

US Army Corps of Engineers®

PROJECT FACT SHEET

Middle Mississippi River Stone Dike Alterations Phase 1

Upper Mississippi River, Unimpounded, River Miles 200-0 Jefferson, St. Genevieve, and Cape Girardeau Counties, Missouri Monroe, Randolph, and Union Counties, Illinois Navigation Ecosystem Sustainability Program, St. Louis District

Location. The Middle Mississippi River (MMR) Stone Dike Alterations study area includes opportunistic sites between RM 200-0. The study area includes, but is not limited to, the following river miles, which have been identified in locations where the biological need aligns with an opportunity to alter existing navigation structures: RM 157-147, 144-138, 129-118, and 66-60. These areas could be phased for feasibility.



A prototypical stone dike constructed within the middle Mississippi River

Land Ownership. The proposed work would only include modifying existing USACE-owned navigation structures; therefore, no landownership has been identified.

Resource Problem. Within the identified areas of interest, there are over 200 existing river training structures within approximately 3,500 acres of main channel border habitat. As noted for years by river resource partners, the stone dikes, constructed to reduce navigation channel maintenance, have caused a homogeneous pattern of sediment deposition that has limited the quality and diversity of aquatic habitat for riverine fishes within the MMR. There is a habitat need to diversify flow and depositional patterns within these homogenous dike fields to benefit native riverine species.

NESP Project Type. The project could consist of the following NESP project types: dike alteration.

Project Objectives. The project seeks to restore flow and depositional patterns within the MMR. The preliminary project objectives include:

- Improve flow and depositional diversity within dike fields; and
- Improve aquatic habitat for riverine fishes.

Potential Measures. The following are potential measures that could be combined into an implementable alternative that may be in the federal interest, address the identified problems, and achieve the project objective:

- Dike alteration (including but not limited to removal, lowering, degrading, raising, extending, or notching); and
- Opportunistic incorporation of woody structure with dike alteration.

Implementation Considerations. The project was endorsed by the River Resources Action Team Exec on July 30, 2021. The following data needs have been identified: hydraulic modeling, bathymetric and flow surveys, pre- and post-construction fisheries monitoring.

Financial Information (Estimate). The estimated Total Project Cost is approximately \$15-18M, including an estimated \$200,000 for monitoring and \$300,000 for adaptive management. Project measures would require minimal operation and maintenance (O&M) costs. This project only modifies existing navigation structures; therefore, the construction of this project would be 100% Federal and does not require a cost-share sponsor.