



Energy and Water in Wisconsin

Synopsis of *Electric Power Plants, Oil and Natural Gas Threats to Water Quality in Wisconsin*

Water and the energy systems in Wisconsin are inextricably connected. Approximately 70 percent of all water used in Wisconsin is used to generate electricity, often on or near water bodies, and about 30 percent of all energy in the state is used to move water. This connection poses significant risks.

Approximately two-thirds of people living in the state get their drinking water from groundwater. Water underpins major sectors of the Wisconsin's economy, including agriculture and tourism. However, the transportation of fuels, generation of energy and disposal of waste from energy generation all pose a threat to the quality of Wisconsin's surface and groundwater resources.

- Energy production is the single largest use of water in Wisconsin.
- Natural gas transmission and distribution pipelines are a significant source of methane leaks. When methane pollutes water resources, it impacts water chemistry, and bacteria in the water can metabolize methane, creating dangerous byproducts like hydrogen sulfide
- Enbridge's holding tanks in Superior can hold up to 13 million barrels of oil about two hundred feet from the Nemadji River, which flows into Lake Superior.
- Many of Wisconsin's oil pipelines are operating beyond their planned lifetime. Fifty-five percent of pipelines in the Great Lakes region were installed before 1970.
- In 2016 a report that showed that Enbridge had 85 spills in Wisconsin during the prior decade. Five were up to 210,000 gallons. During those years Enbridge spills totaled over 3.5 million gallons of crude oil and other liquid industrial products
- Molybdenum contamination in Caledonia has caused concerns about reproductive and developmental problems in animals including fetal mortality and degenerative changes in the brain and nervous system. This contamination is likely linked to local coal ash ponds.
- Crude oil by rail increased from nearly zero in 2010 to just under 1.0 million barrels per day in August 2015

For the full report go to: <http://www.sierraclub.org/wisconsin>