# FINAL ENVIRONMENTAL ASSESSMENT

# BAYOU METO BASIN, ARKANSAS POST GENERAL REEVALUATION DESIGN CHANGES

## July 21, 2010

#### **PROJECT DESCRIPTION**

The Bayou Meto Basin, Arkansas General Reevaluation project area is located in eastern Arkansas and includes portions of Lonoke, Prairie, Jefferson, Arkansas, and Pulaski counties (Figure 1). The project includes waterfowl management, agricultural water supply, flood control, water conservation measures, fish and wildlife, and groundwater management strategies that would be implemented within the project area. A general reevaluation report (GRR) and final environmental impact statement (EIS) were prepared by the U.S. Army Corps of Engineers (USACE), Memphis District, Vicksburg District, and circulated for public review in December 2006. The record of decision (ROD) was signed in November 2007. These documents can be viewed on the Bayou Meto Basin, Arkansas, web site at http://www.mvm.usace.army.mil/bayoumeto/index.asp.

This environmental assessment (EA) covers four proposed modifications to the final EIS: (1) assessment of backwater fishery impacts and mitigation requirements that were not previously addressed; (2) relocation of a project borrow site; (3) relocation of the pumping station #1 and flow regulating reservoir access road, and (4) maintain backwater channel connectivity.

This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), and the Council on Environmental Quality's regulations (40 CFR 1500-1508), as reflected in the USACE Engineering Regulation 200-2-2. The following sections include a discussion of the purpose and need for the proposed action, the authority for the proposed action, alternatives to the proposed action; important resources affected by the proposed action, and associated impacts of the proposed action.

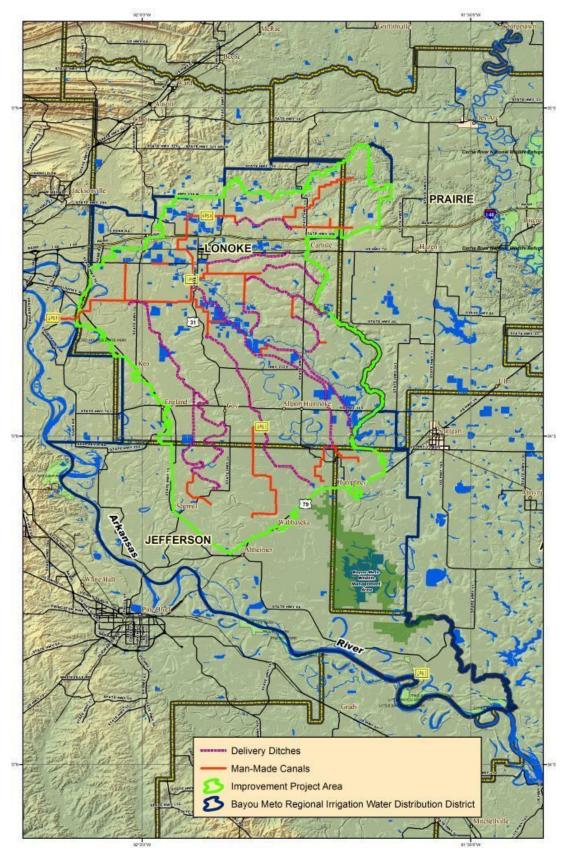


Figure 1. Location of the Bayou Meto Basin, Arkansas Project in east-central Arkansas.

## NEED FOR THE PROPOSED ACTION

## Purpose

The project as described in the EIS and 404(b)(1) evaluation included construction of an inlet channel and flow regulating reservoir; however, it was determined during detailed planning for the first item of work that the location of the inlet channel and flow regulating reservoir had changed after the fishery analysis of impacts had been finalized. Therefore, these impacts were not appropriately addressed in the final EIS. In addition, it was necessary to relocate a borrow site and access road for the reservoir and pumping station # 1 due to housing developments. A decision to maintain the connectivity of a backwater channel to the Arkansas River by not placing an embankment across the channel where the inlet channel would cross it was deemed advisable to provide an outlet for any flood waters that may pass through the backwater area.

It is important to note that this EA covers all project changes to date. Detailed designs for project construction items are at various stages of development. No changes to the project, in addition to those disclosed in this EA are anticipated. However, the project will continually be reviewed in order to ensure compliance with NEPA.

# DESCRIPTIONS OF THE PROPOSED MODIFICATIONS

a) <u>Backwater fishery impact assessment.</u> The impacts to backwater habitat that would result from construction of the inlet channel and flow regulating reservoir were inadvertently omitted from the original Bayou Meto Basin Project Fishery assessment. The proposed action would rectify this oversight by ensuring that the correct mitigation for these impacts is accomplished. A total of approximately 27 acres of backwater habitat would be impacted by the construction of these two items (Figure 2). The Memphis District, in coordination with the environmental interagency team, determined that the appropriate mitigation for these impacts would be in-kind mitigation of 27 acres of currently isolated backwater habitat within the Arkansas River watershed. The interagency team includes representatives of the U.S. Fish and Wildlife Service, the Natural Resources Conservation Service, U.S. Environmental Protection Agency, Arkansas Game and Fish Commission, Arkansas Natural Heritage Commission, Arkansas Department of Environmental Quality, Arkansas Natural Resources Commission, and representatives of the Bayou Meto Water Management District.



Figure 2. Location of the 27 acres of backwater habitat that would be directly and indirectly impacted by project construction. The arrow indicates location of flow design modification to maintain backwater connectivity.

b) <u>Borrow site relocation</u>. The relocation of the borrow site needed for the construction of the flow regulating reservoir and pump station #1 is necessary due to the recent housing development adjacent to the originally identified location. Figure 3 shows the proposed location of the new borrow site. The proposed location is in an agricultural field that was designated by the Natural Resources Conservation Service (NRCS) as a prior converted wetland. Therefore no wetlands impacts would occur. Approximately 34 acres of land would be utilized for extraction of approximately 393,500 cubic yards of material.

Memphis District, USACE archeologists conducted a cultural resources survey of the proposed location and found no evidence of archeological materials within the proposed footprint of the borrow site. Results of this survey are being coordinated with the Arkansas State Historic Preservation Officer (SHPO) and federally recognized tribes. The SHPO has requested that an archeologist monitor the borrow excavation due to the presence of nearby sites. A Memphis District archeologist will be on site during the excavation.

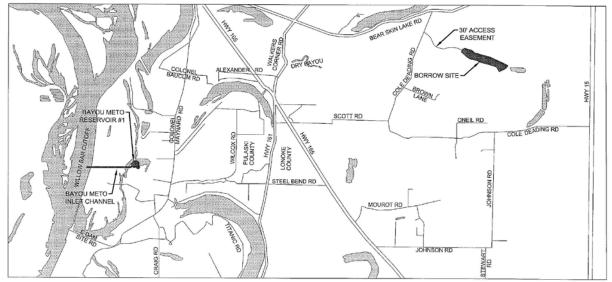


Figure 3. Location of the proposed borrow site for construction of the flow regulating reservoir, pumping station # 1, and inlet channel.

c) <u>Pumping station # 1, inlet channel, and reservoir access road.</u> Due to residential construction within the proposed right-of-way (ROW) for the previous access road, it was necessary to identify an alternative access road location. Figure 4 indicates the proposed location of the construction access road. The construction road would initially be constructed to a level that would allow the passage of construction machinery and dump trucks and would consist of a layer of gravel over compacted earthen material. Once construction of pumping station # 1, inlet canal, and flow regulating reservoir was completed, the road would be paved with concrete. This road would connect to a paved parking area as described in the final GRR. The ROW for the proposed road was surveyed by a Memphis District, USACE archeologist for cultural resources and by USACE Regulatory personnel for potential wetlands impacts. No significant cultural resources or wetlands were identified during the survey. The results of the cultural resources survey are being coordinated with the Arkansas State Historic Preservation Officer.

d) <u>Maintain backwater channel connectivity</u>. It was decided that it would be prudent to maintain the connectivity of a backwater channel to the Arkansas River to allow any backwater floodwaters to pass through the inlet channel and out into the Arkansas River. This connectivity would be achieved by not placing an embankment across the northern side of the backwater channel (see Figure 2). This would keep the existing bottom elevation of the backwater channel at 228 feet NGVD on the northern side of the channel while the southern side would be blocked by the inlet channel embankment. This design would allow the needed connectivity to the river, should a flood event occur, and would offer the ancillary benefit of providing connectivity for backwater fish spawning and rearing. Because there would still be the potential for larval fish entrainment with this design, the proposed mitigation mentioned above would still be required.



# ACCESS ROAD 80 ft EASEMENT

500 Feet

250

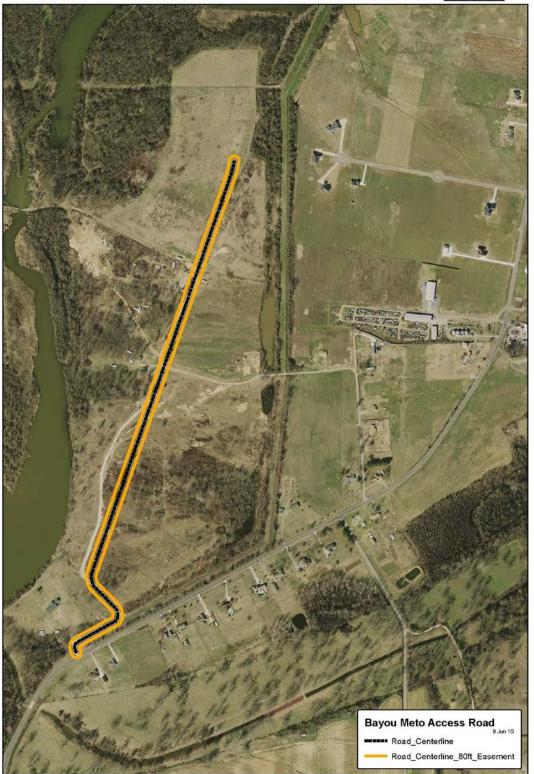


Figure 4. Proposed location of the access road to Pumping Station # 1 and flow regulating reservoir site.

# **PROJECT MODIFICATIONS**

# **MODIFICATION 1** – Evaluation of appropriate mitigation for backwater fishery impacts.

1. **No Action** - With the no action alternative, in-kind mitigation for the backwater fishery impacts would not occur, and the fishery impact mitigation would remain as identified in the final EIS and GRR.

2. **Evaluation of inlet channel and flow regulating reservoir impacts on backwater fishery** – The backwater fishery impacts of the proposed inlet channel and flow regulating reservoir on backwater habitat used by numerous species of fish for spawning and rearing would be assessed and fully mitigated in-kind. Hydrologic connectivity would be restored to 27 acres of isolated backwater habitat along the Arkansas River. This alternative was selected for implementation.

# **MODIFICATION 2 - Relocation of borrow site.**

**1.** No Action - With the no action alternative, the borrow site would remain at the current location, which has been developed for residential housing. Existing homes would need to be purchased and demolished, inconveniencing local residents and increasing project costs.

**2. Relocate borrow site to recommended location.** The construction of the flow regulating reservoir and pumping station # 1 requires a significant quantity of borrow material. A suitable agricultural field designated as prior converted wetland was identified and approximately 34 acres of land would be utilized for extraction of approximately 393,500 cubic yards of material. This alternative was selected for implementation.

# **MODIFICATION 3 -** Relocation of pumping station # 1 and flow regulating reservoir access road.

**1.** No Action - With the no action alternative, the access road would be constructed directly on or adjacent to existing homes. These homes would either be demolished or significant portions of the property would be condemned and the aesthetic and actual value of the home and surroundings would be significantly impacted by the heavy machinery and dump trucks that would pass nearby.

**2. Relocate access road.** A new route for the access road was identified that would not impact existing homes or residential areas. The proposed road ROW would generally follow an existing gravel road, but the route would be straightened slightly. The access road would initially be constructed of gravel during the construction phase of pumping station # 1 and flow regulating reservoir. After the construction phase, the road would be paved and act as the permanent road to the pumping station # 1 parking lot. This alternative was selected for implementation.

# **MODIFICATION 4 - Maintain backwater channel connectivity.**

**1.** No Action - With the no action alternative, there would be a slight possibility that construction of the inlet channel could induce flooding in the backwater area, which would include the Willow Beach Park upstream of the project area.

**2. Maintain backwater channel connectivity.** The backwater channel would remain connected to the Arkansas River by not placing an embankment across it where the inlet channel intersects. This design modification would allow the needed connectivity to the river, should a flood event occur, and would offer the ancillary benefit of providing connectivity for backwater fish spawning and rearing. Because there would still be the potential for larval fish entrainment with this design, the proposed mitigation mentioned above would still be required. This alternative was selected for implementation.

# AUTHORITY FOR THE PROPOSED ACTION

The Grand Prairie-Bayou Meto Project was reauthorized by the Water Resources Development Act of 1996 with a broadened scope of work, to include ground water protection and conservation, agricultural water supply, and waterfowl management. Congressional language contained in the Energy and Water Appropriations Act, 1998, directed the Corps to initiate a reevaluation of the Bayou Meto Basin. The ROD was signed by Major General Riley, Director of Civil Works, in November 2007, authorizing the project as designed.

# FLOODPLAIN MANAGEMENT

Executive Order 11988, Floodplain Management (signed May 24, 1977), requires Federal agencies to recognize the significant values of floodplains and to consider the public benefits that would be realized from restoring and preserving floodplains. The Executive Order has the objective of avoidance, to the extent possible, of long and short-term adverse impacts associated with the occupancy and modification of the base floodplain and the avoidance of direct and indirect support of development in the base floodplain wherever there is a practical alternative. Under this Order the Corps of Engineers is required to provide leadership and take action to:

- a. Avoid development in the base floodplain unless it is the only practical alternative;
- b. Reduce the hazard and risk associated with floods;
- c. Minimize the impact of floods on human safety, health, and welfare; and
- d. Restore and preserve the natural and beneficial values of the base floodplain.

All alternatives were designed to minimize, to the extent practical, adverse impacts to floodplains. The selected plan is responsive to the planning objectives and is consistent with the requirements of Executive Order 11988.

#### ENVIRONMENTAL JUSTICE IN MINORITY AND LOW-INCOME POPULATIONS

The final EIS evaluated potential project impacts to minority and low-income populations according to Executive Order 12898. It was concluded that the project would have no adverse environmental or health effects on low-income or minority populations and that the project would reduce the risk of future unemployment of minorities and low-income residents by maintaining irrigated agricultural practices.

#### **INVASIVE SPECIES**

The final EIS evaluated the potential for invasive species entering the Bayou Meto Basin and determined during an assessment by scientists from USACE Engineer Research and Development Center (ERDC) that, although it was likely that larval zebra mussels (*Dreissena polymorpha*) would enter the irrigation system from the Arkansas River, factors such as temperature and limited attachment sites would prevent successful colonization. Exotic fish species such as Asian carp that could potentially enter the area as a result of importing water are already present in the project area as a result of accidental releases from local fish farms.

## HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW)

Engineering Regulation 1165-2-132, Water Resources Policies and Authorities for Hazardous, Toxic, and Radioactive Waste for Civil Works Projects, requires the performance of a hazardous, toxic, and radioactive waste (HTRW) assessment(s) to determine the potential for encountering any HTRW at or near Corps civil works projects.

A Phase 1 Assessment was conducted over the entire Bayou Meto Basin, Arkansas project area to determine the potential for HTRW occurring within the project-affected area during the project planning effort. Site inspections, aerial videotape and photography review, document research, and coordination with appropriate agencies were performed in conducting this assessment. No site of concern was identified in the footprint of the inlet channel or flow regulating reservoir. In addition, a record search was conducted for this environmental assessment through the Environmental Protection Agency's (EPA) EnviroMapper Web Page (<u>http://maps.epa.gov</u>). The EPA search engine was checked for any superfund sites, toxic releases, or hazardous waste sites within the vicinity of the proposed project area. No such sites were noted on the EPA web page within a five mile radius of the proposed project area. A phase 1 field assessment was conducted for the proposed borrow site and access locations, and no evidence of HTRW materials was uncovered. Based upon the phase 1 assessments and a check of the EPA Web Page, it is reasonable to assume that no HTRW contamination would be encountered within the project area. No additional HTRW investigations are recommended. No other analysis is required unless new information is revealed or HTRW is discovered during construction.

#### **CLEAN WATER ACT COMPLIANCE**

A section 404(b)(1) evaluation was completed during the GRR and was presented in Appendix D, Section IV of the report. The result of the proposed project modifications in this environmental assessment would not change the amount of fill material placed in waters and wetlands of the United States. The proposed mitigation of the backwater impacts may involve removal of some materials such as riprap and sand from areas of the Arkansas River in order to reestablish connectivity to isolated backwaters, but that material would be disposed of in either an upland setting or placed on existing structures. The Arkansas Department of Environmental Quality has confirmed that the Section 401 certification for the Bayou Meto Basin, Arkansas project is still valid.

## **ENVIRONMENTAL SETTING**

#### **Location**

The Bayou Meto Basin, Arkansas project boundaries have not changed since the completion of the final EIS and are shown in Figure 1. The project area encompasses approximately 765,745 acres within the 1,500 square mile Bayou Meto Basin and includes portions of Lonoke, Jefferson, Prairie, Arkansas, and Pulaski counties. Irrigation is used on 369,874 acres of agricultural land, and 22,942 acres are commercial fishponds. There are approximately 135,586 acres of wetlands within the project area, which comprise approximately 18% of the total area. There are numerous streams and ditches within the project area; Bayou Meto, Bayou Two Prairie, and Wabbaseka Bayou are among the largest of the streams. The Bayou Meto inlet channel and flow regulating reservoir are located on the east side of the Arkansas River just upstream of the David D. Terry Lock and Dam in Pulaski County, Arkansas (Figure 2). Both items are located on the riverside of the Arkansas River Levee system. The inlet channel of the Arkansas River before reaching the 1,750 cfs pumping station. Mitigation for the terrestrial impacts was included in the total mitigation disclosed in the final EIS. The proposed footprint of the reservoir includes a flooded borrow pit which was excavated for the mainline levee construction project.

#### <u>Climate</u>

Pulaski County lies in the humid subtropical climate zone and has long hot summers and cool winters, with an average high of 91 °F in the summer (June through August) and an average low of 33 °F in winter (December through February). The total annual precipitation is about 51 inches, varying from a monthly average of 5.7 inches in November, to 2.9 inches in August. Average monthly snowfall is 1.1 inches during the winter months (December through February), but can vary greatly from year to year. Winter ice storms also occur within the area, which can result in severe damage to trees, shrubbery, and power lines.

#### <u>Soils</u>

The alluvial soils in the inlet channel, flow regulating reservoir, and access road area consist primarily of Bruno fine silty loam and Keo silt loams. Both soil types were formed by deposition of materials carried by the Arkansas River. The Bruno soils are excessively well drained and have a low natural fertility, while the Keo soils have moderate to high natural fertility and are well drained. Keo soils support mixed hardwood forests and are well suited to crop production, while the Bruno soils have a low water capacity and are commonly used for pasture (U.S. Soil Conservation Service, 1975).

#### SIGNIFICANT RESOURCES AND IMPACTS

#### Aquatic resources

Impacts to aquatic resources were addressed in the EIS and its appendices, including fish and freshwater mussels, with the exception of assessing the impacts of the placement of the inlet channel and flow regulating reservoir on backwater fish habitats. The construction of the inlet channel and flow regulating reservoir would directly impact approximately 16 acres of existing backwater habitat and indirectly impact approximately 11 additional acres. This habitat type is used by numerous fish species for spawning and rearing. The construction of the inlet channel across the existing backwater channel, even with the modification proposed in this EA, would directly impact approximately 2.5 acres of aquatic habitat and would affect approximately 11 acres of backwater habitat by potentially entraining larval fish that may spawn in that habitat. The indirect impacts extend to a channel crossing approximately 740 meters upstream of the northern edge of the inlet channel structure. This crossing acts as a barrier to further upstream access due to a lack of a functioning culvert. The placement of the reservoir over the existing borrow pit was necessary to increase project efficiency; however, approximately 13 acres of aquatic habitat would be directly affected as a result. The inlet channel would be approximately 600 feet in length and stretch from the Arkansas River to pumping station # 1 (Figure 2).

#### Vegetation

The vegetative community in the Bayou Meto Basin, Arkansas project area was discussed extensively in the EIS. The land on the river side of the Arkansas River levee system supports various bottomland hardwood tree species adapted to occasional flood conditions. Ground cover consists of vines including poison ivy (*Toxicodendron radicans*) and greenbrier (*Smilax* spp.), various forbs, and grasses. Open areas contain a variety of grasses with occasional forbs. The existing shallow borrow pit within the flow regulating reservoir footprint supports a variety of wetland species along its edge including sedges and reeds and floating plants such as duckweed.

The proposed location of the borrow pit is currently in agricultural production with the current crop being soybeans. Little native vegetation is expected to be impacted by borrow pit excavation.

The proposed route for the access road is on or adjacent to an existing gravel road. Vegetation noted in the route during the June 2010 cultural resources and wetlands determination survey included agricultural crops, sedges, grasses, and assorted forbs.

#### Wetlands

There are approximately 89,000 total acres of wetlands within the project boundaries, consisting of 79,000 acres of BLH forest and approximately 10,000 acres of farmed wetlands. Herbaceous wetland/prairie complex (HW/PC) historically occurred within the basin. This type of habitat is wetter than the prairies found in western and northern regions of the United States and included herbaceous wetlands and marsh. HW/PC habitat supported a highly diverse animal population; however, little to no herbaceous wetlands/prairie complex currently remains. The Bayou Meto Basin, Arkansas project would restore 10,000 acres of HW/PC.

Wetlands impacts associated with the alignment of the inlet channel and flow regulating reservoir were assessed and included in the final EIS and 404(b)(1) evaluation for the Bayou Meto Basin, Arkansas project. A hydrogeomorphic (HGM) analysis was performed to identify impacts to wetlands and compensatory mitigation requirements. The HGM analysis revealed that 1,780 acres of cleared wetlands would need to be restored to BLH to offset wetland losses, including impacts to wildlife habitat, associated with hydrologic changes. No additional wetlands would be impacted by the relocation of the borrow pit or access road.

## Wildlife Resources

Impacts of the proposed construction of the inlet channel and reservoir to wildlife resources were quantified in the final EIS. Habitat Evaluation Procedures (HEP) were used to determine the direct construction impacts to wildlife (see Volume 10, Appendix D, Section XIII of the General Reevaluation Report, http://www.mvm.usace.army.mil/bayoumeto/Reports.asp). Construction impacts to 1,595 acres of BLH forest would result in the loss of 3,446.4 AAHUs. To mitigate for these impacts, 1,974 acres of prior converted farmland would be restored to BLH forest.

The proposed location of the borrow area and access road would not result in the loss of any additional wildlife habitat due to their placement within an agricultural field and on or adjacent to an existing gravel road, respectively.

## Threatened and Endangered Species

One endangered species, the interior least tern, is known to occur within the Bayou Meto Basin, Arkansas project area. The interior least tern received protection under the endangered species act on June 27, 1985. The interior least tern is a migratory, colonial shorebird. The ivory-billed woodpecker, a rediscovered endangered species, is thought to inhabit the forests in the Cache River Basin, Arkansas but has not been found in the project area and would not be impacted by the proposed modifications. The fish and mussel studies conducted during the general reevaluation did not identify any endangered species within or adjacent to the project area (Volume 10, Appendix D, Section XII).

## Bald and Golden Eagle Protection Act

Two active bald eagle nests were reported in the southern portion of the project area; however, there is no project related construction proposed within 0.5 miles of these sites, and the proposed modifications would be many miles from these nests.

# Cultural Resources

The cultural resources survey previously conducted for the projects final EIS and GRR covered the area of effect for the inlet channel and flow regulating reservoir. The proposed new location for the borrow site and access road were surveyed by Memphis District, USACE archeologists in 2010. No evidence of archeological materials within the proposed footprint of the borrow site or access road were discovered. All proposed project design modifications associated with this EA will be coordinated for cultural resources inventory, evaluation, and protection (as applicable) under

provisions of the National Historic Preservation Act and the 2009 signed Programmatic Agreement. This coordination includes communication with the Arkansas State Historic Preservation Officer and federally recognized tribes. Any discoveries made during the proposed construction will be resolved under 36 CFR 800.13.

## Air Quality

Potential air quality concerns related to the Bayou Meto Basin, Arkansas project were coordinated with the Arkansas Department of Environmental Quality (ADEQ) during the planning phase of the project. The proposed project area is in attainment for all air quality standards. Since the equipment to be used is a mobile source, the project is exempt from air quality permitting requirements. Although air emissions would not require a permit, best management practices shall be used throughout the construction to minimize air pollution.

#### Water Quality

Water quality was addressed in detail in the final EIS and GRR for the Bayou Meto Basin, Arkansas project and was coordinated with ADEQ. None of the modifications proposed in this EA would negatively impact water quality in either the Arkansas River or the Bayou Meto Basin.

# **CUMULATIVE EFFECTS**

Cumulative impact is defined as the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." (40 CFR § 1508.7).

The cumulative effects of the Bayou Meto Basin, Arkansas project were discussed in the final EIS. None of the proposed modifications would significantly increase the cumulative effects of the project.

The mitigation for the impacts to backwater fishery habitat would offset the reduction in available habitat within the Arkansas River watershed.

# MITIGATION

It was determined during interagency coordination, that the appropriate mitigation for the loss of approximately 27 acres of backwater fish habitat would be reestablishing connectivity to a minimum of 27 acres of currently isolated habitat along the Arkansas River. Mitigation would include the removal of the material preventing natural connectivity and placing that material in an area not designated as waters of the state or wetlands. This mitigation would restore all the functions lost due to the alignment of the inlet channel and placement of the flow regulating reservoir. Several sites have been identified by interagency representatives as appropriate for this mitigation effort. Careful analysis is ongoing to determine which location(s) offer the best opportunity for habitat restoration without

negatively impacting the authorized navigation in the Arkansas River. A final determination of the appropriate sites will be made in coordination with representatives of the interagency team.

To date, a tract of prior converted farmland totaling approximately 141 acres has been identified and is in the process of being purchased by the local sponsor for project mitigation. This tract is adjacent to an Arkansas Game and Fish Commission Wildlife Management Area (Holland Bottoms) near Jacksonville, Arkansas.

# **COMPLIANCE WITH REGULATIONS**

Project compliance with applicable federal and state regulations is shown in Table 1 in the Appendix. Review of the draft EA by appropriate agencies and individuals and a finding of no significant impact (FONSI) would bring the project into full compliance with the listed laws and regulations.

# Table 1. Relationship of Plan to Environmental Laws and Regulations

The relationships of the recommended plan to the requirements of environmental laws, executive orders, and other policies are presented below:

Federal Policies and Acts	Compliance Status
Archaeological Resources Protection Act of 1979	2
Bald Eagle Act	1
Clean Air Act Amendments of 1977	1
Clean Water Act of 1977, as amended	1
Endangered Species Act of 1973, as amended	1
Fish and Wildlife Coordination Act of 1958	1
Flood Control Act of 1946, as amended	1
Food Security Act of 1985	1
Land and Water Conservation Fund Act	1
National Environmental Policy Act of 1969	2*
National Historic Preservation Act of 1966, as amended	1
River and Harbor and Flood Control Act of 1970	1
Water Resources Development Act of 1986	1
Water Resources Planning Act of 1965	1
Executive Orders	
Floodplain Management (E.O. 11988)	1
Protection, Enhancement of the Cultural Environment	1
(E.O. 11593)	
Protection of Wetlands (E.O. 11990)	1
Other Federal Policies	
Water Resources Council, Economic and Environmental	1
Principles and Guidelines for Water and Related	
Land Resources Implementation Studies	

 $\underline{1}$ / Full compliance with the policy and related regulations has been accomplished.

2/ Partial compliance with the policy and related regulations has been accomplished.\*Full compliance would be met following the Finding of No Significant Impact.

## COORDINATION

Project modifications have been coordinated with the project interagency environmental team. The team is comprised of representatives from USACE, USFWS, Arkansas Game and Fish Commission, Arkansas Natural Heritage Commission, ADEQ, Arkansas Natural Resources Commission, U.S. Environmental Protection Agency, and the Bayou Meto Water Management District. In addition, this draft environmental assessment is being coordinated with these agencies and other interested parties.

## CONCLUSION

During the detailed design of the Bayou Meto Basin, Arkansas project, a requirement for four modifications to the project as detailed in the final EIS and GRR were identified. The proposed change in locations for the borrow pit and access road associated with the construction of the inlet channel, pumping station # 1 and flow regulating reservoir were needed due to recent residential development. A decision to maintain the connectivity of a backwater channel to the Arkansas River by not placing an embankment across the channel where the inlet channel would cross it was deemed advisable to provide an outlet for any flood waters that may pass through the backwater area. The oversight in assessing the impacts to backwater fishery habitat that would result from the placement of the inlet channel and flow regulating reservoir would also need to be adequately addressed.

Although the proposed modifications include the identification of a need to mitigate for 27 acres of backwater fishery impact, none of the proposed modifications discussed in this EA actually changes the impacts of the authorized Bayou Meto Basin, Arkansas project. The decision to proactively alter the design of the inlet channel to ensure that no unexpected flooding would be induced also has the ancillary benefits of providing some connectivity of the backwater area that would otherwise be fully isolated. This ancillary benefit does not however, affect the decision to fully mitigate the entire backwater area affected by the inlet channel and flow regulating reservoir. No other significant project modifications, in addition to the changes disclosed in this EA, are anticipated. However, the Memphis and Vicksburg districts and interagency team will continually review the project to ensure NEPA compliance. The proposed design modifications do not constitute a major federal action that would significantly affect the human environment. Therefore, a supplemental EIS is not required.

# PREPARER

For additional information contact Mr. Mark Smith at (901) 544-0670, <u>Mark.R.Smith@MVM02.USACE.ARMY.MIL</u>, or by mail at USACE Memphis District, Attn: Mark Smith, 167 North Main St., B202, Memphis, TN 38103-1894.

# LITERATURE CITED

U.S. Soil Department of Agriculture, Soil Conservation Service in Cooperation with Arkansas Agricultural Experiment Station. 1975. *Soil Survey of Pulaski County, Arkansas.*