



Hatchie-Loosahatchie Mississippi River Ecosystem Restoration Study



Appendix 2e – Draft Finding of No Significant Impact

February 2023

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Draft Finding of No Significant Impact1

LIST OF TABLES

None

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None

Section 1

DRAFT FINDING OF NO SIGNIFICANT IMPACT

HATCHIE/LOOSAHATCHIE MISSISSIPPI RIVER MILE 775-736, TN AND AR INTEGRATED DRAFT FEASIBILITY REPORT AND DRAFT ENVIRONMENTAL ASSESSMENT MISSISSIPPI AND CRITTENDEN COUNTIES, ARKANSAS AND TIPTON AND SHELBY COUNTIES TENNESSEE

The U.S. Army Corps of Engineers, Memphis District (Corps) has conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The final Integrated Feasibility Report and Environmental Assessment (IFR/EA) dated TBD, 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 TBD.

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

- 38 restoration measures summarized in the following categories that will benefit a total of 7,012 acres and provide 4,673 Average Annual Habitat Units (AAHUs) to eight unique habitats including: bottomland hardwood forest, cypress-tupelo forest, meander scarps, moist soil management areas, riverfront forest communities, seasonally herbaceous wetlands, secondary channels, and sloughs.
 - 4 measures to increase connectivity within secondary channels through dike notching of stone and pile dikes.
 - 2 measures to increase connectivity within meander scarps by lowering invert elevations of obstructions and increasing flow.
 - 5 measures increasing habitat complexity in secondary channels through large woody debris traps.
 - 3 measures to restore flow to backwater sloughs and wetland complexes by lowering invert elevations of obstructions.
 - 2 measures to protect the bank of secondary channels with riprap hardpoints.
 - 13 reforestation measures restoring the bottomland hardwood community, cypress/tupelo community, and riparian buffers along the Mississippi River.
 - 6 forest stand improvement measures to restore bottomland hardwood and cypress/tupelo communities.
 - 2 measures to restore wetland complexes and seasonal herbaceous wetlands.
 - 1 measure to promote moist soil management areas.
- 2 recreational features consisting of trail access improvements at Meeman Shelby Forest State Park and interpretive media in Wolf River Harbor to benefit public access and education.

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. 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

	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquatic resources/wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish and wildlife habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered species/critical habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic properties	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other cultural resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous, toxic & radioactive waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hydrology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Navigation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise levels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public infrastructure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Socio-economics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Environmental justice	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tribal trust resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Greenhouse gases	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prime and unique farmland	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood risk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the IFR/EA will be implemented, if appropriate, to minimize impacts. These BMPs 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 BMPs for nonpoint pollution at construction sites. A stormwater pollution prevention plan (SWPPP) would be prepared in compliance with EPA 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.

No compensatory mitigation is required as part of the recommended plan.

Public review of the draft IFR/EA and FONSI was completed on TBD. All comments submitted during the public review period were responded to in the Final IFR/EA and FONSI. A 30-day state and agency review of the Final IFR/EA was completed on TBD.

Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers determined that the recommended plan 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, tricolored bat, eastern black rail, piping plover, red knot, pallid sturgeon, fat pocketbook mussel, monarch butterfly, pondberry, and alligator snapping turtle. The U.S. Fish and Wildlife Service (FWS) concurred with the Corps' determination on TBD

Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties may be adversely affected by the recommended plan. The Corps and the TBD entered into a Programmatic Agreement (PA), dated TBD. All terms and conditions resulting from the agreement shall be implemented in order to minimize adverse impacts to historic properties.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the recommended plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Appendix A2 of the IFR/EA.

A water quality certification pursuant to section 401 of the Clean Water Act will be obtained from the Arkansas Department of Energy and Environment and the Tennessee Department of Environment and Conservation prior to construction. In a letter dated TBD, the States of Arkansas and Tennessee stated that the recommended plan 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 phase. All conditions of the water quality certification will be implemented in order 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 recommended plan would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date

Brian D. Sawser
Colonel, Corps of Engineers
District Commander