

RECORD OF DECISION

YAZOO BACKWATER AREA WATER MANAGEMENT PROJECT FINAL ENVIRONMENTAL IMPACT STATEMENT

YAZOO BASIN, MISSISSIPPI

The Final Environmental Impact Statement (FEIS) dated November 2024, for the Yazoo Backwater Area Water Management Project, Yazoo Basin, Mississippi addresses the need to provide a flood risk reduction solution for the Yazoo Study Area (YSA) communities and the local economy while avoiding and minimizing impacts to important environmental resources. Based on this analysis, the reviews by other Federal, State, and local agencies, Tribes, input of the public, review by my staff, as well as assurances and commitments contained in the attached three Memorandums of Agreement developed with the U.S. Environmental Protection Agency (EPA) and the U.S. Fish and Wildlife Service (USFWS) and signed on 25 November 2024, I find the Recommended Plan to be in accordance with environmental statutes and in the public interest.

The FEIS, incorporated herein by reference, evaluated four alternatives related to reduction of backwater flooding. The Recommended Plan (Alternative 3) provides significant flood risk reduction features to resolve the long-standing flood impacts to the vulnerable and underserved communities and the agricultural economy. The Recommended Plan includes:

- Installation of a 25,000 cubic feet per second pump station adjacent to the Steele Bayou structure. To minimize and/or avoid potential adverse project impacts to the environment while meeting the goals of the project, an operation of managing water levels at 90.0 feet during crop season (25 March – 15 October) and up to 93.0 feet during non-crop season (16 October – 24 March).
- A nonstructural feature on lands below 93 feet offering all owners a variety of voluntary acquisition alternatives that may include the opportunity to sell their fee lands and improvements, or to sell a flowage easement and all improvements on their lands but retain fee ownership under certain human habitation restrictions, or elevation of residential structures or floodproofing of non-residential structures with certain restrictive easements. All acquisitions are voluntary for the nonstructural features, whether fee, easement, or elevation/floodproofing; no mandatory acquisitions are planned for the nonstructural features. However, property owners would be advised that there would be periods of time when the structures may not be usable or accessible based on seasonal management of water levels. USACE may provide relocation assistance to displaced tenants, in accordance with the “Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970”.
- Installation of thirty-four supplemental low-flow groundwater wells to deliver a maximum of 5.0 cubic feet/second/well during low flow periods to the most impacted channels in the study area in the YSA. Along with the full operation of Steele Bayou structure, the releases from low-flow wells will provide aquatic habitat to support aquatic resources in the YSA.

Section 3 of the FEIS includes a full discussion of the alternative formulation and screening process. Furthermore, additional actions to be completed prior to construction are provided in Section 9.

SUMMARY OF POTENTIAL EFFECTS

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the Recommended Plan are listed in Table 1.

Table 1. Summary of potential effects of the recommended plan.

	Significant adverse effect	Less than significant effects due to mitigation	Less than significant effects	Resource unaffected by action
Aesthetics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Aquatic Resources/Wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish and Wildlife Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered Species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous, Toxic and Radioactive Waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise Levels	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Environmental Justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All practicable means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Additionally, as plans are further developed and locations finalized, surveys would be conducted to ensure minimization and avoidance of impacts to human use. Best management practices to control erosion and reduce noise disturbances and traffic delays will also be implemented to minimize impacts.

COMPENSATORY MITIGATION

Based upon the types of habitats in the project area, the interagency planning team determined that a suite of models would be needed to assess the project’s impacts on fish and wildlife habitat and other ecological resources. Table 2 identifies anticipated impacts by ecological unit to habitat types as well as the estimated acreage needed for each habitat type to compensate for the modeled impacts.

Table 2. Anticipated impacts to habitat types and estimated mitigation acreage.

Habitat Type	Impact Quantity (Habitat Units) *	Estimated Mitigation Acres Required
Wetlands	27,354 AAFCU	5,722 Acres
Waterfowl	196,721 DUD	338 Acres
Aquatic Resources and Fisheries	3,851 ADFA	3,106 Acres
Migratory Birds	694 AAHU	1,056 acres
Great Blue Heron	698 AAHU	776 - 2,742 acres**
Shorebirds	352 AAHU	403 acres

* AAFCU = Average Annual Functional Capacity Units, DUD = Annual Duck Use Days, ADFA = Average Daily Flooded Acres, AAHU = Average Annual Habitat Unit

** Varies depending on proximity to existing nesting colonies and foraging habitat

With the exception of shorebird impacts, it is anticipated that compensatory mitigation required to compensate for other impacted resources will be provided through wetland restoration within the post-project 2- and 5-year floodplains, provided distinct habitat variables and appropriate temporal hydrological conditions are available within the wetland tracts. Shorebird habitat would be restored through establishment and management of approximately 403 acres of moist soil units. A multifaceted approach to mitigation planning will achieve the overall mitigation goals through the use of an existing in lieu fee program; USACE constructed mitigation sites; and/or the use of existing mitigation banks. Proposed work will not commence in waters of the United States until all in-lieu fee program/mitigation bank credits have been purchased and/or USACE constructed compensatory mitigation sites have been secured (e.g., acquired via fee title acquisition).

PUBLIC REVIEW

Public review of the draft EIS was completed on 12 August 2024. Six in-person public meetings were also held, as well as one virtual meeting. The most prevalent comments voiced by participants over the seven public meetings were: support for alternative two and pump installation, concern for flood damages to homes and agriculture, opposition to mandatory buyouts, environmental concerns due to prolonged flooding effects to plants, wildlife, forests and wetland ecosystems, and preference for both lowering the elevation threshold by several feet to start pumping and establishing a pump activation date earlier in March. Other concerns raised were about potential loss of life and economic activity in the area. Thousands of comments, in the form of email, social media, physical letters, and form letters, came in during the public comment period. In total, 43,000 comments were received, including 349 unique comments from the general public, other state, federal, and local agencies, and NGOs. This figure includes comments made in the public meetings. The majority of comments in opposition (42,680 comments) to the pumps came from form letters and NGOs with the exception of a letter with 56 signatures opposed to the project over environmental justice concerns. Responses to all comments submitted during the public comment period are provided in the FEIS. A 30-day review period of the FEIS was completed on 30 December 2024.

ENDANGERED SPECIES ACT

Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers (USACE) has determined that the proposed water management

solution would be “*Likely to Adversely Affect*” a subset of extant federally endangered pondberry colonies between the elevation 90.0 and 93.0 ft National Geodetic Vertical Datum (NGVD 29) flood zone or within a 15-m horizontal buffer of this elevation range. For the remaining 100 extant colonies that occur above elevation 93.0 feet NGVD, USACE has determined that the proposed water management solution “*May affect, but is not likely to adversely affect*” these higher-elevation colonies. The USFWS provided a biological opinion on 08 November 2024 and concluded that the Action is not likely to jeopardize the continued existence of pondberry. Additionally, USACE has made the determination that the project “*may affect, but is not likely to adversely affect*” the federally listed pallid sturgeon, northern long-eared bat, fat pocketbook mussel; and the proposed for listing alligator snapping turtle and tricolored bat. The USFWS concurred with this determination on 16 October 2024.

NATIONAL HISTORIC PRESERVATION ACT

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, USACE has determined that the effects on historic properties cannot be fully determined prior to plan approval. Therefore, in accordance with Section 106 of the NHPA (16 U.S.C. § 470f.) and its implementing regulations (36 C.F.R. § 800), USACE has elected to fulfill its Section 106 obligations through the execution and implementation of an Amended Programmatic Agreement (PA) per § 800.14(b) with the Mississippi State Historic Preservation Office, the Mississippi Levee Board, The Alabama Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, The Caddo Nation of Oklahoma, The Chickasaw Nation, The Chitimacha Tribe of Louisiana, The Choctaw Nation of Oklahoma, The Coushatta Tribe of Louisiana, The Jena Band of Choctaw Indians, The Mississippi Band of Choctaw Indians, The Muscogee (Creek) Nation, The Quapaw Nation, The Seminole Nation of Oklahoma, The Seminole Tribe of Florida, The Tunica-Biloxi Tribe of Louisiana, and The United Keetoowah Band of Cherokee Indians. All terms and conditions resulting from the agreement shall be implemented to avoid, minimize, and/or mitigate adverse impacts to historic properties.

CLEAN WATER ACT SECTION 404(B)(1) COMPLIANCE

Pursuant to the Clean Water Act of 1972, as amended, all discharges of dredged or fill material associated with the recommended plan have been found to be compliant with the section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Appendix I of the FEIS.

Based on a comprehensive evaluation of the Clean Water Act Section 404(c) Final Determination issued by the EPA in 2008, the EPA has concluded that the Clean Water Act Section 404 discharges from the 2024 Recommended Plan are not prohibited by the 2008 Final Determination. Therefore, the 2008 Final Determination does not apply to the 2024 Recommended Plan.

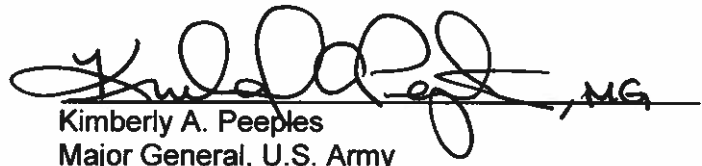
CLEAN WATER ACT SECTION 401 COMPLIANCE

Compliance with the Clean Water Act of 1972, as amended, will be achieved once Section 401 permitting is completed in coordination with the Mississippi Department of Environmental Quality (MDEQ). This would occur, when and if the project is approved and funded for construction. Application for state water quality certification from the MDEQ would occur during the design phase of this project.

FINDING

The formulation of alternative plans was developed in accordance with current guidelines for water resources projects. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. This Record of Decision completes the National Environmental Policy Act process.

16 Jan 2025
Date


Kimberly A. Peebles
Major General, U.S. Army
Commanding