

HABITAT TASK GROUP EXECUTIVE SUMMARY REPORT MARCH 2025



Introduction - The following provides a brief encapsulation of information presented in the annual report of the Lake Erie Committee (LEC) Habitat Task Group (HTG). The complete report is available from the GLFC's Lake Erie Committee website at <http://glfc.org/lake-erie-committee.php>, or upon request from an LEC, Standing Technical Committee (STC), or HTG representative.

The HTG had two charges in 2024–2025: (1) Maintain a list of functional habitats and impediments for species specified by the LEC Fish Community Objectives (FCOs); (2) Support other task groups by compiling metrics of habitat use by fish. Charge 1 had four supporting sub-components 1a) Identify and evaluate Priority Management Areas, (1b) Identify data needs to better identify and describe functional habitats, (1c) Document key habitat and research projects, (1d) Use GIS techniques to refine PMA mapping.

Charge 1: List of functional habitats and impediments for species specified by the LEC FCOs

Charge 1a: Identify Priority Management Areas (PMAs)

In 2019, the HTG completed the first iteration of the PMA exercise as reported in the 2018–19 HTG report. Through 2021–22 the HTG defined a 4-phase process to better capture the progress to date and communicate future work needs for updating the PMAs. Additional detail on each phase can be found in the full 2024–25 HTG report. The HTG has completed Phase 2 (geospatial framework) along with a prototype viewer for Phase 3 (geospatial interface) and has begun to develop processes to execute Phase 4 (update and refine). The HTG is working on a new analysis that will use telemetry and environmental data to develop Species Distribution Models for multiple species in Lake Erie. Spatial outputs from these models will be used to define high use areas around the Lake Erie that the HTG can use to compare, refine and update our PMAs.

Charge 1b: Identify data needs to better identify and describe functional habitats.

In 2021, during Phase 2 of PMA development it became evident that there were numerous data needs required to help detect and describe additional functional habitats. With the completion of Phase 2, these data needs will be compiled and addressed through Phase 4.

Charge 1c: Document key habitat and research projects

The 2024–25 HTG report includes project overviews for 11 different habitat and research projects underway or completed in low to very high priority PMAs across the Lake Erie basin. In particular, the Gorge Dam removal project that has been initiated includes contaminated sediment remediation among other efforts and is preceded by a habitat suitability index (HSI) project to determine the current amount of available habitat in the Cuyahoga River.

The profiled projects in the 2024–25 task group report include:

- HSI:
 - o Juvenile lake sturgeon habitat suitability index in the upper Niagara River (New York)

- Lake sturgeon habitat suitability in the Cuyahoga River (Ohio)
- Sauger habitat suitability in the Sandusky River (Ohio)
- Benthic mapping of reefs in Eastern Lake Erie (New York)
- Evaluation of fish habitat restoration in the St. Clair-Detroit River System (Michigan and Ontario)
- Hardy Point Reef assessments (Ohio)
- Influence of ice cover on reef hydrodynamics (Ohio)
- Gorge Dam removal on the Cuyahoga River
- Great Lakes Coastal Wetland Framework (basin wide)
- Cedar Point Causeway wetlands project (Sandusky Bay)
- Clark and Delaware/Horseshoe Islands Restoration Projects (Maumee River)



Figure 1. The left image shows the monitoring station being deployed to investigate the influence of ice cover on the Niagara Reef. The right image is a rendering of the monitoring station deployed near a fish spawning reef.

Charge 1d: Use GIS techniques to refine PMA mapping, coordination, and scale.

In 2023, the Habitat Task Group reported out on the development of reef and river plume layers identified as Priority Management Areas. Those layers were further refined and the exercise was used to help develop reef prediction layers for the other Great Lakes. Work will continue with Great Lakes Aquatic Habitat Framework support staff to refine layers and develop workflow processes through PMA phases 3 and 4.

Charge 2: Support other task groups by compiling metrics of habitat use by fish.

There was no new work towards this charge in 2024–25. There are ongoing efforts targeted at this charge which have been captured in prior reports. Throughout 2025–26 the HTG will continue to look for opportunities to assist agencies with the use of technologies.

For more information including detailed methodology for identifying PMAs and project summaries, please see the complete HTG report, available from the GLFC’s Lake Erie Committee website at <http://glfc.org/lake-erie-committee.php>, or upon request from an LEC, Standing Technical Committee, or HTG representative.