

HABITAT TASK GROUP EXECUTIVE SUMMARY REPORT



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 2019-2020: (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 previous HTG report (2018/2019). Through 2020, the HTG has investigated further into entry deficient areas of the dataset and has identified completed projects. Over the next year, the HTG will continue to evaluate the PMA dataset and investigate how the new FCO's (Francis et al. 2020) may require updates to the dataset.

Charge 1b: Develop strategic research direction

In 2017, the LEC linked the HTG strategic research direction for the LEEOs to the development of PMAs. Efforts to investigate use of the PMA dataset to identify knowledge gaps that could then be used to develop a list of strategic research questions was begun in 2019 and continued through early 2021. Over the next year the HTG will continue to identify and prioritize those knowledge gaps to develop a list of strategic research questions.

Charge 1c: Document key habitat and research projects

The 2021 HTG report includes project overviews for 3 different habitat and research projects underway or completed in medium to very high PMAs across the Lake Erie basin. These projects are:

- Update of the ODNR Wetland Restoration within the H2Ohio Program
- Peche Island Fish Habitat and Erosion Mitigation Project – Detroit River
- Niagara River Coastal wetland restoration project

Charge 1d: Use GIS techniques to refine PMA mapping

In 2019, the HTG began collaborating with the Great Lakes Aquatic Habitat Framework project team to begin interpreting the PMA dataset into GIS layers. These efforts were continued in early 2021 to further develop the layers and transition the PMA dataset from a "flat file" spreadsheet to a spatial dataset. The work group has been able to develop conceptual layers for the functional habitats identified in the PMA dataset and begin development of a viewing tool that will allow users to see priorities in a variety of ways and scales. During 2021, the HTG will continue refining these layers and transition the dataset completely into a spatial dataset.

Charge 2: Assist member agencies with the use of technology

There was no new work towards this charge in 2020. There are ongoing efforts targeted at this charge which have been captured in prior reports. One such effort is the Real-time Aquatic Ecosystem Observation Network (RAEON; raeon.org). This program provides instruments, technical expertise, and data management for research on the Great Lakes. 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 2020. Like Charge 2, there are ongoing efforts reported on in prior HTG reports. One ongoing effort is the Experimental Lake Erie Hypoxia Forecast led by NOAA (https://www.glerl.noaa.gov/res/HABs_and_Hypoxia/hypoxiaWarningSystem.html). This system provides a forecast of bottom temperature and dissolved oxygen with the intent to alert users of hypoxic events (including upwelling events) in Lake Erie. The information collected and forecasted through this effort assists fisheries managers as well as many other stakeholders around Lake Erie. 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://qlfc.org/lake-erie-committee.php>, or upon request from an LEC, Standing Technical Committee (STC), or HTG representative.