



Much remains to be learned about Lake Erie.

Over time the uses of Lake Erie resources have changed significantly.



Research increases our understanding of how we use and impact resources in the Lake Erie ecosystem.

Lake Erie Literacy Principle 7d: New technologies and observation methods expand our ability to explore Lake Erie. Freshwater scientists rely on new tools to monitor conditions in the lake and provide information to policy makers and leaders in coastal communities.

The sustainability of Lake Erie's resources depends on our understanding of the resources and our ability to make wise decisions about resource use and conservation.



Nearshore Habitat

Research shows that the health of Lake Erie's world-class fishery is directly related to the quality of the lake's nearshore habitats. Minimizing impacts of shore construction projects, while preserving and restoring the physical characteristics of the nearshore, can positively influence the quality of the habitats that support the Lake Erie fishery.



Sediment Bedload Harvester

Removing excessive eroded material from the Cuyahoga River before it enters the shipping channel is the goal of the innovative Sediment Bedload Harvester installed in the Cuyahoga River immediately northwest of the I-77/I-480. The harvester was placed in the river in April 2015. The upland machine that sorts harvested sand and pea gravel started in June. The harvester is expected to reduce shipping channel dredging needs by 20%. This public-private partnership includes ODNR, Ohio EPA, Cleveland-Cuyahoga Port Authority, Kurtz Bros. International, and Streamside Technology.



Recycling Dredged Material

ODNR and the Ohio EPA are working with the ports of Toledo and Cleveland to build the infrastructure to recycle soil and sand dredged from the Maumee and Cuyahoga river shipping channels. The Healthy Lake Erie-funded projects are steps in the process of ending open lake dumping.



Fisheries Research

ODNR's Lake Erie Fisheries Research Units evaluate and manage fish populations in Lake Erie's Western and Central basins and their tributary streams. The Fisheries Research Units sample fish populations with trawls and gill nets aboard research vessels such as the *Grandon* and the *Explorer II*. Research vessels are also used to monitor the food web and the spread of exotic species such as the sea lamprey (pictured at right).

