

HABITAT TASK GROUP EXECUTIVE SUMMARY REPORT MARCH 2022



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 three charges in 2021-2022: (1) Maintain a list of functional habitats and impediments for species specified by the LEC Fish Community Objectives (FCOs); (2) Assist member agencies with the use of technology; (3) Support other task groups by compiling metrics of habitat use by fish. Charge 1 had four supporting sub-components 1a) Identify Priority Management Areas, (1b) Develop strategic research direction, (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 to finish developing a functional, systematic, adaptive, cumulative, and collaborative approach for identifying PMAs (Figure 1). Specific detail on each phase can be found in the Full 2021/22 HTG report. The HTG is working to finish Phase 2 and beginning to develop processes to execute phases 3 and 4.

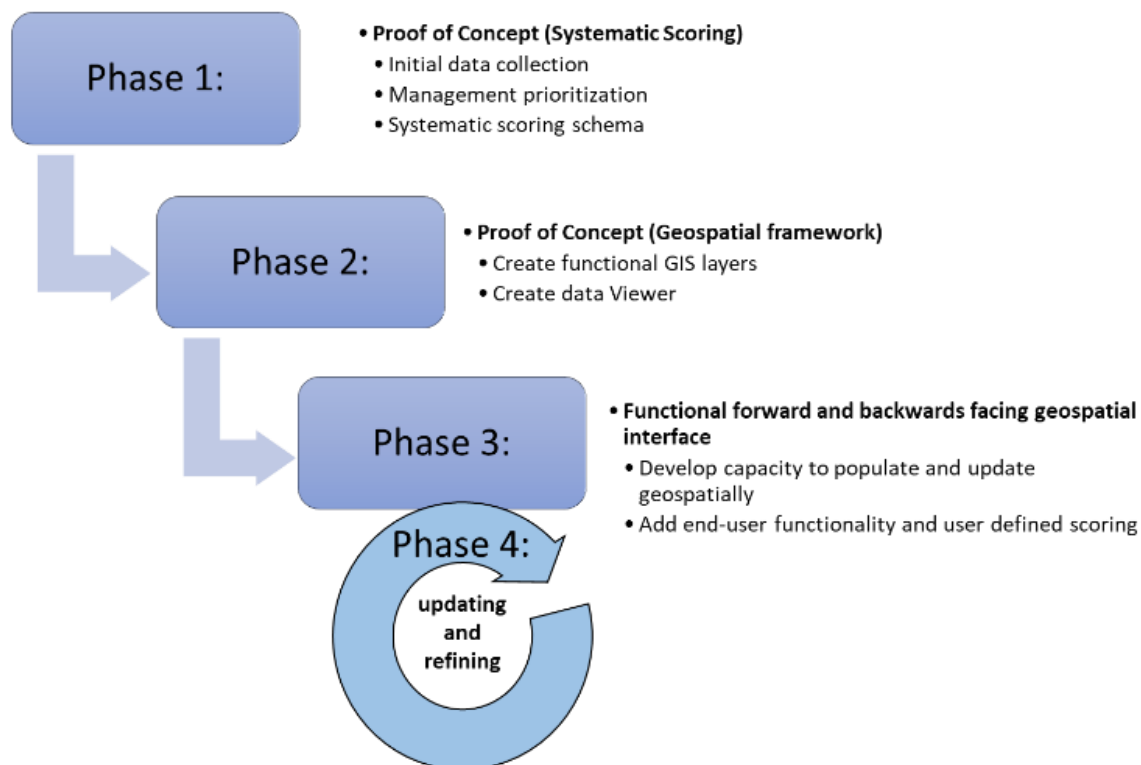


Figure 1: Four phases of PMA development identified by the Habitat Task Group.

Charge 1b: Develop strategic research direction

In 2021, during Phase 2 PMA development it became evident that gaps and data needs coming from this process would drive research directions for the Lake Erie Environmental Objectives. The HTG subsequently paused development of strategic research directions until this work is completed.

Charge 1c: Document key habitat and research projects

The 2021/22 HTG report includes project overviews for 10 different habitat and research projects underway or completed in medium to very high PMAs across the Lake Erie basin. In particular, HTG members are associated with three Habitat Suitability Indexes (H.S.I.). H.S.I. are used to identify and quantify suitable habitat for various fish species by comparing habitat characteristics (e.g., substrate, water depth, and flow) to species' optimal ranges at various life stages (e.g., spawning and juvenile). Moving into 2022/23 the HTG will look for opportunities for broader collaboration among the H.S.I. groups and facilitate knowledge transfer opportunities.

The profiled projects in the 2021/22 task group includes:

- H.S.I.s:
 - o Ballville Dam Removal Doubles Available Walleye Spawning Habitat in the Sandusky River (Ohio)
 - o Native species Habitat Suitability in Southern Ontario tributaries (Ontario)
 - o Lake Sturgeon Habitat Suitability in the Cuyahoga River (Ohio)
- The H2Ohio Wetland Restoration and Monitoring Program: 2021 Update (Ohio)
- Identifying and characterizing Lake Whitefish spawning habitat in Lake Erie
- Public Data on Temperature and Dissolved Oxygen
- Lake Erie MetroPark coastal wetland work (Michigan)
- Niagara River Coastal Wetland Restoration Projects (Ontario)
- Spicer Creek Wildlife Management Area Habitat Restoration (New York)
- Buckhorn Island State Park Habitat Restoration (New York)

Charge 1d: Use GIS techniques to refine PMA mapping

In 2019, the HTG began collaborating with the Great Lakes Aquatic Habitat Framework (GLAHF) project team to begin transitioning the Phase 1 "flat file" spreadsheet PMA dataset into the Phase 2 spatial dataset with accompanying GIS shape files. In 2021 these efforts were enhanced with funding from GLFC to the University of Michigan (Dr. Catherine Riseng) that supported several part-time student positions. Most of the effort was spent creating functional habitat spatial layers of PMA development (i.e. Phase 2) and developing a spatial data viewer. Specific details can be found in the full 2021/21 HTG report.

Charge 2: Assist member agencies with the use of technology

There was no new work towards this charge in 2021. There are ongoing efforts targeted at this charge which have been captured in prior reports. Throughout next year the HTG will continue to look for opportunities to assist agencies with the use of technologies.

Charge 3: Support other task groups by compiling metrics of habitat

There was no new work towards this charge in 2021. Like Charge 2, there are ongoing efforts reported on in prior HTG reports. Over the next year, the HTG will continue looking for opportunities to compile habitat metrics which are beneficial for the goals and objectives of the LEC.

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 (STC), or HTG representative.