

DRAFT
FINDING OF NO SIGNIFICANT IMPACT
Ensley Levee Seepage Berm Repair
Shelby County, Tennessee

The U.S. Army Corps of Engineers, Memphis District (MVM), is proposing to repair the Ensley Levee seepage berm, located in the southern extent of the Frank C. Pidgeon Industrial Area in southwestern Shelby County, Tennessee. An environmental assessment (EA) was prepared to evaluate potential impacts associated with the repair of the seepage berm.

Proposed Project Action: The proposed project action consists of installing 95 relief wells at an interval of approximately one every 200 feet along the toe of the Ensley Levee seepage berm and repairing those portions of seepage berm that were damaged during the record level flooding of the Mississippi River in May 2011. No ditch work would occur and seepage waters from the relief wells would flow along the natural topography of the land. The limit of work for the proposed project is within a 4-mile section of the seepage berm located at the southern extent of the industrial area. Approximately 6,300 cubic yards of earthen material would be needed to repair the damaged sections of the berm. The earthen material would be obtained from a stockpiled source located approximately 1 mile north of the Nucor Steel Plant. Equipment such as a backhoe would load the material into haul trucks, which would then transport the material to the repair sites along the seepage berm. Access to the stockpile site would be coordinated with and approved by the Memphis and Shelby County Port Commission. Access to the berm repair sites would be via the existing dirt/gravel road on the crown of the Ensley Levee and existing ramps leading off the levee onto the seepage berm.

A silt fence or approved equivalent would be installed along the northern boundary of the area to be cleared to contain sediments within the proposed project area. Bulldozers may be used to remove the vegetation from the top of the berm toe for a maximum width of 50 feet, which extends approximately 20 feet into existing wetlands. Vegetation removed may be hauled off or would be pushed away from the toe of the berm and stockpiled on site or burned. Approximately 23 acres would be impacted by the proposed project, including 13.3 acres of non-wet pastureland within the berm and berm toe, and 9.7 acres of mixed wetland habitat consisting of 8 acres of forested wetlands and 1.7 acres of scrub/shrub wetlands within the 20-foot wide section to be cleared. Excavation equipment such as backhoes would excavate the soil to a depth of approximately 3 feet to expose the voids created by seepage under the levee. Once a void has been located, it would be repaired with the excavated material plus any additional material required from the stockpile site. After completion of the berm repairs, the silt fence would be removed and the areas disturbed by the proposed project action would be reseeded with grass. The 50-foot wide cleared area would be maintained (mowed) to prevent the re-establishment of trees.

The Ensley Levee was constructed in the late 1950s and early 1960s before the National Environmental Policy Act of 1969 was implemented. In the early 1990s, a seepage berm approximately 7 miles in length was constructed to reduce seepage in the area immediately landside of the Ensley Levee. The berm construction impacted approximately 116 acres, including 100 acres of wetlands. A Mitigation Plan addressing the original 1990 project impacts was signed by the MVM and the Memphis and Shelby County Port Commissions on July 13, 1990. The Mitigation Plan included the planting of 134 acres in bottomland hardwood seedlings within the vicinity of the

project. However, to compensate for expected seedling mortality, a total of approximately 145 acres was planted within a site located northwest of the Ensley Pump Station.

A site assessment to the 145-acre mitigation site on November 2, 2012 by MVM biologists found a well-established bottomland hardwood forest, with an estimated survival rate of 80% to 90% based on the original tree planting design. Numerous trees, mostly hackberry, cottonwood, oak, boxelder, and elm, were 20 to 40 feet tall and 8 to 12 inches in diameter at breast height. Mitigation requirements for the 1990 seepage berm construction have been fulfilled. The proposed repairs to the seepage berm are within the footprints of the original 1990 construction, thus no additional mitigation is required.

A survey to the proposed project area on September 19, 2012 by MVM biologists and a U.S. Fish and Wildlife Service (USFWS) biologist determined that the proposed project is not expected to adversely impact any threatened or endangered species or their critical habitat. The USFWS concurred by letter dated September 28, 2012. By letter dated September 13, 2012, the Tennessee State Historic Preservation Officer concurred with MVM's determination that the proposed project would have no effect to significant cultural resources.

An application for aquatic resources alteration permit for state water quality certification was submitted to the Tennessee Department of Environment and Conservation, Division of Water Pollution Control on November 27, 2012. To comply with state requirements for the permits, a public notice sign briefly describing the proposed project action was posted on February 7, 2013 where it is visible and can be read from a public road near the proposed activity, and a public notice was published in the Memphis Business Journal on February 8, 2013. The Division of Water Pollution Control issued Permit #NRS12.251 on March 18, 2013. A Section 404(b)(1) evaluation was prepared and submitted for public review along with the environmental assessment.

Based on a review of the analysis performed in the environmental assessment and supporting documentation, I have determined the proposed action is not a major Federal action significantly affecting the quality of the human environment. Therefore, I have determined that an environmental impact statement is not required.

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Date

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Colonel, Corps of Engineers
District Engineer