



Attend Upper Mississippi River Basin Association Meeting

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

The Upper Mississippi River Basin Association (UMRBA) is a regional policy coordinating group composed of Governor's representatives from natural resource agencies in five states and seven federal agencies. They were formed in the 1980s to consider environmental and economic issues related to Upper Mississippi River System operations. They have been very successful at building a regional consensus for policies, programs, and funding to benefit navigation and ecosystem restoration missions.

The UMRBA meets quarterly to discuss official business and forms subcommittees to discuss specific topics. The Corps is working on a Planning Assistance to States project to develop a significant watershed planning project under Section 729 authority. They were convening regional workshops and follow-up meetings to discuss Sediment, Flood, and Drought issues in the watershed planning context. ERDC-EL has been supporting St. Paul, Rock Island, and St. Louis District watershed assessments, environmental restoration, dredging operations and water management operations and has relevant expertise to support watershed, floodplain, and river management. DOTS funding provided travel support to a regional planning meeting at Rock Island District.

Chuck Theiling provided background on the Minnesota River Basin Interagency Study which modeled water, sediment, nutrient, avian, and fisheries response to alternative land management scenarios for a large watershed. The study cannot be replicated for the Mississippi River, but it provides conclusions applicable to much of the basin. Floodplain management is a major concern in the region where Dr. Theiling has helped evaluate the benefits of levee setbacks and alternative floodplain management strategies for greater flood resiliency and ecosystem services. There are methods to increase carbon and nutrient sequestration in managed wetlands, biomass crops, and algal phytoremediation within existing infrastructure. Beneficial use of dredged material and floodway filling are critical sediment-related issues ubiquitous in the region. Sediment characteristics and problems they cause differ throughout the Upper Mississippi where Dr. Theiling has been supporting beneficial use of dredged material investigations in St. Paul and Rock Island Districts channel maintenance and environmental dredging operations.

Period of Performance:

January FY20 – March FY20

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

Sediment transport and climate-related flooding are important watershed issues affecting Corps river operations. Coordination at this level provides opportunities for ERDC to provide research support. Dr. Theiling anticipates FY21 direct funding from 2 districts and additional support from other authorized programs.

Briefly summarize the benefits of the technical response to the Dredging /Navigation program(s).

Deliverable:

UMRBA draft report: Keys to the River 2020



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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