



Dredging Portal Web Tools

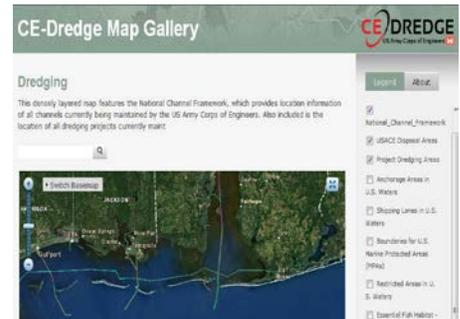
Dredging Operations Environmental Research Program (DOER)

U.S. ARMY CORPS OF ENGINEERS

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Problem

Access to dredging related data and tools utilized by Corps Districts, Headquarters, and R&D to make decisions regarding dredging operations can be cumbersome and time consuming because data are collected and stored in many formats and in a variety of databases, servers, and personal computers across the Corps, and the tools which utilize the data were developed in a variety of programming languages/software packages and without consideration of connectivity between them. These factors lead to inefficiencies in the process to visualize, analyze, plan, and manage dredging operations, as well as dredging related environmental assessments. Corps dredging operations managers, HQ, and R&D need more efficient access to integrated data, tools, and guidance to improve decision making on near-term (tactical) and long-term (strategic) scales in order to meet present-day and future challenges of reduced budgets and resources.



Study Description

This effort will 1) provide a Corps national database architecture to accommodate the integration of dredging and dredging-related information and data, 2) assist in expanding existing national databases to accommodate new datasets, 3) provide access to identified and available non-Corps dredging related data and information (i.e. NOAA, IOOS, USGS, EPA, etc), 4) integrate existing web-based viewers and portals into a single dredging portal, 5) reduce duplication of data and manual entry, 6) facilitate data archival for future access, 7) improve interfaces and guidance to existing screening level tools, and 8) develop new tools to evaluate or implement new technologies and research finding.

Products

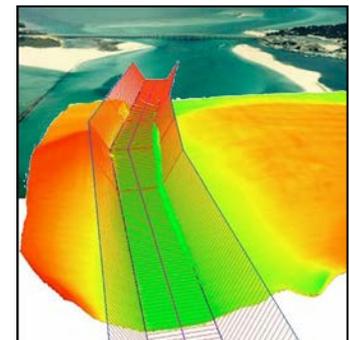
Framework for improved management and integration of USACE navigation and dredging data

CE-Dredge Portal - A web/GIS-based system to provide access to and visualization of USACE navigation and dredging data with decision support tools

Improved guidance, interfaces, and outputs for screening level evaluation and analysis tools made accessible on the web

Summary

Through enhanced analysis and evaluation tools and an integrated web-based portal, this effort will provide improved data access, visualization, and decision support for Corps dredging operations managers, HQ, and R&D, resulting in greater efficiencies across the Navigation business line and increased support for the national marine transportation infrastructure.



Balancing operational and environmental initiatives and meeting complex challenges of dredging and dredged material placement in support of the navigation mission.



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