

An aerial photograph showing the Chicago skyline, including several tall skyscrapers, and the city's coastline along Lake Michigan. The image captures the dense urban development and the proximity of the city to the water.

4.4 The Great Lakes Today: Pollution

During the 1960s and 1970s, the state of the Great Lakes worried many people, both Americans and Canadians. Dr. Seuss, the famous children's author, wrote about Lake Erie in his book *The Lorax*. In this 1971 book, fish living in a polluted lake decide to look for a new home. Dr. Seuss wrote,

*They'll walk on their fins and get woefully weary,
In search of some water that isn't so smeary.
I hear things are just as bad up in Lake Erie.*

By 1991, however, Lake Erie had improved so much that this last line was removed from *The Lorax*. This amazing change was due to cleanup work done on both sides of the U.S.-Canada border.

Making Laws to Reduce Pollution In 1972, the United States and Canada created the first Great Lakes Water Quality Agreement, pledging to clean up and protect the Great Lakes ecosystem. The first cleanup efforts involved **point-source pollution**—pollution from a single source, such as a discharge pipe at a sewage treatment plant or a factory.

New laws put strict limits on the amount of phosphorus and other chemicals that factories and sewage treatment plants could release into the lakes. Detergent makers stopped putting phosphorus in their products. Industries stopped dumping oil and other pollutants into rivers draining into the lakes. Other laws banned the use of a number of **toxic chemicals**, like PCBs and DDT.

The new laws gradually worked. The Cuyahoga River was no longer flammable, or likely to catch fire. Algae growth was greatly reduced, and the lakes turned from green back to blue. PCBs and DDT in the food chain declined. And, as the amount of DDT in fish declined, the bald eagle made a comeback.

The Chicago Waterfront

The city of Chicago lies on the shores of Lake Michigan. For years, the city dumped untreated sewage and factory wastes into the lake. At the same time, it depended on the lake for its water supply. In 2009, the city was drawing 1 billion gallons of water a day from the lake. This water met the needs of Chicago and 124 neighboring towns. Today, Chicago treats its wastewater. The result is a cleaner lake and safer drinking water for millions of people.