



Illinois Waterway Soil Manufacturing Investigations

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

We used DOTS support to describe beneficial use of dredged material investigations on the Illinois Waterway for Rock Island District (MVR). Dr. Theiling worked at MVR where he initiated alternative strategies to use material in Dredged Material Management Areas (DMMA) that are full to capacity. Problems and opportunities were reviewed in 2015, a project site (Mackinaw DMMA) was evaluated in 2016, and the Bull's Island DMMA was investigated in 2017 and 2018. These activities were summarized in a Technical Report produced for DOTS.

DOTS funding also supported development of a proposal responding to the WRDA 2016, Section 1122 Beneficial Use Demonstration Projects. We integrated activity from an ongoing Planning Assistance to States study to propose commercial soil harvest, manufacturing, and sales to support Peoria Lake ecosystem restoration while also supporting navigation dredging management. Engineered soils require a mix of coarse sand available from channel dredging and fine material from environmental dredging so the activity can benefit two Corps missions. There is even a small fraction of flood risk reduction from removing sediment from the floodway.

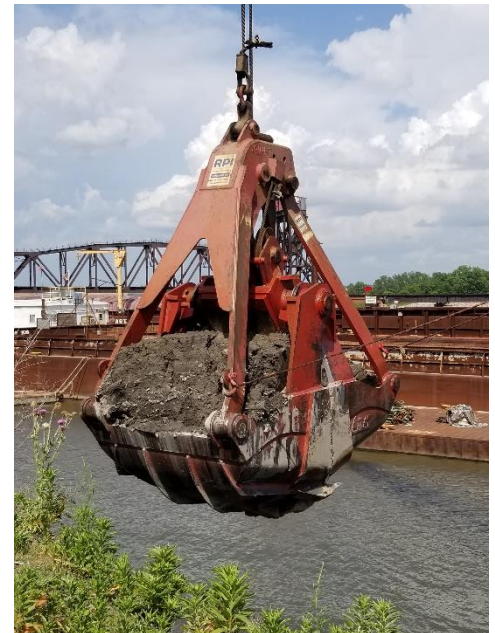
Innovative use Corps funding programs and integrating projects in the same geographic region added significant value to this project. The DOTS funding supported beneficial use of dredged material technology transfer (Tech. Report) and program development (beneficial use proposal).

Period of Performance: February 2018 to September 2018.

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

The DOTS funding will help communicate the potential to develop an innovative public private partnership model for dredged material management. Planning activity on the Illinois Waterway which is communicated in this DOTS funded ERDC Technical Report indicates there is significant opportunity to replicate an engineered soil market operating in Minnesota. Many relationships have been formed and should grow into a regional market for manufactured sediment that supports Corps navigation and ecosystem restoration missions.

The project will grow faster and with more Corps direction if the ASA-CW selects the proposal we prepared with DOTS support. The attention derived as one of ten beneficial use demonstration projects would help establish a Beneficial Use Center of Expertise in Peoria.



Deliverable:

An ERDC Technical Report was prepared and submitted to the review system Sept 2018.

A research proposal for WRDA Section 1122 funding was developed for with the Tri-County Regional Planning Commission.



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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