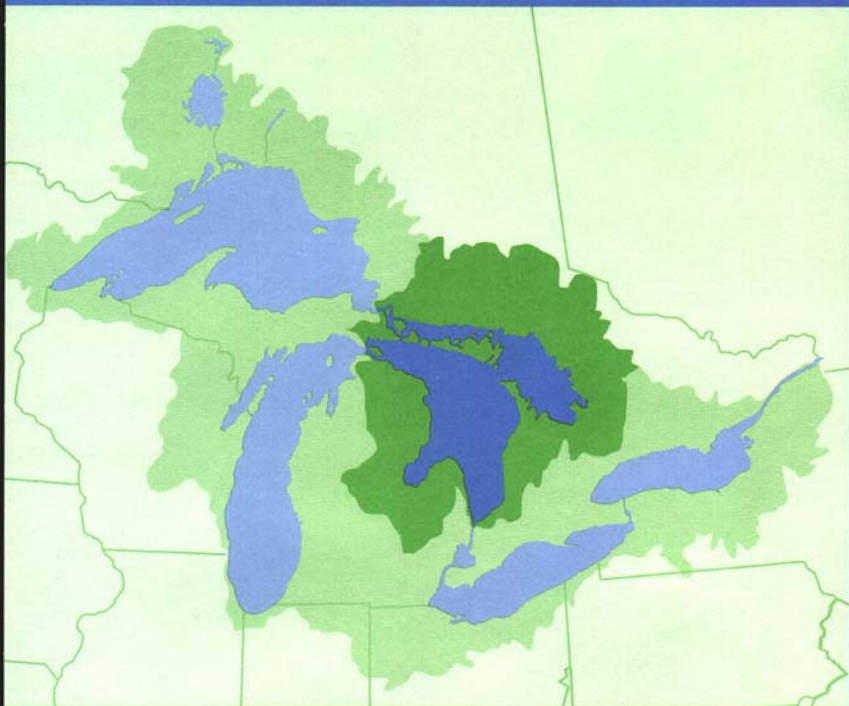


Lake Huron Basin

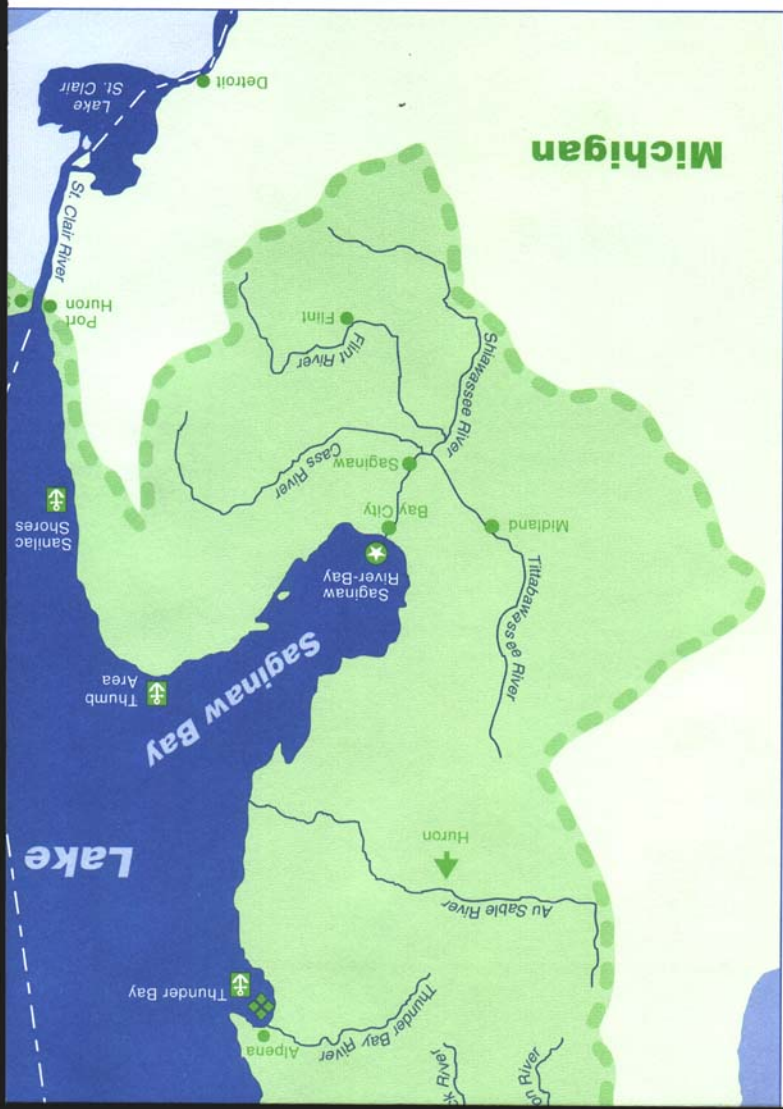


Lake Huron Basin Statistics

Length	206 mi/332 km	Shoreline Length	3,830 mi/6,164 km (including islands)
Breadth	183 mi/ 295 km	Elevation	577.5 ft/176.0 m
Depth	195 ft/59 m average 750 ft/229 m maximum	Outlet	St. Clair River to Lake Erie
Volume	849 mi ³ /3,538 km ³	Retention/Replacement Time	21 years
Water Surface Area	23,000 mi ² /59,565 km ²	Population	2,960,359
Drainage Basin Area	50,700 mi ² /131,303 km ²	United States	1,483,872
		Canada	1,476,487

Lake Hu





Michigan

Saginaw Bay

Lake

St. Clair Lake

St. Clair River

Port Huron

Sanilac Shores

Thumb Area

Thunder Bay

Alpena

Thunder Bay River

Au Sable River

Huron

Tittabawassee River

Midland

Bay City

Saginaw

Cass River

Flint River

Flint

Detroit

Lake Huron is the second largest of the Great Lakes and the fourth largest freshwater lake in the world. It is hydrologically connected to Lake Michigan at the Straits of Mackinac, so the two could actually be one lake. Lake Huron also includes the two largest bays on the Great Lakes — Georgian Bay and Saginaw Bay. Georgian Bay alone is large enough to be one of the world's 20 largest lakes. Lake Huron has inflow from both Lake Superior and Lake Michigan but has a shorter retention time than either — 21 years.

The state of Michigan and the province of Ontario surround Lake Huron. The United States/Canada border divides Lake Huron almost exactly in half. The southern portion of the Lake Huron basin is more developed than the northern portion and is dominated by residential areas and agriculture. The northern portion of the basin is heavily forested, sparsely populated, scenically beautiful and economically dependent on its rich natural resources.

Shoreline Use

United States

27.3%	Residential
5.0%	Commercial/Industrial
0.3%	Agricultural
67.5%*	Other

Canada

13.9%
1.0%
1.7%
83.4%**

* U.S. "other" classification includes public, beaches, forests, barren lands.

** Canadian "other" classification includes transportation and communications, recreation, extraction, water, wetlands, forestry, grassland, barren and unknown.

Economy

The Lake Huron basin supports a varied economy with strong industrial, agricultural and recreational sectors.

Industry: One of the largest U.S. chemical producers is located in the basin at Midland, Michigan, and one of Canada's largest petrochemical centers is at Sarnia, Ontario.

Mining: Large nickel reserves are located in Ontario just north of the lake. The world's largest limestone quarry is located in the basin near Rogers City, Michigan.

Manitoulin Island is the largest freshwater island in the world. On that island is a lake (Manitoulin Lake), which is the largest lake on an island in a lake in the world. Manitoulin Lake has an island that is the largest island on a lake on an island in a lake in the world!

Shipping: Lake Huron functions as a conveyor within the Great Lakes system. Vessels loaded with raw materials and finished goods move from Lake Superior and Lake Michigan through Lake Huron to the urban and industrial centers along Lake Erie and Lake Ontario. The lock system in the St. Marys River at Sault Ste. Marie makes this transfer possible.

Agriculture: Huron County in Michigan's Thumb region produces more dry beans than any other county in the nation. Other crops grown in the basin include soybeans, potatoes, cucumbers, corn and sugar beets.

Fisheries: In 1996, Lake Huron produced a commercial harvest of more than 9 million pounds of fish, primarily lake whitefish and chubs. Recreational fishing is also important, attracting 230,000 U.S. anglers in 1991 and 443,000 Canadians in 1985.

Tourism/Recreation: Many vacation cottages cluster on the Lake Huron shoreline, and each year more than 6.5 million people visit national, provincial and state parks, and underwater preserves/parks in the Lake Huron basin. Underwater preserves/parks are special areas in the lakes designated by Michigan/Ontario to protect shipwrecks and other cultural and geologic resources. In 2000, Michigan's Thunder Bay Underwater Preserve near Alpena, Michigan, also became the United States' first National Marine Sanctuary in the Great Lakes.

When Lake Huron's 30,000 islands are included, the lake has the longest shoreline of any of the Great Lakes.

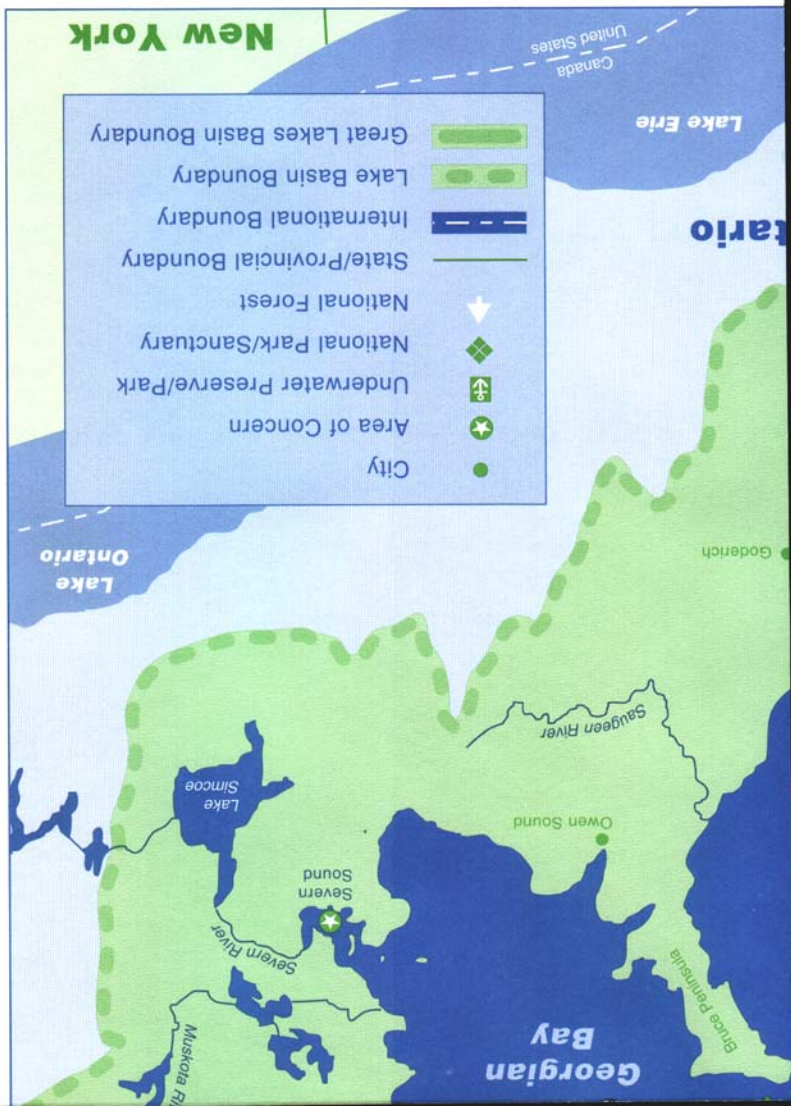
Ecology

Many types of forests are located in the Lake Huron basin, including northern hardwood and pine forests in the north and oak-hickory forests in the south.

Thirty-seven percent of all wetlands found in Michigan are in the Lake Huron basin. Lake Huron's coastal wetlands are home to more than 40 species of rare plants, five species of reptiles and more than 80 species of fish. Birds in the basin include the bald eagle, great blue heron and snowy owl.

A wide array of mammals live in the Lake Huron basin, including moose, elk, black bear, gray wolf, Canada lynx, beaver, coyote, porcupine and flying squirrels, along with 10 species of frogs and Michigan's only poisonous snake, the eastern massasauga rattlesnake.





on Basin



Natural Resource and Environmental Issues

Loss of Wetlands: Thirty-seven percent of all coastal wetlands in Michigan are in the Lake Huron basin. Wetlands help to replenish and purify groundwater, prevent flooding and erosion, and support a wide diversity of plant and animal life. However, wetlands continue to be drained and filled — mostly on the U.S. shoreline, where it is estimated that 50 percent of the original Saginaw Bay wetlands have been lost to urban encroachment, cottage development and agriculture.

Water Quality: Pollution is not as severe in Lake Huron as it is in some other Great Lakes basins, but problem areas do exist. The sources of this pollution are agricultural runoff, industrial plants and municipal wastewater treatment plants. Toxins enter the lake from direct discharge and atmospheric deposition. These toxins can be harmful to fish and wildlife. Consumption advisories have been placed on some Lake Huron sport-caught fish because of concern that contaminants may affect humans who eat fish in large amounts. The U.S. and Canadian governments have designated three places on the Lake Huron shoreline as areas of concern where beneficial uses have been impaired and environmental standards are not being met. Improvements have occurred in the Lake Huron basin, however. One result of these efforts was the delisting of one area of concern — Collingwood Harbour at the southern end of Georgian Bay — the first in the Great Lakes Basin to be removed from the list.

Exotic Species: Several aquatic nuisance species have found their way into the waters of Lake Huron and are disrupting its ecological dynamics. Sea lamprey, which entered Lake Huron in 1932, prey on and have decimated valued species of fish such as lake trout, whitefish and chinook salmon. Because these lampreys have no natural predators in the Great Lakes, alternative control methods are being used to sustain important fisheries. Zebra mussels have also caused ecological and economic problems in Lake Huron. These small, striped mussels cluster inside water pipes, disrupting normal inflow necessary for industry, agriculture and residential use. In addition, they can affect recreation if large numbers of them wash ashore, leaving behind their sharp shells and producing a foul odor. Zebra mussels are damaging populations of native mussels by attaching to their shells, impairing the natives' ability to function, and eventually killing them.



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