



**US Army Corps
of Engineers** ®
Memphis District

ISSUE DATE: June 7, 2023

EXPIRATION DATE: July 7, 2023

JOINT PUBLIC NOTICE

**U.S. Army Corps of Engineers
Memphis District**

Missouri Department of Natural Resources

**Availability of draft Environmental Assessment
and draft Finding of No Significant Impacts**

TITLE: Mississippi River Mainline Levee Construction, St. Johns Bayou Outlet Ditch Scour Repair, New Madrid County, Missouri.

JOINT PUBLIC NOTICE: This public notice is issued jointly with the Missouri Department of Natural Resources (MDNR). The MDNR will use the comments to this notice in deciding whether to grant Section 401 water quality certification.

AUTHORITY: The project is authorized as part of the Flood Control Act of 1928, as amended.

LOCATION: The proposed scour control measures are located within and along the banks of the St. Johns Outlet Ditch, downstream of the St. Johns Bayou outlet structure, adjacent to the right descending bank of the Mississippi River (river mile 890), and east of the town of New Madrid, New Madrid County, Missouri (Figure 1).

TO WHOM IT MAY CONCERN: Pursuant to the National Environmental Policy Act of 1969, as amended, the U.S. Army Corps of Engineers (USACE), Memphis District (MVM), is issuing this notice of the proposed installation of scour repair measures within the channel and along the banks of the St. Johns Bayou Outlet Ditch, New Madrid County, Missouri.

PURPOSE: There is a need to design, build, maintain, operate, and repair the Mississippi River Levee (MRL) system to ensure protection during a flood event. A catastrophic failure of the MRL, at any point, would likely inundate land, structures, and result in consequences to humans and a variety of flora and fauna. During data analysis of 2020 flood reports and hydrologic surveys, stability and grade issues were identified at the confluence of the Mississippi River and St. Johns Bayou Outlet Ditch which could potentially affect the MRL ability to function as designed. Therefore, funding was provided through Supplemental Funding Public Law 117-58 (15 November 2021) to address these issues.

DESCRIPTION OF PROPOSED ACTION: The proposed project would involve scour repair measures consisting of removing approximately three to four feet of the unconsolidated/non-stable substrate and replacing with rip-rap (R-2200 and R-400) and bedding material to stabilize

the channel and bank shaping to repair scour and prevent additional erosion. It is anticipated that approximately 230,000 cubic yards (CY) of material would be removed from St. Johns Bayou Outlet Ditch and replaced with an estimated 260,000 tons (TN) of rip-rap and bedding material from a commercial source. Access to the project area would be from barge during high water, with State Highway WW, County Road 404, and levee roads providing additional access locations. Conventional earth moving equipment (e.g., bulldozers and excavators) would be used to construct the project. Compensatory mitigation requirements for stream impacts would be provided through in-stream and/or riparian buffer establishment while unavoidable impacts to wetlands would consist of restoring 2 acres of cleared agricultural lands to bottomland hardwood forest as described in the draft Environmental Assessment (EA).

Alternatives Considered

1) Alternative 1 – Future without Project Condition (No-Action)

In the future without project condition (no-action), the proposed action would not be constructed. The no-action alternative could result in increased scour and bank erosion within St. Johns Bayou Outlet Ditch during flood conditions. This could eventually lead to levee failure during a major flood event.

2) Alternative 2 – Repair Scour Conditions in St. Johns Bayou Outlet Ditch with Rip-Rap

This alternative would involve repairing scour within the channel and erosion along the banks of St. Johns Bayou Outlet Ditch in four separate phases via removal of three to four feet of the unconsolidated/non-stable substrate, bank shaping to repair scour/erosion, and placement of rip-rap (i.e., R-2200 and R-400) and bedding stone to stabilize the channel and banks.

3) Alternative 3 – Repair Scour Conditions in St. Johns Bayou Outlet Ditch with Rip-Rap Alternatives

This alternative would involve repairing scour within the channel and erosion along the banks of St. Johns Bayou Outlet Ditch in four separate phases as described for Alternative 2. However, in contrast to the placement of rip-rap and bedding stone, stabilization methods such as articulated concrete and geotextile mattress products were considered.

Preferred Alternative for the Proposed Project

A hydrologic computer model of the project system was developed which determined the worst-case velocities and erosion forces for use in evaluating potential stabilization methods and materials known to be capable of withstanding the aforementioned model results. It was determined that all protective materials considered would be effective at withstanding predicted velocities and erosion forces. Additionally, analysis was performed to determine if excavation depth could potentially induce seepage at adjacent MRL locations. The results indicate that soil material at the flowline of the ditch is sufficient so that increased ditch depth excavation does not correlate to increased seepage risk at the adjacent MRL segment. Although mattress alternatives could potentially reduce the required depth of channel excavation, design constraints associated with dredging depth can be removed from consideration leaving cost as the final screening factor. Therefore, when considering cost of implementation, as analyzed mattress products are more costly, rip-rap was determined to be the most efficient solution to resist the determined velocities and erosion forces.

Therefore, two alternatives were considered practicable and carried forward for detailed analysis: Alternative 1 (No Action); and Alternative 2 (Repair Scour Conditions in St. Johns Bayou Basin with Rip-Rap). After careful consideration of the alternatives, it was determined that alternative 1 (no-action) was unacceptable because of risks to human life and property. If scour problems are not addressed, levee failure could ultimately result. All factors considered, alternative 2 is the most practical solution for seepage control and is the preferred alternative for the proposed project assessed in this EA.

Furthermore, as the proposed project is presented in phases, Phase 1 has been awarded funding through the 2022 Infrastructure Investment and Jobs Act and would be designed to construction specifications. Phases 2 – 4 of the project are eligible for fiscal year 2025 funding and are anticipated to be designed to approximately thirty-five percent design specifications. As such, all analysis contained in the following assumes a “worst-case” type analysis (i.e., complete resource impacts within project phase footprint) for Phases 2 – 4, although future plans would likely incorporate avoid and minimize measures during design development. Additionally, state Water Quality Certification and Section 7 consultation is being requested for only the Phase 1 portion of the project at this time. Future state Water Quality Certification requests and Section 7 consultation are anticipated for Phases 2 – 4 as funding is awarded and plans developed.

WATER QUALITY CERTIFICATION: Impacts to water quality within the St. Johns Outlet Ditch and adjacent Mississippi River would be minimal or have no effect, as both the outlet ditch and river normally carry a heavy sediment load. Thus, no significant impacts to water quality would occur as a result of the proposed project. A Section 404(b)(1) Evaluation was prepared for the proposed project action and is included as an attachment. A state water quality certification for actions associated with Phase 1 of the project is requested from the State of Missouri, Department of Natural Resources with this draft EA. Additional state Water Quality Certification requests are anticipated for Phases 2 – 4 as funding is awarded and plans developed.

PROTECTED SPECIES: In the fall of 2022, USACE biologists conducted a site assessment of the project area to determine the presence of suitable/potential habitat for listed protected species. Pursuant to Section 7 of the Endangered Species Act, as amended, USACE has determined that implementation of Phase 1 of the proposed project would have no effect on the gray bat, Indiana bat, northern long-eared bat, tricolored bat, alligator snapping turtle, or the pallid sturgeon. Additionally, no evidence of bald eagles, or their nests, were observed at any project Phase location. An effect determination has not been made and concurrence not sought at this time regarding Phases 2 – 4 of the project.

CULTURAL RESOURCES: A literature review and cultural resources survey within the project’s Area-of-Potential-Effect (APE) were completed by the MVM archaeologist in the fall of 2022. The investigation revealed no significant cultural resources within the project’s APE and no historic properties are anticipated to be affected as a result of the proposed project. Concurrence from the Missouri State Historic Preservation Office is requested with the draft EA.

PUBLIC INTEREST REVIEW: The purpose of this public notice is to advise all interested parties of the proposed activities and to solicit comments and information necessary to evaluate the probable impact on the public interest. This notice is being circulated to federal, state and local environmental agencies. The decision to proceed with the proposed modifications will be based on an evaluation of the probable impact, including cumulative impacts, of the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The potential benefits of the activity must be balanced

against its reasonably foreseeable detriments. Potential direct, indirect, and cumulative effects of the activity on the human environment will be considered.

The USACE is soliciting comments from the public, federal, state, and local agencies and officials; Indian Tribes; and other interested parties to consider and evaluate the impacts of the proposed activity. Any comments received will be considered by MVM to determine whether to proceed with the proposed action. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors. Comments are also used in preparation of the final EA pursuant to the National Environmental Policy Act and to determine the overall public interest of the proposed activity. The draft Environmental Assessment and draft Finding of No Significant Impact have been completed and will be circulated to agencies and any other party that responds to this notice requesting a copy. A copy has been placed on the District's website at: <http://www.mvm.usace.army.mil/About/Offices/Regulatory/Public-Notices/>.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this proposed project action. Requests for a public hearing should clearly state the reason for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed to reach a decision on the project. Should any agency or individual decline comment on this notice, it will be interpreted by MVM to mean that there is no objection to the proposed work.

COMMENTS OR REQUEST FOR ADDITIONAL INFORMATION: Send comments to the U.S. Army Corps of Engineers, Memphis District, and MDNR. Comments may be sent via mail or email to the following:

U.S. Army Corps of Engineers – Memphis District
ATTN: Joshua Koontz
167 North Main St., Room B-202
Memphis, TN 38103-1894
e-mail: joshua.m.koontz@usace.army.mil
phone: (901)544-3975

MDNR
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176
email: wpsc401cert@dnr.mo.gov

Comments must be received by the expiration date listed on page one of this notice.

Sincerely,



Edward P. Lambert
Chief, Environmental Compliance Branch
Regional Planning and Environmental Division South

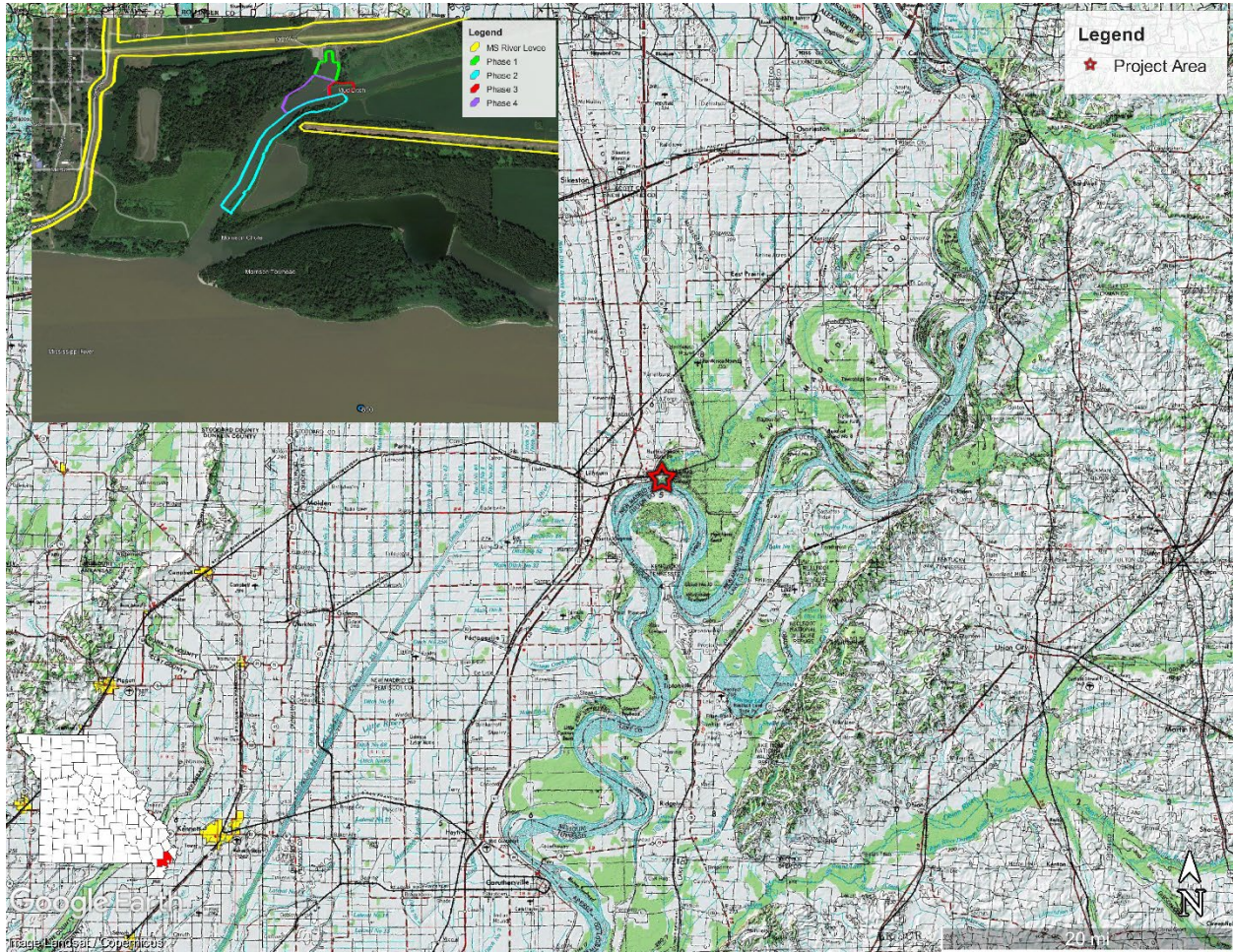


Figure 1. Location of proposed scour repair measures at St. Johns Bayou Outlet Ditch, adjacent to the Mississippi River mainline levee (see insert), New Madrid County, Missouri.