



Incorporating Engineering With Nature® Principles in River Training Structures on the Mississippi River

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Response Summary:

Scheduled a meeting at the USFWS office in East Lansing, MI to discuss the use of clean dredged material for creation of an emergent/submergent wetland complex at the mouth of the St. Marys River west of the downbound channel at Moon Island. Discussed were the project overview, the potential for an Engineering With Nature® demonstration project using up to 150,000 CYD material, monitoring requirements. The overall site is 300 acres in size primarily sand flats presently with water depths of -2' to -7' LWD. Plans would include rock armor stone moved from the Rock Cut to be placed on the outside of the placement area to a set elevation (concerns would need to be alleviated with cormorant nesting, etc) to protect the dredged materials from wave erosion using one year's worth of dredged material from downbound Course 7 and 8 as the pilot project. The project supported the USACE Detroit District.

Period of Performance:

Meeting was held on 28 June 2018.

Benefits of the Response to the USACE Dredging/Navigation Program:

Key benefits communicated at the meeting were: Unique opportunity to incorporate EWN and NNBF; Triple win outcome feasible: economic, social, and environmental benefits possible; Focus energy to motivate and facilitate innovation in both technical and business processes; Accelerate progress through co-development of solutions; and, Important to elevate stakeholder communications to advance practice and to maximize enhancement of project value.



Stakeholders attending were Michigan Department of Environmental Quality (DEQ), State of Michigan, Michigan Department of Natural Resources (DNR), U.S. Fish and Wildlife Service, and U.S. Environmental Protection Agency.

Deliverable:

The primary deliverable for this response was a presentation to stakeholders that included the many possibilities that EWN could be integrated into the design of the project.



Providing environmental and engineering technical support to the U.S. Army Corps of Engineers
Operations and Maintenance navigation and dredging missions

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