



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:

The ERDC-EL supported the USACE St. Louis District (MVS) by participating in the 2018 River Resource Action Team (RRAT) Site Visit Coordination Trip from St. Louis, MO to Cairo, IL. The purpose of the trip was to gain knowledge of the multiple projects undertaken by MVS, including several planned or ongoing Regulating Works projects, numerous UMRR Program ecosystem restoration projects in planning on the MMR, and continued efforts to support the Endangered Species Act within the MMR including a flexible pipe island creation project through the MVS maintenance dredging program that are consistent with Engineering With Nature® (EWN) principles. Projects identified as representative of providing multiple benefits consistent with EWN principles will be chosen for communications with MVS stakeholders.

Period of Performance:

The RRAT took place on 5-7 September 2018. Writing on the Technical Report (TR) continued into 2019.

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

Key benefits included identifying appropriate MVS projects that are realizing multiple benefits and that could be included in the TR. ERDC-EL also met with many MVS staff and RRAT partners for coordination, collaboration, and discussion of current and future EWN projects. The TR will serve as an important communications tool with MVS stakeholders regarding the innovative use of river training structures to achieve multiple benefits consistent with EWN®.



River training structures such as this W dike can yield multiple environmental benefits while still maintaining safe navigation.

Deliverable:

The primary deliverable for this response will be an ERDC TR that summarizes the innovative use of river training structures to create multiple economic, social, and environmental benefits associated with their design and construction in the Mississippi River.



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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