



Train LRE Personnel on Use of RECOVERY/CAP Model for Designing Caps in Duluth Harbor

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

An engineer from LRE came to ERDC for one week to learn how to design sediment caps for Slips 3 and C in Duluth Harbor using the RECOVERY/CAP model. Collectively, we developed the input data for the model including selecting cap materials, physical and chemical properties for the sediment profiles, site conditions for water depth, groundwater, deposition, flow-through velocity, and contaminant partitioning and reaction values. Tools were developed for estimating sediment properties and stable cap slopes during placement. A tool was also developed for estimating stable particle size for prop wash as a function of prop size, horsepower, and water depth.

Period of Performance:

Start date: 23 October 2017 Completion Date: 12 February 2018

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

The response improved the USACE Dredging/Navigation Program ability to address contaminated sediment issues.

Deliverable:

The deliverable was technology transfer, developing a trained engineer and additional tools to aid sediment cap design.



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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