

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

MVP has requested for ERDC to explore expanded long term use of dredge material in the Upper Mississippi, as well as other strategic opportunities related to maintaining the 9' channel and navigation along the Mississippi River.

Period of Performance:

11/6 – 12/31

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

To maintain a viable channel for both recreation and commercial shipping, MVP dredges the Upper Mississippi River (UMR) Navigation channel on an annual basis, averaging just under one million CY dredged each year. Most of this dredged material is placed at upland sites, due to the inherent constraints of a pooled system, as well as state specific regulations in regard to in-channel placement. With upland placement comes increased dredging costs as the material is often doubled or triple handled before reaching permanent placement sites. In addition to the monetary challenges, finding suitable and available placement options for this dredged material can be difficult, and at times USACE has received pushback from residents, who do not wish to have these large sand placement areas locally. With connectivity to several of the nation's busiest waterways, the UMR channel is a crucial asset for both import and export of commodities. Finding long term strategic placement opportunities for this dredged material is essential. Also, equally as important, is the ability to show the importance of the river and the need to keep it open though dredging activites.

Deliverable:

Through early discussions with MVP, it was understood that the overall scope of the effort would require additional work on top of the initial DOTS request. Through the DOTS request CHL created an overall scope to:

-Identify and analyze data which can quantify the current state of inland navigation, its benefit to the region and potential impacts of changes in the state of navigation. In addition, information for other modes of transportation serving the area was reviewed to determine if there is information available on their capacity and cost and/or recommending ways to do so.

-Summarize the future of inland navigation. This includes reviewing trends in inland navigation and reviewing case studies or literature on US and European inland ports that have implemented improvements. This included input from discussions with local ports and shipping industry on the current state and future of the waterway.

-Review cost of dredging within MVP and how it relates to the region, along with impacts to cost from Dredge Material Management Plan (DMMP.) Identify potential future strategic/beneficial uses of the District's dredged material such as sand as a commodity, or a marketing strategy regarding its quality and availability. Highlight the unique situation of the upper reach, with environmental restrictions, channel restrictions, and challenges with in-water placement.

-Identify political landscape within the MVP Area of Responsibility (AOR); representatives, committees/sub-committees, special interests, state Department of Transportation (DOTS) with waterway policies, etc. This will help establish a baseline for MVP to pursue an appropriate relationship with key political contacts at the state and federal level.

***This DOTS request led to a MVP funded effort titled "MVP Strategic Navigation Vision". The technical report is currently undergoing review. Further, a follow-on effort to continue strategic outreach and explore multi modal capabilities for MVP in FY22 is underway.

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

> Ben Emery Coastal and Hydraulics Laboratory

DOTS ID: DOTS-21-R10