Beneficial Use of Dredged Material in Detroit District

Successes, Strategies, and Challenges

December 12, 2018
Recent Beneficial Use Success Stories

Minnesota:
- 21st Avenue
- 40th Avenue
- Slip 2
- Slip 3
- Slip C
- MN Slip

Michigan:
- Clinton River Mouth
A number of strategies have been used to accomplish beneficial use habitat and remediation projects:

- **St. Louis River AOC**
- **Annual O&M Navigation Dredging**
- **Strategic Navigation Dredging**
- **Remedial Action Planning**
- **Contractor Furnished Placement Site**
At the end of the 2018 construction season one million cubic yards of dredged material has been beneficially reused in the St. Louis River!

And we’re not done yet…

- **FY2019** – Piping Plover Habitat (WI)
  - Strategic Navigation Dredging
- **FY2020** – Azcon/DSPA Slip and Northland/AGP Slip (MN)
  - Strategic Navigation Dredging
- **FY2021** – Ponds behind Erie Pier (MN)
  - TBD (will depend on quantity and nature of material needed)
- **Other potential projects**: Superior Bay, Interstate Island, MN Point
Clinton River Mouth

Restoration Targets
3.8 Acres Upland (Wet Mesic Savanna)
0.5 Acres Ponds (Sedge Meadow)
0.5 Acres of Limestone-Cobble Shoreline/Transition Zone
14 Acres Emergent Wetlands

Legend
- Large Woody Debris Habitat Structures
- Limestone Cobble Shoreline
- Sedge Meadow Zone
- Wet Mesic Zone
- Emergent Wetland
- Transition Zone

CONCEPTUAL

Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Clinton River Mouth Wetland Creation Material
In Practice…
Challenges with Beneficial Use

- Specific requirements for desired material
- Timing (permits, design, etc.)
- Quantity of Material Needed
- Limitations of O&M Program
- Time Frame for Civil Works Authorities
Getting more Strategic…

To date projects have largely been opportunistic

Keys to Successful Partnerships:

▪ Stakeholder driven ideas for placement sites
▪ Plan Ahead
▪ Have multiple options to increase likelihood of being able to use O&M material
▪ Work with regulatory agencies early to work through innovative ideas
▪ Share success stories!