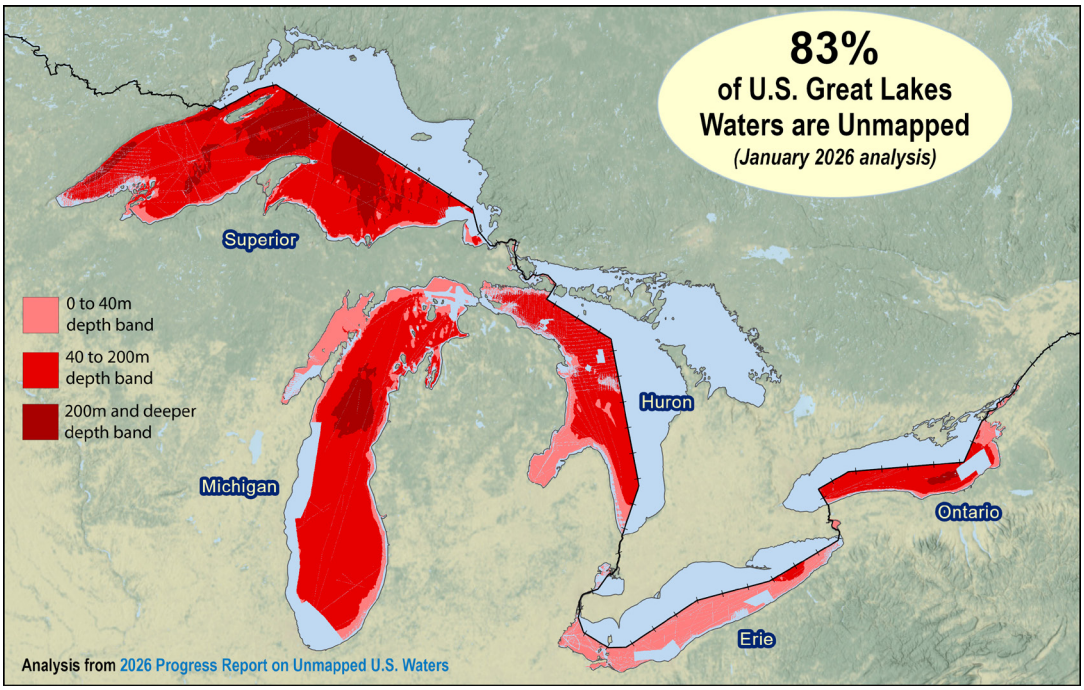
2026 Progress Report: Unmapped U.S. Great Lakes Waters

Interagency Working Group on Ocean and Coastal Mapping

Contributing $28 billion to the U.S. GDP annually, the Great Lakes are an economic engine for North America, supporting 500,000 jobs, maritime commerce, a prosperous fishing industry, and thriving tourism. Modern, high-resolution mapping data are critical to maintain these vast economic, ecological, and societal benefits; mitigate natural disasters; and manage the natural resources within this unique environment. As of January 2026, 83% of the U.S. Great Lakes are not mapped to modern standards.



Mapping the Lakebed

primary sources of bathymetry

Multibeam and lidar surveys
by trained hydrographers and other personnel from government, academia and private industry

Coastline
Representing ~0-40 meters water depth, mapping this area is ideal for aircraft using lidar technology and autonomous systems using multibeam sonar technology.

Shallow water
Representing ~40-200 meters water depth, mapping this area is ideal for ships using multibeam sonar technology alongside autonomous systems as a force multiplier.

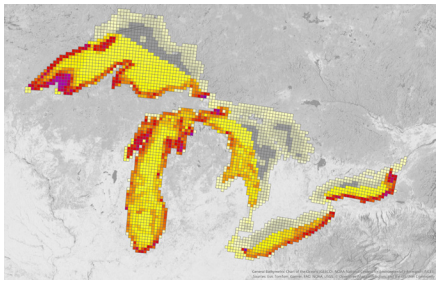
Deep water
Representing water depths >200 meters, mapping this area is ideal for ships using multibeam sonar technology

other sources

- Uncrewed aerial vehicles
- Satellite-derived bathymetry
- Sidescan sonar
- Single beam bathymetry
- Crowdsourced bathymetry

NOAA's 2026 Great Lakes Survey Season Plans

Shown below, NOAA and its federal partners have mapped approximately 17% of U.S. Great Lakes waters in the last five years, primarily in support of safe navigation, benthic habitat mapping, and resource conservation and management. In 2026, NOAA plans to map an additional 10% of U.S. Great Lakes waters. These data are made publicly accessible through NOAA's National Centers for Environmental Information and Digital Coast.



Identified mapping priorities

Regional priorities and data acquisition plans may be found on the U.S. Mapping Coordination website, a tool to facilitate cost-effective use of government mapping resources. These efforts, many of which have been funded by the Great Lakes Restoration Initiative, support the National Ocean Mapping, Exploration, and Characterization (NOMEC) Strategy and the regional Lakebed 2030 Initiative, where partners have consistently cited navigation, fisheries, habitat classification, and natural hazards as primary justifications for mapping in spatial priorities studies, requiring products with accurate elevation and habitat and substrate characterization.

Learn more