

Great Lakes Coastal Wetland Conservation Framework

The Great Lakes Coastal Assembly, a multi-national, voluntary partnership, collaborated with over 30 organizations to develop a framework to advance Great Lakes coastal wetland conservation in the U.S. and Canada.



Need

Great Lakes coastal wetlands are critical habitats with high ecological, economic, and cultural importance. There is considerable interest and investment in both the U.S. and Canada to restore, enhance and protect coastal wetlands in the Great Lakes. However, key questions remain regarding basin-wide extent and condition of existing coastal wetlands as well as the area of wetlands needed to achieve desirable conditions and ecosystem services at a lakewide scale.

What

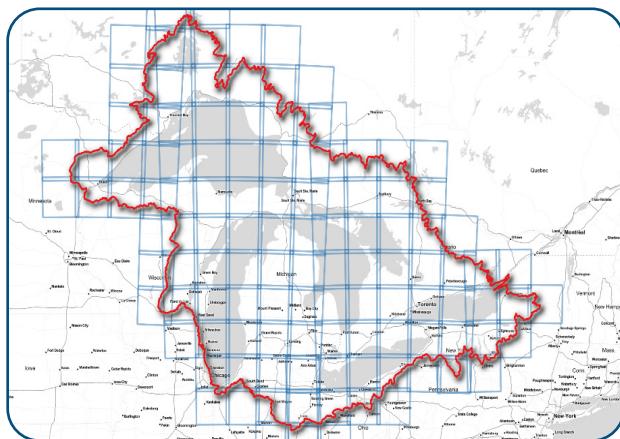
To help meet this need, the Great Lakes Coastal Assembly convened experts from over 30 organizations to define three objectives and develop a framework for coastal wetland conservation in the Great Lakes. Coastal wetlands were defined as all types of wetlands with current hydrologic connectivity to, and directly influenced by, one of the Great Lakes and rivers connecting the Great Lakes.

Objectives

1. Establish existing baseline extent and condition of Great Lakes coastal wetlands
2. Determine extent and condition of coastal wetlands needed to help achieve healthy Great Lakes and coastal communities
3. Identify where to focus coastal wetland efforts to achieve healthy Great Lakes and coastal communities

Products

- Range of total existing wetland acres, wetland acres by geomorphic type or classification type, ecological conditions of existing wetlands, annual variation and change over time, and water level variation
- Qualitative or quantitative desired status for extent and condition for coastal wetland types, that if achieved, represents success
- Family of maps depicting metrics associated with desired status and a decision support tool that helps partners identify where to focus coastal wetland efforts to achieve desired status
- Outreach materials including a publicly available web browser-based dashboard for data access and visualization



Photos: Saginaw Bay Wetland (Michigan Sea Grant), High Waters at South Haven Beach (Michigan Sea Grant), Sentinel 2 Satellite Tiling Image Over the Great Lakes

Where

A pilot of the framework will be implemented in Lake Erie at a lakewide scale with support from key partners, including the Lake Erie Lakewide Action Management Plan. Five additional training areas in each of the Great Lakes will also be included to calibrate models that require a diverse sampling of wetland types. Ultimately, we aim to implement the framework in each of the Great Lakes.



Who

Intended audiences and users of products developed through the framework include land managers, scientists, and funding organizations. Successful implementation of this framework involves putting products into action through decisions that impact on-the-ground conservation activities, while representing community groups that may be affected by changes to the landscape.

When

NOAA and USFWS received FY22 GLRI Focus Area 4 (Habitats and Species) funding to begin implementing the Lake Erie pilot. NOAA has begun work towards Objective 1 of the framework and expects to make progress towards mapping five training areas by the end of 2022. USFWS is finalizing a scope of work for Objectives 2 and 3, which will be processed through their contract vehicle in fall of 2022. We expect to make significant progress towards completing the Lake Erie pilot by the end of 2025.

Steering Team

A team of partners with strong connections to Lake Erie was formed to help guide implementation of the framework. The Steering Team includes representatives from the following organizations and initiatives:

| **State** | Michigan Dept. of Environment, Great Lakes, and Energy · Michigan Dept. of Natural Resources · New York Dept. of Environmental Conservation · Ohio Dept. of Natural Resources · Pennsylvania Dept. of Environmental Protection · Wisconsin Dept. of Natural Resources · Great Lakes Commission | **Interstate** | Great Lakes Commission | **Provincial** | Ontario Ministry of Environment, Conservation and Parks · Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry | **Federal** | Environment and Climate Change Canada · National Oceanic and Atmospheric Administration · Old Woman Creek National Estuarine Research Reserve · U.S. Environmental Protection Agency · U.S. Fish and Wildlife Service · U.S. Geological Survey | **Intergovernmental** | Great Lakes Fisheries Commission Lake Erie Committee Habitat Task Group · Lake Erie Lakewide Action Management Plan | **Nongovernmental** | The Nature Conservancy · Nature Conservancy of Canada | **Research & Monitoring** | H2Ohio Wetland Monitoring Program · Lake Erie and Aquatic Research Network · Great Lakes Coastal Wetland Monitoring Program · Environmental Principles and Nearshore Habitat Assessment · Lake Erie Biodiversity Conservation Strategy | **Coastal Initiatives** | Saginaw Bay-Western Lake Erie Coastal Wetland Blueprint · Lake Erie Canadian Baseline Coastal Habitat Survey · Great Lakes Coastal Wetland Restoration Assessment | **Partnerships** | Great Lakes Coastal Assembly · Phragmites Collaborative

