UPCOMING USACE PROJECT WORK IN THE DULUTH-SUPERIOR HARBOR AREA

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HTAC Meeting 07 June 2023





US Army Corps of Engineers.







- Duluth O&M Dredging
- Erie Pier CDF Fill Removal
- Duluth Vessel Yard Phase 2
- Duluth Canal Shoreline Protection
- Section 111, MN Point
- Floating Plant Work at Superior Entry

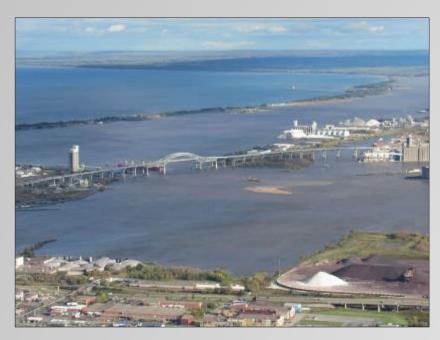
Other Projects:

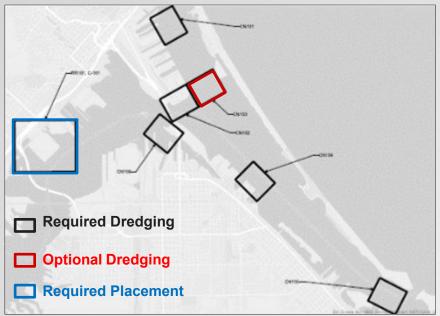
- Army Reserve Center Shoreline Protection
- Current GLRI Projects
- Future GLRI Projects



DULUTH - SUPERIOR HARBOR O&M DREDGING







Project Overview

Estimated Award	Estimated Start	Estimated	Appropriated	Funding Source
Date	Date	Completion	Funds	
July 2023	August 2023	October 15, 2023	\$2.6 million	O&M

Duluth-Superior Harbor MD, MN-WI. This routine project consists of maintenance dredging up to ~85,000 CY within designated areas in Duluth-Superior Harbor with placement of dredged material at the Erie Pier Confined Disposal Facility (CDF).



ERIE PIER FINE MATERIAL MANAGEMENT







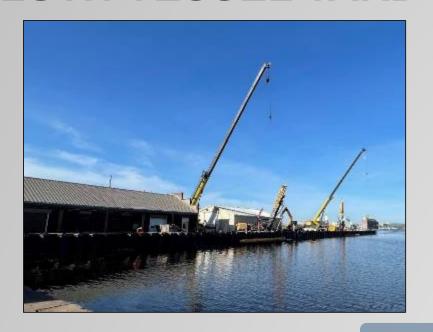
Project Overview

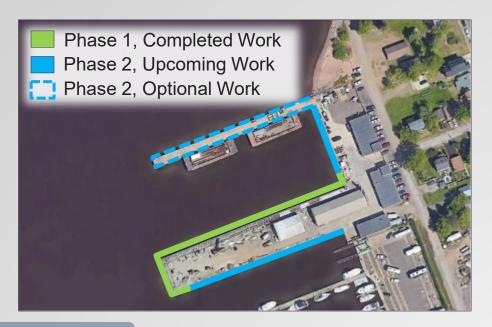
Estimated Award Date	Estimated Start Date	Estimated Completion	Appropriated Funds	Funding Source
Spring 2024	Spring 2024	Spring 2027	\$6.0 million	BIL

This service contract project consists of the removal and transport of approximately 200,000 CY of dredged material fines located at the Erie Pier Confined Disposal Facility, to various receiving locations throughout the region. Sites have been identified to receive material as far as 88 miles away from the location. Proposed use for the material includes impoundment closure pond reclamation, site restorations, general construction fill, and landfill cover.



DULUTH VESSEL YARD STEEL WALL PHASE 2





Project Overview

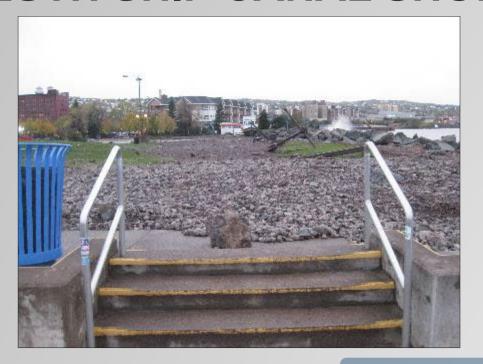
Es	timated Award Date	Estimated Start Date	Estimated Completion	Appropriated Funds	Funding Source
	31-Dec-2023	Spring 2024	15-Nov-2024	\$13.0 million	BIL, O&M

This project will tie into last year's Phase 1 pier reconstruction at the USACE Duluth Vessel Yard. The vessel yard houses the Corps' floating plant and survey vessels. The overall work in Phase 2 will consist of repairs and encapsulation of the existing structure along the south side of the south pier and along the east headwall. The system will be constructed using steel sheet pile and a pile-supported concrete cap. It includes critical upgrades to the existing shore power and lighting infrastructure. If all proposed options are exercised, the work will be extended to encapsulate the North Pier.



DULUTH SHIP CANAL SHORELINE PROTECTION







Project Overview

Estimated Award	Estimated Start	Estimated	Appropriated	Funding Source
Date	Date	Completion	Funds	
Fall 2023	Spring/Summer 2024	Summer 2025	\$4.4 million	BIL

The overall project consists of T-wall construction to improve shoreline protection and maintain continuity with the City of Duluth's shoreline protection structure. It involves the design and construction of an effective armor stone revetment, and landscape reconstruction on the USACE recreational grounds to include redesign of park features, sidewalk, and drainage.

SECTION 111, MINNESOTA POINT







Project Overview

Study Start Date	Estimated Completion	Appropriated Funds	Funding Source
28-Oct-2022	Jan 2026	\$1,850,000	CAP Funds – Sec 111

An ongoing Section 111 study to determine the impacts associated with the federal navigation structures on the sediment transport for Minnesota Point. The study identifies impacts related to these structures and any possible corrective actions. If this study identifies impacts associated to the navigation structure it would provide the support needed to request funds to alleviate these impacts.



FLOATING PLANT WORK - SUPERIOR ENTRY



Insert photo of concrete arch/exposed tie rods.



Project Overview

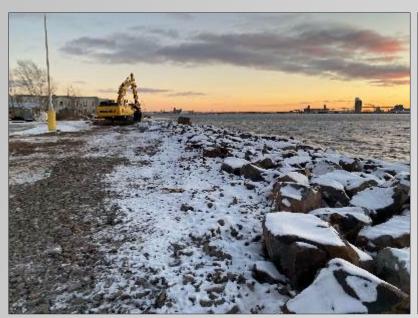
Estimated Award	Estimated Start	Estimated	Appropriated	Funding Source
Date	Date	Completion	Funds	
N/A	October 2022	June 2023	\$1.6 million	O&M

This work represents a portion of the Operations and Maintenance work performed by the Duluth Floating Plant in the Duluth Superior Harbor. Fill stone will be placed to support sidewalks and to protect Tie-Rods on the south side of the south pier where underlaying material has eroded away in storm events. The work consists of placing fill stone placed by crane and spread with a loader to support walkways. In addition to this, continued replenishment & salvage of Armor 1 & Armor 2 stones ranging from (3-12 tons) on the Eastern & Western Rubble breakwater where high water and severe storms have dislodged the stones.



88TH ARMY RESERVE CENTER (ARC) SHORELINE PROTECTION







Project Overview

Award Date	Start Date	Required Completion	Contract Amount	Funding Source
28-Sep-2022	11-Nov-2022	13-Nov-2023	\$1.18 million	88 th ARC

Work required under this contract consists of constructing an improved shoreline revetment at the 88th Army Reserve Center located on Minnesota Point in Duluth, MN. Additionally, this contract requires improvements to both the facility's security fencing and sections of the asphalt parking lot.



GREAT LAKES RESTORATION INITIATIVE – (GLRI)



EPA-led program to protect and restore the Great Lakes

- USACE one of 16 Federal agencies implementing GLRI
- Through FY22, USACE has received \$549M GLRI funds and leveraged over \$40M of non-Federal contributions
- USACE work has supported over 5,000 jobs in the construction, engineering, design and professional services sector
- Significant work remains in all 5 Great Lakes









CURRENT GLRI PROJECTS







EPA Contract, USACE QA and Safety Oversight

 The project involves sediment remediation in areas where contaminants of concern are above clean up levels. The project dredged, dewatered/treated, and transported ~32,000 CY of material to a local landfill. Site restoration activities are underway to address shorelines and other areas impacted by project activities.

EPA Contract, USACE QA and Safety Oversight

• This 40-acre reservoir supplies the Scanlon concrete dam used for hydroelectric generation. Elevated concentrations of dioxin/furans and mercury have been found in sediments widely throughout the reservoir. The project applied a cover of activated carbon to trap contaminants and prevent their migration.

EPA Contract, USACE QA and Safety Oversight

 Remediate approximately 12.6 acres by dredging an estimated 85,000 CY of material of varying toxicity along the MN-WI border, with offsite disposal and remedial capping in impacted areas.



FUTURE GLRI PROJECTS





EPA Contract, USACE QA and Safety Oversight

- Fst. Summer 2024
- Involves placement of amendment materials within Thomson Reservoir. Includes construction of support areas and reservoir access points, debris removal from the reservoir, and placement verification activities.

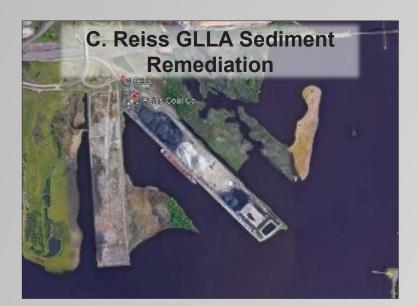


EPA Contract, USACE QA and Safety Oversight

- Est. Summer 2024
- Involves restoration of Mud Lake to native depths and improve the connectivity to the St. Louis River to improve water quality and restoration of habitat.

FUTURE GLRI PROJECTS





USACE Contractual Authority

- Est. Summer 2024
- Includes removal and handling of contaminated sediment, requiring dewatering and treatment of the process water.
 A secondary contractor will handle final disposal of the dewatered sediments.



EPA Contract, USACE QA Oversight

- Est. Summer 2024
- Remediation of a small slip in Superior WI, to address sediments contaminated with PAHs and mercury