RECORD OF DECISION

MEMPHIS METROPOLITAN STORMWATER, NORTH DESOTO COUNTY FEASIBILITY STUDY, FINAL FEASIBILITY REPORT WITH INTEGRATED ENVIRONMENTAL IMPACT STATEMENT

DESOTO COUNTY, MISSISSIPPI

The Final Integrated Feasibility Report and Environmental Impact Statement (IFR-EIS) dated July 2023, for the Memphis Metropolitan Stormwater-North DeSoto, DeSoto County, Mississippi Feasibility Study addresses the need for additional improvements to prevent flooding from storm water, to restore environmental resources, and to improve the quality of water entering the Mississippi River and its tributaries from the metropolitan Memphis, Tennessee area and tributary basins including Shelby, Tipton, and Fayette Counties, Tennessee, and DeSoto and Marshall Counties, Mississippi. The final recommendation is contained in the report of the Chief of Engineers, dated 18 December 2023. Based on these reports, the reviews by other Federal, State, and local agencies, Tribes, input of the public, and the review by my staff, I find the plan recommended by the Chief of Engineers (hereafter, the Recommended Plan) to be technically feasible, in accordance with environmental statutes and the public interest.

The Final IFR-EIS, incorporated herein by reference, evaluated various alternatives related to two separate project purposes, the National Economic Development Plan (NED) to address flood risk management (FRM) issues and a National Ecosystem Restoration Plan (NER) to address chronic channel incision and degraded ecological habitats via aquatic ecosystem restoration (AER). The FRM Recommended Plan (plan 8b) provides significant flood risk reduction in terms of national economic development along with the added benefit of flood risk reduction to vulnerable and disadvantaged communities and includes:

- An approximate 3,000 linear-foot levee and floodwall near the southwest corner of the Highway 51 and Goodman Road intersection to reduce flooding along Goodman Road west of the Highway 51 intersection as well as along Highway 51 south of the Goodman Road intersection. The proposed structural plan would reduce flood damages to 180 structures during the 500-year event.

- Dry-floodproofing of 35 structures (21 commercial and 14 residential) on the east side of Hwy 51 and Goodman Road to address residual flooding.

The recommended AER plan will stabilize and restore approximately 28 miles of stream, support connectivity of an estimated 90 stream miles, provide 327 acres of bottomland hardwoods riparian restoration and includes:

- A comprehensive system of 74 bank stabilizing grade control structures and riparian restoration within and along 10 streams (Camp, Cane, Hurricane, Johnson, Lick, Mussacuna, Nolehoe, Nonconnah, Red Banks, and Short Fork Creeks) within the study area.

In addition to a “no action” plan, five alternatives (*i.e.*, Extended Horn Lake Enlargement, Extended Horn Lake Channel Enlargement with Lateral D Detention Basins, Extended Horn Lake Channel Enlargement with Cow Pen, Lateral D, and Rocky Detention Basins, Levee and Floodwall, Levee and Floodwall with dry floodproofing 14 residential and 21 commercial structures) were evaluated. Section 4 of the IFR/EIS includes a full discussion of the alternative formulation and screening process.

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	☐	☐	☒	☐
Air Quality	☐	☐	☒	☐
Aquatic Resources/Wetlands	☐	☐	☒	☐
Fish and Wildlife Habitat	☐	☐	☒	☐
Threatened/Endangered Species	☐	☐	☒	☐
Cultural resources	☐	☐	☒	☐
Floodplains	☐	☐	☐	☒
Hazardous, Toxic and Radioactive Waste	☐	☐	☐	☒
Noise levels	☐	☐	☒	☐
Environmental justice	☐	☐	☒	☐
Water quality	☐	☐	☒	☐

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. Furthermore, best management practices to control erosion and reduce noise disturbances and traffic delays will be implemented to minimize impacts.

COMPENSATORY MITIGATION NOT REQUIRED

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

PUBLIC REVIEW:

Public review of the draft IFR/EIS was completed on 21 June 2022. Comments received during the meeting and public comment period were related to erosion and stream instability,

roadway flooding, increase in stormwater flooding, and culvert sizing, residential flooding, and wastewater treatment facility locations. All comments submitted during the public comment period were responded to in the Final IFR/EIS. The 30-day waiting period for review of the Final IFR/EIS culminated 30 September 2023.

ENDANGERED SPECIES ACT

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 Northern Long-eared Bat (*Myotis septentrionalis*). On 27 April 2022, the U.S. Fish and Wildlife Service (USFWS) noted reliance upon the 2016 programmatic biological opinion for the final 4(d) rule to fulfill project-specific Section 7 responsibilities. However, on 30 November 2022, USFWS published a final rule which reclassified the Northern Long-eared Bat as endangered under the Endangered Species Act, which ultimately became effective 31 March 2023 As this species designation has been recently updated, USACE proposes to avoid potential tree clearing between 15 May and 31 July as well as will continue to coordinate with USFWS on this and other species that may become listed throughout design development and construction to maintain Section 7 compliance. USFWS concurred with the USACE determination and approach on 11 October 2024.

NATIONAL HISTORIC PRESERVATION ACT

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that the effects on historic properties cannot be fully determined before plan approval. In accord with ER 1105-2-100, paragraph C-4(d)(5)(d)(2), the Corps has elected to fulfill its obligations under Section 106 of the NHPA through the execution and implementation of a Programmatic Agreement (PA) with the Mississippi State Historic Preservation Office, and the Chickasaw and Cherokee Nations. All terms and conditions resulting from the agreement shall be implemented to minimize 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 A of the IFR/EIS.

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. This would occur, when and if the project(s) are approved and funded for construction. Coordination with the Mississippi Department of Environmental Quality is on-going, and State Water Quality Certification would be requested as plans progress and detailed designs are completed. During ongoing coordination, there has been no indication of concern raised by the Mississippi Department of Environmental Quality regarding the issuance of State Water Quality Certification, pending review of detailed plans, when available.

FINDING

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 the review of these evaluations, I find that benefits of the recommended plan outweigh the costs and any adverse effects certify that all of the alternatives, information and analyses submitted by State, Tribal, and local governments and public commenters based on the summary in the IFR-EIS have been considered by the Corps. This Record of Decision completes the National Environmental Policy Act process.

October 25, 2024

Date

MICHAEL L. CONNOR
Assistant Secretary of the Army
(Civil Works)