FINDING OF NO SIGNIFICANT IMPACT

HATCHIE/LOOSAHATCHIE MISSISSIPPI RIVER MILE 775-736, TN AND AR, INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL ASSESSMENT

MISSISSIPPI AND CRITTENDEN COUNTIES, ARKANSAS AND TIPTON AND SHELBY COUNTIES TENNESSEE

The U.S. Army Corps of Engineers (USACE), Memphis District (Corps) has conducted an environmental analysis in accordance with the NEPA of 1969, as amended. The final Integrated Feasibility Report and Environmental Assessment (IFR/EA) dated February 2024, for the Hatchie/Loosahatchie Mississippi River Mile 775-736 Feasibility Study addresses ecosystem restoration opportunities and feasibility in Mississippi and Crittenden Counties, Arkansas and Tipton and Shelby Counties, Tennessee. The final recommendation is contained in the report of the Chief of Engineers, dated August 12, 2024.

The final IFR/EA, incorporated herein by reference, evaluated various alternatives that would achieve ecosystem restoration benefits in the study area. The recommended plan (RP) is the National Ecosystem Restoration plan and includes:

- 38 ecological restoration measures and two recreational measures all of which are separable elements that could be implemented independently. The RP restores ecological structure and function to the mosaic of habitats along the Mississippi River including secondary channels and other aquatic habitat; floodplain forests; and several scarce vegetative communities such as wetlands, rivercane, riverfront forests, and bottom land hardwood forests.
- The plan includes eleven dike notches through both pile and stone dikes to restore connectivity in secondary channels by allowing flow through the dikes at lower river stages.
- The plan contains five woody debris traps to collect drifting wood as it floats downstream, creating a diverse habitat for fish and macroinvertebrates. The traps are placed in permanent or near-permanently flowing water in proximity to the island side of secondary channels.
- The plan contains two bank protection measures, one riprap bank paving measure, and one set of riprap hardpoints to prevent future bank line erosion and forested buffer degradation.
- The plan includes one river training structure measure to divert additional water into a chute at various river stages and create diverse fish habitat to maintain a navigation channel by directing flow and altering channel geomorphology.
- The plan contains five culvert measures, including concrete box culverts and corrugated metal pipe culverts to enhance the connectivity of waterbodies.
- The plan includes two swale cleanouts and one channel cleanout to restore connectivity and two earthen berms construction to pond water for moist soil management practices.
- The plan includes two bridge replacement measures to restore connectivity within the meander scarp by enhancing debris passage.
- Two recreational features are recommended, trail access improvements at Meeman Shelby Forest and interpretive media in Wolf River Harbor.
- The plan includes natural vegetation enhancement and restoration to restore vegetation through canopy gapping, cypress-tupelo planting, herbaceous wetland planting, and various forms of reforestation.

- The ecosystem restoration features provide 4,673 Average Annual Habitat Units.

In addition to a "no action" plan, nine alternatives were evaluated. The alternatives included a No Action Alternative and nine different combinations of locations and restoration techniques. Section 2 describes the alternative formulation process, and Section 4 describes the alternative comparison and selection process.

For all alternatives, the potential effects were evaluated, as appropriate, and are covered in Section 3. A summary assessment of the potential effects of the RP are listed in Table 1.

Table 1. Summary of Potential Effects of the Recommended Plan

	Less than significant effects	Less than significant effects because of mitigation*	Resource unaffected by action
Aesthetics	☒	☐	☐
Air quality	☒	☐	☐
Aquatic resources/wetlands	☒	☐	☐
Invasive species	☒	☐	☐
Fish and wildlife habitat	☒	☐	☐
Threatened/Endangered species/critical habitat	☒	☐	☐
Historic properties*	☐	☒	☐
Other cultural resources	☒	☐	☐
Floodplains	☒	☐	☐
Hazardous, toxic & radioactive waste	☐	☐	☒
Hydrology	☒	☐	☐
Land use	☒	☐	☐
Navigation	☒	☐	☐
Noise levels	☒	☐	☐
Public infrastructure	☒	☐	☐
Socio-economics	☒	☐	☐
Soils	☒	☐	☐
Tribal trust resources	☒	☐	☐
Water quality	☒	☐	☐
Mississippi River & Tributaries Features	☒	☐	☐
**The USACE will follow the process described in the programmatic agreement to ensure compliance with Section 106 of the National Historic Preservation Act of 1966.*			

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the RP. Best management practices (BMP) as detailed in the IFR/EA will be implemented, if appropriate, to minimize impacts. These BMP are detailed in Section 3 of the IFR/EA and include:

- The use of existing roads and location of staging areas in previously disturbed areas to the extent practical.
- Implementation of BMP for nonpoint pollution at construction sites. A stormwater pollution prevention plan (SWPPP) would be prepared in compliance with the Environmental Protection Agency and associated state regulations with each construction contract. The SWPPP would outline temporary erosion control measures

such as silt fences, retention ponds, and dikes. The construction contract would include permanent erosion control measures, such as turfing and placement of riprap and filter material.
- Any measures that pose a safety concern to navigation would be added to the navigation charts.

Mitigation for resources covered by Section 106 of the National Historic Preservation Act (NHPA) as amended, includes, but is not limited to, the following:

- The USACE will follow the process described in the Programmatic Agreement (PA) to ensure compliance with Section 106 of the NHPA. Prior to initiating construction activities, the USACE will complete efforts to identify archaeological sites eligible for listing in the National Register of Historic Places (NRHP) within the direct area of potential effect for the project and will provide PA signatories, invited signatories, and consulting parties' opportunity to review and comment on the findings. If archaeological sites meeting the criteria for listing on the NRHP are identified, the USACE will coordinate with the PA signatories, invited signatories, and consulting parties to determine practical avoidance, minimization, or mitigation measures needed to be completed prior to construction to ensure compliance with the NHPA.

No compensatory mitigation is required as part of the RP.

Public review of the draft IFR/EA and a Finding of No Significant Impact (FONSI) was completed on March 13, 2023. All comments submitted during the public review period were responded to in the final IFR/EA and the FONSI. A 30-day state and agency review of the final IFR/EA was completed on March 23, 2024. Comments from state and agency review did not result in any changes to the final IFR/EA

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the USACE determined that the RP may affect, but is not likely to adversely affect, the following federally listed species or their designated critical habitat: Indiana bat, northern long-eared bat, eastern black rail, piping plover, red knot, pallid sturgeon, fat pocketbook mussel, and pondberry. In addition, the USACE reached a “may affect but not likely to adversely affect” determination for the proposed endangered tri-colored bat, proposed threatened alligator snapping turtle, and candidate monarch butterfly. There is no designated critical habitat in the project locations. The U.S. Fish and Wildlife Service concurred with the USACE’s determinations on February 22, 2023.

Pursuant to Section 106 of the NHPA of 1966, as amended, the USACE determined that historic properties may be adversely affected by the RP. The USACE and the Arkansas State Historic Preservation Officer, the Tennessee State Historic Preservation Officer, and the Tennessee Division of Archaeology entered into a PA dated December 1, 2023. All terms and conditions resulting from the agreement shall be implemented to minimize adverse impacts to historic properties.

Pursuant to the Clean Water Act (CWA) of 1972, as amended, the discharge of dredged or fill material associated with the RP has been found to be compliant with section 404(b)(1) guidelines (40 CFR 230). The CWA section 404(b)(1) guidelines evaluation is found in Appendix 2c of the final IFR/EA.

A water quality certification pursuant to Section 401 of the CWA will be obtained from the Arkansas Department of Energy and Environment and the Tennessee Department of Environment and Conservation prior to construction. In letters dated February 13, 2024 and April 21, 2023, respectively, the States of Arkansas and Tennessee stated that the RP appears to meet the requirements of the water quality certification, pending confirmation based on information to be developed during the Pre-construction Engineering and Design. All conditions of the water quality certification will be implemented to minimize adverse impacts to water quality.

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed.

Technical, environmental, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on this report, the reviews by other Federal, state, and local agencies, Tribes, input of the public, and the review by my staff, it is my determination that the RP would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

JONES.COLLIN.R.1077506248 Digitally signed by JONES.COLLIN.R.1077506248 Date: 2025.04.03 07:46:47 -05'00'

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Date

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Brian D. Sawser
Colonel, Corps of Engineers
District Commander