

Beneficial Use of Dredged Material in Detroit District

Successes, Strategies, and Challenges

December 12, 2018



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US Army Corps of Engineers
BUILDING STRONG®

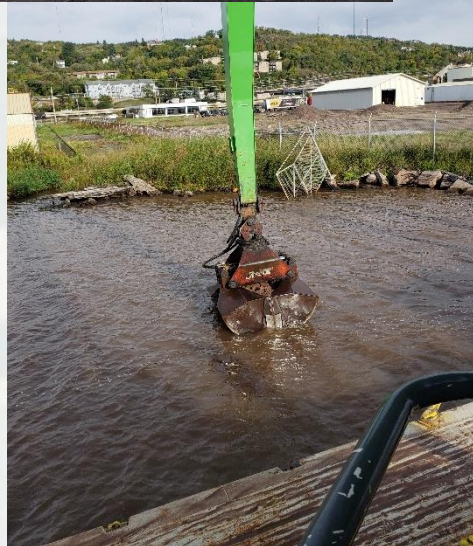
Recent Beneficial Use Success Stories

Minnesota:

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

Michigan:

- Clinton River Mouth

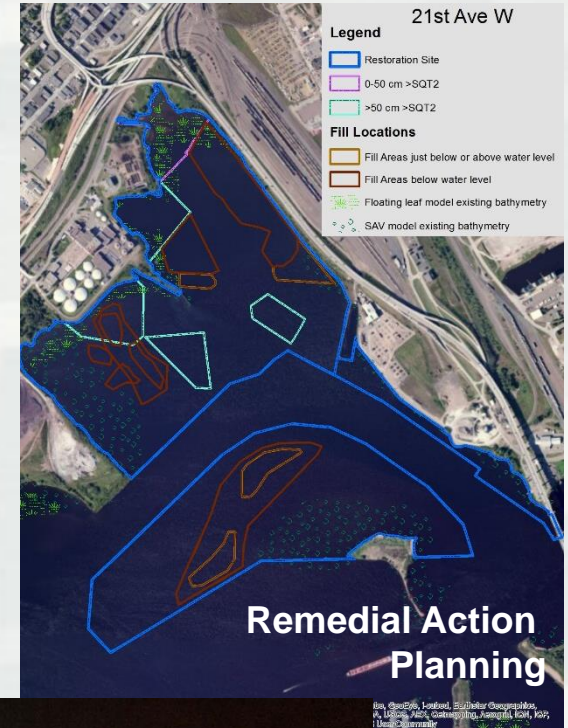


St. Louis River AOC

A number of strategies have been used to accomplish beneficial use habitat and remediation projects:



Annual O&M Navigation Dredging



Contractor Furnished Placement Site



Strategic Navigation Dredging



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



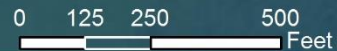
Clinton River Mouth



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



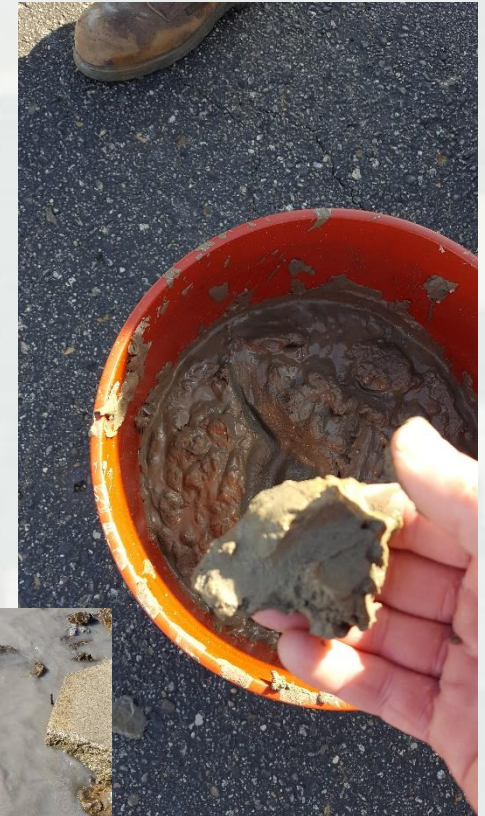
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In Practice...



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!

