



# Peoria Lakes Comprehensive Conservation Plan; Including Beneficial Use of Navigation Dredging

## ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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### Response Summary:

The Rock Island District (MVR) requested Dr. Chuck Theiling's assistance to coordinate and prepare a response to a USACE-HQ sponsored RFP to investigate beneficial use for dredged material under WRDA 2016, Section 1122. Investigations were first centered around the Bull's Island Dredged Material Management Area (DMMA) and expanded to include Peoria Lake to integrate Navigation and Environmental dredging for mission integration. An ERDC Technical Note (draft) summarizes innovations in stakeholder engagement and dredged material marketing that emerged from Illinois River Regional Sediment Management studies that began in 2015. Dredged material was discussed as a beneficial input to commercial soil products that provide contractors "a better material at a lower price." Coordination at several dredge material placement sites led to the potential for a near-term pilot study for beneficial use of dredged material and municipal yard waste management in Ottawa, Illinois. The Bull's Island site public-private beneficial use implementation was on a fast pace that we did not want to impede with the uncertainty of a Corps RFP, so we developed the requested beneficial use proposal with partners in a related MVR Planning Assistance to States (PAS) study.

The purpose of Peoria Lake PAS study is to reach a regional consensus on what conservation alternatives should be pursued in the future to conserve Peoria Lake, marshal regional support for taking action to conserve Peoria Lakes, and to develop a plan to be well positioned to move forward to conserve the Peoria Lakes. Peoria Lake is terribly impacted by excessive sedimentation so the study included measures to address sediment source, pathways, and sinks. Restoring depth lost to sedimentation in Peoria Lake has been a long standing restoration objective for residents and economic development interests in the region, so we devised a plan for a non-profit soil manufacturing entity to fund dredging for environmental enhancement in Peoria Lake. The project benefits navigation because the fine material from the Lake will be mixed in a blend with up to 80 percent sand from Navigation Operations stockpile sites that at or near capacity and need to be off-loaded or replaced at great expense to the Navigation mission.

### Period of Performance:

January 2018 – June 2018

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

This DOER study helped summarize activities leading to engineered soil manufacturing to create beneficial use opportunities for dredged material. It support coordination and development of a proposal to integrate environmental and navigation dredging in a USACE-HQ RFP for WRDA 2016, Section 1122 funding.

### Deliverable:

Technical Note: Bull's Island Soil Manufacturing Investigations.

HQ Section 1122 Proposal: Peoria Lakes Comprehensive Conservation Plan; including Beneficial Use of Navigation Dredging.

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



Chuck Theiling  
Environmental Laboratory • [Charles.H.Theiling@usace.army.mil](mailto:Charles.H.Theiling@usace.army.mil)

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