

Deep Threats to Our Sixth Great Lake

Spotlighting and Solving Michigan's Groundwater Emergency

FLOW
FOR LOVE OF WATER

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GROUNDWATER PROVIDES DRINKING WATER FOR 45% OF MICHIGAN'S POPULATION

Groundwater is part of a single hydrological cycle and essential to the quantity and quality of Michigan's wetlands, lakes, and streams, and the Great Lakes.

Yet groundwater is the least protected arc of that cycle. While modern laws and policies protecting surface water are well-established, dating to the 1960s and 1970s, the same cannot be said for groundwater. Despite increasing scientific understanding about threats to groundwater and its importance to the healthy sustainability of life, uses, and communities in a watershed, groundwater's out-of-sight character has often left protective policies out of mind. It is well past time for Michigan to remedy that, dealing with threats from toxic chemicals, agricultural pollutants and failing septic systems.

Deep Threats to Our Sixth Great Lake—FLOW's new report summarized by this fact sheet—proposes an overarching, comprehensive solution in state law and policy: a Michigan Groundwater Protection Act to prevent groundwater contamination while holding accountable those who pollute this shared public resource. Such a solution is critical now and will become increasingly so in this century. Michigan's public waters, including groundwater, will face new demands as population grows and industries relocate here in the face of water shortages and climate change pressures elsewhere.

Unfortunately, Michigan is failing the groundwater stewardship test. The highly publicized “green ooze” discovery along a highway in suburban Detroit last year is a vivid illustration of that fact. Here’s a snapshot of the deep threats:

- There are an estimated 14,000 contamination sites needing state funding for cleanup, and at the current rate of remediation, they won’t all be addressed for decades.
- Although 1.25 million private water wells supply drinking water to more than two million Michiganders, there is no regular safety testing of that water.
- High-risk toxic chemicals, including TCE, which has contaminated groundwater in more than 300 known Michigan locations, are still in widespread use.
- Michigan is the last holdout among the 50 states in protecting groundwater and surface water from an estimated 130,000 failing septic systems, whose pollution has been linked with disease.
- Michigan laws protecting groundwater are fragmented and lack a clear overall policy goal.

Some progress has been made since FLOW’s 2018 groundwater report. The state has set protective standards for toxic PFAS in drinking water, increased funding has been allocated to cleaning up contamination sites, and Governor Whitmer has proposed a new \$35 million fund for replacing failing septic systems. Still, there is much more to be done.

In our new report, FLOW recommends that the state of Michigan:

- Develop and enact a state groundwater policy built on the principle that groundwater must be fully and aggressively protected through a combination of prevention and rigorous cleanup measures.
- Ban or strictly limit use in Michigan of chemicals that frequently contaminate groundwater.
- Reinstate the polluter pay principle in law both to assure polluters are held accountable and to deter future groundwater contamination.
- Assess fines, penalties, and damages for impairment of the state’s groundwater resource, and require full clean-up by polluters unless technically infeasible.
- Establish a fund to assist homeowners, largely in rural areas, in obtaining water well testing.
- Publish an annual or biennial report, based on a comprehensive public database, that identifies and ranks by hazard all sites of contaminated groundwater or connected overlying land.
- Direct additional public funding to accelerate the cleanup of Michigan’s groundwater contamination.



FLOW (For Love of Water) is working to build deeper awareness among all stakeholders—including groups, governments, and citizens—regarding the public trust framework that protects the Great Lakes. This groundwater report is part of that continuing effort. Funding for FLOW’s groundwater work has been provided by The Harry A. and Margaret D. Towsley Foundation and by the Andrew R. and Janet F. Miller Foundation.

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