


# Lake Erie Protection & Restoration Plan 2023



Lake Erie  
Commission



# Table of Contents

- 2** Commissioners
- 3** About the Ohio Lake Erie Commission
- 4** About the Lake Erie Protection & Restoration Plan
- 5** The Lake Erie Protection Fund
- 6** Great Lakes Water Quality Agreement
- 7** Highlights of Accomplishments & Progress Since 2020
- 10** 2023 Ohio Lake Erie Priorities
- 20** Implementing the Plan
- 21** Glossary

# Commissioners

**Anne Vogel**

Director, Ohio Environmental Protection Agency, Chair

**Mary Mertz**

Director, Ohio Department of Natural Resources

**Brian Baldrige**

Director, Ohio Department of Agriculture

**Jack Marchbanks**

Director, Ohio Department of Transportation

**Bruce Vanderhoff**

Director, Ohio Department of Health

**Lydia Mihalik**

Director, Ohio Department of Development

**Bill Wolf**

Independent Contractor/Agriculture

**Jim Stouffer**

President and CEO, Catawba Cleveland Development

**Crystal Davis**

Alliance for the Great Lakes

**Danielle Giannantonio**

Northeast Ohio Regional Sewer District

**Diane Miller**

University of Toledo

**Kate Bartter**

Great Lakes Protection Fund

**Richard Hylant**

Great Lakes Protection Fund

**Joy Mulinex**

*Executive Director, Ohio Lake Erie Commission*



# About The Ohio Lake Erie Commission



The Ohio Lake Erie Commission is a state body that convenes the directors of six state agencies and five Commissioners from the Lake Erie community to bring together Ohio's priorities for the protection and restoration of Lake Erie. The Commission coordinates programs and policies to protect and restore the Lake Erie Watershed in Ohio.

The Commission's current activities include:

- Leading the coordination of Governor DeWine's H2Ohio Initiative for the Lake Erie Watershed with Ohio Environmental Protection Agency, Ohio Department of Agriculture and Ohio Department of Natural Resources.
- Administering State of Ohio work for federal programs under the Great Lakes Water Quality Agreement, including the Areas of Concern Program, Lake Erie Lakewide Action and Management Plan, and Ohio Domestic Action Plan.
- Administering the Lake Erie Protection Fund and preparing the Lake Erie Protection & Restoration Plan.
- Increasing awareness of opportunities to protect, restore, and promote Ohio's Lake Erie through the Life on Lake Erie Photo Contest, the Erie...Our Great Lake License Plate, Lake Erie Quality Index, quarterly Commission meetings, and sharing funding opportunities for local implementation.

Lake Erie continues to serve as an ecological and economic anchor to the State of Ohio and the communities it encompasses. Lake Erie brings distinct assets to the region that are reflected as one travels along its coastline. Adaptation and resiliency for future generations are critical to the long term sustainability of the resource. Lake Erie continues to evolve as Ohio's land uses, demographics and economic drivers also change. This plan will serve as a guide to prepare for Lake Erie's future.





# About the Lake Erie Protection & Restoration Plan

Ohio Revised Code (ORC 1506-21) outlines the administration of the Lake Erie Protection & Restoration Plan.

*The Commission shall publish a Lake Erie protection and restoration strategy that describes the goals of the commission and prioritize the uses of the Lake Erie protection fund and other funds for the following state fiscal year.*

Since 1992, the Commission has established a Lake Erie Protection & Restoration Plan to set goals, objectives and priorities for its work and State Agencies. For 2023, the Plan will guide the Commission's work, funding priorities, and alignment between State Agencies and their specific roles for Lake Erie.



# The Lake Erie Protection Fund



The Lake Erie Protection Fund was established to hold resources for research and implementation to address Lake Erie Protection & Restoration Plan priorities.

The fund's resources come from the citizens of Ohio in part through the sale of the Erie...Our Great Lake automotive license plates. The Lake Erie license plate featuring the Marblehead Lighthouse design was the inaugural novelty plate in 1993. The other designs currently available include the Toledo Harbor Lighthouse and the Lake Erie Life Ring.

The [Lake Erie Protection Fund](#) also accepts memorial donations and other direct donations through our digital platforms or by check payable to the "Lake Erie Protection Fund". Donations are tax deductible.



# Great Lakes Water Quality Agreement

The Ohio Lake Erie Commission coordinates with state agencies on the implementation of the Great Lakes Water Quality Agreement (GLWQA) in Ohio. This is accomplished through coordination of GLWQA Annex priorities, including primarily Annex 1 (Areas of Concern), Annex 2 (Lake Erie Lakewide Action and Management Plan), Annex 4 (Ohio Domestic Action Plan), and Annex 10 (Science).

The Commission also brings together state and federal partners on Great Lakes funding in Ohio. Since 2020, approximately \$85 million has been invested in Ohio through the GLRI towards the protection and restoration of Lake Erie. In 2023-2025, the Commission will work to include State of Ohio priorities in the upcoming GLRI Action Plan IV - so that federal investments will leverage state funding to address Ohio's highest priorities for the long-term sustainability of Lake Erie.





# Highlights of Accomplishments & Progress Since 2020

## Nutrient Pollution Reduction

- Establishment and implementation of H2Ohio in the Lake Erie watershed. See [H2Ohio Annual Report](#) for more details.
- Over 1.4 million acres of voluntary nutrient [management plans](#) implemented by roughly 2,400 agricultural producers.
- Over 140 projects with a total of 15,000 acres of restored and enhanced wetlands completed through [H2Ohio](#) for nutrient reduction.
- Through grants to local health districts, Ohio EPA has funded the replacement or repair of 293 [Home Sewage Treatment Systems](#) in the Lake Erie Watershed, with 211 being in the Western Lake Erie Basin.
- Through GLRI and [319 funding](#), implemented grassed waterways, 2-stage ditch restoration, wetland, floodplain and stream restoration to reduce erosion and sedimentation in Lake Erie communities.
- The 2021 NPDES Small MS4 General Permit contained nutrient reduction best management practices via Total Maximum Daily Load (TMDL) Performance Standards.
- Establishment of the [LEARN](#) Monitoring Network for wetland research.
- Completion of over 20 [NPS-IS Plans](#) in the Lake Erie Basin.
- Development of the [Maumee River Watershed Nutrient TMDL](#).
- [Ohio Domestic Action Plan 2020 Update](#).
- Development of the H2Ohio Technology Assessment Program (TAP) to explore innovation for nutrient reduction.

## Habitat & Species

- Increased state and federal funding towards habitat restoration and protection projects in the Lake Erie counties through programs at Ohio EPA, ODNR and Clean Ohio.
- Population increases of rare or endangered bird species such as piping plover, bald eagle, and trumpeter swan.

## Invasive Species

- Continuation of ODNR [AIS State Management Plan](#) implementation.
- Harpersfield Dam for Sea Lamprey Barrier completed.
- Ohio Erie Canal [GLMRIS](#) AIS Barrier completion.
- Little Killbuck Creek GLMRIS AIS Barrier funding secured for Phase I.
- Implementation of the Lake Erie Grass Carp Response Strategy.
- Ohio EPA and ODNR participation in VIDA work groups for Ballast Waters management.



# Highlights of Accomplishments & Progress Since 2020

## Dredged Material Management & Maritime Infrastructure

- Ohio has worked closely with the U.S. Army Corps of Engineers (USACE) and local stakeholders to develop and implement dredge material beneficial use projects for each of Ohio's eight federal commercial Lake Erie harbors.
- Provided \$45 million in grants from federal funds to four Ohio communities for the design and construction of new and expanded dredge material sediment recycling facilities for [Conneaut](#), [Fairport](#), [Lorain](#), and [Toledo](#) Harbors.
- Issued multiple individual beneficial use permits for dredge material. An inaugural Harbor sediment authorization for Conneaut Harbor was issued in 2021.
- Dredged sediment is being beneficially used to establish a total of 48.5 acres of wetland habitat at Ashtabula and Sandusky Harbors.
- Over a total of 790,000 cubic yards of sediment dredged from the Cleveland and Toledo Harbors is becoming available for beneficial use.
- Dredge sediment research and farm field demonstration projects have been completed to evaluate dredge beneficial use as farm soil amendments, marketable products and habitat restoration.

## Areas of Concern

- Delisting of the [Ashtabula Area of Concern](#).
- Removal of five Beneficial Use Impairments in all four [Areas of Concern](#).
- Completion of 18 Management Actions towards delisting of Ohio [Areas of Concern](#).

## Toxic Pollutants

- Awarded \$185.7 million to Lake Erie watershed counties for more than 140 projects through the [Brownfield Remediation Program](#).
- Issued the [2022 State Fish Consumption Advisory](#).

# Highlights of Accomplishments & Progress Since 2020

As the Commission looks ahead to the next two years, it is important to reflect on the progress since the 2020 Lake Erie Protection & Restoration Plan and any new focus as a result of the work over the past two years.

## Beach & Recreation Use

- Upgrades to the [Beach Guard](#) System.
- The use of Beach Guard data at 67 beaches along Lake Erie as part of Ohio EPA's 2022 [Integrated Report](#). Expanded outreach to communities on [fish consumption advisories](#).
- Continued investments in public access and recreational uses in local communities through ODNR, Clean Ohio, ODOT, and federal funding sources. Projects include the Marblehead Lighthouse; Kelleys Island Glacial Grooves facility; and full-service campground upgrade at Geneva State Park.
- Installation of trash trapping devices at Ohio's designated [Clean Marinas](#).
- Designation of [Portage River](#) and the [Lake Erie coast](#) along Cuyahoga County as State Water Trails.
- Development and public availability of the [DETOUR statewide trails](#) application and website.
- [Ohio Bikeways Brochure & Map](#) produced through ODOT, ODNR and Ohio Tourism.

## Tourism, Jobs & Economy

- Continued investments in communities through JobsOhio that include 418 projects that created over 28,000 new job commitments and investments of \$11.6 million in Lake Erie watershed counties.
- Continued marketing Lake Erie and coastal amenities by Ohio Tourism.
- Continued investments in Lake Erie Ports and Transportation Systems for shipping and commerce.
- [Maritime Assistance Grants](#) for \$37.6 million to Lake Erie Ports in Cleveland and Toledo.

## Water Withdrawals

- Continued coordination and management of any water withdrawals in Lake Erie in accordance with the [Great Lakes Compact](#).



# 2023 Ohio Lake Erie Priorities

The Commission reviewed the priorities from 2020, coordinated with agencies, and received community input through public comments on the draft report to determine the 2023 priorities. While the priorities for 2023 remain similar, the goals have been updated to reflect emerging issues, adaptation needs, and continued progress to achieve longer-term goals for Lake Erie.

Each Priority is outlined on its purpose, need and objectives set forth for 2023 and the coming two years for the Commission.

- **Nutrient Pollution Reduction**
- **Habitat and Species**
- **Invasive Species**
- **Dredge Material Management and Maritime Infrastructure**
- **Areas of Concern**
- **Toxic Pollutants**
- **Beach and Recreational Use**
- **Tourism, Jobs and Economy**
- **Water Withdrawals**

# Lake Erie Priority: Nutrient Pollution Reduction

Ohio Environmental Protection Agency  
Ohio Department of Agriculture  
Ohio Department of Natural Resources  
Ohio Lake Erie Commission

Over the past two years, much work has been conducted through Governor DeWine's H2Ohio Initiative to identify and implement the most effective practices and other actions to reduce nutrient pollution in the Lake Erie watershed, particularly in the Western Lake Erie Basin. Areas for further actions to reduce Harmful Algae Blooms (HABs) have been identified. This includes better understanding of how HABs are affected by changing weather conditions and precipitation patterns, and ways to increase the effectiveness and implementation rate of agricultural best management practices.

As stated in the 2022 Lake Erie Quality Index, "Information presented in the LEQI indicates that while lake conditions related to HABs are in the poor to fair range, trends are flat or improving. There remains much work to be done to restore Lake Erie from the effects of nutrient pollution."

## 2023 - 2025 Goals

- Continue the H2Ohio Initiative in the Lake Erie Watershed to meet nutrient reduction and overall pollution reduction goals by implementation of agricultural best management practices, wetland enhancement, and instream projects to address HABs.
- Continue to support research funding to better understand HABs and their environmental and health impacts.
- Continue the development and implementation of NPS-IS Plans, especially in the Maumee River watershed.
- Continue to support increasing the capacity for SWCDs for NPS-IS plan development, project identification, and project implementation with a focus on counties and watersheds in the Western Lake Erie Basin.
- Complete and implement the Maumee River Watershed Nutrient TMDL. Continue the implementation of the other nutrient and nonpoint source pollutant TMDLs in the Lake Erie basin.
- Update Ohio's Domestic Action Plan in 2023.
- Continue the investments in water infrastructure to prevent drinking water advisories due to algae toxins or taste and odor problems due to low oxygen in the lake.
- Continue and expand the robust monitoring of nutrient reduction efforts and instream conditions to adapt and improve nutrient reduction strategies if necessary.
- Continue the identification of innovative technologies for source reduction of nutrients and support research on how to scale up suitable technologies.
- Continue the expansion of H2Ohio across the Lake Erie Watershed.
- Continue the support for local government actions that will reduce nutrient losses from community sources such as implementation of Long Term Control Plans, green infrastructure, and other storm water management actions.
- Increase education efforts to agricultural producers on nutrient management plan adoption and implementation.



# Lake Erie Priority: Habitat & Species

Ohio Environmental Protection Agency  
Ohio Department of Natural Resources

The 2022 LEQI noted that Ohio's Lake Erie coastal wetlands are generally either of low quality or in declining condition. These results indicate a potential to enhance and expand current coastal wetlands and enhance a robust monitoring system through work with partners.

Some key wildlife species continue to grow their populations as habitat conditions improve in Ohio's portion of Lake Erie and its river systems. Examples include increasing numbers of bald eagle nests, new sightings of nesting piping plover, and increased numbers of trumpeter swans, river otters, and various rare fish species. These improvements in wildlife populations are good signs of improved habitats in Lake Erie due to investments in increased acreage or quality of available habitat for these species.

Ohio works with federal Lake Erie management agencies to identify critical habitats for important fish species in the Lake Erie Basin and to develop maps for future enhancement and restoration of these habitats.

Progress continues towards integrating shoreline erosion prevention and coastal habitat protection with adaptation to changing water levels and the increased number and severity of extreme weather events.

## 2023 - 2025 Goals

- Restore or enhance up to 500 acres of coastal wetlands.
- Continue tracking of Trumpeter swans. Trumpeter swans live in coastal marshes and their numbers continue to increase with the removal of non-native mute swans and the increase of wetlands.
- Increase the number of protective structures constructed as nature-based shorelines and other habitat sensitive shoreline protections to improve coastal habitats along Ohio Lake Erie's coast.
- Implement H2Ohio's Rivers Initiative to expand the habitat restoration potential of the Cuyahoga, Maumee and Sandusky Rivers.
- Continue the investment in ecosystem scale habitat restoration for the Sandusky Bay, Maumee Bay, Lake Erie islands and coastal shorelines through specific project identification and implementation.
- Continue tracking fish species in the Lake Erie basin to assess habitat priorities for protection and restoration for Lake Erie fish such as smallmouth bass.
- Maintain investments for resource restoration and protection through state programs of the Clean Ohio Fund, Water Resource Restoration Sponsor Program and other state funding opportunities.
- Continue to define critical habitats for ecological and recreational fish species through mapping and monitoring.



# Lake Erie Priority: Invasive Species

Ohio Environmental Protection Agency  
Ohio Department of Natural Resources

Preventing or minimizing the introduction and establishment of aquatic and terrestrial invasive species is a priority to protect the Lake Erie ecosystem and economy. Some of the significant invasive species of interest include invasive carp; sea lamprey; zebra mussels; round goby; and the proliferation of invasive plant species such as phragmites, hydrilla, Japanese knotweed, and European frogbit.

As a result of the survey work conducted over the past few years, more knowledge has been gained on invasive carp activity and management. Of particular note, efforts are now underway to actively locate and remove emerging breeding populations of grass carp in tributary waters of Lake Erie and prevention work continues on Ohio's connections to waters with invasive carp.

The management and prevention of invasive species will require long term strategies over a large geography of Lake Erie's rivers and lands.

## 2023 - 2025 Goals

- Continue the implementation of Ohio's Lake Erie Grass Carp Response Strategy and development of a new five-year plan with the Great Lakes Fishery Commission.
- Continue efforts to close the Little Killbuck Creek connection to waterways with established invasive carp in order to protect Ohio's Lake Erie Watershed.
- Maintenance of sea lamprey monitoring in Ohio's designated Lake Erie rivers.
- Continue tracking and evaluating emerging invasive species.
- Expand the use of technologies to detect, manage, and remove invasive species.
- Continue the support and coordination with regional invasive management coordination entities.





# Lake Erie Priority: Areas of Concern

## Ohio Environmental Protection Agency Ohio Lake Erie Commission

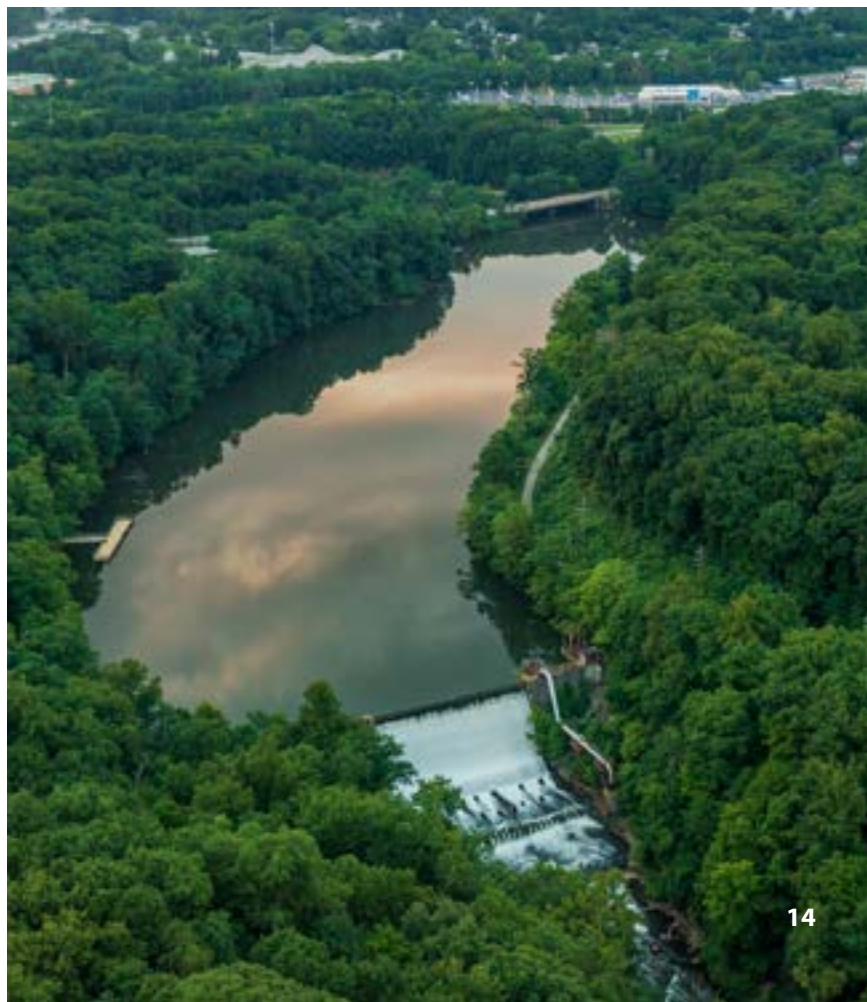
As part of the Great Lakes Water Quality Agreement, Areas of Concern (AOCs) were designated in Ohio in 1987 where highly degraded river systems existed as a result of industrial and urban land uses. These AOCs are making significant progress with federal and local partners to address each AOC's remaining beneficial use impairments (BUIs) and upon removal of these BUIs, their delisting.

In 2023, 16 of 34 original BUIs remain. With the Ashtabula River AOC delisting in 2021, three designated AOCs in Ohio remain - the Maumee, Black, and Cuyahoga Rivers. Since 2020, Ohio's AOCs have focused on identifying all restoration projects needed to remove their remaining BUIs. As of 2023, there are 57 projects underway or proposed to be completed by 2027 including remaining legacy contaminated sediment projects in the Maumee and Cuyahoga River AOCs through the federal Great Lakes Legacy Act (GLLA) program. These projects include the Cuyahoga Gorge Remedial Action and Dam Removal project which is estimated to remove over 900,000 cubic yards of sediment and the dam structure to eliminate the last major impediment to a free-flowing river in the lower 46 miles of the Cuyahoga River. Additionally, lower Maumee River and Swan Creek contaminated sediment projects and the Cuyahoga Old River project will advance work towards the removal of legacy contaminated sediments under GLLA and their return to healthy river systems in the coming years.

In the 2022 LEQI, an Ohio AOC goal was to remove 1.5 million cubic yards of contaminated sediments in the remaining AOC. Upon the completion of the Cuyahoga Gorge project, the amount of contaminated sediment remaining to achieve this goal will be less than 600,000 cubic yards.

### 2023 - 2025 Goals

- Complete up to 25 Management Actions In the Black, Cuyahoga and Maumee AOCs.
- Remove up to seven Beneficial Use impairments in Ohio's AOCs.
- Kick-off remedial action implementation for the Cuyahoga Gorge Sediment and Dam Removal and Cuyahoga River Old Channel Great Lakes Legacy Act (GLLA) projects removing up to 1 million cubic yards of contaminated sediments from the Cuyahoga River.
- Complete the remedial design of the Lower Maumee River and Swan Creek GLLA projects.
- Initiate the delisting of the Black River AOC with federal and local partners.



# Lake Erie Priority: Dredge Material Management & Maritime Infrastructure

Ohio Environmental Protection Agency  
Ohio Department of Natural Resources  
Ohio Department of Transportation  
Ohio Lake Erie Commission

Maintaining Ohio's Lake Erie navigation channels for commerce is vital to local and regional economies, with around a reported 40 million tons of material shipped via Ohio's ports in 2020 by the Great Lakes Seaway Partnership. Today, Ohio's established navigation channels are an active link for the movement of goods and materials to companies with lake transportation access and wider supply chain networks globally. To maintain these channels and support the economic prosperity of Ohio's ports, regular dredging of accumulated sediment and managing its beneficial reuse is a priority for the Ohio Lake Erie Commission to protect the long term health of Lake Erie.

Since 2020, significant progress has been made to accomplish the goals set forth to manage navigation channel dredge sediment between local port authorities and U.S. Army Corps of Engineers. There is an estimated 1.5 million cubic yards of dredged material that is projected to be removed annually and managed at Ohio's eight Lake Erie commercial ports and their associated channels. A dredged material management plan (DMMP) is currently under development by the U.S. Army Corps of Engineers for each port. When fully implemented by 2025, these 20-year plans will manage nearly all of the dredged material through new habitat creation and restoration areas, farm soil amendments, and beneficial use sediment processing/recycling facilities.

## 2023 - 2025 Goals

- Maintain and update plans to develop alternatives for open lake placement including long term, 20-year Dredge Material Management Plans (DMMPs) for each Ohio Lake Erie harbor in coordination with USACE, State of Ohio, and local stakeholders.
- Complete material recycling facilities or improvements at Fairport Harbor, Conneaut Harbor, and Lorain Harbor.
- Expand dredge sediment capacity at Toledo Port Authority's Facility 3 and Port of Cleveland's Sediment Processing Facility.
- Continue support of dredge sediment research, demonstration projects, and practical applications of beneficially used dredge for marketable soil and products and habitat restoration such as the Cleveland Harbor Eastern Embayment Resilience Strategy for dredge beneficial use and the Cleveland Harbor DMMP.
- Continue issuing individual beneficial use permits and harbor sediment authorizations to encourage ongoing dredge sediment beneficial use.
- Continue Sandusky Harbor and Ashtabula Harbor dredge sediment beneficial use projects creating over 48 acres of wetland habitat.
- Continue the Maritime Assistance Grant Program supporting capital infrastructure at Ohio's Lake Erie Ports as funding is available.





# Lake Erie Priority: Toxic Pollutants

Ohio Environmental Protection Agency  
Ohio Department of Health  
Ohio Department of Development

Pollutants within the Lake Erie Watershed can affect the conditions and use of Lake Erie whether it be fish consumption, land use, or human health activities. Progress continues through state and federal investments to address sites and waterways that have legacy contaminated sediments. Fish tissue monitoring in support of consumption advisories shows that while conditions are improving, residual and emerging contaminants of concern are still circulating in areas. Legacy pollutants, PFAS, and other emerging toxic compounds will continue to be evaluated to determine trends and explore future measures for control and cleanup.

## 2023 - 2025 Goals

- Maintain Inter-Agency Sport Fish Tissue Monitoring Committee to identify areas of focus for fish consumption advisory trends and determine actions such as to address conditions where applicable.
- Invest in clean up of brownfield sites in the Lake Erie Watershed to provide cleaner land for uses that align with local community long-term visions and planning.
- Evaluate and identify applicable strategies for PFAS and other existing or emerging toxic compounds in the Lake Erie Watershed.





# Lake Erie Priority: Beach & Recreational Use

Ohio Environmental Protection Agency  
Ohio Department of Health  
Ohio Department of Transportation

Lake Erie in Ohio boasts a robust economy through the variety of experiences the north coast offers to its many visitors annually. Water-based recreational uses are a mainstay for the economy in Ohio's Lake Erie region with significant increases in boater registrations since 2020 for both recreational boating and paddling/kayaking which are now over 109,000 in the Lake Erie coastal counties based on data reported in the LEQI.

Investments in new and updated public access at local, state and regional metroparks have been identified in many local community plans. Ohio's Clean Marinas program focuses on increasing designated clean marinas that instill best practices that assists in protecting Lake Erie. Clean Marina pilot demonstration sites showcase clean marina best practices at work while maintaining a marina network that continues to be actively used by boaters.

Through Ohio Department of Health's Beach Guard, more information is shared, and more frequently, to educate beach users on daily conditions for safe recreational use. There has been expanded outreach to the fishing community to encourage safe consumption of Lake Erie fish, reaching out to new population groups where sport fish consumption is an important source of food. While there was progress in improvement in fish consumption conditions as shown in the 2022 LEQI, more work will be needed to continue to reduce the need for consumption advisories in the future.



## 2023 - 2025 Goals

- Continue between focus on environmental compliance and stewardship at State Parks with the installation of a new boat wash station at Geneva State Park, wetlands restoration at Headlands Beach State Park and conservation initiatives at Maumee Bay State Park.
- Implement capital improvement projects including the installation of restrooms, building rehabilitation and boardwalk replacement to enhance the visitor experience at multiple state parks along the Lake Erie coast: Kelleys Island State Park, Middle Bass State Park, East Harbor State Park, Maumee Bay State Park and Headlands Beach State Park.
- Re-platform the current DETOUR trails application and website, continuing to add functionality, ease of use and more detailed trail statewide trail information.
- Continue to provide State grants to local governments and others to improve public access and encourage recreation along Lake Erie including bike and pedestrian connections to key destination areas.
- Work with designated State Water Trail river communities to fund updates to maps, brochures and signage, and continue to support communities interested in designation of new water trails.
- Continue updates to the Beach Guard System to provide beach conditions and associated information to beachgoers.
- Continue efforts to provide fish consumption information in multiple languages for Lake Erie fishing activities.
- Develop Clean Marina case studies for marine debris technologies and continued education and outreach.

# Lake Erie Priority: Travel, Tourism, Jobs & Economy

Ohio Department of Development  
Ohio Department of Natural Resources  
Ohio Department of Transportation

In 2021, Ohio's Lake Erie region generated a record \$17.2 billion in total business sales and 126,243 jobs, according to a study conducted by Tourism Economics and discussed in the LEQI, demonstrating the shores of Lake Erie continue to be a destination for a variety of experiences.

Travel and tourism is a cornerstone to many small and large coastal communities along Lake Erie shorelines. Investments in public access, new and existing businesses, transportation, and associated infrastructure will continue to maintain and grow the vibrant travel and tourism economy on the North Coast.

JobsOhio is a centerpiece throughout Ohio for growing jobs. In the Lake Erie Watershed, Jobs Ohio has established 176 projects in the eight coastal counties since 2020 to bring 13,167 new job commitments to the region. The investments and coordination of JobsOhio will continue to identify and collaborate with local communities about resources and ways to sustain and grow their economic development opportunities.

Activities at Ohio's Lake Erie federal ports and maritime commerce continue to change as goods and materials demand fluctuates with industry changes in energy and raw material sectors. Infrastructure investments through ODOT and other programs will maintain and improve transportation systems necessary for supporting maritime based economic activity across the primary Lake Erie transportation corridors and in port and maritime facilities.

Great Lakes cruise lines have emerged in the past five years as a growing tourism sector that could have the potential to increase in the coming years.

## 2023 - 2025 Goals

- Administer Maritime Assistance Grants for improvements to Ohio's Lake Erie port facilities and operations.
- Administer grant funding through state programs to enhance travel and tourism experiences for transportation, infrastructure, public access and economic development with lakeshore communities.
- Identify job growth, job retention and asset investments through state programs to economic sectors in the Lake Erie watershed.
- Maintain JobsOhio activities for future economic development collaboration opportunities in the Lake Erie Watershed for sustainable economic vitality.



# Lake Erie Priority: Water Withdrawals

Ohio Department of Natural Resources

Lake Erie water withdrawals are governed by the Great Lakes Water Compact. The Great Lakes Compact, developed through the Council of Great Lakes Governors, details how the states will manage and protect the waters and related natural resources of the Great Lakes Basin and provides a framework for each state to enact measures for this protection.

Ohio has enacted additional legislation to implement commitments made in the Compact. This is in the Ohio Revised Code - Chapter 1522 - Great Lakes-St. Lawrence River Basing Water Resources Compact.

As redevelopment or new development continues to be introduced in the Lake Erie Watershed, the state will continue to provide the stewardship necessary to maintain the integrity of Lake Erie water resources for all Ohioans.

## 2023 - 2025 Goals

- Continue participation in the Great Lakes Compact Regional Body/Compact Council meetings.
- Continue participation and leadership in the collaborative, jurisdiction-led Science Strategy for the Compact. This commitment's intended purpose is:
  - to guide the collection and application of scientific information to support an improved understanding of the individual and cumulative impacts of withdrawals from various locations and water sources on the Basin ecosystem;
  - to develop a mechanism by which impacts of water withdrawals may be assessed; to periodically assess the cumulative impacts of withdrawals, diversions, and consumptive uses on the Great Lake and St. Lawrence River watershed;
  - to improve scientific understanding of the waters within the Basin;
  - to improve the understanding of the role of groundwater in Basin water resources management; and
  - to develop, transfer and apply science and research related to water conservation efficiency.





# Implementing the Plan



The Commission will continue to monitor progress of the 2023 Lake Erie Protection & Restoration Plan Priority Areas. Additionally the Commission will focus on the following primary actions to implement these priorities.

- Continue to identify opportunities to leverage and make impactful investments for the administration of the Lake Erie Protection Fund.
- Continue to lead the coordination and metrics of H2Ohio for the Lake Erie basin with ODNR, Ohio EPA and ODA.
- Continue to lead the coordination and administration of the Area of Concern Program.
- Continue to identify and coordinate federal funding opportunities that leverage and expedite implementing the Protection and Restoration Plan priorities.
- Continue coordination for updates to the Ohio Domestic Action Plan under Annex 4 of the Great Lakes Water Quality Agreement.
- Continue coordination with the Great Lakes Restoration Initiative to align with State priorities.
- Continue public engagement and outreach with local stakeholders and implementation partners.

The Lake Erie license plate supports Ohio's Lake Erie Protection Fund (LEPF). The funds support research and projects aimed at protecting, preserving, and restoring Lake Erie and its watershed.

# Glossary

Ohio EPA – Ohio Environmental Protection Agency  
ODNR – Ohio Department of Natural Resources  
ODA – Ohio Department of Agriculture  
ODOT – Ohio Department of Transportation  
DOD – Department of Development  
ODH – Ohio Department of Health  
OLEC – Ohio Lake Erie Commission

AIS – Aquatic Invasive Species  
AOC – Areas of Concern  
CMAG- Coastal Management Assistance Grant  
DMMP – Dredge Material Management Plan  
HABs – Harmful Algal Blooms  
GLLA – Great Lakes Legacy Act  
GLMRIS – Great Lakes and Mississippi River  
Interbasin Study  
GLRI – Great Lakes Restoration Initiative  
HSTS – Home Sewage Treatment Systems  
LEARN – Lake Erie and Aquatic Research Network  
LEQI – Lake Erie Quality Index  
MS4 – Municipal Separate Storm Sewer Systems  
NPDES – National Pollutant Discharge  
Elimination Systems  
NPS-IS – Nonpoint Source Implementation Strategies  
PFAS – Per-and Polyfluorinated Substances  
TAP – Technology Assessment Program  
TMDL – Total Maximum Daily Load  
SWCD – Soil and Water Conservation District  
VIDA – Vessel Incidental Discharge Act





**Ohio Lake Erie Commission**  
**[lakeerie.ohio.gov](http://lakeerie.ohio.gov)**  
**[lakeeriecommission@lakeerie.ohio.gov](mailto:lakeeriecommission@lakeerie.ohio.gov)**