

## FINDING OF NO SIGNIFICANT IMPACT

### MONONGAHELA RIVER LOCKS AND DAM 4 ACCESS/WORK AREAS AND ADDITIONAL LANDS AT VICTORY HOLLOW OFFLOADING/STAGING AREA

The Pittsburgh District, US Army Corps of Engineers, is proceeding with construction authorized by congress as the "Locks and Dams 2, 3 and 4, Monongahela River Project." The District has identified project access and work areas for Locks 4 and the Victory Hollow Disposal Site not specifically described in previous project reports and environmental compliance documentation. These areas are located on both sides of the river in the vicinity of Locks 4, i.e. Charleroi/North Charleroi, Washington Co., PA, and Monessen vicinity, Westmoreland Co., PA; and at the river offloading site at Victory Hollow, Carroll Township, between Monongahela and Donora, Washington Co., PA. The Victory Hollow Disposal Site was addressed for NEPA compliance in our **Supplemental Environmental Impact Statement, Disposal of Dredged and Excavated Material (1998)**. This site included a 7-acre± riverside offloading area. The District proposes to acquire a 14-acre± parcel adjoining the existing offloading site for additional offloading/storage space. This offloading site will be used over an 8-year± period during disposal operations from project dredging. The Locks 4 work areas will be used for about a 5-year± period.

The subject sites were all historically disturbed by industrial/mining/transportation development. There are no sensitive terrestrial resources that will be affected by the proposed use of these sites. Delivery of materials to the concrete batch plant in the Charleroi/North Charleroi area will be by truck over local roads. The anticipated traffic levels have been estimated and disclosed in the assessment. Delivery of materials to the Victory Hollow Disposal Site will be by river, through expansion of an existing barge dock. Instream work associated with these sites will include the dock expansion at Victory Hollow and construction of an offloading platform at the Locks 4 batch plant. Impacts to aquatic resources will be minimized through scheduling instream work outside of the spawning period (mid-April through June) and implementing sedimentation/erosion control measures for the upland work.

The District considered alternative Locks 4 work/access areas in the project vicinity. Sites with adequate space to accommodate a concrete batch plant close to the locks have access or terrain problems. The preferred site for the concrete batch plant has suitable space and access, and was used for similar purposes in the early 1960s when the District replaced Dam 4. The additional Victory Hollow offloading lands provide options for avoiding an at-grade crossing of an active railroad line and state highway between the offloading site and upland disposal site.

The Environmental Assessment and Draft Finding of No Significant Impact were circulated for a 30-day public review and comment period in May 2000. Only one reviewer, the Pennsylvania Game Commission, responded, concurring in our finding that "little significant impact will occur to the wildlife habitat in either area." Although the Pennsylvania Fish and Boat Commission did not comment on the documentation, our

subsequent consultation with them confirmed that they consider a previously identified issue to be unresolved. In their November 2, 1999 letter provided during preparation of the assessment, they recommended a fishery and freshwater mussel survey in the Victory Hollow and left bank batch plant areas. Our commitment to avoid instream work during the spawning and nursery period, as previously coordinated with the aquatic resource agencies for the overall Lower Mon Project, was insufficient in their opinion to protect the special concern species identified in their letter. We will continue to coordinate and resolve this issue under the Fish and Wildlife Coordination Act prior to undertaking any instream work associated with this action. There are no unresolved issues involving the lands associated with this action.

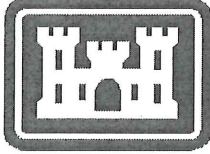
Based on an evaluation of the Environmental Assessment and comments received through the public review process, it is my determination that the proposed use of these project work/access areas would not constitute a major Federal action significantly affecting the human environment as defined in the Council on Environmental Quality's current regulations implementing the National Environmental Policy Act. Consequently, the preparation of an environmental impact statement is not warranted.

20 Jul 00

Date



David R. Ridenour  
Colonel, Corps of Engineers  
District Engineer



**US Army Corps  
of Engineers**  
Pittsburgh District

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May 2000

## ENVIRONMENTAL ASSESSMENT

# MONONGAHELA RIVER LOCKS AND DAM 4 ACCESS AND WORK AREAS AND ADDITIONAL LANDS AT VICTORY HOLLOW OFFLOADING/STAGING AREA

Additional Documentation to the  
Lower Monongahela River Navigation System Feasibility Study and  
Final Environmental Impact Statement  
December 1991

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LOCKS AND DAMS 2, 3 & 4, MONONGAHELA RIVER PROJECT  
ALLEGHENY, WASHINGTON AND WESTMORELAND COUNTIES,  
PENNSYLVANIA

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Cover Sheet

**LEAD AGENCY:** U.S. Army Corps of Engineers, Pittsburgh District

**TITLE:** Locks and Dam 4 Access and Work Areas and Additional Lands at Victory Hollow Offloading/Staging Area, Locks and Dams 2,3 and 4, Monongahela River Project, Environmental Assessment; Additional Documentation to the Lower Monongahela River Navigation System Feasibility Study Final Environmental Impact Statement (December 1991)

**CONTACT:** Additional copies of this information may be obtained by submitting a written request to: Chief, Natural and Cultural Resources Branch, U.S. Army Corps of Engineers, Pittsburgh District, 1000 Liberty Avenue, Pittsburgh, PA 15222-4186.

**ABSTRACT:** The United States Army Corps of Engineers, Pittsburgh District, has prepared this Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) to evaluate environmental, economic, and social impacts which may be associated with establishing land requirements to support the replacement of both locks at the Locks and Dam 4 project at Charleroi, Pennsylvania, and expanding the offloading and staging area at the Victory Hollow Disposal Site in Donora, Pennsylvania.

The replacement of the locks and expansion of the offloading and staging area are a project component of the authorized navigation improvement project for the Lower Monongahela River.

Based on the impact assessment conducted during the preparation of this Environmental Assessment, the impacts from the proposed action are not significant.

**AVAILABILITY:** The EA and Draft FONSI are available for public inspection in the following libraries: Donora Public Library, John K. Tener Public Library, Monessen Public Library, and the Monongahela Area Public Library.

**PUBLIC COMMENT:** The U.S. Army Corps of Engineers encourages public participation in the National Environmental Policy Act (NEPA) process. Accordingly, the public is invited to provide written comments to the District by June 2, 2000. Comments should be addressed to:

Mr. James A. Purdy  
Chief, Natural and Cultural Resources Branch  
Pittsburgh District, USACE  
1000 Liberty Avenue  
Pittsburgh, PA 15222-4186

MONONGAHELA RIVER LOCKS AND DAM 4 ACCESS AND WORK AREAS  
AND  
ADDITIONAL LANDS AT VICTORY HOLLOW OFFLOADING/STAGING AREA

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## **1. Purpose and Need**

This Environmental Assessment (EA) identifies and evaluates the potential environmental impacts associated with establishing land requirements to support the replacement of both locks at the Locks and Dam 4 project at Charleroi, Pennsylvania (River Mile 41.5), and expanding the offloading and staging area at the Victory Hollow disposal site near Donora, Pennsylvania. (See Figure 1).

A project to replace Locks and Dams 2, 3, and 4 on the Monongahela River (Lower Mon Project) was authorized by Congress in the Water Resources Development Act of 1992. The Final Environmental Impact Statement (FEIS) for this navigation project was filed with the U.S. Environmental Protection Agency on January 28, 1992. The Director of Civil Works signed a Record of Decision on December 17, 1992 documenting and concluding the NEPA compliance process.

Presently, as part of the Lower Mon Project, the District is establishing land requirements to support the replacement of both locks at the Locks and Dam 4 project at Charleroi, Pennsylvania, and expanding the offloading and staging area at the Victory Hollow disposal site near Donora, Pennsylvania. The lands are described below and shown on Figures 2 and 3. The use of these lands for the Lower Mon Project was not specifically addressed in the FEIS. This Environmental Assessment has been prepared to fulfill the National Environmental Policy Act (NEPA) requirements for the use of these lands for this purpose.

## **2. Study Area and Project Description**

### **a. Locks and Dam 4 – Right Bank Work Area**

The right bank work area is approximately 8.5 acres and includes land surrounding existing District property at Locks and Dam 4 as well as a portion of the Monessen Riverfront Industrial Park (MRIP) (See Figure 2). The MRIP is being developed by the Redevelopment Authority of Westmoreland County (RAWC).

The entire parcel is defined as lands between the easternmost active rail lines (2 tracks) and the river, extending to the north approximately 600 feet north of the main access road into the MRIP and to the south approximately 100 feet south of the southern end of the Locks and Dam 4 property. The District will acquire a temporary access and storage easement from the RAWC.

The land behind the lower guide wall will be used as a lay-down area for accelerated work items and will serve as part of the right bank highway access for future middle wall and land wall construction. Some work may be required to stabilize the existing guide wall in order to use it in this manner. Wall stabilization measures may involve the use of rock anchors or the removal of several feet of material behind the wall in order to decrease the surcharge. Utility easements will also be required.

The segment of the Right Bank lying adjacent to Monessen Riverfront Industrial Park will be used to provide highway access to the right bank work area in support of the future new middle wall and new land wall construction. The 600-foot portion of this segment that lies north of the existing rail crossing may be used for lay-down or other purposes. Alternatively, the District is considering acquiring an easement for the parcel shown as Area 6 on Figure 2. This would allow the District to construct an overpass over the railroad tracks and would eliminate the need for a land purchase from the RAWC (see Alternatives Considered).

#### **b. Locks and Dam 4 – Left Bank Work Area**

The District will acquire a 7-acre± parcel just north of the District's existing access to the left abutment of Dam 4 and the Charleroi sewage treatment plant (See Figure 2). This parcel has been used as a mine dump and is covered with several feet of fill. In the 1960s this was the site of the concrete batch plant for construction of the replacement Dam 4. The District is also acquiring additional road easements on the left bank in addition to those already owned.

For the Locks 4 batch plant, the District may reuse a large existing concrete pad foundation or remove it and construct a new foundation or footers, which may extend into the fill approximately five feet. The remaining portion of the parcel will be used for raw material and fabricated item storage, parking, and access to the river.

An offloading facility will be constructed immediately downstream of the abutment wall at Locks and Dam 4. This will facilitate future construction activities at Locks and Dam 4 allowing for transfer of materials and concrete to and from work barges. To provide adequate draft for barge access into the newly constructed off-loading facility, approximately 10,000 cubic yards of dredge material will be generated. Prior to final completion of work at this site, the docking structure will be removed and the riverbank will be restored to its pre-existing condition.

The dredged materials will be disposed of in Pool 3 of the Monongahela River. Environmental compliance for this activity was accomplished through the *Supplemental Environmental Impact Statement, Disposal of Dredged and Excavated Material* (January 1998), and Clean Water Act Public Notice 98-M2

#### **c. Additional Lands at Victory Hollow Offloading/Staging Area**

The proposed addition to the Victory Hollow Offloading/Staging Area is approximately 14 acres and includes an abandoned railroad bridge over SR 837, an existing settling pond, and existing docking and off-loading facilities (see Figure 3). The total area for the Staging Area is approximately 22 acres. The District proposes to acquire a temporary work easement for the entire parcel, including the off-loading facility and possibly existing buildings for use as is during the Lower Mon Project. The remainder of the offloading site and the upland disposal site was described in the District's *Supplemental Environmental Impact Statement, Disposal of Dredged and Excavated Material* (January 1998).



The offloading/staging site is located on an elevated flood plain adjacent to the Monongahela River on the left bank at RM 34.5. The site is a vacant land tract situated between the former American Carbon Metals coal transfer facility and an abandoned elevated rail line that is owned by MIDA, Inc. The off-loading site was formerly used as an aggregate and processed slag stockpile area. The site is currently covered with a 0.5 inch to 12-inch thick layer of coal fines and refuse material as well as some miscellaneous small piles of refuse.

The Victory Hollow site will be used as a lay-down and staging area for the project. Two field office trailers, an electrical power hook-up, and portable comfort facility are also proposed for the site. Project excavation materials that may pass through the site include sediments, rocks, stone concrete rubble, scrap metal, timber, and vegetative materials. A comprehensive sampling and analysis plan was completed in 1997 to characterize the proposed deposition materials. Only materials that meet residential fill requirements will be deposited on the adjacent, upland portions of the Victory Hollow Disposal Site. Non-hazardous solid waste derived from the project excavations will be transported to other locations, such as licensed commercial landfills. No hazardous excavation materials have been identified, however, if such materials are identified, they will be disposed of in accordance with all local, State, EPA hazardous waste laws and regulations, specifically the Resource Conservation and Recovery Act (RCRA).

For material to be temporarily stockpiled on this parcel, an earthen dike containment system will be constructed around the off-loading area to contain sediment-laden water derived from the spoil unloading, drying, and re-handling processes. The containment dike will be constructed of on-site topsoil and will be seeded and mulched along the outside perimeter. White pines and other ornamental shrubs will be planted along the crest of the dike to screen the disposal operation from the highway.

The project area is to be graded to achieve positive drainage to the existing sediment pond. The water presently in the pond is to be treated and pumped out. Stormwater runoff will be handled in accordance with an approved Erosion and Sediment Control Plan. The existing land surface within the containment area will be regraded to facilitate positive drainage into collection ditches around the inside perimeter of the dike. All run-off from within the dike and unloading areas will pass through a sedimentation basin prior to discharge into the Monongahela River. Sediments contained within the basin and water samples collected from the basin outflow will be periodically tested for priority pollutants as part of the District's Quality Control and Assurance Program. After suspended solids have settled out of the containment system, the clarified water will be discharged into the river.

A stockpile area will be located adjacent to the river offloading platform for temporary placement of materials, which are wet and unsuitable for transportation or upland placement. Sufficient area is provided for spreading and reworking the material to facilitate drying. The stockpile area may also be used to store materials during delivery surges or nightshift barge deliveries.

Material cleared for placement at the Victory Hollow Disposal Site will be loaded onto trucks, transported along haul roads, and then unloaded at the placement sites. There are three alternatives for crossing SR837 and the Norfolk Southern Railroad tracks to access the upland disposal site: the existing at-grade crossing, reuse of the abandoned Donora Southern Railroad truss bridge with minor modification, and construction of a new approach and bridge crossing. The preferred alternative is the reuse of the Donora Southern bridge (now owned by Monongahela Industrial Development Authority (MIDA)).

Use of the site as an off-loading facility will require construction of a rock fill berm, mooring cells, and dredging, as a modification of an existing offloading platform at the river's edge. A new offloading platform will be constructed immediately downstream of the existing transfer (offload/onload) facility located at RM 34.2 consisting of stacked barges in poor condition. The platform will be constructed of steel sheet piling and rock. The new platform will maintain the same alignment as the existing barges. The platform will be constructed at a lower elevation to allow for more efficient material offloading at times when the river pool is low. In addition, two mooring cells will be constructed of steel sheet piling and rock to assist in offloading operations. Approximately 32,000 cubic yards of dredge material will be generated for barge access into the offloading facility with a final dredging elevation (after pool 3 lowering by 3.2 feet) of 712.7. Pre-pool 3 lowering will require approximately 7,500 cubic yards of dredging to elevation 715.9. Disposal of the dredged material will be in accordance with all applicable regulations.

Prior to final completion of work at this site, the new offloading platform and mooring cells will be removed, and the riverbank will be restored and stabilized to its pre-existing condition. Over the offloading/storage area, topsoil (located off the site but on the same property to the east) is to be spread over the project area as needed. The project area is to be conditioned and revegetated per mining permit reclamation requirements. An alternative to topsoil and revegetation would be stabilization with beneficial-use aggregate, provided the aggregate meets DEP beneficial use criteria. The property owner has expressed an interest in stabilizing with aggregate that meets the DEP beneficial-use criteria. The type of final cover material will be worked out between the property owner and the District.

The West Penn Power Company (WPP) owns electric lines on the south side of and parallel to SR 837. WPP has been notified that two power poles, with guys and anchors will have to be relocated.

Bell Atlantic-PA (BAPA) owns telephone lines on the south side of SR 837. BAPA has been notified that these lines will have to be raised to facilitate the off-road vehicles passing under these phone lines. Also, one pole will have to be relocated approximately 25 feet west of its existing location to accommodate the installation of the auxiliary reinforced concrete pipe culvert.

The Pennsylvania Department of Transportation (PADOT) has an existing 8-foot by 4-foot concrete arch culvert that runs under SR 837 and the Norfolk Southern tracks and connects to a 7-foot diameter concrete pipe that drains storm water from the existing disposal site. Because the proposed finished grade will increase storm water, an auxiliary 126 inch

diameter reinforced concrete culvert approximately 555 feet long will be installed parallel to the existing pipe.

### **3. Existing Environmental Setting**

#### **a. General**

The current project area lies within the project area as described in Section IV of the 1991 FEIS. The discussion below focuses upon many of those topics as were addressed in the Significant Resources section of the 1991 FEIS. Specifically, these topics include water quality, wetlands, terrestrial habitat, aquatic habitat, fish and wildlife, endangered and threatened species, flood plains, scenic rivers, cultural resources, recreation, soil and groundwater, air quality, prime farmland, noise, environmental site assessments for the presence of HTRW, aesthetics, transportation and navigation, and socio-economics. Information on the physiography, climate, geology, and hydrology are contained in Sections IV.A through IV.E of the 1991 FEIS.

#### **b. Water Quality**

Water quality in the project area over the past 2 decades has improved with the reduction of acid mine drainage pollution and the shutdown of many manufacturing plants during the 1970s and 1980s. However, there remain some significant domestic and industrial pollution problems in the Lower Monongahela River, especially during summer low flow conditions. Water quality problems observed in the Lower Monongahela River include elevated temperatures, reduced dissolved oxygen, elevated iron and sulfate ions, high levels of turbidity, and high levels of dissolved solids. Changes in water quality will be of concern at the USX industrial water intake (R.M. 11.2) and the Pennsylvania-American Water Company's intake (R.M. 25.3).

#### **c. Wetlands**

A site visitation was conducted on October 19<sup>th</sup>, 1999. During the visit a preliminary wetland reconnaissance was conducted. Steep topography and years of development within the Monongahela River flood plain have significantly reduced the amount of wetlands along and adjacent to its banks. The right bank's shoreline along Corps' property has previously been raised and leveled by fill and grading and is retained by a concrete wall. Shoreline areas on the left bank and in the proposed Victory Hollow staging area are rocky and sparsely vegetated, characterized by large rocks and pieces of concrete rubble. No wetlands were observed to exist in the project areas. The Victory Hollow site does contain a settling pond. Due to the disturbed nature of the manmade settling pond, the relative lack of wetland plant species, the lack of natural hydrology, and low wildlife value, the pond would not be considered a jurisdictional wetland. Overall, the lower Monongahela River supports almost all of the aquatic beds of submerged aquatic vascular plants in the District's navigable waters.

#### **d. Terrestrial Habitat and Wildlife**

Historically, the vegetation surrounding the banks of the Monongahela River has been dominated by oak, beech and hemlock forests. White oak-hickory is the typical upland forest in the region, while lowland forest communities include willow, beech and maple. Today, the majority of land along the lower 45 miles of the Monongahela River is heavily developed with large riverside industrial developments, redevelopment parks, utilities, roads, railroads, and communities. Native vegetation is restricted to areas with limited human accessibility or rugged topographic relief. Additionally, narrow bands of riparian vegetation persist along the water's edge.

The project area and proposed work/storage areas have been highly disturbed by previous fill/grading activities and prior industrial uses, and therefore have low habitat value. Some areas, such as undeveloped riverbanks, are slowly revegetating with grasses and secondary, shrub-like growth of mainly black locust, ailanthus, sycamore, black cherry, and sumac.

The lands alongside the right bank of the Monongahela adjacent to Locks 4 guidewall are open grassy areas maintained by the Corps. Downstream of this area, the right bank has a thin wooded zone that transitions landward into an open field approaching the railroad tracks. The areas along the railroad tracks have been disturbed due to slag deposition on the site.

The Locks 4 left bank batch plant has a narrow wooded riparian zone, consisting of typical riverbank species of black locust, sycamore, willow, elm, and silver maple. The remainder of the left bank site is open field and shrub. The site has been extensively disturbed by the placement of fill and a large coal waste pile. In the early 1960s, the District used this site as a concrete batch plant for replacement of Dam 4, and some of the plant's concrete base pads remain.

The Victory Hollow site also has a thin wooded zone along the riverbank. Additionally, there is an embedded barge dock located along the bank used for barge docking and loading and unloading of materials. The remainder of the site is an open, disturbed field, with weedy vegetation growing up from the slag and mine wastes deposited on the ground.

According to the Pennsylvania Fish and Wildlife database, the region surrounding the Monongahela River lists 47 species of mammals, 260 species of birds, and 58 species of reptiles and amphibians that potentially occur in the area. However, due to the high level of disturbance in the project areas from industrialization and other urban uses, limited amount of habitat remains, causing a reduced number of species and species diversity.

Suitable wildlife habitat is primarily restricted to the narrow, wooded riparian zone and steep hillsides along the river. However, the majority of the project sites are open, disturbed fields having little habitat value. Species expected to occur here are those that are accustomed to human activity. Mammals and birds such as the grey squirrel, raccoon, opossum, Norway rat, eastern cottontail, English sparrow, starlings, and pigeons may use this habitat.

#### **e. Aquatic Habitat and Wildlife**

The aquatic habitat has been slowly improving along the Monongahela River. Improved water quality, and the reduction of human impacts such as industrialization and dredging has allowed for these improved conditions and a subsequent increase in species. Although the physical habitat of the river and riverside has changed very little, fishery resources have increased due to actions taken to reduce and control pollution levels entering the Monongahela River.

According to the Pennsylvania Fish and Wildlife database, 65 species of fish have been recorded in the Monongahela River. Among the fish species recorded have been the gizzard shad, freshwater drum, emerald shiner, channel catfish, bluegill, white crappie, smallmouth bass, spotted bass and walleye. The fish species are primarily found where gravelly and rock substrate exists.

The macroinvertebrate community of the Monongahela River can be characterized as worm/midge/Asiatic clam dominated. Studies of the macroinvertebrate communities yield 139 taxa including hydra, roundworms, moss animals, flatworms, spiny-headed worms, leeches, aquatic worms, crustaceans, insects, snails, and clams. The native, *Unionidae*, freshwater mussels also appear to be making a comeback in parts of the Monongahela River. The Asiatic clam, *Corbicula fluminea*, has been introduced to the Monongahela River in recent years and is considered a nuisance species to utilities and industries for clogging up water intakes used in water cooling systems. This species also puts added stress on the natural species occurring in the river through competition for limited resources.

#### **f. Endangered and Threatened Species**

Coordination concerning threatened and endangered species within the project area has been conducted with the United States Fish and Wildlife Service (USFWS), the Pennsylvania Bureau of Forestry, the Pennsylvania Fish and Boat Commission, and the Pennsylvania Game Commission. The USFWS responded with a letter (Appendix A, USFWS, November 12, 1999) reporting no known federally listed or proposed threatened or endangered species under the USFWS jurisdiction to occur at Locks and Dam 4, or at the proposed staging areas. The Pennsylvania Bureau of Forestry, in a letter dated November 1, 1999 (Appendix A) reports their Pennsylvania Natural diversity Inventory (PNDI) search resulted in no known occurrences of plant species of special concern occurring within the project areas. In a letter dated, November 29, 1999 (Appendix A), the Pennsylvania Game Commission records show no state listed endangered or threatened species of birds or mammals known to occur within the proposed project areas. However, in a letter dated November 30, 1999, the Pennsylvania Fish and Boat Commission (PFBC) lists the nine fish candidate, threatened, or endangered species presented in Table 1 which are known to occur in the vicinity of the project sites.

Table 1:  
Rare or Protected Species potentially occurring near Locks and Dam Number 4.

Common Name	Scientific Name	Pennsylvania Status
Skipjack herring	<i>Alosa chrysochloris</i>	Threatened
Black Bullhead	<i>Amerius melas</i>	Endangered
Mooneye	<i>Hiodon tergisus</i>	Threatened
Smallmouth buffalo	<i>Ictiobus bubalus</i>	Threatened
Brook silverside	<i>Labidesthes sicculus</i>	Candidate
Longnose gar	<i>Lepisosteus osseus</i>	Candidate
Warmouth	<i>Lepomis gulosus</i>	Endangered
River redhorse	<i>Moxostoma carinatum</i>	Candidate
Ghost shiner	<i>Notropis buchanani</i>	Endangered

Additionally, the PFBC commented that several rare freshwater mussel species were once known in the vicinity of the project area, however, no survey has been conducted for freshwater mussel species for some time.

The Pennsylvania Fish and Boat Commission (PFBC) has recommended a fishery study for several state-endangered, -threatened, -candidate species that may be expected in the vicinity. Based on our knowledge of the river’s present fishery, we concur that some of these species may occur in the area. The District’s position on this is that restricting instream construction activities to a period outside the spawning/nursery period would be sufficient to insure negligible impact to the fishery, and that a fishery study would not contribute to our ability to further reduce impacts.

They have also recommended that a freshwater mussel study be conducted in the project area. The potential for any native freshwater mussels is low since they have been historically extirpated and none are known to occur in the portion of the river located near the project. However, due to improvements in the water quality, the PFBC believes the potential exists that these species may have relocated back to the river. The District will continue to consult with the PFBC and the US Fish and Wildlife Service under the Fish and Wildlife Coordination Act on the advisability of mussel surveys in the project area

**g. Flood Plains**

The Monongahela River flood plain has been mapped in the project area by the Federal Emergency Management Agency. The following areas are within the 100-year flood plain of the Monongahela River: the right bank laydown area, the possible second batch plant area, a portion of the left bank work/batch plant area, and a portion of the Victory Hollow offloading staging area.

The proposed work and access areas for Locks and Dam 4 are largely within the Federal Emergency Management Agency’s (FEMA) 100-year flood plain as shown on the attached flood plain maps (Figures 4 and 5). The 100-year flood plain is an area that FEMA estimates will be inundated by a 100-year flood (a flood with a 1% chance of occurrence in

any given year). Both the left and right bank areas lie within FEMA's Zone AE, shaded Zone X, unshaded Zone X and partially within the floodway.

FEMA's AE zone is the 100-year flood plain with 100-year flood elevation levels, or BFEs, already determined. These elevations are represented on the map with lines labeled with elevations (such as 762 and 763) that generally run perpendicular to the river.

FEMA's shaded Zone X can either be an area that is inundated by the 100-year flood, but with floodwaters that are less than a foot deep, but generally it depicts the 500-year flood plain. These areas are higher in elevation than adjacent AE zones, and would offer better protection from flooding events.

FEMA's unshaded Zone X are areas that are outside of the 500-year flood plain and are generally higher ground than adjacent shaded X zones and AE zones. According to FEMA, these areas would not be inundated by flood waters during a 500-year flood event (an event with a 0.2% chance of occurrence in any given year) and thus offer better protection against flood inundation than both of the other zones.

FEMA's floodway lies within AE zones, and includes the stream channel, in this case the Monongahela River, and any adjacent flood plain areas that must be kept free of any type of encroachment. The locks and dam lie mostly within the floodway.

#### **h. Recreation**

Recreational use of the Monongahela River has increased in recent years, and is expected to continue to rise. Traditionally the river has been blocked somewhat for recreational use by the steep banks on either side of the river, and the railroad tracks which run along side the river. The quality of the water in the Monongahela has improved over the last several years due to more stringent environmental regulation and the sharp decline of heavy industry in the Monongahela River Valley. This industrial decline has also led to more sites along the river opening up and has increased the area available for other uses, including recreation. If some of these areas are developed for housing along the river, there could be a corresponding large increase in recreational development. The decision of local governments regarding land use along the river will be the most significant factor affecting expanded land use for recreation.

The most common recreational uses of the river in the project area are boating and fishing. The number of private and public recreational facilities located along the river near Locks and Dam 4 has fluctuated in recent years. The general trend of recreational boat lockages has been upward, indicated by the percent increase in recreational use for River Pool 4, and by the increase in boat registrations for Washington and Westmoreland Counties (USACE Pittsburgh, 1991).

A significant amount of fishing occurs along the Monongahela River. The sites used for fishing are mostly undeveloped sites along the river that people can reach where they can fish undisturbed. At Locks and Dam 4, fishing from the dam abutment is popular, although

legal public access is not available. Fishing also occurs from boats below the dam (USACE Pittsburgh, 1991). Fishing does not occur on the right bank, however, due to the close proximity of the railroad tracks and the unwillingness of the railroad owners to grant access.

### **i. Soil and Groundwater**

The soils in the project area have been mapped by the Natural Resource Conservation Service (NRCS, formerly the Soil Conservation Service) and published in the Soil Survey of Greene and Washington Counties, PA (NRCS, 1983) and the Soil Survey of Westmoreland County (NRCS, 1968). The soils in the project area are mapped as follows:

- Monongahela silt loam, 0-3 percent slopes (MoA); right bank
- Monongahela silt loam, 8-15 percent slopes, moderately eroded (MoC2); right bank
- Weikert shaly silt loam, 30-60 percent slopes (WhF), right bank
- Dumps, mine (Du), left bank
- Urban land (Us), left bank

The water-bearing alluvial fill in the Monongahela and Youghiogheny valleys has a maximum average thickness of 65 feet, but depths of more than 80 feet have been reported in some wells in the Duquesne area. The top 0-25 feet of soil are generally fine-grained silt deposits of recent age. The basal section is generally fine-grained and in many areas not easily distinguished from more recent deposits. In some places, coarse, permeable units may be found in otherwise fine-grained deposits.

The site visit conducted on October 19<sup>th</sup>, 1999 has shown a change in the soils since they were mapped by the NRCS. Soils along the right bank have been disturbed with addition of fill near Lock and Dam 4 and the deposition of slag alongside the railroad tracks and adjacent areas. The left bank work area has since been utilized as a mine dump area and a large tippile pile rests on a portion of the south end of the property. The Victory Hollow site has historically been disturbed with approximately 13 feet of historic fill.

### **j. Scenic Rivers**

The Monongahela River is not a component of the Federal Wild and Scenic River System. The Pennsylvania Scenic Rivers Inventory, revised in April 1987, lists the Monongahela River from Point Marion to Pittsburgh (R.M. 91-0) as a proposed Modified Classification. This classification indicates that the lower 91 miles of the Monongahela River, which includes the project site, has the capability to sustain recreational use, as well as limited levels of residential, commercial and industrial use that would not diminish the river's recreational appeal.

### **k. Air Quality**

The project area lies within an Environmental Protection Agency's (EPA) designated nonattainment area for air quality. An area qualifies as a nonattainment area when any one of EPA's six criteria pollutants exceed the National Primary and Secondary Ambient Air



Quality Standards in the project area. Of the six criteria pollutants (sulfur oxide, particulate matter, carbon monoxide, ozone, nitrogen oxide, and lead), only particulate matter and ozone exceed Air Quality Standards in the project area.

### **I. Cultural Resources**

No archaeological sites have been recorded in the immediate vicinity of the Locks and Dam 4 project area. A prehistoric site was reported at the Victory Hollow area, but Corps archaeological and geomorphological studies confirmed that 20<sup>th</sup> century grading and fill activities have destroyed any archaeological potential across the area. The project area has a long history of industrial use, especially pertaining to the coal and iron industries.

A Phase IA literature search and pedestrian reconnaissance was conducted by a geomorphologist and archaeologist to determine the potential for intact archaeological deposits, including deeply buried archaeological deposits (Greenhorne & O'Mara, Inc. 1999). Geomorphological analysis of several exposed bank cuts in the project area indicate at least 7 meters (22.9 feet) of fill are present in each of the three areas. The fill deposits are composed of slag and coal, which have created artificial terraces along the river. No intact, original soils, which may contain archaeological deposits, are present at the right bank Work Area or at the Victory Hollow Offloading/Staging Area. The left bank Work/Batch Plant Area has disturbances extending to depths of 38-40 feet based on the presence of coal fines in cores drilled for water monitoring wells by the Corps. At these depths, no native soils have the potential to be disturbed by the project.

Historic structures in the vicinity of the right bank project area include the National Register-listed North Charleroi Highway Bridge, the National Register-eligible Locks and Dam 4, the southern end of the National Register-eligible Wheeling-Pittsburgh Steel Corporation property (now Monessen Riverfront Industrial Park), and the tracks and sidings of the potentially eligible Pittsburgh & Lake Erie Railroad.

The left bank Work/Batch Plant Area is a vacant parcel adjacent to the National Register-eligible Monongahela Branch of the Pennsylvania Railroad. The two older buildings situated across the railroad tracks to the west of the work area, the Lee-Norse Building and the former Pittsburgh Street Railways Trolley Barn, have both been previously determined not eligible for the National Register by Pennsylvania Bureau for Historic Preservation (PaBHP).

The Victory Hollow site is adjacent to the National Register-eligible Monongahela Branch of the Pennsylvania Railroad, the berm and bed of the former Donora Southern Railroad, a truss bridge of the Donora Southern, and a barge loader labeled as the property of the American Carbon & Metals Corporation. All were investigated by the Corps in 1999 in the *Phase IA Literature Search and Pedestrian Reconnaissance Monongahela River Locks and Dam 4 Access and Work Areas, and Victory Hollow Offloading/Staging Area, Washington and Westmoreland Counties, Pennsylvania*, currently in draft form. The bridge is simple steel Pratt through truss design, is not an early or significant example of this design, and is recommended as not eligible for the National Register. The Donora Southern Railroad, due

to lack of integrity of the remaining features, is also considered ineligible. The AC&M loader may require further evaluation. The District will continue to consult with the PaBHP on these structures under Section 106 of the National Historic Preservation Act to determine their significance and the effect of the undertaking.

**m. Environmental Site Assessments for Hazardous, Toxic, and Radioactive Waste (HTRW)**

The District conducted two Phase I Environmental Site Assessments (ESAs) and one Phase II ESA of the project areas. The Locks 4 construction areas were addressed in **Lock 4 Construction Monongahela River, Washington and Westmoreland Counties, Pennsylvania, Final Report, Phase 1 Environmental Site Assessment**, (Gannett Fleming, October 1996), and **Phase 2 Environmental Site Assessment – Locks Construction Support Areas – Monongahela River Locks & Dam No. 4**, (Altech, March 2000). The Victory Hollow Offloading Area was addressed in **Phase I Environmental Site Assessment of Victory Hollow, Lower Monongahela River Project, Washington County, Pennsylvania**, (Gannett Fleming, January 1996).

The Phase I methodologies for these studies included the following: (1) field reconnaissance; (2) review of database and regulatory information; and (3) evaluation of historic land use data from various sources (i.e. aerial photographs, maps, interviews, and deed research). Phase II testing included chemical analysis of soil borings and groundwater from the deeper borings. These are discussed in more detail below.

Locks and Dam 4 Access and Work Areas

The 1996 Phase I ESA conducted on the Locks and Dam 4 Access and Work Areas concluded that the potential for contamination exists at each of the project areas. Several of the project areas investigated for the Phase I ESA have since been dropped from consideration. To further investigate areas of concern identified in the Phase I studies and determine potential impacts associated with hazardous wastes, a Phase II ESA was conducted for several of the Lock Construction Support Areas (Altech Environmental Services, Inc., 2000). Findings are summarized below:

Right Bank Access/Laydown Area. The 1996 Phase I ESA identified evidence of potential contamination including stressed vegetation, soil staining, and the presence of drums and railroad sidings. Also, potential releases of waste oil, paint, solvent and petroleum products may have occurred from an adjacent auto body shop. Based on these findings, a Phase II ESA was recommended to investigate subsurface soil and groundwater.

Recent field reconnaissance conducted for this EA revealed that railroad ties and several containers are still present on the property.

For the Right Bank Access/Laydown Area, the Phase II study involved the installation of 42 shallow soil borings along the northern portion and three deeper borings along the southern portion of the study area. For the shallow borings, a thin veneer of soil and gravel was

observed overlying a massive slag deposit. The soil samples collected from the shallow borings were analyzed for volatile organic compounds, semi-volatile organic compounds, herbicides, pesticides, PCBs, and metals. The analytical results revealed that ten semi-volatile organic compounds, two PCB compounds, and 14 metals were detected in the samples. However, only one compound, benzo(a)pyrene was reported at a concentration above the PADEP residential criteria for soils. Benzo(a)pyrene, a common byproduct of incomplete combustion, is associated with the coke and steel manufacturing processes. Although the concentration of benzo(a)pyrene was only slightly above the residential criteria, it was well below applicable non-residential criteria (Altech, 2000).

For the deeper soil borings, groundwater samples were collected along with the soil samples to determine whether any potential groundwater contamination could impact project dewatering activities. The analytical results revealed that subsurface soil and groundwater did not contain concentrations of contaminants near or above established safe levels (Altech, 2000). Although no special health and safety or disposal requirements were judged to be necessary during the project construction, dewatering operations and the disposal of pumped groundwater to the river will likely require an NPDES permit.

Therefore, based on the evaluation of the Phase II data and the comparison with applicable regulatory criteria, it was concluded that the Right Bank Laydown Area was also suitable for the intended project use (Altech, 2000).

Left Bank Work/Batch Plant Area. The 1996 Phase I ESA identified the following potential sources of contamination: a natural gas well, a former garage building, vehicles, contractor storage areas, construction equipment, tanks, containers, drums, and several feet of unknown fill materials. A leaking underground storage tank facility was also identified approximately 1/8<sup>th</sup> of a mile upgradient of the site. Adjacent properties investigated included a sewage treatment plant, a glass production facility, a railroad and a coal waste area. The findings of the Phase I study suggested the potential for contamination from various chemicals, including paints, solvents, fuels, oils or other unknown substances. Based on these findings, a Phase II ESA was recommended to investigate subsurface soil and groundwater.

Recent field reconnaissance conducted for this EA revealed that much of the equipment, containers, etc. observed during the 1996 Phase I study has since been cleared from the property. However, trailers, tires, and other miscellaneous debris are still present.

For the Left Bank Work Area, the Phase II study involved the installation of 43 shallow soil borings throughout the site. Subsurface material on the property was characterized as coal refuse fill. The fill thickness ranges from approximately five feet near the western property boundary to approximately 20 to 25 feet near the eastern property boundary. The site also contains a large "gob pile," which is a mixture of coal, soil, and rock refuse from the former coal operations.

The soil samples collected from the borings were analyzed for volatile organic compounds, semi-volatile organic compounds, and metals. The analytical results revealed that only naturally occurring metals were detected in the samples and that only one metal, arsenic,

was reported at a concentration above the PADEP residential criteria for soils. Arsenic is a naturally occurring metal that is typically elevated in and around mine properties. Although the concentration of arsenic was only slightly above the residential criteria, it was well below applicable non-residential criteria. Therefore, based on the evaluation of the Phase II data and the comparison with applicable regulatory criteria, it was concluded that the Left Bank Work Area was suitable for the intended project use (Altech, 2000).

#### Victory Hollow Offloading/Staging Area

The study area for the Victory Hollow Phase I ESA (1995) encompassed only 8 acres of the 22-acre parcel currently proposed for offloading/staging activities. However, the historical research and field reconnaissance conducted for the Phase I ESA did cover the entire 22-acre site. At the time of the investigation, the property is owned by Duquesne Slag Products (DSP) Company and is leased to the American Carbon and Metals Company. The lessee operated a coal processing/handling facility and a barge dock on the premises.

Prior to the present ownership of this 22-acre property, former owners have included the U.S. Steel Corporation, and other industrial entities. According to background information, one of the previous owners, the Burrell Construction and Supply Company, used the subject property (hereafter referred to as the DSP property) for the processing of slag for construction aggregate.

Field reconnaissance conducted at the time of the Phase I study indicated that diesel fuel tanks, motor oil drums, hydraulic oil drums, salvaged machinery, old batteries, and an equipment maintenance area were present on the DSP property. Also, the presence of a lined sediment basin was noted on the site. This basin was used to collect and treat (with lime) runoff from the site prior to its discharge to the river.

Recent field reconnaissance conducted for this EA revealed that the machinery, drums, tanks, and other materials observed during the 1995 Phase I study have since been cleared from the DSP property. However, the sediment basin and the docking/off-loading facilities are still present.

The Phase I study area also included three larger parcels that comprise the remainder of the Victory Hollow site. According to background information, this land was previously used for the stockpiling and deposition of steel mill slag, the deep mining of Pittsburgh coal, and the surface mining of Redstone coal. The deposited material, comprised of blast furnace and open-hearth slag, was placed on the property between the 1930s and 1960s by the U.S. Steel Corporation and its subsidiaries.

The Phase I study recommended that no Phase II intrusive sampling was necessary for the originally defined eight-acre offloading site. No evidence of contamination was observed on the railroad properties. This study recommended, however, that should the offloading site be expanded to include other DSP property, reevaluation of the need for Phase II investigations would be required. The District reviewed the Phase I information associated with the expanded offloading site (the "other DSP property") and field checked the

additional proposed areas. Nothing was found to indicate that either the environment or the construction personnel for the proposed project are at risk due to environmental contamination.

#### **n. Prime Farmland**

The NRCS mapped unit for the project area of Monongahela silt loam, 0-3 percent (MoA) is listed as Prime Farmland Soils, and the Monongahela silt loam, 8-15 percent is listed as Farmland Soils of Statewide Importance by the NRCS, Westmoreland County. The presence of prime farmland and soils of statewide importance are protected under the Federal Farmland Protection Policy Act (7 CFR part 568).

Even though the right bank has been identified as containing Prime Farmland Soils, as classified by the NRCS, they would not be considered as areas of Prime Farmland and would not be subject to the regulations set forth in the Farmland Protection Policy Act (FPPA) of 1984 (7 U.S.C. 4201 *et seq.*). According to the FPPA, Prime Farmland does not include land already in or committed to urban development or water storage. Prime Farmland also does not include lands designated for industrial, commercial or residential uses that are not, in a zoning ordinance or land use plan, intended to protect farmland. The areas within the study corridor on which Prime Farmland Soils occur are currently zoned for commercial use and are not included in a zoning ordinance or land use plan intended to protect farmland. A letter from Westmoreland County NRCS office confirming that the soils are not protected by the FPPA has been included in Appendix A.

#### **o. Noise**

Ambient noise levels in the project area are characteristic of a mixed urbanized and industrial setting. Noise levels generated by current industrial activities are increased by the passage through the area of diesel-powered trains, diesel-powered boats that navigate the river, and truck traffic in and around the plants in operation.

#### **p. Transportation/Navigation**

Major roadways in the Locks 4 work areas include S.R. 906, the North Charleroi Highway Bridge, 4<sup>th</sup> Street, Lincoln Avenue, Fremont Road, and McKean Avenue. These roadways provide primary means of access for commuting workers and for delivery vehicles into the built-up areas of Charleroi and North Charleroi. S.R. 837 is the main road following the left bank of the Monongahela River through the Victory Hollow area.

Railroads run along both the right bank and through the industrial/residential area on the left bank. The river is in constant use for commercial and industrial transportation, and in seasonal use for recreation.

#### **q. Aesthetics**

Visits to the project area indicate that in general there are no unique or high quality aesthetic resources in the Locks and Dam 4 and the Victory Hollow staging areas. Both areas are highly disturbed industrial areas that have been in use as industrial areas for many years. There are no houses on the right bank near the locks and there are a few houses directly across from the locks, but these do not have a view of the river. The Victory Hollow Offloading/Staging Area is a vacant industrial lot and has no residences in close proximity.

#### **r. Socio-Economic Profile**

The communities in the area developed in the late 1800s due to the abundance of coal in the Monongahela River Basin, which correspondingly resulted in the development of the steel industry. For roughly 100 years the communities in the area were thriving steel towns with active small business districts, then in the 1980s a majority of the steel mills were closed, including the plant in Monessen. These closures resulted in the loss of tens of thousands of jobs in the study area and resulted in the loss of a significant tax base. There were not many alternative opportunities for employment in the area, and as a result there was a large out-migration of younger people seeking employment and a better quality of life. From 1980 to 1990 the communities in the area lost roughly thirteen percent of their population (USACE Pittsburgh, 1991). This has left the old residential communities in the study area predominantly elderly and low-income.

Examination of current census data confirms the findings of the 1991 FEIS findings for the project area. Data for Charleroi Borough and Monessen City indicate that the area's population is decreasing and becoming older.

### **4. Alternatives Considered**

#### **a. No Action Alternative**

The work described in this assessment is in support of the congressionally authorized Lower Mon Project, the modernization of Monongahela River Locks and Dams 2, 3 and 4. The alternatives considered in this assessment for necessary work areas and expansion of the disposal site offloading area represent lands considered by the District to be essential to successful execution of project construction. The no action alternative, not providing appropriate work and disposal facilities for project construction, would result in the District's inability to implement the portions of the project that these features support, i.e. the replacement of Locks 4 and disposal of dredged materials. This is not a practical alternative to completing the authorized project.

## **b. Preferred Alternative**

### Right and Left Bank Work Areas, Locks and Dam 4

Area 2 on the Left Bank is the preferred location for the concrete batch plant from the consideration of space and access to the project (Figure 2). Areas 4 and 5 on the Right Bank were determined to be suitable for the proposed construction access to the project. Areas 2 and 5 border the river and have been extensively filled and used in the past for industrial operations. The portion of Area 4 behind the lock guidewall is owned by the District and is suitable for use in the project.

### Additional Lands at Victory Hollow Offloading/Staging Area

The Victory Hollow Disposal Site was identified as one of the project's preferred disposal site alternatives in the Disposal of Dredged and Excavated Material, Final Supplemental Environmental Impact Statement, January 1998. It is capable of accepting disposal materials from all project features, it can be accessed from the river, it contains no significant environmental, cultural or social concerns and it is available for the duration of the project. The additional lands at the offloading/staging are under the same ownership as the original offloading site and are being considered to increase the flexibility of the use of the offloading site for materials handling and storage.

## **c. Other Alternatives Considered**

### Right and Left Bank Work Areas, Locks and Dam 4

A total of six sites were evaluated for potential use as construction support areas for Locks and Dam 4 and are shown on Figure 2. Areas 1 and 3 were considered as potential work/storage areas, with Area 3 also as a potential batch plant location. Areas 2 and 4 are the preferred work area alternatives. Site access on the right bank could be provided by either Areas 5 or 6, with no preferred alternative identified at this time.

Area 1 was rejected because of substantial qualitative evidence of existing contamination and limited suitable area for the project purposes. Area 3 was rejected as a potential batch plant site due to its limited size and its multi-level topography. It also would present a significant logistics impediment and potential safety hazard to the construction contractor's operations primarily because it is separated from the locks by a mainline railroad.

### Additional Lands at Victory Hollow Offloading/Staging Area

The consideration of additional lands at the Victory Hollow offloading site is for the enlargement of the riverside area to be used for materials storage, and the offloading, dewatering and processing of dredged material for disposal in the upland Victory Hollow Disposal Site (Figure3). It is not for additional disposal area. The alternatives considered for disposal sites were addressed in detail in the District's Disposal of Dredged and Excavated Material, Final Supplemental Environmental Impact Statement, January 1998.

The Victory Hollow Disposal Site was one of the preferred alternative sites from this study, in addition to the Duquesne Industrial Redevelopment Authority and instream disposal for dredged materials.

## **5. Potential Environmental Impacts**

### **a. General**

Direct, indirect and cumulative environmental impacts to the resources described in Section 3 are discussed and evaluated in this section. Direct impacts are those which occur at the same time and place of the project action. Indirect impacts occur later in time and are removed in distance from the project site. Cumulative impacts accrue incrementally with past, present, and future actions.

The overall environmental impacts of the proposed project will be minor and not significant. Since the project areas are previously disturbed, and construction activities will take place landward, any effects to the Monongahela River are considered to be minimal.

### **b. Water Quality**

Project activities would only temporarily affect water quality. Turbidity increases, if any, would occur during construction activities and would return quickly to pre-project levels after the project is finished.

During all construction activities, and during the operation of the batch plant in the right bank work area, Best Management Practices (BMPs) would be implemented to control any nonpoint source pollution discharges to surface waters. BMPs will include, as needed, erosion and sediment controls to minimize soil movement, and the trapping of sediment within settling ponds. The use of BMPs will prevent sedimentation and siltation in the river during construction and operation activities. Consequently, no significant long-term impacts to water quality are expected. Project activities are not expected to threaten the water quality at the USX industrial water intake (R.M. 11.2) or the Pennsylvania-American Water Company's intake (R.M 25.3).

### **c. Wetlands**

Under the Proposed Action, there are no anticipated impacts to wetlands. No impacts to wetlands would be anticipated for the staging areas, however, appropriate BMPs described in the Water Quality section will be implemented.

### **d. Terrestrial Habitat and Wildlife**

Under the Proposed Action and alternatives, impacts to terrestrial habitat are anticipated. Impacts would mainly be the temporary loss of habitat as a result of the operation of



construction equipment and facilities during the construction period (through 2008). Some permanent loss of habitat would occur from construction facilities left in place.

Along the right bank Locks 4 guidewall, the maintained grassy areas would be lost during the construction period. However, this habitat is not of significant value as it is maintained by the Corps as an open lawn area, therefore, impacts would be minor, temporary and reversible.

The left bank batch plant site would also experience a loss of the disturbed open grassy area due to batch plant construction, and paving to accommodate operations of construction equipment. This habitat is also not of significant value, therefore impacts would be minor. Some loss of trees lining the riverfront would occur alongside the left bank in creating river access to the proposed batch plant. The paving and river accesses are proposed as permanent features and would result in the permanent loss of this habitat of marginal value.

The Victory Hollow site would also experience some disturbance to terrestrial habitat. Since the main purpose of the site would be for staging, impacts would be caused from surface grading, storage of materials and operation of construction equipment. The majority of the habitat is open, disturbed grassy area, therefore impacts are anticipated to be minor. Site restoration would consist of retaining site drainage patterns and planting a mixed grass seed mixture for erosion control.

#### **e. Fish and Wildlife**

Under the Proposed Action, impacts are anticipated for the fish and wildlife. Construction of the batch plant and operation of the staging areas are not anticipated to impact aquatic life. Secondary activities such as construction of riverbank facilities (docks, loading/offloading areas) may disrupt the aquatic life in the Monongahela River through increases in turbidity, sedimentation, and disruption of the riverbed. Loss of aquatic life is anticipated to be minimal, as most species would move from the project site during construction activities.

Some terrestrial species will also be affected. The loss of habitat to facilitate the staging areas and the batch plant will cause these species to relocate into adjacent, similar habitats.

#### **f. Threatened and Endangered Species**

Under the Proposed Action, there are no anticipated impacts to any Federally threatened or endangered species.

#### **g. Flood Plains**

Under Executive Order 11988, Floodplain Management, Federal Emergency Management Agency Flood Boundary Floodway Maps for Washington and Westmoreland Counties have been reviewed. Fill and structures placed in this area will be subject to the flood plain regulations as administered by the State of Pennsylvania. flood plain regulations are

administered by FEMA through the local communities or the county, if in an unincorporated area.

#### **h. Recreation**

It is indicated that dredge materials will be disposed of in-stream, therefore, recreational use of the Monongahela River around Locks and Dam 4 could be intermittently interrupted during construction. The affects to recreational activities, if any, are expected to be minor.

It is not expected that the activities at the Victory Hollow offloading staging area will affect recreational activities on the river since this area is currently a large industrial parcel in use as a staging area.

#### **i. Soil and Groundwater**

Only small areas of soil would be disturbed during project activities. Portions of the project area will be graded. On the right bank, some disturbance will be necessary for a small batch plant and laydown area, and for soil stabilization efforts. On the left bank, the possibility of having to construct a new foundation or footers for the batch plant may require excavation as deep as 5 feet. Any excavation activities will follow current OSHA regulations. The District will also take the necessary measures to minimize soil erosion and fugitive dust emissions.

Some excavated soil may be used as backfill. Excavated soil not used as backfill will be disposed in a licensed landfill or in a site approved for disposal as identified in the USACE SEIS, *Disposal of Dredged and Excavated Material, Lower Monongahela River Project, Locks and Dams 2, 3 and 4* (January 1998). Placement facilities will be examined in advance according to NEPA guidelines. Chemical analysis of the excavated soil may be required before the soil is disposed.

Cement, flyash and chemical concrete admixtures will be delivered onsite in closed, sealed containers and subsequently transferred using a closed pumping system. Because the system is closed, no release of these materials is expected.

Aggregates will be natural, inert materials delivered to the batch plant/laydown area in open-bed trucks and stored in open bins. The fine aggregate will consist of natural sand or sand ground from limestone. The coarse aggregate will consist of crushed limestone. Since the aggregates will be shielded from precipitation, no significant amount of the material is expected to run off the site.

#### **j. Scenic Rivers**

The proposed project activities will not cause any significant changes in the river's quality, shoreline development or accessibility in a manner that would jeopardize the Modified Recreation River classification for this portion of the river.

## **k. Air Quality**

Air quality is not expected to be significantly impacted by the proposed project actions. Section 127.14 of Chapter 127 of the Rules and Regulations of the State Department of Environmental Protection states that the emissions from internal combustion engines that power mobile air contamination sources are exempt from permit applications. Since the primary site operations would involve the use of heavy equipment and vehicles powered by internal combustion engines, these activities are exempted from permit requirements.

Additionally, the District will include sound construction practices and containment measures to control dust and other pollutants associated with project activities.

## **l. Cultural Resources**

A previous District geomorphological study indicated there is no potential for intact or deeply buried archeological resources within the Victory Hollow Offloading/Staging Area. The Donora Southern Railroad right-of-way and truss bridge will be affected by site development, but these will likely be determined ineligible for the National Register through consultation with the PaBHP. No effects which may adversely impact the loader or the active (former Pennsylvania Railroad) railroad line are anticipated at the Victory Hollow Area. The area is located in a historically industrial location and the future use will be in keeping with the setting. Final determinations and any treatment of historic properties will be made in consultation with the PaBHP under Section 106, NHPA.

Within the right bank Access/Laydown Areas, there are significant industrial disturbances. In addition, geomorphological analysis indicates there are no landforms within the project area that would have been suitable for human occupation. Because the right bank Access/Laydown Areas are proposed for use as staging and laydown, there are no anticipated impacts are expected as a result of the undertaking in these areas. At the Right Bank Access/Laydown Area, no adverse effects are anticipated to the historic Locks and Dam 4, the North Charleroi Bridge, or the Monessen Riverfront Industrial Park. Although the setting may be altered by the use of the riverfront land during construction, this would not be a significant departure from the historic industrial character of the area and would not adversely affect those qualities that make these resources eligible for the National Register. The Monessen Riverfront Industrial Park has had its historic resources in the area near the Access/Laydown Area demolished and replaced by modern corrugated metal and concrete block structures.

The effect of replacement of historic Locks 4 has been addressed separately under NEPA and Section 106, NHPA. The District is implementing a mitigation plan for this affect, which includes documentation to the Historic American Engineering Record. Large format photography of the facility has been completed.

Archaeological and geomorphological evaluation of the left bank Work/Batch Plant Area indicate no potential for deeply buried archaeological resources. The project will have no affect on archaeological resources at this location. The area is located in a historically

industrial location and the future use will be in keeping with the setting. There will be no affect on the nearby historic railroad line.

#### **m. Hazardous, Toxic and Radioactive Waste**

The materials to be delivered and handled at the Victory Hollow offloading site are excavated sediments that meet PaDEP residential standards. Excavated sediments that do not meet those standards will be disposed of at a PaDEP approved facility.

For the materials to be stored and processed at the concrete batch plant and other construction areas, the District's contractor(s) will be required to obtain all necessary state and local permits regulating those materials.

#### **n. Prime Farmland**

Since the soils within the project site are no longer classified as prime farmland, there will be no impacts to any prime farmland soils.

#### **o. Noise**

Ambient noise levels in the vicinity of the project are expected to increase significantly during construction and operation activities because of the use of heavy construction equipment, batch plant operations, and increased traffic associated with the transportation of materials and personnel to and from the project. During the summer months, the additional noise due to batching and placement of concrete is more likely to occur during the midnight shifts, when the cooler temperatures meet the temperature requirements for placement.

#### **p. Transportation/Navigation**

An access road is proposed through the industrial park on the right bank. The average daily traffic (ADT) levels on State Route 906 (right bank) and McKean Avenue (left bank) are expected to increase significantly as workers enter the proposed project areas with construction equipment, trucks, and personal vehicles.

Materials will be brought to the site over existing roadways. Access to the site is from McKean Avenue (Rt. 88) to 10<sup>th</sup> Street and across the Norfolk Southern Railroad crossing. Approximately 726,400 tons of cement, flyash, ground granulated blast furnace slag, sand and aggregate will be delivered and processed at this site over about a five-year period. Assuming an 18-day work-month and the use of 20-ton capacity trucks, this equates to an average of 34 deliveries per working day. Traffic levels would be reduced by the use of 40-ton trailer lots. Liquid components would be brought in at the average rate of seven deliveries per month (assuming the use of 1000-gallon tank trucks).

A truck transportation route will need to be coordinated with the local railroad lines so that their interference with railway service is avoided. Barge traffic will increase as a result of construction materials and equipment being transported by barge to the project site.

At the Victory Hollow site, the District anticipates avoiding the at-grade crossing of S.R. 837 and the Norfolk Southern railroad tracks by trucks hauling disposal materials from the offloading site to the upland disposal area through the reuse of the abandoned MIDA bridge crossing.

**q. Aesthetics**

No adverse visual impacts are expected since the project areas are already highly disturbed industrial areas. However, the houses located closest to the proposed Left Bank Work Area may experience a slight change in aesthetics, in addition to viewing the existing slagheap, they will have a view of the construction activities.

**r. Socio-Economics**

The activities associated with this project will not have a significant impact on the socio-economics in the project area. The project will not require the displacement of people and no public facilities or services will be affected. There are no disadvantaged groups known to be located in the immediate project area. The activities associated with the project may provide the potential for slight increases in employment in the local area during construction. Businesses close to the project area may also experience a slight increase in business during construction activities.

**6. Compliance with Environmental Statutes**

The project is expected to comply with pertinent federal environmental laws, executive orders and other federal environmental policies. Applicable statutes are listed below.

Clean Air Act: Air quality is not expected to be significantly impacted by the proposed project actions.

Clean Water Act: There are no anticipated impacts to wetlands. Project activities would only temporarily affect water quality.

Endangered Species Act: There are no anticipated impacts to any Federally threatened or endangered species.

Farmland Protection Policy Act: The project will not affect any prime farmland soils.

National Environmental Policy Act: This EA evaluates the alternatives and potential impacts of the project in compliance with NEPA.

National Historic Preservation Act: The District has investigated the project area for historic properties, and has determined that no historic properties will be affected by the

undertaking. Additional coordination with the Pennsylvania Historical and Museum Commission will be conducted to conclude consultation under Section 106.

Wild and Scenic Rivers Act: The proposed project activities will not cause any significant changes in the river's quality, shoreline development or accessibility in a manner that would jeopardize the Modified Recreation River classification for this portion of the river.

Executive Order 11593, Protection and Enhancement of the Cultural Environment: The District has complied with this E.O. through the investigations and consultation with the Pennsylvania Historical and Museum Commission under Section 106 of the National Historic Preservation Act.

Executive Order 11988, Floodplain Management: No project activities are expected to have an impact on the extent of the flood plain or the degree of flood hazard to the communities in these areas.

Executive Order 11990, Protection of Wetlands: The project will not affect any wetlands.

Executive Order 12898, Environmental Justice: The project will not have a disproportionately high or adverse affect on any minority populations in the project area.

CEQ Memorandum on Analysis of Impacts on Prime or Unique Agricultural Lands: The project will not affect any prime farmlands.

## 7. Coordination and Public Involvement

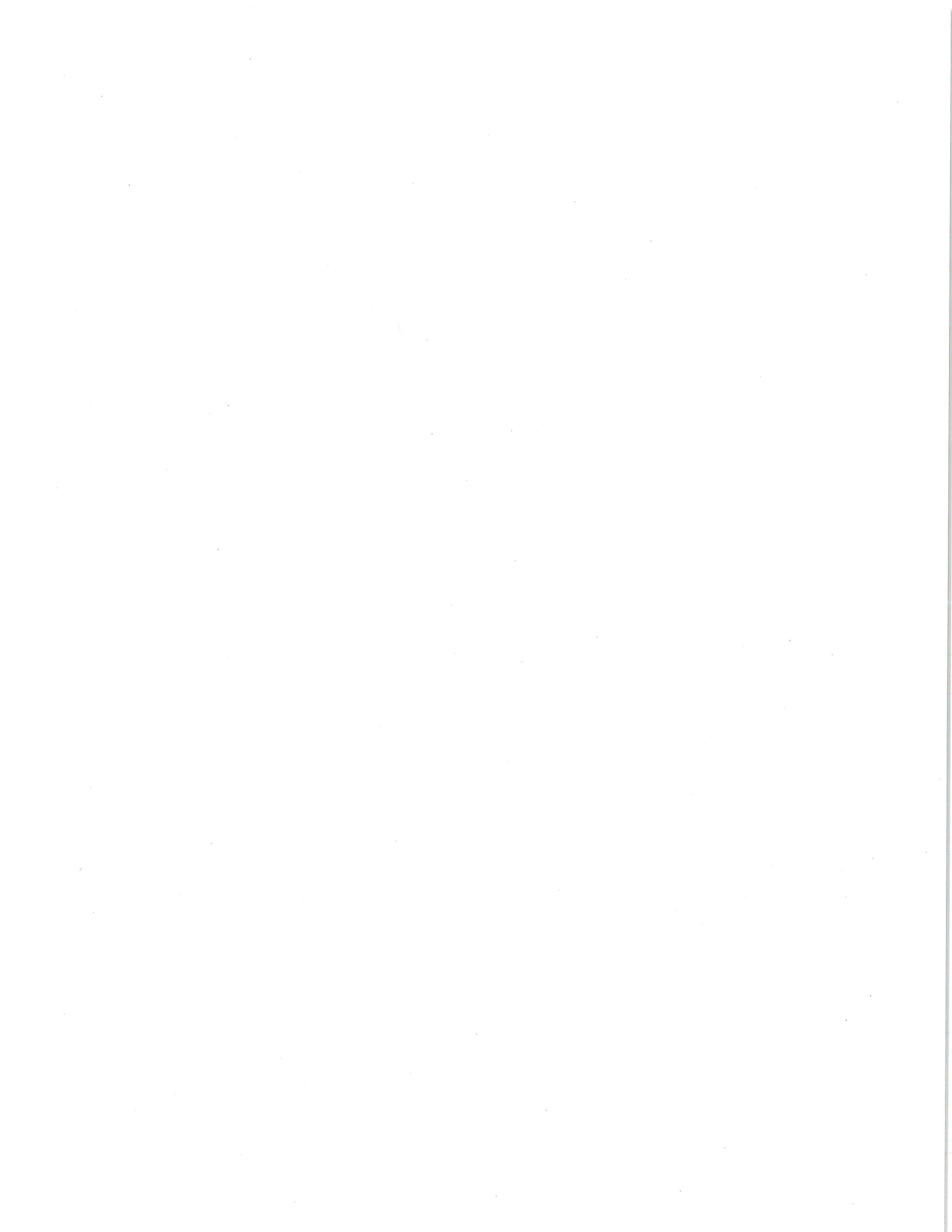
The District coordinated with the appropriate Federal and State agencies, local governmental agencies, and other interests identified during preparation of the Feasibility Report and 1991 FEIS and subsequent environmental compliance for the Lower Mon Project. Additional coordination with specific local interests was conducted as part of the EA preparation for this aspect of the project (see project coordination list in Appendix B). Results of this coordination are summarized below.

Agency	Outcome
U.S. Fish and Wildlife Service	No federally listed threatened or endangered species in project area. See letter in Appendix A dated November 12, 1999.
U.S. Environmental Protection Agency	EPA will receive a copy of the Draft EA for review and comment.
National Resource and Conservation Service	Confirmed that none of the soils in the project area are protected. See letter (undated) in Appendix A.

Pennsylvania Game Commission	No state listed species of endangered birds or mammals in project area. See letter dated November 29, 1999.
Pennsylvania Fish and Boat Commission	Potential for some rare or protected fish and mussels. See letter dated November 30, 1999. Coordination is ongoing.
Pennsylvania Department of Environmental Protection	No wetlands or other resources regulated by DEP will be affected by the project.
Pennsylvania Historical and Museum Commission	Coordination will continue regarding potential impacts to archeological and historic resources.

## 8. Conclusion

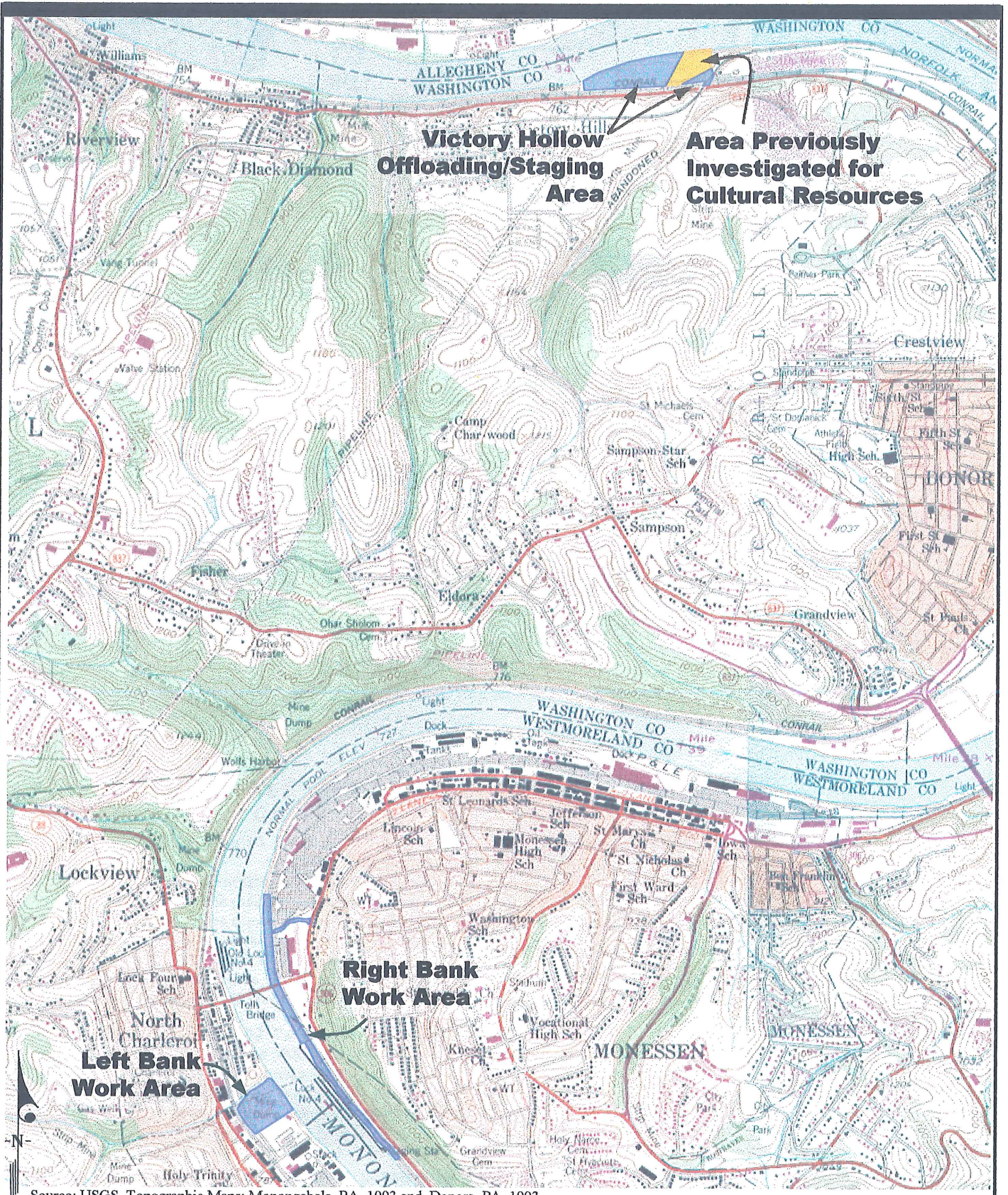
The overall environmental impacts associated with establishing land requirements to support the replacement of both locks at the Locks and Dam 4 project at Charleroi, Pennsylvania, and expanding the offloading and staging area at the Victory Hollow disposal site near Donora, Pennsylvania have been evaluated and assessed by the U.S. Army Corps of Engineers. No significant impacts are expected with the proposed project actions. Alternatives to the proposed action have been described and evaluated within this EA.





## References

- Altech Environmental Services, Inc., March 2000. Phase II Environmental Site Assessment – Locks Construction Support Areas - Monongahela River Locks & Dam No. 4.
- Gannett Fleming, Inc., September, 1995. Phase I Hazardous and Toxic Waste Assessment, Victory Hollow Disposal Site, Lower Monongahela River Project, Washington County, PA.
- Gannett Fleming, Inc., October, 1996. Environmental Site Assessment, Lock 4 Construction Monongahela River, Washington and Westmoreland Counties, PA.
- Geomechanics, Inc., November, 1990. Environmental Assessment Report, Carroll Township Property, Carroll Township, Washington County, PA.
- Greenhorne & O'Mara, Inc., December 1999. (DRAFT) Phase IA Literature Search and Pedestrian Reconnaissance Monongahela River Locks and Dam 4 Access and Work Areas, and Victory Hollow Offloading/Staging Area. Contract No DACW59-98-D-0009, U.S. Army Engineer District, Pittsburgh, Pennsylvania.
- National Flood Insurance Program, December 5, 1995. Flood Insurance Rate Map, Township of Carroll, Pennsylvania, Panel 0010.
- National Flood Insurance Program, December 19, 1995. Flood Insurance Rate Map, Borough of North Charleroi, Pennsylvania, Panel 0001.
- National Flood Insurance Program, January 19, 1996. Flood Insurance Rate Map, Borough of Charleroi, Pennsylvania, Panel 0001.
- National Flood Insurance Program, August 5, 1997. Flood Insurance Rate Map, Westmoreland County, Pennsylvania, Panels 0567 and 0569.
- Natural Resources Conservation Service, 1968 Soil Survey
- Natural Resources Conservation Service, 1983 Soil Survey
- U.S. Army Corps of Engineers, Pittsburgh District, 1991. Lower Monongahela River Navigation System Feasibility Study (Volumes 1-6) and Final Environmental Impact Statement, Lower Monongahela River Project Locks and Dams 2,3 and 4. U.S. Army Engineer District, Corps of Engineers, Pittsburgh, Pennsylvania
- U.S. Census Bureau, Census Lookup, Westmoreland and Washington Counties, and Charleroi Borough. <http://venus.census.gov/cdrom/lookup>.



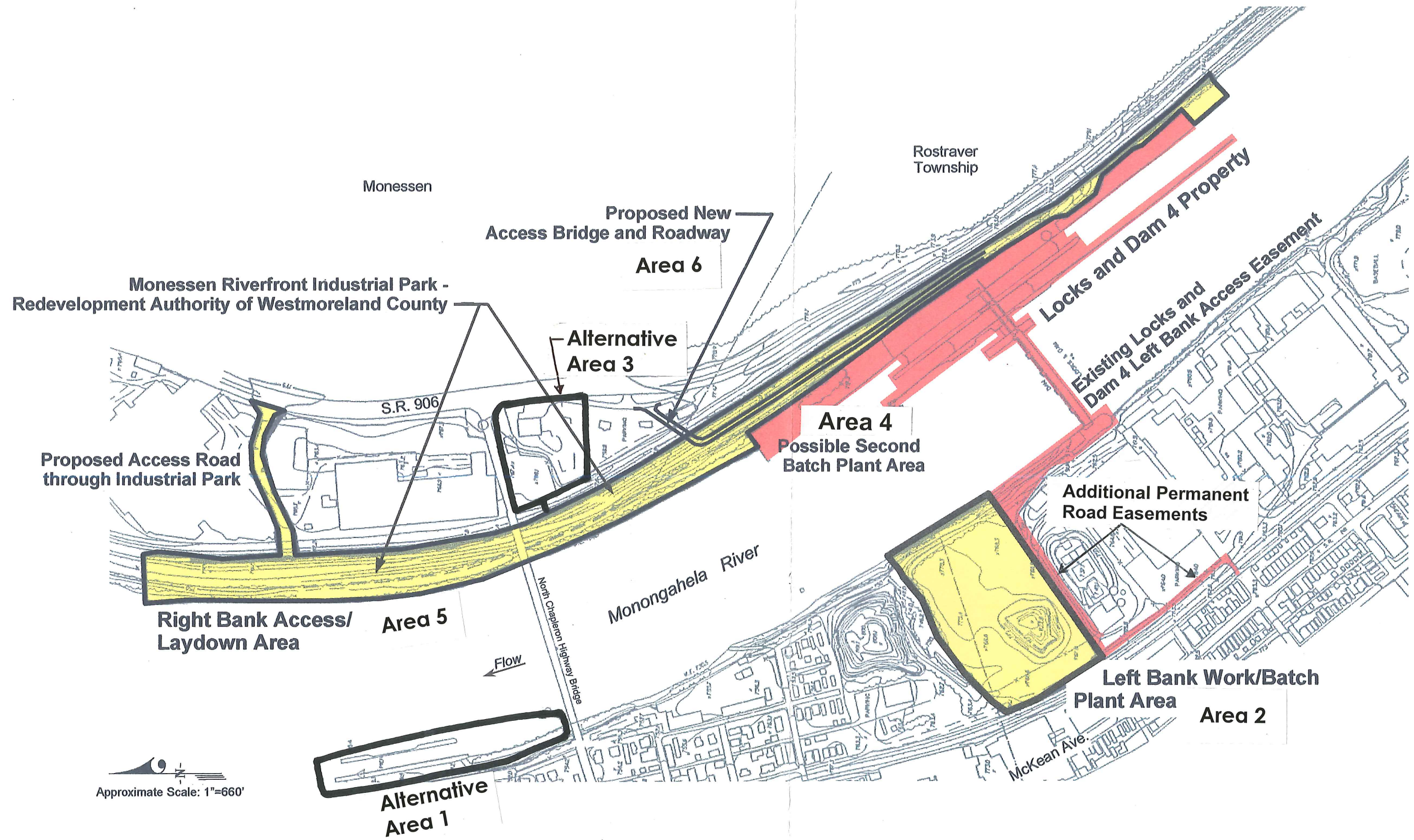
Source: USGS Topographic Maps: Monongahela, PA, 1993 and Donora, PA, 1993

0 1 mile  
0 2 kilometers

**GO** Greenhorne & O'Mara, Inc.  
9001 Edmonston Road  
Greenbelt, Maryland 20770

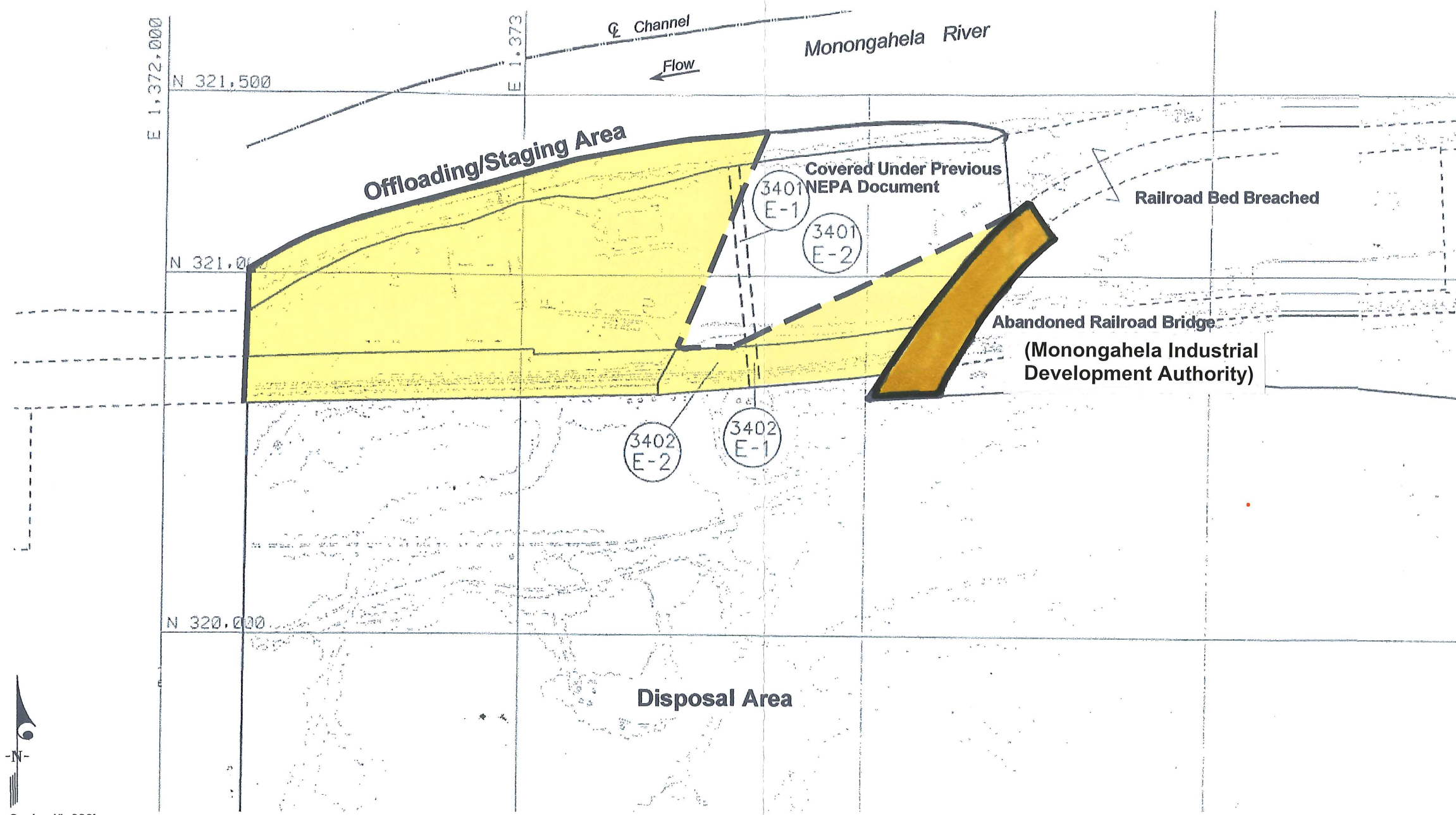
**Project Area**

Figure 1



Note: Most rail lines riverward of the active lines have been removed and many structures noted here in the Industrial Park have been razed.

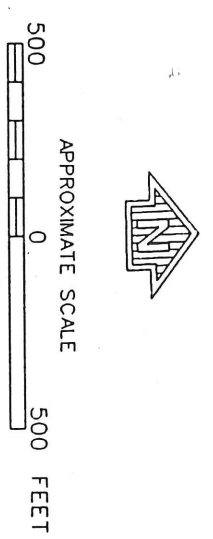
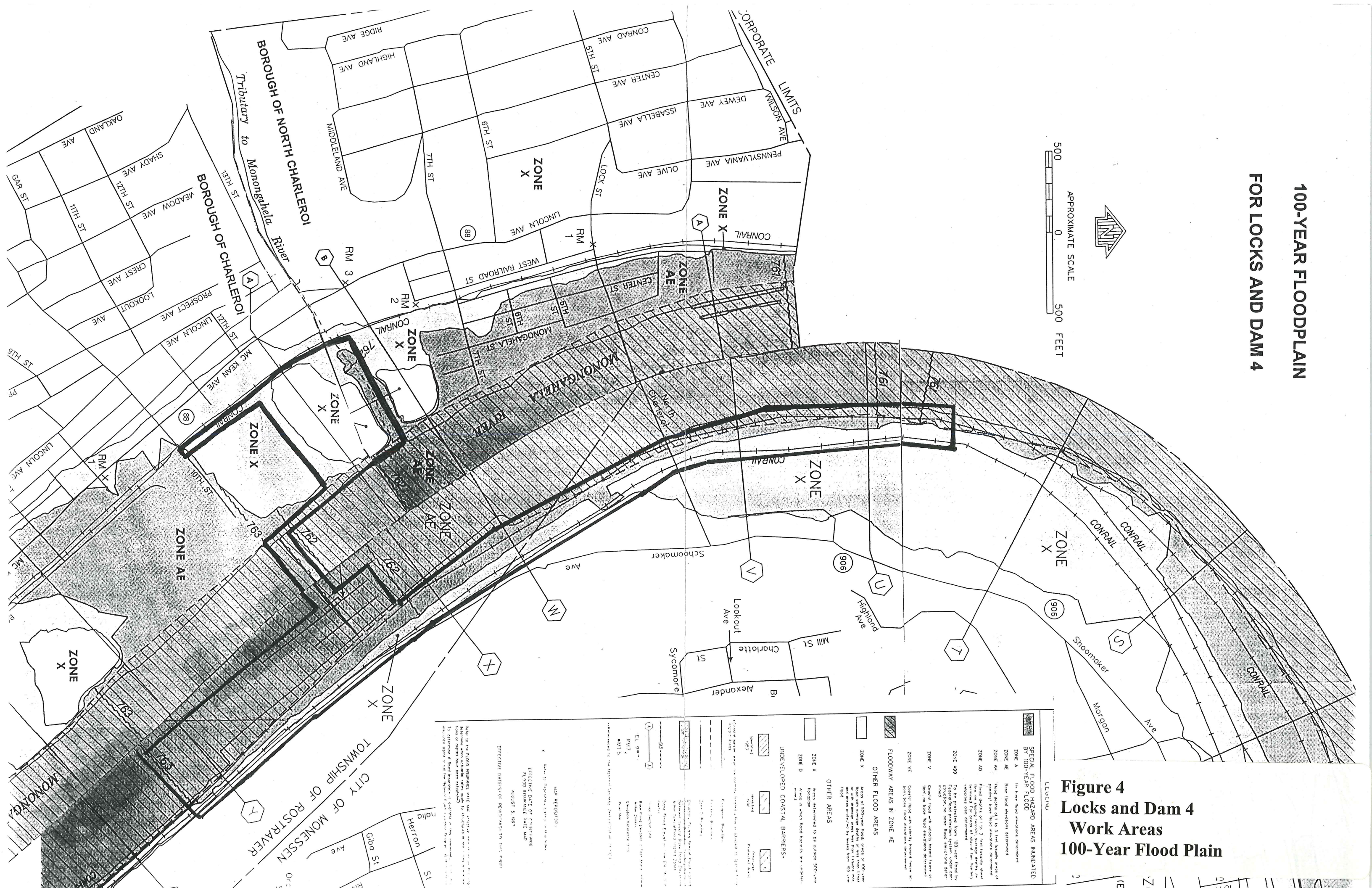
**Proposed Work and Access Areas for Locks and Dam 4**



Approximate Scale: 1"=660'

Note: Portions to be investigated under this contract are shaded. Previous investigations have been conducted for the disposal area and the eastern +/-8 acres of the Offloading/Staging Area as noted

# 100-YEAR FLOODPLAIN FOR LOCKS AND DAM 4



**Figure 4  
Locks and Dam 4  
Work Areas  
100-Year Flood Plain**

**SPECIAL FLOOD HAZARD AREAS INDICATED BY 100-YEAR FLOOD**

- ZONE A** - Base flood elevations determined by flood elevations determined
- ZONE AE** - Flood depths of 1 to 3 feet (under) zone A
- ZONE AM** - Flood depths of 1 to 3 feet (under) zone AE
- ZONE AO** - Flood depths of 1 to 3 feet (under) zone AM
- ZONE A99** - To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined
- ZONE V** - Coastal flood with velocity hazard (wave or storm surge) flood elevations determined
- ZONE VE** - Coastal flood with velocity hazard (wave or storm surge) flood elevations determined

**OTHER FLOOD AREAS**

- FLOODWAY AREAS IN ZONE AE** - Areas determined to be outside 500-year floodplain
- ZONE X** - Areas determined to be outside 500-year floodplain
- ZONE D** - Areas in which flood heights are indicated

**UNDEVELOPED COASTAL BARRIERS**

- UNDEVELOPED COASTAL BARRIERS** - Areas in which flood heights are indicated

**MAP REVISIONS:**

- 1. ELV. 99.7
- 2. RM 7
- 3. RM 5

**EFFECTIVE DATE OF REVISIONS:**

- 1. AUGUST 5, 1993

**EFFECTIVE DATE OF REVISIONS:**

- 1. AUGUST 5, 1993

**DATE OF ORIGINAL MAP:**

- 1. AUGUST 5, 1993

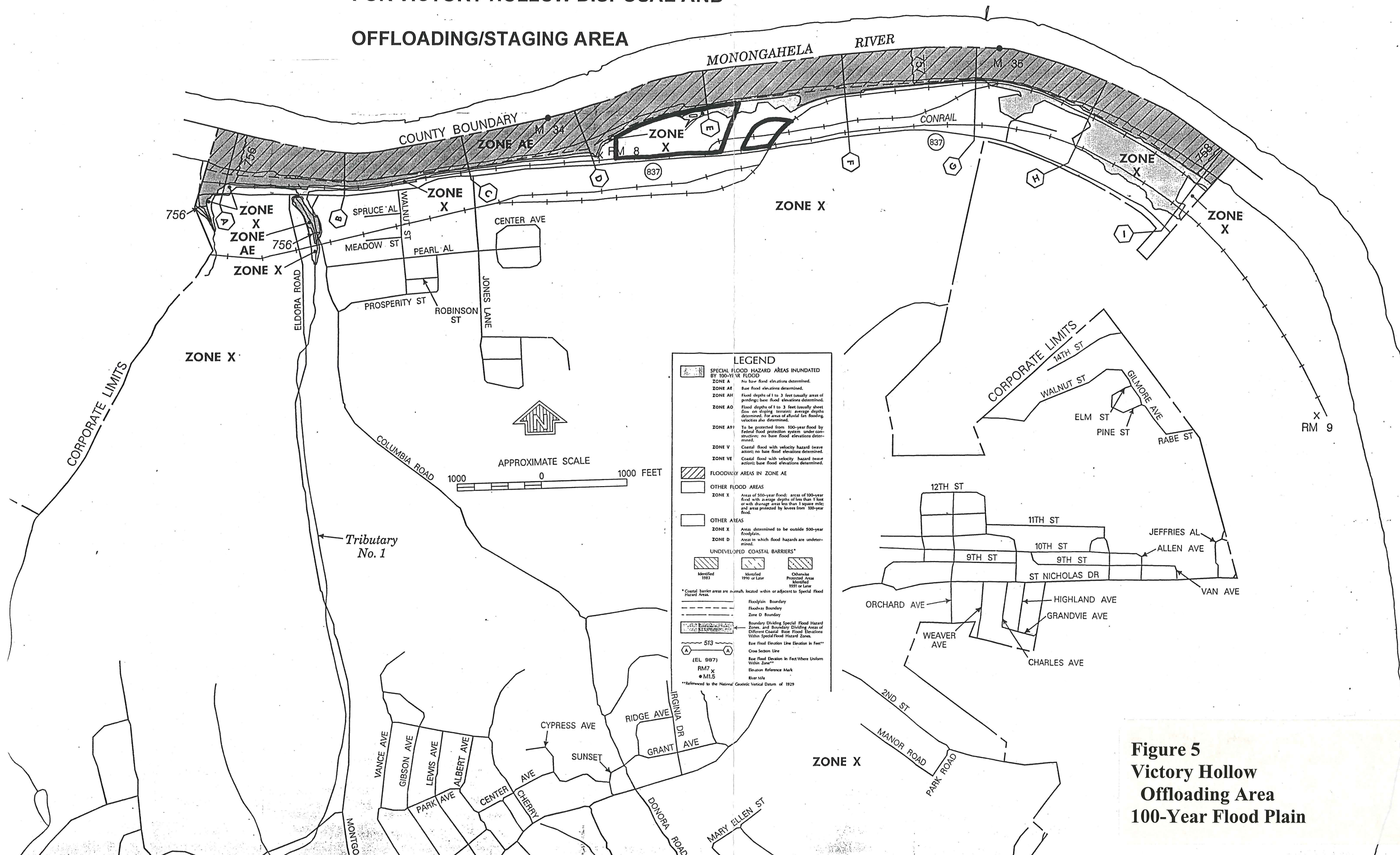
**APPROVED BY:**

- 1. [Signature]

**DATE OF ORIGINAL MAP:**

- 1. AUGUST 5, 1993

# 100-YEAR FLOODPLAIN FOR VICTORY HOLLOW DISPOSAL AND OFFLOADING/STAGING AREA



**Figure 5**  
**Victory Hollow**  
**Offloading Area**  
**100-Year Flood Plain**

## **Appendix A: Coordination Letters**

US Fish and Wildlife Service, November 12, 1999

USDA Natural Resources Conservation Service, n.d.

PA Department of Conservation and Natural Resources, November 1, 1999

PA Fish and Boat Commission, November 30, 1999



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Pennsylvania Field Office  
315 South Allen Street, Suite 322  
State College, Pennsylvania 16801-4850



November 12, 1999

Mr. Robert Naumann  
Environmental Scientist  
Greenhome & O'Mara, Inc.  
9001 Edmonston Road  
Greenbelt, MD 20770

Dear Mr. Naumann:

This responds to your letter of October 1, 1999, requesting information about federally listed and proposed endangered and threatened species within the area affected by the proposed replacement of locks and dam located in Westmoreland and Washington Counties, Pennsylvania. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended: 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

Except for occasional transient species, no federally listed or proposed threatened or endangered species under our jurisdiction are known to occur within the project impact area. Therefore, no Biological Assessment or further Section 7 consultation under the Endangered Species Act will be required with the Fish and Wildlife Service. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered. A compilation of certain federal status species in Pennsylvania is enclosed for your information.

This response relates only to endangered or threatened species under our jurisdiction based on an office review of the proposed project's location. No field inspection of the project area has been conducted by this office. Consequently, this letter is not to be construed as addressing potential Service concerns under the Fish and Wildlife Coordination Act or other authorities.

Requests for information regarding State-listed endangered or threatened species should be directed to the Pennsylvania Game Commission (birds and mammals), the Pennsylvania Fish and Boat Commission (fish, reptiles, amphibians and aquatic invertebrates), and the Pennsylvania Department of Conservation and Natural Resources (plants).



Please contact Michael McCarthy of my staff at 814-234-4090 if you have any questions or require further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "David Densmore", with a long horizontal flourish extending to the right.

David Densmore  
Supervisor

Enclosure

**FEDERALLY LISTED, PROPOSED AND CANDIDATE SPECIES  
(in Pennsylvania)**

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATUS*</u>	<u>DISTRIBUTION</u>
<b><u>FISHES</u></b>			
Shortnose sturgeon**	<i>Acipenser brevirostrum</i>	E	Delaware River and other Atlantic coastal waters
<b><u>REPTILES &amp; AMPHIBIANS</u></b>			
Bog turtle	<i>Clemmys muhlenbergii</i>	T	Current - Adams, Berks, Bucks, Chester, Cumberland, Delaware, Franklin, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton and York Counties. Historic - Crawford, Mercer and Philadelphia Counties
<b><u>BIRDS</u></b>			
Bald eagle	<i>Haliaeetus leucocephalus</i>	T	Suitable habitats across the state. Recent nesting in Butler, Crawford, Dauphin, Erie, Forest, Lancaster, Mercer, Northumberland, Pike, Tioga, Venango, Warren and York Counties. Wintering concentrations occur in association with ice-free sections of rivers, lakes and reservoirs, including the Delaware River.
Piping plover	<i>Charadrius melodus</i>	E	Presque Isle (Erie County). Migratory. No nesting in Pennsylvania since mid-1950s.
<b><u>MAMMALS</u></b>			
Indiana bat	<i>Myotis sodalis</i>	E	Summer range: Blair, Elk, and McKean Counties. Winter hibernacula: Blair, Luzerne, Mifflin and Somerset Counties.
<b><u>MOLLUSKS</u></b>			
Clubshell mussel	<i>Pleurobema clava</i>	E	French Creek and Allegheny River watersheds; Clarion, Crawford, Erie, Forest, Mercer, Venango and Warren Counties
Northern riffleshell	<i>Epioblasma torulosa rangiana</i>	E	French Creek and Allegheny River watersheds; Clarion, Crawford, Erie, Forest, Mercer, Venango and Warren Counties
<b><u>PLANTS</u></b>			
Northeastern bulrush	<i>Scirpus ancistrochaetus</i>	E	Current - Adams, Bedford, Blair, Carbon, Centre, Clinton, Cumberland, Dauphin, Franklin, Huntingdon, Lackawanna, Lehigh, Lycoming, Mifflin, Monroe, Perry, Snyder and Union Counties. Historic - Northampton County
Small-whorled pogonia	<i>Isotria medeoloides</i>	T	Current - Centre and Venango Counties. Historic - Berks, Chester, Greene, Monroe, Montgomery and Philadelphia Counties

\* E = Endangered, T = Threatened, PE = Proposed Endangered, PT = Proposed Threatened, C = Candidate  
\*\* Shortnose sturgeon is under the jurisdiction of the National Marine Fisheries Service

Revised 8/20/99

## FEDERALLY LISTED SPECIES THAT NO LONGER OCCUR IN PENNSYLVANIA

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATUS**</u>	<u>FORMER DISTRIBUTION</u>
<u>MAMMALS</u>			
Delmarva Peninsula fox squirrel	Sciurus niger cinereus	E	mature forests of southeastern PA (Delaware and Chester Co.)
Eastern cougar	Felis concolor cougar	E	state-wide
Grey wolf	Canis lupus	E	state-wide
<u>MOLLUSKS</u>			
Dwarf wedge mussel*	Alasmidonta heterodon	E	Delaware River drainage
Fanshell*	Cyprogenia stegaria	E	Ohio River drainage
Orange pimpleback*	Plethobasus striatus	E	Ohio River drainage
Pink mucket pearly mussel*	Lampsilis abrupta	E	Ohio River drainage
Ring pink mussel*	Obovaria retusa	E	Ohio River drainage
Rough pigtoe*	Pleurobema plenum	E	Ohio River drainage
<u>INSECTS</u>			
American burying beetle	Nicrophorus americanus	E	state-wide
Karner blue butterfly	Lycaeides melissa samuelis	E	pine barrens, oak savannas (wild lupine habitat) (Wayne Co.)
Northeastern beach tiger beetle	Cicindela dorsalis dorsalis	T	along large rivers in southeastern PA
<u>PLANTS</u>			
Eastern prairie fringed orchid	Platanthera leucophaea	T	wet prairies, bogs (Crawford Co.)
Sensitive joint-vetch	Aeschynomene virginica	T	freshwater tidal marshes of Delaware river (Delaware and Philadelphia Co.)
Virginia spiraea*	Spiraea virginiana	T	along Youghiogheny River (Fayette Co.)
Smooth coneflower	Echinacea laevigata	E	serpentine barrens (Lancaster Co.)

\* It is possible that remnant populations of some of these species (indicated with an \*) may still occur in Pennsylvania, however, there have been no confirmed sightings of these species for over 70 years.

\*\* E = Endangered, T = Threatened

The following is a partial list of additional species that no longer occur in Pennsylvania: moose, bison, lynx, wolverine, passenger pigeon, Bachman's sparrow, greater prairie-chicken, olive-sided flycatcher, Bewick's wren, eastern tiger salamander, blue pike, butterfly mussel, Diana fritillary butterfly, precious underwing moth, deertoed mussel, marbled underwing moth, cobblestone tiger beetle, mountain clubmoss, crested yellow orchid, red milkweed, American barberry, small white lady's-slipper, etc, etc.



Donohoe Center  
RR 12, Box 202-C  
Greensburg, PA 15601  
(724) 834-3970

---

Camilla Cornwell  
Greenhorne & O'Mara, Inc.  
9001 Edmonston Road  
Greenbelt, Maryland 20770

Dear Ms. Cornwell,

As you requested, the Natural Resources Conservation Service has reviewed your request for prime farmland information. The site you identified is in extreme Western Westmoreland County along Route 906, City of Monessen, beside the Monongahela River.

There is no prime farmland issue or concern at this site. The area has been previously (many years ago) converted to a non-agricultural use. As we discussed on the phone, a Form AD 1006 is not appropriate. This letter should provide the documentation you need concerning prime farmland.

Please contact us if further information is needed.

Sincerely,

A handwritten signature in cursive script that reads "Wes Gordon".

Wes Gordon  
District Conservationist

cc: Dan Seibert, NRCS, Somerset, Pa.



**Pennsylvania Department of Conservation and Natural Resources**

**Rachel Carson State Office Building  
P.O. Box 8552  
Harrisburg, PA 17105-8552  
November 1, 1999**

fax 717-783-5109  
717-787-3444

**Bureau of Forestry**

Robert Naumann  
Greenhorne & O'Mara, Inc.  
9001 Edmonton Rd.  
Greenbelt, MD 20770

**Re:** Pennsylvania Natural Diversity Inventory Review of Locks and Dam #4, Monongahela River,  
Charleroi, PA. **PER NO: 8472**

Dear Mr. Naumann:

In response to your request on October 1, 1999 the Pennsylvania Natural Diversity Inventory (PNDI) information system was used to gather information regarding the presence of resources of special concern within the referenced site. PNDI records indicate no occurrences of plant species of special concern within the project area, therefore we do not anticipate any impact on endangered, threatened, or rare plant species at this location

Because of the close proximity of the project to several species of special concern, our office recommends that you contact **Andy Shiels** of the Pennsylvania Fish & Boat Commission (814) 359-5113 for recommendations on potential impact on endangered animals in the area.

Pennsylvania Fish and Boat Commission  
Bureau of Fisheries and Engineering  
450 Robinson Lane  
Bellefonte, PA 16823

This response represents the most up-to-date summary of the PNDI data files and is applicable for one year. However, an absence of recorded information does not necessarily imply actual conditions on site. A field survey of any site may reveal previously unreported populations. Should project plans change or additional information on listed or proposed species become available this determination may be reconsidered.

**Stewardship**

**Partnership**

**Service**

Robert Naumann

November 1, 1999

PNDI is a site specific information system that describes significant natural resources of Pennsylvania. This system includes data descriptive of plant and animal species of special concern, exemplary natural communities and unique geological features. PNDI is a cooperative project of the Department of Conservation and Natural Resources, The Nature Conservancy and the Western Pennsylvania Conservancy.

Please phone this office if you have questions concerning this response or the PNDI system.

Sincerely,

A handwritten signature in cursive script that reads "Jeanne Brennan".

Jeanne Brennan  
Environmental Review Specialist  
Pennsylvania Natural Diversity Inventory

Cc: Andy Shiels – PA Fish & Boat Commission

BUREAU OF FISHERIES

Delano R. Graff, Director  
(814) 359-5154  
FAX: (814) 359-5153



DIVISION OF FISHERIES MANAGEMENT

Richard A. Snyder, Chief  
(814) 359-5110  
FAX: (814) 359-5153

COMMONWEALTH OF PENNSYLVANIA  
PENNSYLVANIA FISH & BOAT COMMISSION

450 Robinson Lane  
Bellefonte, PA 16823-9620

IN REPLY REFER TO  
PNDI# 4164

November 30, 1999

GREENHORNE & O'MARA, INC.  
Robert Naumann  
9001 Edmonston Road  
Greenbelt, MO 20770

Dear Mr. Naumann:

RE: Environmental Impact Review – Rare, Candidate, Threatened, and Endangered Species  
Replacement of Locks and Dam Number 4  
Charleroi, Washington and Westmoreland Counties, Pennsylvania

I have examined the map accompanying your recent correspondence which shows the location for the above referenced project. Based on records maintained in the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files, the following rare or protected species are known from the vicinity of the project site in the Monongahela River:

Common Name	Scientific Name	PA Status
Skipjack herring	<i>Alosa chrysochloris</i>	threatened
Black bullhead	<i>Ameiurus melas</i>	endangered
Mooneye	<i>Hiodon tergisus</i>	threatened
Smallmouth buffalo	<i>Ictiobus bubalus</i>	threatened
Brook silverside	<i>Labidesthes sicculus</i>	candidate
Longnose gar	<i>Lepisosteus osseus</i>	candidate
Warmouth	<i>Lepomis gulosus</i>	endangered
River redbhorse	<i>Moxostoma carinatum</i>	candidate
Ghost shiner	<i>Notropis buchmanii</i>	endangered

In addition to the fish species listed above, several rare freshwater mussel species were once known from the vicinity of the project area. This area has not been surveyed for freshwater mussel species for some time. Freshwater mussels are the most imperiled taxonomic group in North America. Nearly half of the species known to occur in the Commonwealth are now extirpated from PA. Two species in the Ohio River drainage are listed as state and federally endangered. According to mussel experts, many of the remaining mussel species are of such limited distribution and abundance that they too should be listed as threatened or endangered, at least at the state level. We are concerned about direct and indirect effects that the proposed project may have on the species of concern. Freshwater mussel species are extremely vulnerable to physical (i.e., siltation, dredging, trenching, rip-rap, stream velocity, water depth) and chemical (i.e., pH, temperature, dissolved oxygen, organic contaminants, heavy metals) changes to their aquatic environment. Fish species are subject to the same threats, especially during the spawning season, when the eggs, fry, and immature fish are vulnerable to physical and chemical changes in their aquatic environment.

R. Naumann  
November 30, 1999  
Page 2

Given the status and sensitivity of the above listed fish and freshwater mussel species, as well as improved water quality conditions in the Monongahela River, we recommend that both fish and mussel presence/absence surveys be conducted at the project area.

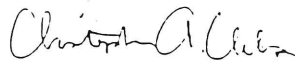
Fish surveys should be conducted by a qualified fisheries biologist using electrofishing equipment in deep water areas and seining in shallow areas where smaller, secretive riffle dwelling fish and other rare fish species are known to reside. The sampling area should include 500 meters upstream and 500 meters downstream including both banks and the project area. If there are no riffle areas within the 1000 meter search zone, then the nearest area of riffle habitat should also be sampled via a minimum 100 meter length. Fish surveys should be conducted from June - November. Upon completion of the survey, the biologist should forward the entire survey results in the form of a report to this office (Nongame and Endangered Species Unit) for further review and consultation. The report should include the gear used, equipment settings, time fished, distance and area covered, species composition list, relative abundance, persons conducting the survey, weather and water conditions including temperature and clarity data, pH, specific conductance, and dissolved oxygen, stream width, velocity, and depth.

Freshwater mussel surveys are to be conducted by a qualified malacologist. The preferred methods include searching quadrats using glass-bottomed buckets to sample the shallow areas. However, deeper areas will need to be sampled by diving or snorkeling. Brailing has been shown to be ineffective pertaining to presence/absence surveys in situations such as these, and therefore would not be appropriate in this case. The qualified malacologist should submit a proposed work plan to this office (Nongame and Endangered Species Unit) prior to conducting the mussel survey.

Voucher specimens should be collected for both the fish and mussel surveys for rare or protected species encountered during the survey (3 specimens/species - at least one male and female of each species). Federally listed mussels should be photographed and replaced immediately into the substrate in a natural life position. The voucher specimens should be sent to this office for quality control purposes.

We look forward to receiving this information. Please contact my office at (814) 359-5113 or (814) 359-5186 if you have questions regarding this response. Thank you for your cooperation and attention to this matter of nongame species conservation.

Sincerely,

  
Andrew L. Shiels, Leader  
Nongame and Endangered Species Unit

CU/hb

cc: R. Snyder, PFBC  
R. Tibbott, PFBC  
PFBC Southwest Regional Law Enforcement Office  
M. McCarthy, U.S. Fish & Wildlife Service



## **Appendix B: Mailing List**

This Environmental Assessment and Draft Finding of No Significant Impact were sent for review to the following agencies and interested parties:

### Federal agencies:

- Environmental Protection Agency
- Fish and Wildlife Service

### Pennsylvania State Agencies:

- Department of Environmental Protection
- PA Fish and Boat Commission
- PA Game Commission

### Local Agencies, Offices, Organizations

- Washington County Commissioners
- Washington Co. Conservation District
- Redevelopment Authority of Washington County
- Monongahela Industrial Development Authority
- Carroll Township Board of Supervisors
- Westmoreland County Commissioners
- Westmoreland Co. Conservation District
- Westmoreland County Industrial Development Authority
- Borough of Charleroi Council
- Authority of the Bureau of Charleroi

### Landowners

- Norfolk Southern Corporation
- CSX Transportation Inc.
- Corning Consumer Products
- LaFarge Corporation
- Mrs. Muriel Latchem

### Libraries

- Donora Public Library
- John K. Tener Public Library
- Monessen Public Library
- Monongahela Area Public Library

Notices of Availability were sent to addressees on the District Lower Mon Project mailing list, including elected officials, federal and state agencies (those having no direct regulatory involvement), newspapers, libraries, historical societies, environmental organizations and other groups and individuals who previously expressed an interest in project environmental documentation.