

Great Lakes Coastal and Nearshore Habitat Assessment Engineering and Design

Project Leads: Coastal States Organization, along with state CZM programs and LimnoTech

Project Status: Engineering and design work underway.

Call to Action: Great Lakes states may submit new projects that would benefit from E&D work. *New submissions will open late August, so consider thinking about projects ready for E&D assistance in your states.*

Project Purpose

To develop 60-80% engineering and design blueprints for four sites prioritized as part of the Great Lakes Coastal and Nearshore Habitat Assessment prioritization process in 2019-2020.

Current Project Sites

- Lake Michigan, Michigan: Pentwater River Drowned River Mouth / Coastal Wetland Habitat Restoration (1 acre/340 feet of streambank)
- Lake Ontario/Niagara River, New York West River Parkway/Niagara River Shoreline & Aquatic Habitat Restoration – (14.7 acres/3,200 feet of shoreline)
- Lake Erie, Pennsylvania Construction and Restoration of Prime Spawning Habitat (10 acres)
- Lake Michigan, Wisconsin Peshtigo River
 Streambank Protection and Enhancement Project
 (4 acres/~870 feet of streambank)

Design Team

The design team for each site will include LimnoTech, GZA, SmithGroup, Tomas Höök, and Drummond Carpenter. The team will also include geospatial service firms for LiDAR and other data collection

Advisory Team

The work of the design team is guided by local project leads, state CZM managers, the NOAA Office of Coastal Management, and Coastal States Organization staff.

Timeline

October 2021: Great Lakes States submitted projects for consideration

December 2021: Four projects were selected for engineering and design work

February 2022: Request for proposals was released.

April 2022: Design team selected through a competitive review process.

May 2022: Kick off meetings convened; environmental compliance (NEPA and Historic Preservation) work underway

Summer 2022: Field work/data gathering

Summer and Fall 2022: Engineering and design work underway, advised by federal, state and local project partners.

November 2022: Draft blueprints available for comment and feedback

December 2022: Project wrap up/final reports developed.

A unique approach

- In lieu of a traditional, linear design process, this project utilizes a more non-linear, rapid schematic design process.
- This process develops and advances multiple concept designs at the same time and places them into a head-to-head competition that allows real-time critical evaluation by the design team and the client team.
- The design process will provide a path forward that meets the ecosystem restoration objectives while meeting requirements for implementability and cost-effectiveness.
- Following the schematic design, with the feedback and support of the project partners and stakeholders, the design details will be fleshed out through the design development and documentation tasks.

CSO Point of Contact

Vidya Balasubramanyam, Research, Science and Program Director vbalasubramanyam@coastalstates.org