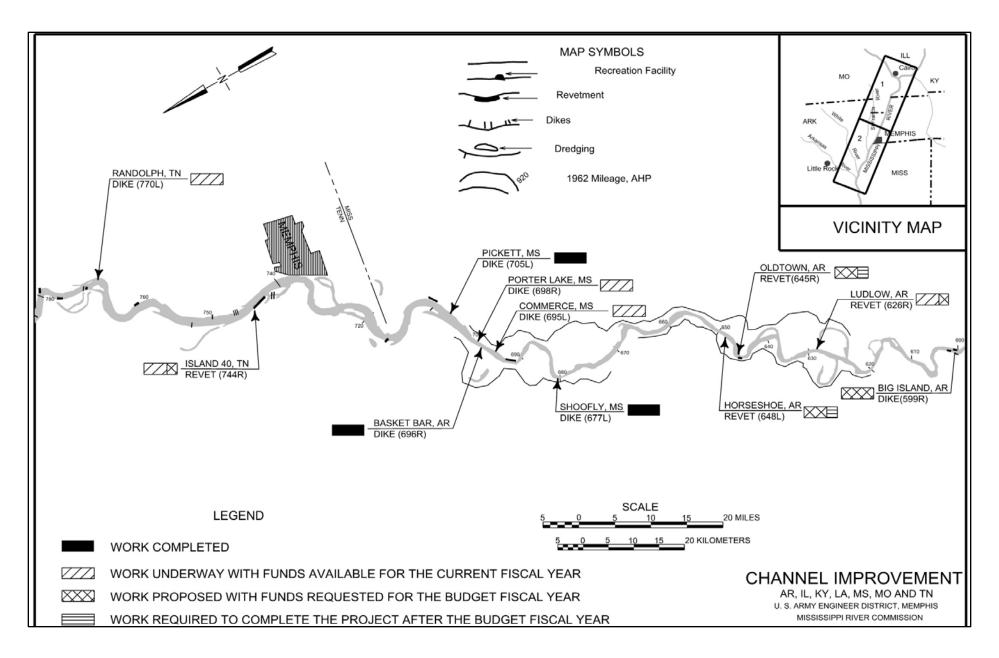
Total \$16,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

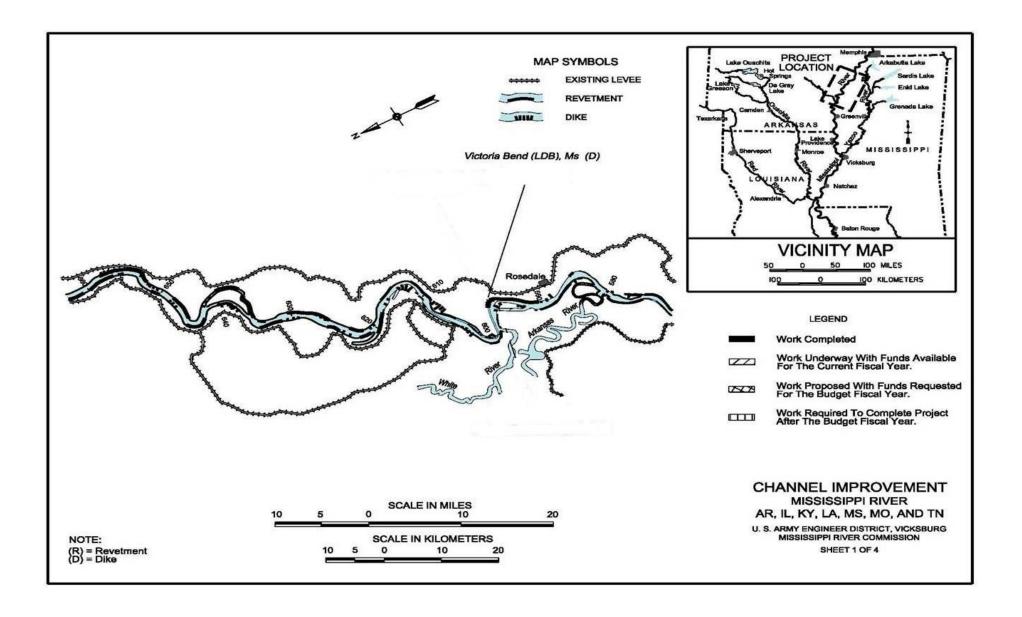
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.

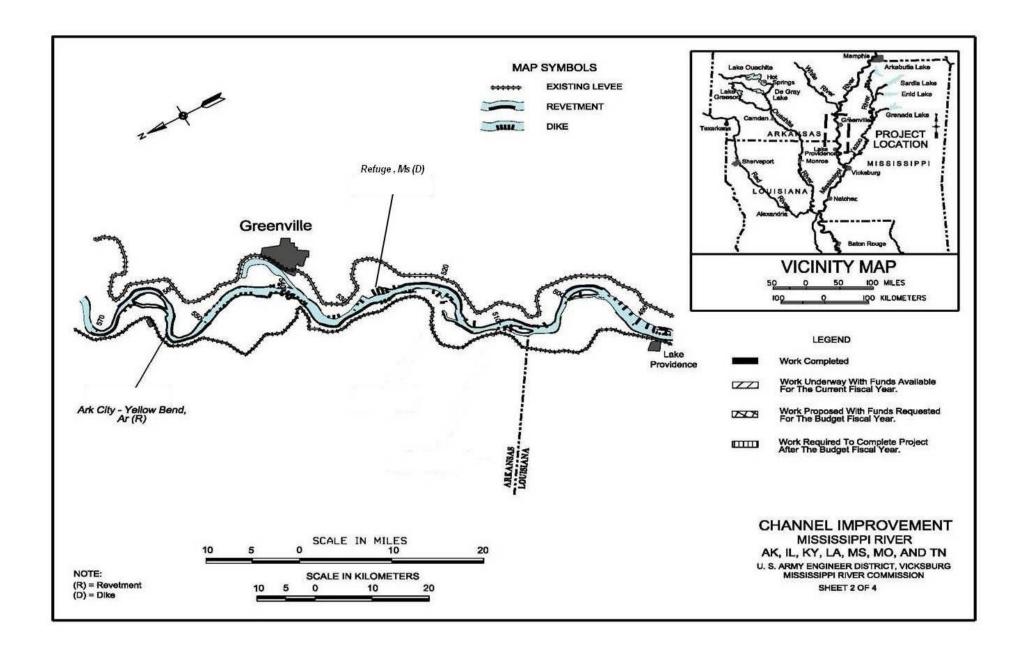


Memphis, Vicksburg, and New Orleans Districts Channel Improvement, AR, IL KY, LA, MS, MO, and TN

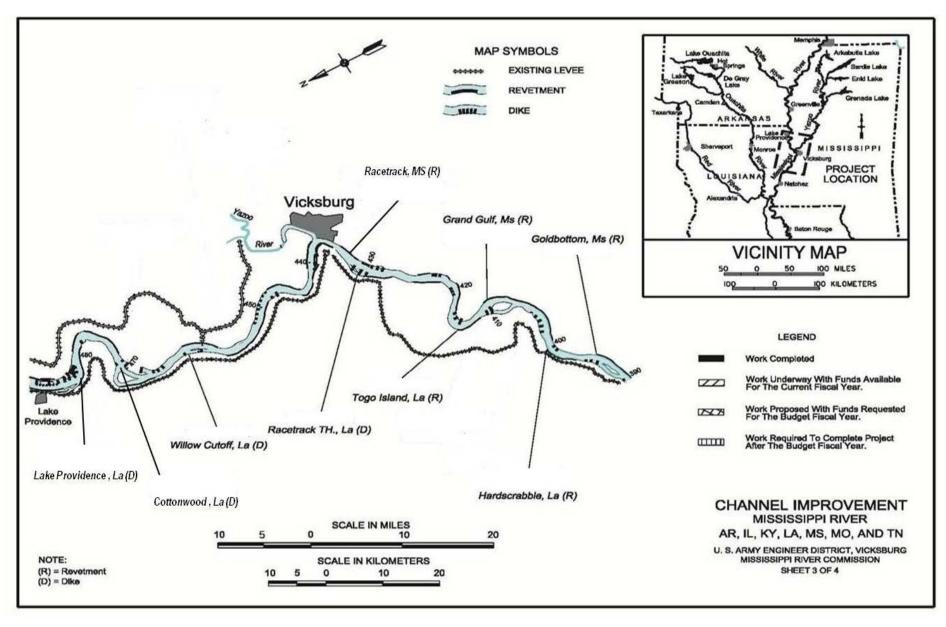


Memphis, Vicksburg, and New Orleans Districts Channel Improvement, AR, IL KY, LA, MS, MO, and TN

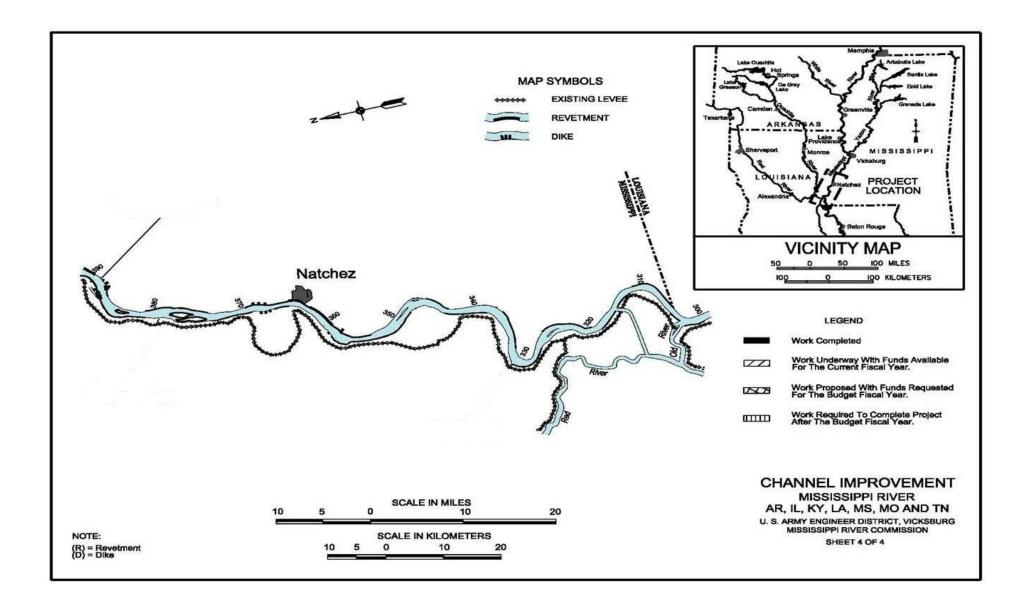




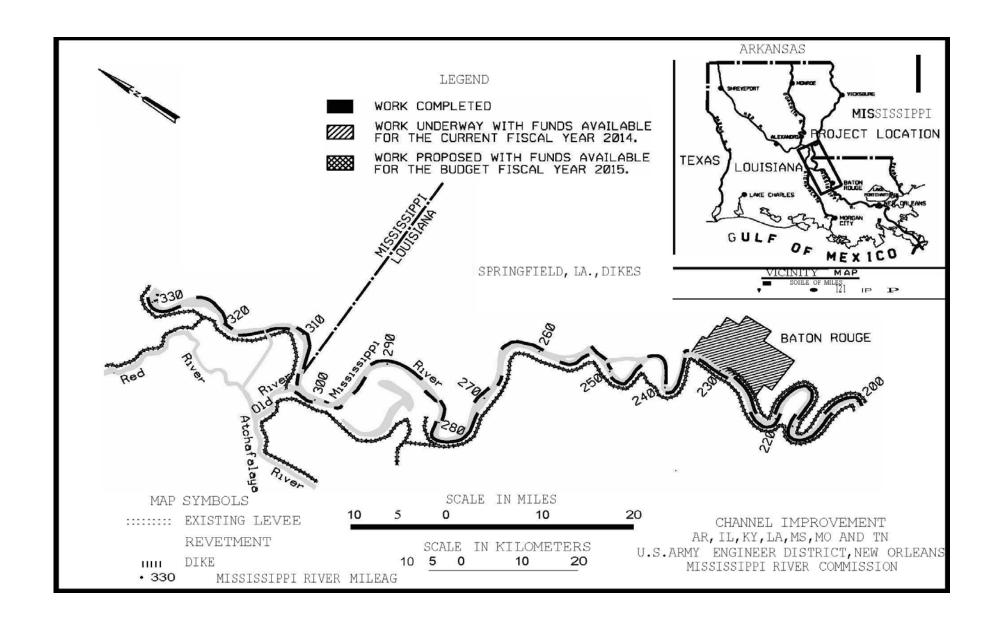
Memphis, Vicksburg, and New Orleans Districts Channel Improvement, AR, IL KY, LA, MS, MO, and TN

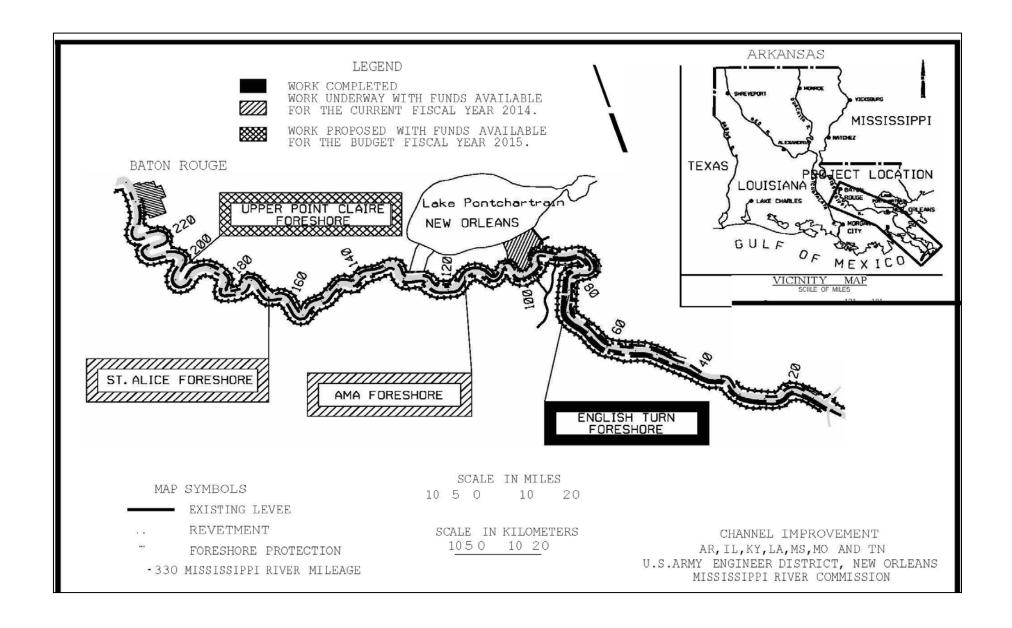


Memphis, Vicksburg, and New Orleans Districts



Memphis, Vicksburg, and New Orleans Districts Channel Improvement, AR, IL KY, LA, MS, MO, and TN





Memphis, Vicksburg, and New Orleans Districts Channel Improvement, AR, IL KY, LA, MS, MO, and TN

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Construction

PROJECT: Grand Prairie Region, AR (Continuing)

LOCATION: The project area is primarily located in Arkansas and Prairie Counties and a small portion in Lonoke and Monroe Counties.

DESCRIPTION: 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: 1.2 to 1 at 7-3/8 percent - Water Supply (FY 1999).

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.

Mississippi River Commission Memphis District Grand Prairie Region, AR

SUMMARIZED FINANCIAL DAT	·A	фооо ооо ооо	ACCUM PCT OF EST	STATUS	PERCENT	PHYSICAL COMPLETION
Estimated Federal Cost		\$293,000,000	FED COST	(1 January 2014)	COMPLETE	SCHEDULE
Estimated Non-Federal Cost Cash Contribution Other Costs	\$68,050,000 88,950,000	\$157,000,000		Grand Prairie Region	26	TBD
Total Estimated Project Cost		\$450,000,000				
Allocations to 30 September 201 Allocation for FY 2012 Allocation for FY 2013 Allocation for FY 2014 Allocations through FY 2014 Estimated Unobligated Carry-In I President's Budget for FY 2015 Programmed Balance to Comple Un-programmed Balance to Com	Funds te after FY 2015	\$ 98,925,000 592,000 5,600,000 22,000,000 127,117,000 1 9,300,000 \$156,583,000				

<sup>1/\$0</sup> reprogrammed to (from) the project.

PHYSICAL DATA: The major project features for this project include a 1,640 cfs pumping station and a 100 cfs relief station, 184 miles of new channels, 291 miles of improvements to existing channels and 120 channel weirs, 14 pipeline check stations, 34 bridge relocations and 342 utility relocations.

Mississippi River Commission

Memphis District

Grand Prairie Region, AR

<sup>2/\$0</sup> rescinded from the project.

<sup>3/ \$0</sup> transferred to the Flood Control and Coastal Emergencies account.

<sup>4/</sup> Estimated Unobligated "Carry-in" Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$107,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this project effort are \$0. This amount will be used to perform work on the study as follows: N/A

<sup>5/</sup> PED costs of \$11,583,000 are included in this amount.

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 could 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 on 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 for 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 o

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 2014: The Total unobligated dollars and current year funds are being applied as follows:

Initiate and Complete:

DeValls Bluff Pump Station Superstructure	\$20,000,000
Planning, Engineering and Design	1,000,000
Construction Management	1,107,000

Total \$22,107,000

FISCAL YEAR 2015: The budget amount will be applied as follows:

Initiate and Complete:

Widened Canal Regulating Reservoir \$7,600,000
Engineering and Design 600,000
Construction Management 1,100,000
Total \$9,300,000

Mississippi River Commission Memphis District Grand Prairie Region, AR

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.	\$ 20,410,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), where necessary for the construction of the project.	18,840,000	
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)).		\$7,300,000
Contribute 35 percent of the non-Federal share of project costs. (Includes \$49,700,000 for work-in-kind credits.)	117,750,000	
Total Non-Federal Costs	\$157,000,000	\$7,300,000

The current non-Federal cost estimate of \$157,000,000 which includes a cash contribution of \$68,050,000 is no change from the latest estimate (\$157,000,000) presented to Congress (FY 2014).

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 (WRID), on 4 August 2000. The WRID intends to utilize proceeds from water contracts, state grants and bond issues to provide their required share of the project cost. 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.

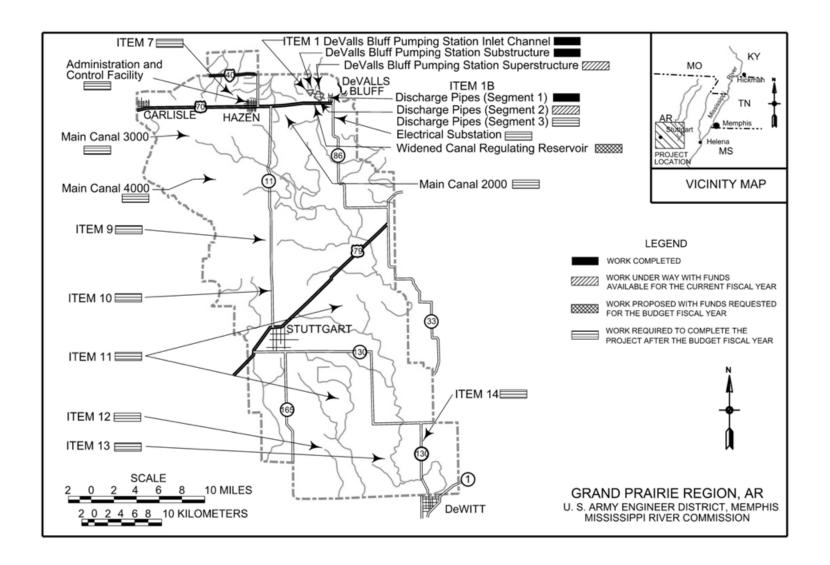
COMPARISON OF FEDERAL COST ESTMATES: The current Federal cost estimate of \$293,000,000 is no change from the latest estimate (\$293,000,000) presented to Congress (FY 2014).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Record of Decision (ROD) for the Final Environmental Impact Statement was executed in February 2000.

Mississippi River Commission Memphis District Grand Prairie Region, AR

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 Resources Development Act 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 General Reevaluation Report 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 on the final Environmental Impact Statement was executed in February 2000. The Memorandum of Agreement with the Natural Resource Conservation Service 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.

Mississippi River Commission Memphis District Grand Prairie Region, AR



Mississippi River Commission Memphis District Grand Prairie Region, AR

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and 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 totaling 1,609.8 miles. 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, WRDA 1992, and WRDA 2000.

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit – Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.18 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.

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2014)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$ 2,553,449,000		Entire Project	94	TBD
Future Non-Federal Reimbursement	674,000				
Estimated Federal Cost (Ultimate)	2,554,123,000				
Estimated Non-Federal Cost Cash Contributions \$ 2,584,000 Other Costs 85,295,000 Reimbursement 674,000 Recreation Facilities \$674,000	88,553,000				
Total Estimated Project Cost	\$2,642,676,000				
Allocations to 30 September 2011 Allocation for FY 2012 Allocation for FY 2013 Allocation for FY 2014 Allocations through FY 2014 Estimated Unobligated Carry-in Funds President's Budget for FY 2015 Programmed Balance to Complete After FY 2015 Un-programmed Balance to Complete After FY 2015	\$ 1,448,956,000 27,727,000 42,377,000 25,163,000 1,544,223,000 <u>1</u> /2/ 0 4/ 18,947,000 \$ 990,953,000 0	61			

<sup>1/\$0</sup> reprogrammed to (from) the project.

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN

<sup>2/\$0</sup> rescinded from the project.

<sup>3/\$0</sup> transferred to the Flood Control and Coastal Emergencies account.

<sup>4/</sup> Unobligated "Carry-in" Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$13,091,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this project effort are \$0. This amount will be used to perform work on the project as follows: N/A

PHYSICAL DATA: The Mississippi River Levee system encompasses 72 miles of channels and canals. The total length of its levees equals 1,595 miles and range in height from 20 to 35 feet. There are 14.8 miles of floodwall ranging from 14 to 23 feet in height. There are also 654.8 miles of berm, 541.6 miles of levee road, and 5 pump stations within the project.

JUSTIFICATION: The Mississippi River Levee System provides protection to 35,000 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 \$522,100,000,000 in 2014 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10,600,000 acres of agricultural lands, and 6,500,000 acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22,700,000 acres. The area that will be provided complete protection by the completed project is 15,100,000 acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 178,000,000 tons. The average savings per ton is \$37.00.

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 \$347,000,000. This would be equivalent to \$16,100,000,000 in damages in 2014 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10,800,000 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 19,800,000 acres would have been inundated. Total damages with existing projects in operation were \$643,000,000 (1973 price levels). Damages without projects would have been \$11,300,000,000 and total damages prevented by projects amounted to \$10,600,000,000. Expressed in 2014 prices, damages without the projects would have been \$58,400,000,000 and damages prevented would have been \$55,100,000,000.

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 \$2,800,000,000 (2011 price levels). In addition, \$1,500,000,000 damages were incurred by Federal flood protection works within the MR&T projects. Damages without projects would have been \$236,900,000,000 and total damages prevented by projects amounted to \$234,100,000,000. Households numbering more than 974,000 were saved from impacts and no known deaths occurred. Expressed in 2014 prices, damages without the projects would have been \$249,000,000,000 and damages prevented would have been \$246,000,000,000.

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:

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts

Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN

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Annual Remaining Benefits	Amount
Flood Control Navigation Area Redevelopment Recreation	\$415,336,000 109,522,000 1,587,000 2,645,000
Total	\$529,090,000

# FISCAL YEAR 2014: The total unobligated dollars and current year funds are being applied as follows:

Initiate	
Economic Evaluation of the MR&T Main Stem Features	\$ 499,000
Initiate and Complete	
Slope Flattening, Cairo, IL	4,000,000
Relief Wells, Tunica, MS Parcel 2	2,000,000
Waterproof Upper Lake Concordia, Item 377-R	8,000,000
Continue	
Cultural Resources Preservation	25,000
Relocations	1,750,000
Modifications/Claims on Existing Contracts	1,628,000
Planning, Engineering and Design	18,152,000
Construction Management	2,200,000
Total	\$38,254,000

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 2015: The budget amount will be applied as follows:

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Economic Evaluation of the MR&T Main Stem Features	\$ 42,000
Planning, Engineering and Design Construction Management	11,305,000 7,600,000
Total	\$18,947,000

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.	\$ 84,720,000	
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.		\$11,191,000
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.	3,258,000	0
Other (levee and revetment construction)	575,000	
Total Non-Federal Costs	\$88,553,000	\$11,191,000

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 FY 2015. Supplemental assurances covering the requirements of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 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 and Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 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

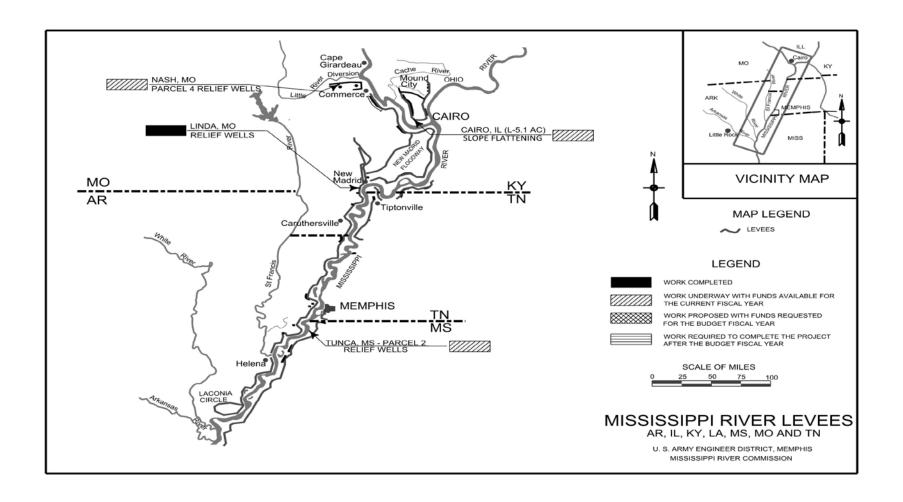
Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,554,123,000 is an increase of \$5,231,000 from the latest estimate \$2,548,892,000 presented to Congress (FY 2014). This change includes the following items:

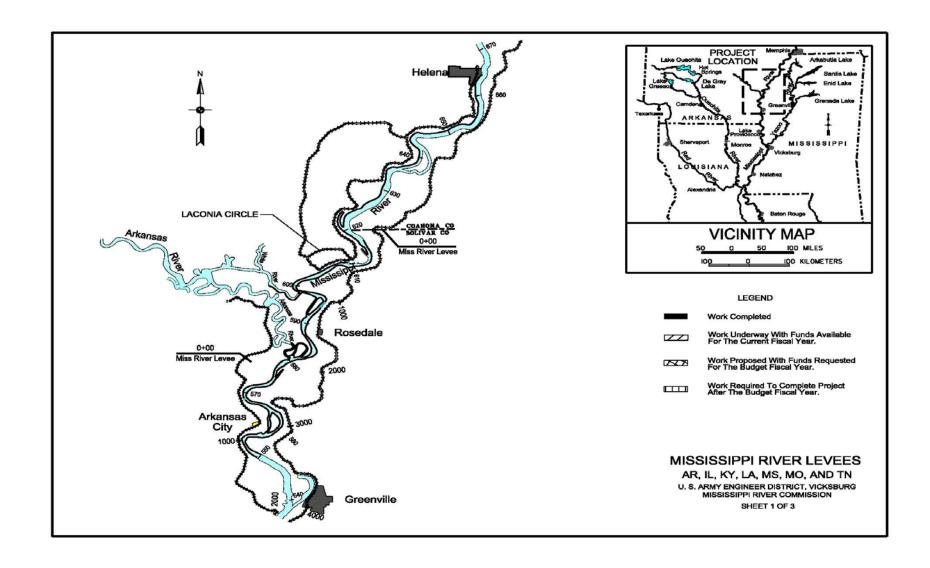
Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (including contingency adjustments) Price Escalation on Real Estate	\$25,615,000 (26,293,000) 5,909,000

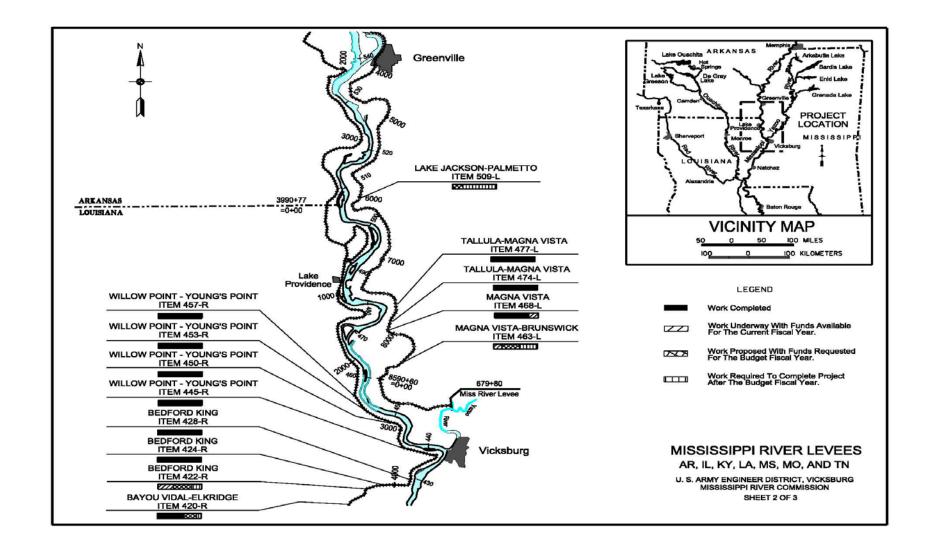
Total \$ 5,231,000

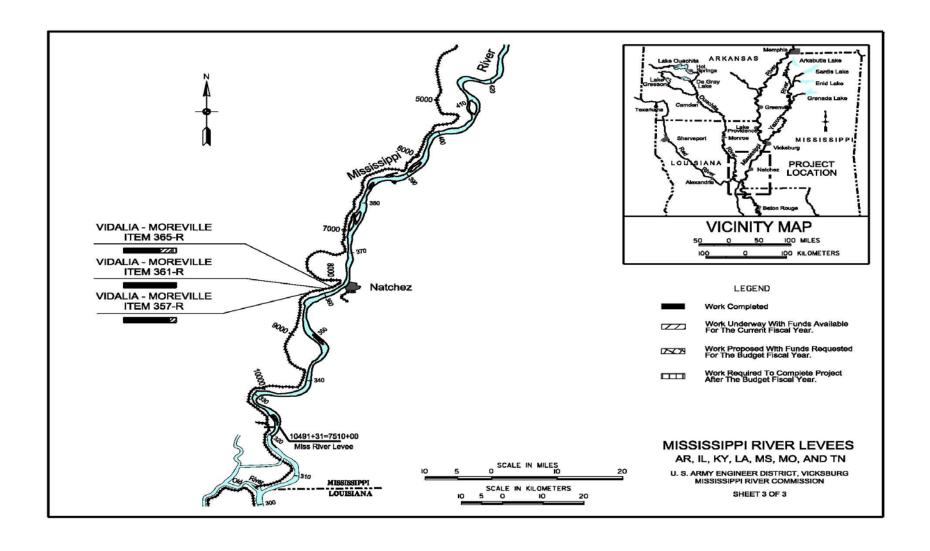
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976. A Supplemental Environmental Impact Statement for the project was completed and the Record of Decision was signed on 5 October 1998. The adequacy of 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.

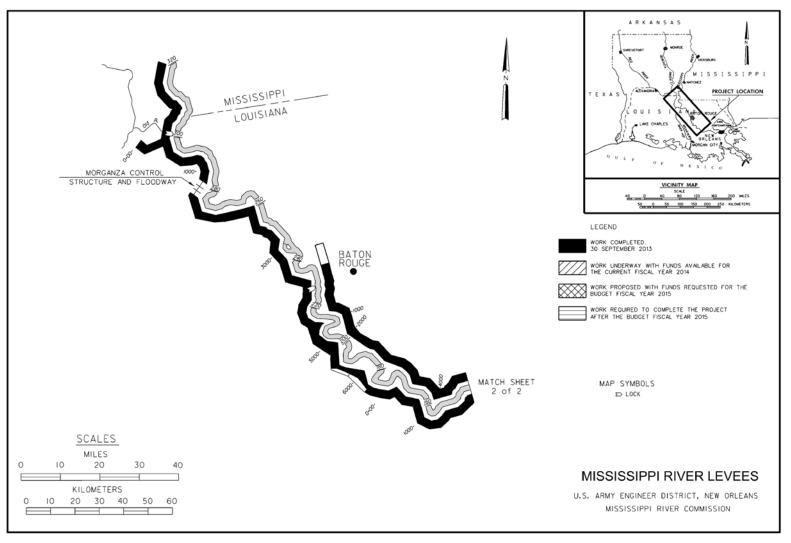
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.



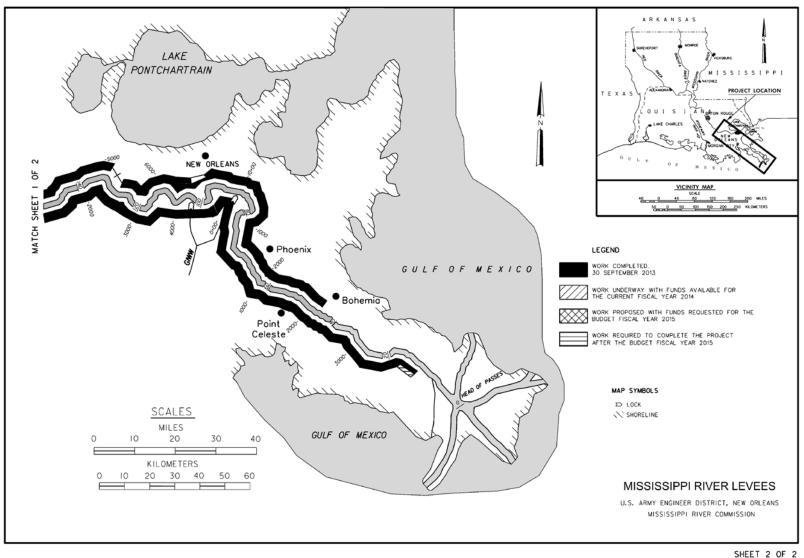








SHEET I OF 2



MR&T - 53

# **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, and 1954

REMAINING BENEFIT-REMAINING COST RATIO: Validated Remaining Benefit - Remaining Cost Ratio: Not available.

TOTAL BENEFIT-COST RATIO: 3.18 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 (MR&T) project.

INITIAL BENEFIT - COST RATIO: This project feature of the Main Stem system was authorized in FY 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the MR&T 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 2014)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$2,117,977,000		Entire Project	96	TBD
Estimated Non-Federal Cost Cash Contribution \$ 2,500,000 Other Costs 12,523,000	\$ 15,023,000		Entire i Toject	Physical	155
Total Estimated Project Cost	\$2,133,000,000				
Allocations to 30 September 2011 Allocation for FY 2012 Allocation for FY 2013 Allocation for FY 2014 Allocations through FY 2014 Estimated Unobligated Carry-In Funds President's Budget for FY 2015 Programmed Balance to Complete after FY 2015 Unprogrammed Balance to Complete after FY 2015	\$1,072,213,000 6,471,000 6,587,000 6,800,000 1,092,071,000 1 2,505,000 1,023,401,000	<u>1/2/3</u> / 52 <u>4</u> / 52			

 $<sup>\</sup>underline{1}$ / \$0 reprogrammed to (from) the project.  $\underline{2}$ / \$0 rescinded from the project.

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<sup>3/\$0</sup> transferred to the Flood Control and Coastal Emergencies account.

<sup>4/</sup> Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$151,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

PHYSICAL DATA: The Atchafalaya Basin Construction Project consists of 449 miles of Levees at an average height of 20'; 20 miles of railroad and 15 miles of road relocations; 9 drainage structures that include Point Coupe (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); 289,212 acres of Lands and Damages; 15 pumping stations with a minimum capacity of 50 cubic feet per second, a Maximum capacity of 1,500 cubic feet per second, and an average capacity of 400 cubic feet per second; 58 miles of bank stabilization; 3 floodgates that include Charenton - Sector-gates, 45 feet wide, East Calumet - sector-gates, 45 feet wide, and West Calumet - sector-gates, 45 feet wide; 147.1 miles of channels; 3 locks that include Bayou Boeuf, 75 feet by 1,156 feet, earth chamber, Bayou Sorrel, 56 feet by 797 feet, earth chamber, and Berwick, 45 feet by 300 feet, concrete chamber; 10.1 miles of new channel river navigation; 2 planned freshwater control structures that include Sherburne - 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 cubic feet per second 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 cubic feet per second 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 cubic feet per second which includes the Red/Ouachita/Black watershed flows and diverted flows via the ORCC (620,000 cubic feet per second) and the Morganza Floodway (600,000 cubic feet per second) 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.

Mississippi River Commission

New Orleans District

Atchafalaya Basin, LA

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$522,100,000,000 in 2014 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10,600,000 acres of agricultural lands, and 6,500,000 acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22,700,000 acres. The area that will be provided complete protection by the completed project is 15,100,000 acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 178,000,000 tons. The average savings per ton is \$37.00.

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 \$347,000,000. This would be equivalent to \$16,100,000,000 in damages in 2014 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10,800,000 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 19,800,000 acres would have been inundated. Total damages with existing projects in operation were \$643,000,000 (1973 price levels). Damages without projects would have been \$11,300,000,000 and total damages prevented by projects amounted to \$10,600,000,000. Expressed in 2014 prices, damages without the projects would have been \$58,400,000,000 and damages prevented would have been \$55,100,000,000.

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 \$2,800,000,000 (2011 price levels). In addition, \$1,500,000,000 damages were incurred by Federal flood protection works within the MR&T projects. Damages without projects would have been \$236,900,000,000 and total damages prevented by projects amounted to \$234,100,000,000. Households numbering more than 974,000 were saved from impacts and no known deaths occurred. Expressed in 2014 prices, damages without the projects would have been \$249,000,000,000 and damages prevented would have been \$246,000,000,000.

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		
Flood Control Navigation Area Redevelopment Recreation	\$ 415,336,000 109,522,000 1,587,000 2,645,000		
Total	\$ 529,090,000		

Mississippi River Commission

**New Orleans District** 

Atchafalaya Basin, LA

# FISCAL YEAR 2014: The total unobligated carryover and current year funds are being applied as follows:

Initiate and Complete Tiger Island Floodwall Tie In Levee	\$3,300,000
Continue:	
Lands and Damages	5,000
Surveys and Layouts	10,000
Economic evaluation of the MR&T Main Stem Features	500,000
Planning, Engineering, and Design	1,000,000
Construction Management	2,136,000
Total	\$6,951,000

### FISCAL YEAR 2015: The budget amount will be applied as follows:

Continue economic evaluation of the MR&T Main Stem Features	\$ 125,000
Planning, Engineering, and Design	1,130,000
Construction Management	1,250,000
Total	\$2,505,000

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 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, and comply with the provision of Section 221 of the Flood Control Act of 1970.	11,413,000	0
The State of Louisiana, through the Department of Transportation and Development as the local sponsor, will provide a voluntary 25 percent 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	\$15,023,000	\$3,700,000

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.

Mississippi River Commission

New Orleans District

Atchafalaya Basin, LA

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,117,977,000 is a decrease of \$88,223,000 from the latest estimate (\$2,206,200,000) presented to Congress (FY 2014).

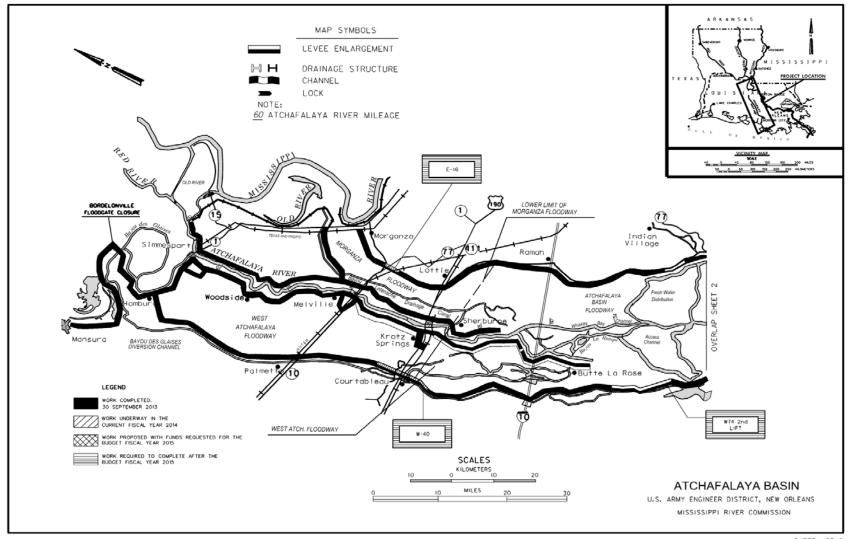
Item Amount

Price Escalation on Construction Features (\$88,223,000)

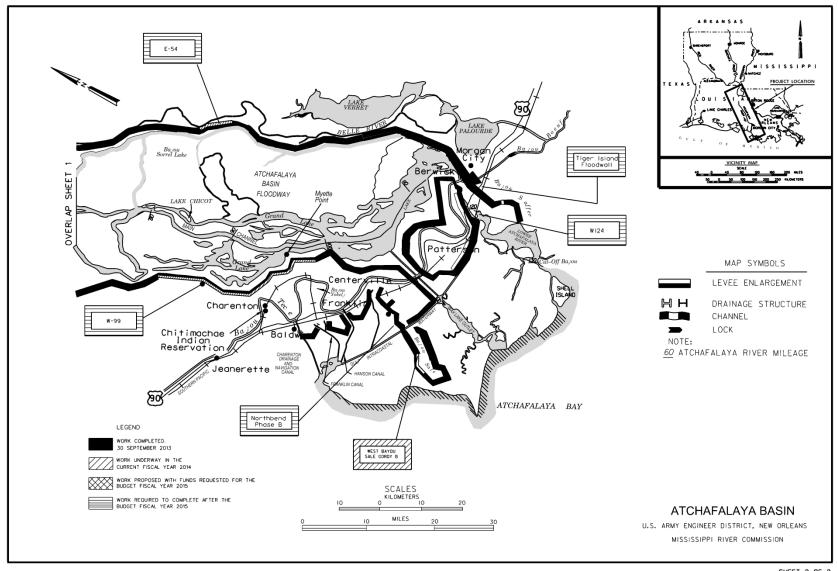
Total (\$88,223,000)

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.



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: Atchafalaya Basin Floodway System, LA (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, environmental protection, developmental control, and public access; acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway, for recreation developmental 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. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act, 1985; Water Resources Development Act, 1986; Energy and Water Development Appropriations Act, 1981; Energy and Water Development Appropriations Act, 1997; 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: 3.18 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 (MR&T) 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 1 January 2014	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	<b>#054 000 000</b>			Land Acquisition	60	TBD
Estimated Non-Federal Cost	\$251,200,000 29,800,000			Management Units	7	TBD
Cash Contribution \$28,850,000 Other Costs \$950,000				Entire Project	34	TBD
Total Estimated Project Cost	\$281,000,000					
Allocations thru 30 September 2011	138,575,000					
Allocation for FY 2012	7,800,000					
Allocation for FY 2013	1,647,000					
Allocation for FY 2014	1,800,000					
Allocations through FY 2014	149,822,000	<u>1</u> / <u>2</u> / <u>3</u> / 60				
Estimated Unobligated Carry-In Funds	0	<u>4</u> /				
President's Budget for FY 2015	2,325,000	61				
Programmed Balance to Complete after FY 2015	99,053,000					
Un-programmed Balance to Complete after FY 2015	0					

Mississippi River Commission

New Orleans District

Atchafalaya Basin Floodway System, LA

<sup>1/\$0</sup> reprogrammed to (from) the project.

<sup>2/\$0</sup> rescinded from the project.

<sup>3/\$0</sup> transferred to the Flood Control and Coastal Emergencies account.
4/ Unobligated Carry-In Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$2,432,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this project are \$0. This amount will be used to perform work on the project as follows: N/A.

PHYSCIAL DATA: Land and damages: 388,000 acres recreation facilities; 3 campgrounds have been developed; 7 primitive campgrounds; 15 2-lane boat launching ramps; 1 visitor center and numerous trails.

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 \$522,100,000,000 in 2014 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10,600,000 acres of agricultural lands, and 6,500,000 acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22,700,000 acres. The area that will be provided complete protection by the completed project is 15,100,000 acres.

For navigation, the major commodities are agricultural goods and industrial materials. The five-year average commercial tonnage is 178,000,000 tons. The average savings per ton is \$37.00.

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 \$347,000,000. This would be equivalent to \$16,100,000,000 in damages in 2014 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10,800,000 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 19,800,000 acres would have been inundated. Total damages with existing projects in operation were \$643,000,000 (1973 price levels). Damages without projects would have been \$11,300,000,000 and total damages prevented by projects amounted to \$10,600,000,000. Expressed in 2014 prices, damages without the projects would have been \$58,400,000,000 and damages prevented would have been \$55,100,000,000.

Mississippi River Commission

New Orleans District

Atchafalaya Basin Floodway System, LA

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 \$2,800,000,000 (2011 price levels). In addition, \$1,500,000,000 damages were incurred by Federal flood protection works within the MR&T projects. Damages without projects would have been \$236,900,000,000 and total damages prevented by projects amounted to \$234,100,000,000. Households numbering more than 974,000 were saved from impacts and no known deaths occurred. Expressed in 2014 prices, damages without the projects would have been \$246,000,000,000.

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
Flood Control Navigation Area Redevelopment Recreation	\$415,336,000 109,522,000 1,587,000 2,645,000
Total	\$529,090,000

FISCAL YEAR 2014: The total unobligated carryover and current year funds are being applied as follows:

#### Continue:

Land and damages	\$100,000
Buffalo Cove Construction	3,332,000
Economic evaluation of the MR&T Main Stem Features	250,000
Planning, Engineering, and Design	300,000
Construction Management	250,000
Total	\$4,232,000

Mississippi River Commission

New Orleans District

Atchafalaya Basin Floodway System, LA

#### FISCAL YEAR 2015: The budget amount will be applied as follows:

#### Continue:

Buffalo Cove Construction	\$1,050,000
Lands and Damages	150,000
Planning, Engineering, and Design	500,000
Construction Management	500,000
Economic Evaluation of the MR&T Main Stem Features	125,000
Total	\$2.325.000

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.	\$ 18,806,000	\$ 1,361,000
Provide lands, easements, right-of-way, and dredged material disposal areas for recreation.	950,000	0
Pay 25 percent of construction, operation, and maintenance of Water Management Units.	10,044,000	7,253,000
Total Non-Federal Costs	\$ 29,800,000	\$ 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.

Mississippi River Commission

New Orleans District

Atchafalaya Basin Floodway System, LA

The State designated the Department of Natural Resources to be the lead State agency to represent the State in the implementation of the project. An additional sponsor, 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 \$251,200,000 is a decrease of \$171,623,000 from the latest estimate (\$422,823,000) presented to Congress (FY 2014). 1/

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments	\$ 1,905,000 (173,528,000)
Total	(\$171,623,000)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT (EIS): The final EIS 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) was initiated in FY 2008 with anticipated completion and approval in FY 2014. A SEIS for Buffalo Cove, Flat Lake, Beau Bayou, and Cocodrie Swamp has also been initiated with completion paralleling the 5-year monitoring program for Buffalo Cove.

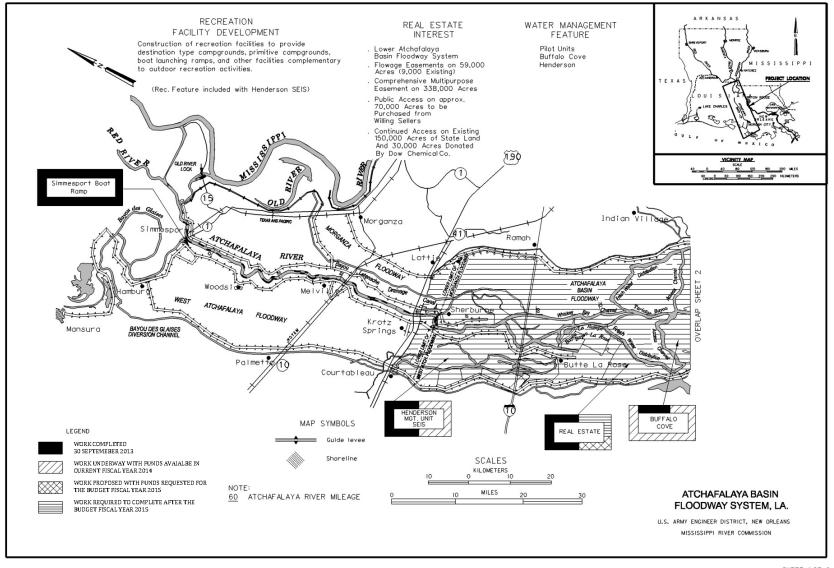
OTHER INFORMATION: First fiscal year project funds were appropriated in 1985.

1/ The FY 2014 Justification Sheet cost estimate of \$422,823,000 was in error.

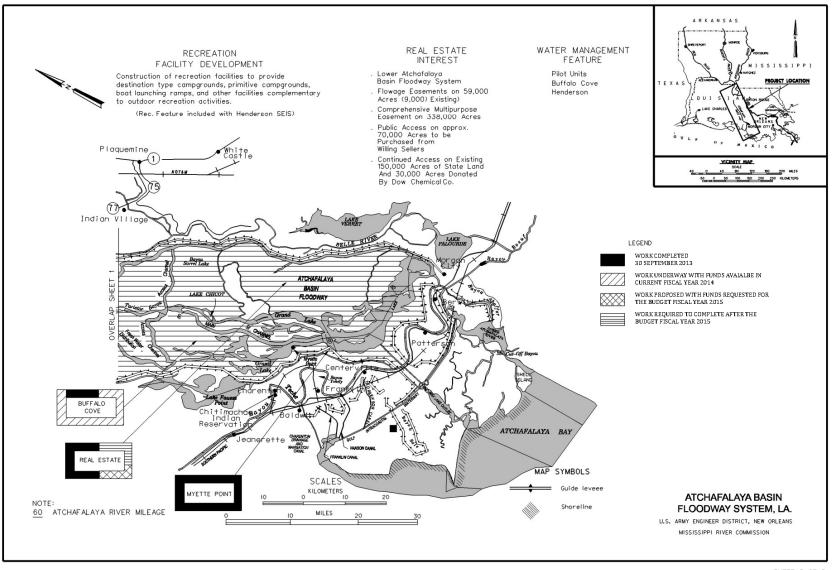
Mississippi River Commission

New Orleans District

Atchafalaya Basin Floodway System, LA



SHEET 1 OF 2



SHEET 2 OF 2

# MR&T OPERATION AND MAINTENANCE

### **Key to Abbreviations:**

N = Navigation FDR = Flood Damage Reduction Rec = Recreation Hydro = Hydropower ES = Environmental Stewardship WS = Water Supply

### **ARKANSAS**

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 management and navigation along the Mississippi River by means of revetments, dikes, foreshore protection, and improvement dredging.

ALLOCATION AMOUNT FOR FY 2014: \$76,978,000

BUDGETED AMOUNT FOR FY 2015: M: \$61,983,000 **O**: \$3,756,000 T: \$65,739,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: \$18,668,000 provides for dredging and dike maintenance of the Mississippi River which is critical for transportation of goods and provides access to numerous ports and recreation facilities.

FRM: \$47,071,000 provides for hired labor activities associated with the revetment season including upper bank paving, and stone repairs contract.

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 Mississippi River and Tributaries (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 River to reach deep drafts ports, it must transit this reach.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$2,006,000 (Dikes \$47,000, Revetment \$119,000 and Dredging \$1,840,000). As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

Mississippi Valley Division

Memphis, Vicksburg, and New Orleans Districts

Channel Improvement, AR, IL, KY, LA, MS, MO, and TN

PROJECT NAME: Helena Harbor, Phillips County, AR

AUTHORIZATION: WRDA 1986, as amended

LOCATION AND DESCRIPTION: The harbor is located in Phillips County, about five miles south of Helena, Arkansas, at mile 652 on the lower Mississippi River. The harbor is used by farm communities and other industries in this region for movement of goods to and from markets. Federal maintenance is authorized. The approved channel dimensions for navigation are 9 feet deep by 300 feet wide by 3.85 miles long, with an additional 50 feet of width for berthing; a fleeting area, 100 feet by 1,000 feet; and a turning basin, 600 feet by 600 feet. The local interest is the Helena-West Helena Phillips County Port Authority.

ALLOCATION FOR FY 2014: \$533,000

BUDGETED AMOUNT FOR FY 2015: M: \$11,000 O: \$22,000 T: \$33,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: \$33,000 provides for performance of minimal 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: 5 year average commercial tonnage is 1,771.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$156,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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 control structures, flood control structures, flood ways, drainage structures, pumping stations, flood control channels, reservoirs, dikes, and revetments.

ALLOCATION FOR FY 2014: \$2,278,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$2,329,000 T: \$2,329,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A.

FRM: \$2,329,000 provides for inspections and monitoring of the Mississippi River and Tributaries flood control system, including 463 miles of levees, 516 miles of channels, 125 drainage structures, 1 pumping plant and 15 weirs. Also provides for flood control permitting and levee evaluation.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION: Most of the flood control features referenced above are federally constructed, but are operated and maintained by state levee districts or local governmental agencies. The Inspection of Completed Works program includes responsibility for inspecting all of the flood control features to ensure appropriate maintenance is being performed. The Mississippi Rivers and Tributaries system has prevented over \$86,500,000 in flood damages to date.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$169,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts Inspection of Completed Works, AR, IL, KY, LA, MS, MO, and TN

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.

ALLOCATION FOR FY 2014: \$287,000

BUDGETED AMOUNT FOR FY 2015: M: \$294,000 O: \$0 T: \$294,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$294,000 provides minimal operation and maintenance of the project including levee slide repairs.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project has prevented over \$7,700,000 in flood damages since project completion in 1940.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$2,000.

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.

ALLOCATION AMOUNT FOR FY 2014: T: \$193,000 1/

BUDGETED AMOUNT FOR FY 2015: M: \$150,000 O: \$48,000 T: \$198,000

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2015:

N: N/A

FRM: \$198,000 provides for minimal operation and maintenance of the project including levee slide repairs and data collection.

RC: N/A

H: N/A

E: N/A

WS: N/A

OTHER INFORMATION: None.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION FOR FY 2014: T: \$1,063,000

BUDGETED AMOUNT FOR FY 2015: M: \$555,000 O: \$508,000 T: \$1,063,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$1,063,000 provides for the annual maintenance of existing/new inventory, collection of funds for the sales of maps, publications, historical documents, photos, aerial photography, and flood control infrastructure on the Mississippi River and Tributaries. Also includes annual updates to navigation portfolio and other maps for flood damage potamology analysis and navigation channel identification which includes logging and archiving of project as-built drawings. The I:62,500 quadrangle maps are currently being converted from the original hard copy format to a computer-aided design and drafting format. The digital format will allow the maps to be used in the computer-aided design and drafting environment for a multitude of uses including geographic information systems 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/ Unobligated Carry-in Funding: The actual unobligated balance from FY 13 into FY 14 for this project is \$9,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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 percent Federally funded. Local interests are responsible for providing minor maintenance and rights-of-way.

ALLOCATION FOR FY 2014: T: \$9,979,000

BUDGETED AMOUNT FOR FY 2015: M: \$6,202,000 O: \$2,688,000 T: \$8,890,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$8,890,000 provides for minimal operation and maintenance of levees and levee slide repairs.

RC: N/A.

H: N/A.

EN: N/A

WS: N/A.

OTHER INFORMATION: None.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$1,333,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION FOR FY 2014: \$ 5,900,000

BUDGETED AMOUNT FOR FY 2015: M: \$2,900,000 O: \$3,000,000 T: \$5,900,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$5,900,000 provides for minimal 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/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$137,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

Mississippi River Commission

Memphis District

St. Francis Basin, AR and MO

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.

ALLOCATION FOR FY 2014: \$3,939,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$2,485,000 T: \$2,485,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$2,485,000 provides for minimal operation and maintenance of the project including inspections, Lake Chicot Pumping Plant, data collection, analysis and real estate management.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project has prevented over \$2,000,000 in flood damages since construction and allows adequate drainage for 5,300 square miles in southeast Arkansas and northeast Louisiana.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$254,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION FOR FY 2014: T: \$ 1,142,000

BUDGETED AMOUNT FOR FY 2015: M: \$550,000 O: \$790,000 T: \$1,340,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$1,340,000 provides for minimal operation and maintenance 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.

RC: N/A

H: N/A

EN: 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/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$22,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

### **LOUISIANA**

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.

ALLOCATION FOR FY 2014: \$11,247,000

BUDGETED AMOUNT FOR FY 2015: M: \$6,058,000 O: \$7,059,000 T: \$13,117,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: \$7,852,000 provides for 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: \$5,265,000 provides for operations and routine maintenance of flood risk reduction structures – Morganza flood control structure, Pointe Coupee pumping station and drainage structure, Bayou Courtableau flood gate, Charenton drainage structure, 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 risk reduction structures and bridges.

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 Gulf Intracoastal Waterway main stem and Alternate Route. Dredging Three Rivers is essential for navigation passing from the Mississippi River into the Atchafalaya River through Old River Lock.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 13 into FY 14 for this project is \$606,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

Mississippi River Commission

New Orleans District

Atchafalaya Basin, LA

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 100,000 acres of easement lands.

ALLOCATION FOR FY 2014: T: \$ 1,521,000

BUDGETED AMOUNT FOR FY 2015: M: \$384,000 O: \$1,459,000 T: \$1,843,000 <u>1/</u>

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$221,000 provides inspection of developmental control and environmental protection, easement lands, as well as flowage easement lands within basin protection levees.

RC: \$676,000 provides for operation and maintenance of recreation and public access features On feeowned lands within the Atchafalaya Basin.

H: N/A

EN: \$946,000 provides for operation and maintenance of environmental and natural resources on feeowned lands of the Atchafalaya Basin.

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/ Unobligated Carry-in Funding: The actual unobligated balance from FY13 into FY14 for this project is \$67,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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. Provides a slack water channel for barge traffic and an industrial expansion area for the port of Baton Rouge, LA.

ALLOCATION FOR FY 2014: \$569,000

BUDGETED AMOUNT FOR FY 2015: M: \$ 0 O: \$51,000 T: \$51,000 <u>1</u>/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: \$51,000 provides for surveys to determine channel conditions, and minimal maintenance dredging.

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 percent availability.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 13 into FY 14 for this project is \$3,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION FOR FY 2014: T: \$ 48,000

BUDGETED AMOUNT FOR FY 2015: M: \$ 0 O: \$48,000 T: \$48,000 <u>1</u>/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$48,000 provides 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/ Unobligated Carry-in Funding: The actual unobligated balance from FY 13 into FY 14 for this project is \$0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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 Mississippi River and Tributaries system. Located in St. Charles Parish, Louisiana, the spillway furnishes protection for the city of New Orleans and other communities about 26 miles downstream.

ALLOCATION FOR FY 2014: \$2,188,000

BUDGETED AMOUNT FOR FY 2015: M: \$569,000 O: \$1,645,000 T: \$2,214,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015: N:

N/A

FRM: \$1,548,000 provides for routine operation and maintenance including grass cutting; floodway clearing; building, equipment and road maintenance; review of permits, outgrants, and existing rights-of way).

RC: \$429,000 provides for accommodation of visitors including ranger patrols and maintenance of visitor use areas such as shelters, boat ramps, dog training areas, ATV trails and fishing/crawfishing areas.

H: N/A

EN: \$237,000 provides for operation and maintenance of natural resources within the 7,623- acre project area.

WS: N/A

#### OTHER INFORMATION:

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 13 into FY 14 for this project is \$10,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

PROJECT NAME: Lower Red River, South Bank Levees, LA

AUTHORIZATION: Flood Control Act of 1928, (Public Law 391), 70<sup>th</sup> 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.

ALLOCATION FOR FY 2014: \$456,000

BUDGETED AMOUNT FOR FY 2015 M: \$327,000 O: \$171,000 T: \$498,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$498,000 provides for minimal operation and maintenance of the project including levee slide repair.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: 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.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$10,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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. The project 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.

ALLOCATION FOR FY 2014: T: \$472,000

BUDGETED AMOUNT FOR FY 2015: M: \$ 0 O: \$532,000 T: \$532,000 <u>1</u>/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$532,000 provides for operating and maintaining the Caernarvon Freshwater Diversion Structure and the Davis Pond Freshwater Diversion Structure.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: 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. Funding for project operation and maintenance is cost-shared at 75 percent Federal/25percent State. 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/ Unobligated Carry-in Funding: The actual unobligated balance from FY 13 into FY 14 for this project is \$1,507,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

Mississippi Valley Commission

New Orleans District

Mississippi Delta Region, LA

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.

ALLOCATION FOR FY 2014: \$9,118,000

BUDGETED AMOUNT FOR FY 2015: M: \$ 5,933,000 O: \$ 2,455,000 T: \$8,388,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: \$2,910,000 provides for operation and routine maintenance of Old River Lock; reconnaissance surveys performed in the forebay and tailbay channel to assure channels are navigable; real estate management; instrumentation and data gathering and evaluation; dredge forebay and tailbay channel to assure the channels are navigable and completion of inspection reports of the Old River Lock & Bridge.

FRM: \$5,153,000 provides for 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; perform underwater inspection of the Low Sill and Auxiliary Structures' stilling basins; build a new office building at the Low Sill Control Structure; and re-wire the Low Sill Control Structure Gantry Cranes.

RC: \$157,000 provides for operations for recreation activities.

H: N/A

EN: \$168,000 provides for management of special status species and natural resources.

WS: N/A

OTHER INFORMATION: None

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 13 into FY 14 for this project is \$533,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

Mississippi River Commission

New Orleans District

Old River, LA

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.

ALLOCATION AMOUNT FOR FY 2014: T: \$2,414,000 1/

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$3,262,000 T: \$3,262,000

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$3,262,000 provides for minimal operation and maintenance of the project including Tensas Cocodrie Pumping Plant, levee slide repair, inspections, data collection, analysis and real estate management.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$421,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

### **MISSISSIPPI**

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.

ALLOCATION FOR FY 2014: \$524,000

BUDGETED AMOUNT FOR FY 2015: M: \$20,000 O: \$4,000 T: \$24,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

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: Greenville Harbor supports approximately 540 jobs with an annual payroll of \$12,600,000 million.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$0. As of the date this justification sheet was prepared, the total estimated unobligated dollars to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION FOR FY 2014: \$542,000

BUDGETED AMOUNT FOR FY 2015: M: \$38,000 O: \$4,000 T: \$42,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

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: Vicksburg Harbor supports approximately 4,000 jobs with an annual payroll of \$80,000,000. The economic impact to the area is approximately \$565,000,000.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

PROJECT NAME: Yazoo Basin, Arkabutla Lake, MS

AUTHORIZATION: Flood Control Acts of 1028, (Sec 3); 1936, (Sec 4); 1037, (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.

ALLOCATION FOR FY 2014: \$6,854,000

BUDGETED AMOUNT FOR FY 2015: M: \$44,000 O: \$5,450,000 T: \$5,494,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$3,097,000 provides for minimal critical operation and maintenance of the project including inspections, data collection, analysis and real estate management. Also provides 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, turf grass maintenance, nuisance animal control, maintenance of rock shoreline protection and herbicide applications.

FRM-SUS15: \$44,000 This package will replace current 4 feet flourescent tubes with 4 feet LED tubes. 2/

RC: \$1,895,000 provides for 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: \$502,000 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 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.

Arkabutla maintains a total visitation of over 854,000 visitors per year and visitor spending resulted in \$14,400,000 million total sales, \$5,300,000 in total personal income, and supported 224 jobs in the local communities.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$2,000. As of the date this justification sheet was prepared, the total unobligated dollars

Mississippi River Commission

Vicksburg District

Yazoo Basin, Arkabutla Lake, MS

estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

2/ In accordance with FY15 Department of the Army budget guidance, sustainability and energy work package(s) (SUSTAINABILITY/SUS) have been specifically selected and funded as additional funding to the project's O&M budget request in the business line(s) as indicated above. The amount(s) identified as SUS FY15 funds are SUS sub-totals that are included in the top-line total for each business line. Business lines with no SUS sub-totals shown above have no SUS additional funding requested for FY15.

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.

ALLOCATION AMOUNT FOR FY 2014: \$185,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$185,000 T: \$185,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$185,000 provides for minimal operation and maintenance of the project including inspections, data collection and analysis.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The project has prevented over \$413,000,000 in flood damages since construction.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION AMOUNT FOR FY 2014: \$4,777,000

BUDGETED AMOUNT FOR FY 2015: M: O: \$4,898,000 T: \$4,898,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$2,412,000 provides for minimal operation and maintenance of the project including inspections, data collection, analysis and real estate management. Also provides 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.

RC: \$1,879,000 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: \$607,000 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: 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. Enid maintains a total visitation of over 569,000 visitors per year and visitor spending resulted in \$10,500,000 in total sales, \$3,600,000 in total personal income, and supported 161 iobs in the local communities.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$0. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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 Greenwood Protection Works and includes 55 miles of levees, 14 miles of channels, 2 miles of ditch, 59 drainage structures, 4 pumping plants and 7 weirs.

ALLOCATION AMOUNT FOR FY 2014: \$788,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$807,000 T: \$807,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$807,000 provides for minimal 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/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$12,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION AMOUNT FOR FY 2014: \$5,164,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$5,705,000 T: \$5,705,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$2,850,000 provides for minimal operation and maintenance of the project including inspections, data collection, analysis and real estate management. Also provides 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.

RC: \$1,922,000 - 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: \$933,000 - 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 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 Grenada maintains a total visitation of over 1,800,000 visitors per year. And visitor spending resulted in \$38,800,000 total sales, \$12,900,000 in total personal income, and supported 676 jobs in the local communities.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$12,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION AMOUNT FOR FY 2014: \$1,273,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$1,344,000 T: \$1,344,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A.

FRM: \$1,344,000 provides for minimal operation and maintenance of the project including inspections, data collection and analysis.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Protects approximately 1,200,000 million acres of prime agricultural lands and communities from overflow of the Yazoo River system.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$52,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION AMOUNT FOR FY 2014: \$6,493,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$6,629,000 T: \$6,629,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$3,642,000 provides for minimal operation and maintenance of the project including inspections, data collection, analysis and real estate management. Also provides 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.

RC: \$2,264,000 - 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: \$723,000 - 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 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. Sardis Lake maintains a total visitation of over 1,300,000 million visitors per year and visitor spending resulted in \$26,200,000 total sales, \$8,400,000 in total personal income, and supported 427 jobs in the local communities.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$35,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

Mississippi River Commission

Vicksburg District

Yazoo Basin, Sardis Lake, MS

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.

ALLOCATION AMOUNT FOR FY 2014: \$944,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$967,000 T: \$967,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$967,000 provides for minimal operation and maintenance of the project including inspections, data collection and analysis.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Protects approximately 1,200,000 acres of prime agricultural lands and communities from overflow of the Yazoo River system.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$29,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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 AMOUNT FOR FY 2014: \$375,000

BUDGETED AMOUNT FOR FY 2015: M: \$6,000 O: \$378,000 T: \$384,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$384,000 provides for minimal operation and maintenance of the project including inspections, data collection and analysis.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This flood control feature splits the flows of the Yazoo River and reduces flood stages in the Yazoo Basin.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$1,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION AMOUNT FOR FY 2014: \$2,226,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$544,000 T: \$544,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$544,000 provides for minimal operation and maintenance of the project including inspections, data collection and analysis.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Project has prevented over \$98,000,000 dollars in flood damages since construction, protecting prime agricultural lands and many small communities from backwater flooding from the Mississippi River.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$190,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

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.

ALLOCATION AMOUNT FOR FY 2014: \$714,000

BUDGETED AMOUNT FOR FY 2015: M: \$0 O: \$731,000 T: \$731,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$731,000 provides for minimal 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 Mississippi River and Tributaries system.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$47,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

## **MISSOURI**

APPROPRIATION TITLE: Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN

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 44,000 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.

ALLOCATION FOR FY 2014: \$4,760,000

BUDGETED AMOUNT FOR FY2015: M: \$918,000 O: \$3,378,000 T: \$4,296,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: N/A

FRM: \$1,790,000 provides for minimal operations and maintenance for flood risk management operations; dam safety (gatehouse, concrete overflow spillway, dam and 3 dikes); water control data/analysis; security; real estate costs for compliance management.

RC: Routine operation 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 and visitor center operations.

H: N/A

EN: \$628,000 provides for minimal routine operation and maintenance of environmental stewardship program and features including 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 1,878,000, generating economic benefits estimated at \$32,988,000 (due to nation-wide effort to modernize the visitation estimation and reporting system FY13 data is unavailable).

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 13 into FY 14 for this project is \$486,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.

## **TENNESSEE**

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.

ALLOCATION FOR FY 2014: \$2,303,000

BUDGETED AMOUNT FOR FY 2015: M: \$1,642,000 O: \$0 T: \$1,642,000 <u>1</u>/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2015:

N: \$1,642,000 provides for performance of minimal 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 8,321.

1/ Unobligated Carry-in Funding: The actual unobligated balance from FY 2013 into FY 2014 for this project is \$1,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2015 from prior appropriations for use on this effort are \$0. This amount will be used to perform work on the project as follows: N/A.