

**Draft FINDING OF NO SIGNIFICANT IMPACT
(FONSI)**

**Mississippi River Mainline Levee
Miston Berm and Levee Rehabilitation
Dyer and Lake Counties, Tennessee**

Description of the Proposed Action

The Mississippi River Mainline Levee (MRL) in Dyer and Lake Counties, Tennessee has been found to be in need of repair. Significant seepage occurs during high water events and the landside slopes of the levee have been sliding in areas due to soil conditions. Two actions were determined to be necessary in order to ensure that the MRL continues to provide protection to life and property.

In order to repair and prevent future levee stability issues USACE proposes to excavate and repair levee slides along the MRL using approximately 450,000 cubic yards of material excavated from the agricultural land adjacent to the existing borrow pit on the riverside of the MRL. Through Geotechnical analysis, it has been determined that this material is more suitable than the highly plastic clays that currently are causing the levee to slide in several locations. The slopes would also be flattened to the extent possible while staying within the existing right-of-way. Levee slopes would range between 3-3.5H:1V. The material that currently constitutes the existing levee embankment would be excavated and used for construction of the proposed seepage berms described below.

Seepage berms were considered in the 1998 SEIS, and involve constructing four berms along the landside toe of the MRL to control seepage and piping under the levee. Approximately 430,000 cubic yards of material would be required for construction of the seepage berms. This material would be excavated from the levee embankment during the repair of the levee slides, any additional material required would be excavated from the proposed borrow pit. Temporary impacts to local roadways and the public use of those roads would result, as haul trucks would be needed to transport the tons of material to the project site; however, a traffic plan is being developed with the Tennessee Department of Transportation.

The majority of work would occur concurrently and in sections to reduce the risk of levee failure during construction. For example, the excavation of the levee slopes must occur concurrently with borrow pit excavation as no more than 300 feet of levee excavation may occur without backfill and compaction, and no more than 1,000 feet of levee may be excavated at any time. Back fill of the levee slopes must be complete within 30 days of excavation. Material excavated from the levee slopes must be hauled to the berm locations and compacted as work is occurring.

A total of approximately 3.3 acres of forested wetlands, 0.85 acres of farmed wetland, 0.14 acres of mowed/maintained wetlands along the landside toe of the levee, and 8 acres of non-wet treed area would be impacted by the proposed project. Compensatory mitigation requirements entail creation of 27 acres of forested BLH wetlands (11 acres due to wetland

impacts and 16 acres due to non-wet tree clearing) as described in the Mitigation Section below. Compensatory mitigation would occur concurrently with construction of the project.

Factors Considered in This Determination

A 1998 final Supplemental EIS (SEIS), *Mississippi River Mainline Levees Enlargement and Seepage Control*, addressed seepage control measures to be implemented along the MRL. While berm construction in this area was covered under the SEIS, it was determined that additional rights-of-way were needed and potential environmental impacts were identified.

An EA was prepared specifically to assess the potential impacts of this work on cultural and natural resources, including endangered species, water quality, infrastructure, wildlife habitat, and to update coordination with the associated levee work. The EA revealed that the proposed project action was the most practicable alternative. Compensatory mitigation requirements are described in the mitigation section below. A Section 404(b)(1) evaluation was prepared for the proposed project action and is included as an appendix. A state water quality certification was requested from the State of Tennessee, Department of Environment and Conservation.

Pursuant to Section 7 of the Endangered Species Act, USACE coordinated with the U.S. Fish and Wildlife Service (USFWS), and will conduct a mist-net survey in the project area beginning May 15, 2018. Results would be coordinated with USFWS prior to finalizing the NEPA process. If Indiana bats are captured, radio-tracking would commence and formal consultation would begin. Every effort would be made to conduct tree clearing between November 1 and March 31, even if no threatened or endangered bats are captured. USACE has determined that there would be no effect to the interior least tern or pallid sturgeon.

Coordination with the federally recognized Native American Tribes within MVM, as well as with the Tennessee State Historic Preservation Office is being conducted with the circulation of the draft EA. No additional cultural resources investigations are recommended prior to the project's implementation.

Mitigation

A total of approximately 3.3 acres of forested wetlands, 0.85 acres of farmed wetland, 0.14 acres of mowed/maintained wetlands along the landside toe of the levee, and 8 acres of non-wet treed area would be impacted by the proposed project. Compensatory mitigation requirements entail creation of 27 acres of forested BLH wetlands (11 acres due to wetland impacts and 16 acres due to non-wet tree clearing). Actions include planting bottomland hardwood species and restoring hydrology, if necessary, within tracts of cleared agricultural land. The proposed mitigation site is anticipated to be located in Dyer County, Tennessee as the USACE has proposed two tracts of land totaling approximately 36.5 acres to mitigate for the unavoidable impacts that would be incurred due to these project actions. The remaining acreage may be used in the future to mitigate for other MRL projects. A detailed, site-specific mitigation plan is being drafted, and will be coordinated with the interagency team. Compensatory mitigation would occur concurrently with construction of the proposed project.

Public Involvement

The proposed action has been coordinated with appropriate Federal, state, and local agencies, Federally recognized tribes, and businesses, organizations, and individuals through distribution of the draft EA, *Mississippi River Mainline Levee, Miston Seepage Berm and Levee Rehabilitation, Dyer and Lake Counties, Tennessee*, for their review and comment.

Conclusion

This office has assessed the potential environmental impacts of the proposed action. Based on the associated EA, and a review of the public comments received on the associated EA, a determination on the appropriateness of signing a Finding of No Significant Impact would be made by the MVM District Commander.

Draft

Date

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