Lake Erie
Committee

May 12, 2026

Lake Erie Committee Environmental Priorities

Degradation of water quality, destruction of physical habitat, and associated impairment of ecosystem function cause damage to Great Lakes fish communities and fisheries. Accordingly, *A Joint Strategic Plan for Management of Great Lakes Fisheries* directs lake committees to identify environmental issues that may impede achievement of their fish community objectives and to work within governmental initiatives, such as the Great Lakes Water Quality Agreement, that provide opportunities for achieving water quality targets that support progress toward environmental and fish community objectives.

In 2016, the Council of Lake Committees (CLC) adopted its *Environmental Principles for Sustainable Fisheries in the Great Lakes Basin* to help guide individual lake committees as they identified and prioritized environmental issues that impede achievement of their Fish Community Objectives (FCOs). The CLC recognized that diverse functional habitats are required for sustainable fish production; protection and improvement of fish habitat should occur systematically, cumulatively, and collaboratively; fishery value should be accommodated in decisions that affect functional habitats; and manageable sources of anthropogenic stress are pathways for addressing impediments to functional fish habitats.

Using this guidance, the Lake Erie Committee (LEC) tasked the Habitat Task Group to identify Priority Management Areas (PMAs) to support development of a short-list of impediments. The Task Group assessed functional habitats in Lake Erie, as they relate to production of fish stocks of common concern, identified impediments to fish production, and recommended actions. The Task Group has developed a geospatial data viewer to enhance data visualization and plans to make it publicly available in the future.

The LEC prioritized the recommended actions based on expected benefits. The result is a list of regional and site-specific actions that will support the achievement and maintenance of FCOs; improving production of key species like lake sturgeon, lake whitefish, lake trout, walleye, yellow perch, and muskellunge.

- **Increase shoreline/nearshore complexity and increase submerged aquatic vegetation**
    - **Problem:** Shoreline hardening, wetland diking, and herbicide treatments reduce habitat complexity and vegetation; impairs LECs ability to achieve FCOs and affects

species that support recreational and commercial fisheries
    - **Action:** Soften hardened shorelines, restore coastal wetlands, and increase submerged vegetation where possible. Educate regulators and stakeholders on the importance of submerged vegetation.
    - **Focal Areas** where shoreline alterations are limiting production of FCO species: Sandusky Bay, St. Clair-Detroit River System, Grand River (OH), and Upper Niagara River

- **Increase tributary connectivity for migratory fish species of LEC concern**
    - **Problem:** Dams block fish movement to important habitats, reducing fish production; impairing LECs ability to achieve FCOs and affects species that support recreational and commercial fisheries
    - **Action:** Remove or modify barriers to increase connectivity and production
    - **Focal Areas** limiting production of FCO species: Wingford Dam (Black River, MI), Flat Rock Dam (Huron River, MI) and Dunnville Dam (Grand River, ON)

- **Reduce phosphorus loading to achieve mesotrophic conditions in the western and central basins and the nearshore waters of the eastern basin**
    - **Problem:** Excess nutrients impair fisheries production and ability to achieve FCOs across 12 PMAs
    - **Action:** Implement regional nutrient reduction strategies in priority watersheds
    - **Focal Areas** affecting eight PMAs in the western basin of Lake Erie: Maumee and Thames River Watersheds

- **Reduce impact of invasive zebra and quagga (dreissenid) mussels on fish spawning habitat**
    - **Problem:** Invasive dreissenid mussels colonize spawning reefs, altering habitat structure and reducing egg survival of fish species
    - **Action:** Implement real-world mussel control and/or removal methods that improve spawning habitats
    - **Focal Areas** are natural and constructed spawning reefs throughout the basin where dreissenid mussel colonization limits production of FCO species

Achieving the LEC environmental priorities requires collaboration, as many key actions lie beyond the direct jurisdiction of fisheries managers. Successfully implementing actions that support the achievement of environmental priorities requires a multidisciplinary approach relying on agency partners and stakeholders who influence/regulate watershed management, habitat restoration, and water quality. This collaborative approach aligns with the Council of Lake Committees (CLC) position statement advocating for an ecosystem-based approach, which emphasizes integrated management across ecological, social, and economic dimensions. Through coordinated efforts across disciplines, the LEC will advance shared goals that support a resilient Lake Erie ecosystem and the fisheries it sustains.