



Fact Sheet
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Fast Facts About the Great Lakes

- From west to east, the Great Lakes are Lakes Superior, Michigan, Huron, Erie and Ontario. The Lakes are connected to the Atlantic Ocean by the St. Lawrence River.
- The Great Lakes and their connecting channels form the largest freshwater lake system in the world. These “sweetwater seas” hold 18% of the globe’s surface freshwater – second only to the polar ice caps.
- The Great Lakes drainage basin covers an area the size of France and is home to over 37 million people. It includes the major metropolitan areas of Chicago, Milwaukee, Detroit, Cleveland and Toronto.
- Chicago is the largest city on the Great Lakes. The city processes almost a billion gallons of Great Lakes water each day for residential and industrial use. Although the city takes its drinking water from Lake Michigan, wastewater is not returned to the Great Lakes. Instead, it flows to the Gulf of Mexico.
- Everyone who lives in the Great Lakes drainage basin relies on the Lakes for their drinking water. Twenty-six million residents use water withdrawn directly from the Lakes, while 11 million intercept Great Lakes groundwater as it drains to basin tributaries and the Lakes themselves.
- Only 1% of the water in the Great Lakes system is replenished each year; the remaining 99% was a one-time gift from the melting glaciers that created the lakes ten to fifteen thousand years ago.
- On average, it takes a drop of water 191 years to cycle through Lake Superior (e.g. from entering as a drop of rain and exiting to Lake Huron via the St. Mary’s River). Lake Michigan’s retention time is 99 years.
- The Great Lakes drainage basin is home to an incredible diversity of plants and wildlife, including 128 species and 50 natural communities that are considered imperiled or rare on a *global scale*.
- Despite the fact that they account for half of Illinois’ population, Cook and Lake Counties, the state’s only coastal counties, contain by far the richest concentration of natural treasures according to the IL DNR.
- Nearly three quarters of Illinois’ threatened or endangered bird species are found on the state’s Lake Michigan coastline along with fifty-six threatened or endangered plant species.
- 288 of Illinois’ 300 bird species, along with 77 fish species and 44 mammal species can be found in along the state’s Lake Michigan coastlands.
- About 80% of the U.S. Great Lakes shoreline is privately owned and not accessible to the public, by contrast, just 20% of the Canadian Great Lakes shoreline is in private hands.
- Over recent decades, the Lake Michigan shoreline in Illinois has been pushed inland an average of one foot per year.
- Illinois’ Great Lakes counties counted nearly 170,000 acres of prairie prior to European settlement. Today, only 671 acres of that original prairie habitat remain.
- Chicago’s Grant Park is built on a foundation of debris from the Great Chicago Fire that was dumped into Lake Michigan in the 1870’s. Businessman Aaron Montgomery Ward sued the city to protect the shoreline from development. Supporting lakeshore protection in 1909, Daniel H. Burnham said, “The lake is living water . . . Not a foot of its shores should be appropriated by individuals to the exclusion of the people.”

- Since the 1800s, more than 160 aquatic invasive species have become established in the Great Lakes. The five most notorious are the zebra mussel, sea lamprey, round goby, spiny water flea and quagga mussel. Today, it costs U.S. and Canadian tax-payers \$15 million annually to keep sea lamprey populations under control. Zebra mussels clog intake pipes and motors and cause other problems – it's estimated that monitoring and maintenance cost the United States \$750 million to \$1 billion just during the 1990's.
- According to the Chicago-based Alliance for the Great Lakes, there were a record 1,473 beach closings and advisories for Lake Michigan in 2003. By comparison, beaches closed 919 times in 2002 and 182 times in 1996.
- During the 1850's, residents of Chicago suffered deadly summertime cholera outbreaks caused by drinking polluted Lake Michigan water. The lake was polluted by the Chicago River, which served as an open sewer for tens of thousands of residents. A major Typhoid outbreak in 1891 encouraged the city to protect its primary water supply from the sewage-filled river which flowed to the lake. Chicago undertook a massive engineering project to reverse the flow of the Chicago River. Although the Chicago Sanitary and Ship Canal opened more than one hundred years ago, it continues to drain 2.1 billion gallons of water from the Lakes into the Gulf of Mexico every day.
- Parts of all of the Great Lakes and their connecting channels are currently under fish consumption advisories for one or more toxic chemicals. In 2002, mercury, PCBs, dioxins or chlordane were at least partly responsible for 96% of fish consumption advisories, while 75% were issued in part due to mercury contamination.
- A recent National Academy of Sciences study estimated up to 60,000 newborns nationwide suffer learning disabilities due to prenatal mercury exposure.
- Air pollution is responsible for over 90% of mercury contamination in our Great Lakes waters - largely from coal-fired power plants.

For additional fast facts, in-depth information on the Great Lakes, tips and more, visit www.greatlakesforever.org. Great Lakes Forever is a public education initiative launching this June by the Biodiversity Project to raise awareness of the ecological value of the Great Lakes and concern about the threats to the ecosystem's health.

Biodiversity Project advocates for biodiversity by designing and implementing innovative communication strategies that build and motivate a broad constituency to protect biodiversity. A national organization based in Madison, Wisconsin, the Biodiversity Project has worked with leaders in policy, advocacy, education, science, religious and grantmaking fields since 1995. For more information, visit www.biodiversityproject.org and www.greatlakesforever.org