

Great lakes

[Environment](#), [Pollution](#)



The North American great lakes including Lake Erie, Michigan, Huron, Superior, and Ontario. Lake Huron is the 3rd largest lake out of all five of them. It measures at 850 cubic meters of water; it extends to about 3, 827 miles, measures at 206 miles across, and about 183 miles north to south. The average water depth in this huge lake is 195 ft. These lakes are the largest fresh water supply and home to many of the world's wildlife. For several years the Great Lakes have served as a dumping ground for many harmful pollutants.

Damage from drain pipes and industrial waste produce harmful conditions for the fish, wildlife, and humans dwelling in the surrounding area of the region. Countless people wouldn't believe so because this is a second home place to many, many families and they travel to this area for their summer vacations. As people travel to the Great Lakes, perhaps they can all see the true of how mistreated these stunning lakes are. The first major source of pollution comes from point source pollution.

Point source pollution is simply a direct source of pollution such as a pipe or other vessels. Earlier age industrial companies, such as pulp and paper were located right on the outskirts of the Great Lakes. They were dumping tons of waste including mercury into the water. Some of this polluting was done involuntarily with the malfunctioning of these pipes or vessels. However, some of this pollution was intentional from them thinking that anything would dissolve in the waters and "neutralize". Pathogens are another source of pollution to the Great Lakes.

Pathogens refer to bacterial organisms found in the intestinal tracts of mammals. Nutrient sources include municipal wastewater treatment plants, septic systems, and agricultural runoffs. There are three major areas which are Saginaw Bay, Severn Sound, and the southeastern shore of Lake Huron Basin. Pathogens have had such an impact on Lake Huron that it had beach closings in these regions due to the findings of E. coli contaminations.

Another form of pollution to the Great Lakes is fecal matters. It is believed that fecal matters infested the lakes by sewage.

Sewage is known to having some of the most harmful bacteria's. Putting these bacteria's into the waters it's not only polluting them but it's also making the water quality decline and the bacteria growth will continue to increase (Shear 2006). Air-bound pesticides and fertilizer runoffs are both involuntary forms of pollutants to the Great Lakes. These types of pollutants are deposited into the lakes by the inadvertency of the environment. Testing the tissues of fish and mussels can determine the level of contaminate residing in the waters.

Lindane, Dieldrin, Toxaphene, and Chlor-diphenyl-tichloroethane (DDT) are some of the main harmful substances found in the water (Agency for toxic Substances and Disease registry 1997). Since 1990, Toxaphene has been prohibited yet traces of it still remain. Figure 1 These are all of the pollutants found in the Great Lakes that were reported to Congress. Figure 2 These are the four concentrations of pollutants compared to biomass. Figure 3 This shows the levels of Toxaphene concentration increases, the biomass

decreases and vice versa. For humans, interactions with these types of pollutants are extremely likely.

You can reach all of the pollutants by simply going to the shorelines. Eating contaminated fish, or wildlife, in pathogen-contaminated waters, can cause infections and stomach disorders. Polluted beaches result in loss of utility for those who have planned to visit or swim in the water; that in turn impacts local economies in the form of lost tourist dollars and the jobs they support (The National Resources Defense Council (NRDC) 2012). Tourists enjoy coming there to do activities such as canoeing, kayaking, and boating. Tourism ensures jobs for the many people that live close to the lakes.

Many families rely on fishing to feed their families'. This is why caution must be used when eating the fish in Lake Huron. Lake Huron, along with the other Great Lakes, are very important to us. They are our main source of fresh water in the United States. The government is regulating chemicals and other harmful substances that could affect the Great Lakes. Getting laws passed like the Clean Water Act, recognizes the importance of preserving the Americans waters. Thankfully we have groups like NRDC whose main goal is to make sure that Lake Huron, and the other Great Lakes, stays safe for fishing, swimming, and boating.

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Natural Resources Defense Council (NRDC). (2012). The impact of beach pollution. Retrieved from <http://www.nrdc.org/water/oceans/ttw/health-economic.asp> Shear, H. (2006). The Great Lakes, an Ecosystem Rehabilitated, but Still Under Threat. Environmental Monitoring and

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