



AN About Michigan

The Great Lakes

Michigan's state nickname is the "Great Lake State." The Great Lakes contain the largest supply of fresh water on earth - around 20%! That is six quadrillion gallons of water! Only the polar ice caps contain more fresh water. Another interesting fact is that Michigan has more shoreline than any other state except Alaska and Michigan is the only state that touches four of the five Great Lakes!

The Great Lakes themselves were formed at the end of the last ice age, when melting glaciers filled the region with fresh water. However, the earliest seed for the lakes was planted some 2 billion years ago, when two tectonic plates collided and formed the valley that eventually became Lake Superior.

To remember the Great Lakes' names - try this!

- H = Huron
- O = Ontario
- M = Michigan
- E = Erie
- S = Superior

Lake Superior is the largest of the Great Lakes. It's so big that it could hold all of the water in the other Great Lakes plus three more the size of Lake Erie.

- Most of the world's water sources lie in lowlands but the Great Lakes are high or tall. We measure this by saying places are so many feet above sea level. Lake Superior is about 600 feet above, making it the highest of the Great Lakes.
- Lake Superior is the deepest of the Great Lakes going down as far as 1,332 feet. That's what makes it the coldest of the Great Lakes too!
- Each year a small amount of water travels out of the lake and it takes about 200 years for this water to be replaced.
- On the southwestern tip of Lake Superior lies the city of Duluth which is the only international port that is located so deep within the United States borders. Inland cities like Hibbing, mine taconite (a mineral that is used to make steel) and send it by rail to the port of Duluth where ore boats carry it to various places around the world.
- The shoreline of Lake Superior is often very rocky.

Lake Michigan is located east of Lake Superior and is the third largest of the Great Lakes. It touches the borders of four states-Wisconsin, Illinois, Indiana and Michigan.

- The world's largest freshwater dunes lie on Lake Michigan's shoreline.
- At the southern most tip of Lake Michigan lies the city of Chicago. Chicago is highly populated besides being an industrial and commercial center. Small boats can travel down the Illinois Waterway from the Chicago River into the Mississippi River.
- On the north, Lake Michigan is connected to Lake Huron at the Straits of Mackinac.

- Water circulates slowly in Lake Michigan before it leaves through the Straits of Mackinac. Because of this, it would take 99 years before water could be replaced.



Lake Huron is the second largest of the Great Lakes and has the longest shoreline. It lies east of Lake Superior and Lake Michigan and follows along the state of Michigan's eastern shore.

- Lake Huron is connected to Lake Michigan at the Straits of Mackinac and to Lake Superior at the St. Mary's River.
- Large ships pass from Lake Superior into Lake Huron through the Sault St. Marie locks.
- Three bays extend out from Lake Huron. Georgian Bay is the largest and was considered a separate lake by early explorers.
- Lake Huron is as many feet above sea level as Lake Michigan.
- It takes 22 years for water to be replaced in Lake Huron.

Lake Erie is the shallowest and warmest of the Great Lakes and ranks fourth in size to the other Great Lakes. It receives water from Lakes Superior, Huron, and Michigan.

- Lake Erie's water levels are constantly changing.
- Lake Erie is bordered by the states of Ohio, Pennsylvania, Michigan, and New York.
- Lake Erie empties into the Niagara River and Welland Canal. The first Welland Canal was built in 1833 with wooden locks.
- Along the shore of Lake Erie lie the major cities of Cleveland, Ohio and Erie, Pennsylvania.
- Water is replaced in the shortest amount of time in Lake Erie, only about 2.6 years.

Lake Ontario is the easternmost and smallest of the Great Lakes. It is from here that ships will pass through the Saint Lawrence River and out into the Atlantic Ocean.

- Lake Ontario ranks smallest in elevation (feet above sea level), length, and size of all the Great Lakes. While small in all of these, it has some points as deep as 802 feet.
- Lake Ontario lies below Lake Erie and it is here that the great Niagara Falls flow. Until locks were built, boats could not pass into the other lakes.
- Toronto, one of Canada's largest cities lies on Lake Ontario.