Federal coastal navigation projects were inventoried to determine the extent to which Regional Sediment Management (RSM) goals and beneficial use of dredged material have been implemented across the USACE Districts at the project, District, and Division levels. Data from the USACE Institute for Water Resources (IWR) Navigation Data Center’s Dredging Information System (DIS) were utilized and considerably refined using District managed information and data. A web-application, a District Specific/Quality Checked (QC) database, and a database of USACE DIS data specific to this project were produced. The database is being expanded to include inland Navigation data.

Issue/Challenge To Address

The Regional Sediment Management Program was created in 1999 in response to a charge from the Coastal Engineering Research Board. Since the inception of the program, beneficial use of dredged material has become more common practice, however, it is unknown to what extent. The RSM and Beneficial Use Database will help to quantify the percentage of dredged sediment that is used beneficially. It will also help to determine where improvements need to be made in how often dredged sediment is used beneficially.

Successes Lessons Learned

Throughout the course of the project, it was determined that the DIS data used for this project needed to be supplemented with District specific data to narrow the unknown percentages. It was determined through this process that since 1998, 36% of our dredged material from coastal navigation channels is used beneficially. Outyears will include this calculation for inland Districts.

Expected Products

- Database showing placement location for inland and coastal navigation sediment
- Technical Report

Stakeholders/Users

Districts and Divisions will be participating by assisting in resolving unknown placement areas in their specific regions. They will also be quality checking the database for accuracy. The database allows any user (federal agency, resource agency, stakeholder, local government, etc.) to determine total project dredge volume over time, as well as placement area.
National Regional Sediment Management Program

RSM and Beneficial Use Database: USACE Navigation Sediment Placement

Projected Benefits

The project will provide significant value to the RSM, NAV, FRM, and ECO programs. Results may help to determine where improvements can be made in how dredged material is used for beneficial use.

Leveraging Opportunities

Data were leveraged from DIS and Districts to create the database.

Points of Contact

Linda Lillycrop
Program Manager, National Regional Sediment Management Program
202-761-1837
Linda.S.Lillycrop@usace.army.mil

Dr. Katherine E. Brutsché, CEERD-HNC
Deputy Program Manager, Regional Sediment Management
601-634-4174
Katherine.E.Brutsche@usace.army.mil

Dr. Nicole Elko
Elko Coastal Consulting
843-371-7082
nelko@elkocoastal.com

Participating Partners

USACE Districts and Divisions
Elko Coastal Consulting
APTIM