Water Pollution

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In 1972, we passed the Clean Water Act, a first-of-its-kind piece of legislation that aimed to restore and protect our nation's waters. However, industrial water pollution is still a big problem in Michigan due to an overly lenient system that fails to enforce the protections we have won.

According to a report released by Environment Michigan in 2018, industrial facilities exceeded pollution limits 8,100 times from January 2016 through September 2017, and the majority of these violations went unpunished.¹

Furthermore, the most widespread, serious pollution that is affecting our water currently is PFAS contamination. PFAS stands for per and poly-fluoroalkyl substances, and they are a group of thousands of man-made chemicals that have made their way into our water. While PFAS have received a lot of attention due to their persistent nature and widespread presence in our environment, they are far from the only chemical that has ended up in our water from industrial pollution.

Economy

- Michigan is the Great Lakes state, and our tourism relies on clean water. When our water isn't clean and safe it hurts our economy and makes us a less attractive place to visit and live.
- According to Quality Unknown: The Invisible Water Crisis, a 2019 report published by the World Bank, economic growth drops by one-third in areas downstream of high river pollution. Richard Damania, the top economist in the World Bank's water program, claims that "prevention is cheaper and better than the cure". 2

Public Health

- PFAS has been linked to a number of health concerns including thyroid conditions, cancer, and reproductive issues, and more.
- ◆ Due to the large number of chemicals in the PFAS category and the lack of research on these chemicals, there are likely many public health effects that have not yet been proven.
- Many of the other pollutants in our water, such as heavy metals and other toxic chemicals, can also lead to adverse health effects.
- Safe, clean drinking water is vital to life and necessary to sustain it.

Natural Resources

- We are surrounded by 21% of the world's surface freshwater, which is a natural resource that will only become more valuable as climate change increases, and we can't afford to pollute it with toxic chemicals
- PFAS affects our food supply; since it is bio-accumulative, once it gets into our water, it ends up in the animals that drink that water and the fish that live in it.

When the Clean Water Act was passed, it created that National Pollutant Discharge Elimination System (NPDES) permit program, which regulated point-source pollution (specific locations such as discharge pipes) that release pollutants into the waters of the United States. The NPDES program grants permits to facilities that are discharging pollutants, placing limits on what the facility can discharge and laying out requirements for how the facility must monitor and report its releases.

Michigan is one of the states that is authorized by the EPA to oversee its NPDES program, meaning EGLE oversees the granting of permits and the enforcement. The two main direct dischargers are industrial and commercial facilities, such as factories and oil-refineries, and water treatment plants. Water pollution permits are meant to protect and restore American waterways, but implementation of this program has often been ineffective. In many cases, states and EPA set pollution levels that fail to meet the Clean Water Act's requirements, and, despite the weak requirements, many facilities fail to comply and see no punishment. ⁴

Clearly, our regulatory system isn't functioning correctly. However, PFAS represents a family of chemicals that we didn't even know we needed to regulate. PFAS have been manufactured and used in industries across the globe, and in the U.S. since the 1940s. These chemicals are incredibly persistent in the environment and the human body, meaning they don't break down and they accumulate over time. PFAS have been used in countless products such as food packaging and cosmetics for decades, meaning they have infiltrated our environment through multiple pathways.

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Solutions/Policy Ideas

Polluter Pay

- A polluter pay law would require any corporation that is responsible for water, air, or soil contamination to pay for remediation and clean up. This burden currently falls to our drastically underfunded state government, leading to contaminated sites not being cleaned up, and water contamination spreading when the state lacks the funding to effectively address contaminated sites.
- We must restore our polluter pay laws to begin to remedy the growing amount of contamination in our state without crippling our taxpayers

Learn more here: https://cleanwater.org/features/making-polluters-pay-michigan

Remove Polluter Panels

Right now, polluters have the final say in regulating water pollution, thanks to panels such as the Environmental Rules Review Committee (ERRC), put in place by Governor Snyder's administration. These panels are made up of members of the industries that are being regulated. We must remove these panels to ensure that science and health are the only factors driving the formation of our environmental rules.

Increase funding for the Department of Environment, Great Lakes, and Energy (EGLE)

• Funding for our state environmental agency has been steadily going down in recent years, and we must push to make sure that EGLE has the necessary funding in order to run and enforce the NPDES program

We must push for a regulatory system that requires companies to prove that what they're putting on the market is safe rather than forcing people to have to prove these chemicals are making them sick before any action is taken.

Key Resources

Michigan Clean Water Action
Huron Clinton Watershed Council
Michigan PFAS Action Response Team (MPART)
Michigan Environmental Council
Environment Michigan

www.cleanwateraction.org/mi www.hrwc.org www.michigan.gov/pfasresponse www.environmentalcouncil.org/clean_water www.environmentmichigan.org

¹ E. Berg, H. Kim, and J. Rumpler, 2018 'Troubled Waters: Industrial Pollution Still Threatens American Waterways', Environment Michigan and Frontier Group, Retrieved on 30 January, 2020 from https://environmentmichigan.org/sites/environment/files/reports/MI TroubledWaters scrn 0.pdf

² R. Damania, S. Desbureaux, A. Rodella, J. Russ, and E. Zaveri, 2019, 'Quality Unkown: The Invisible Water Crisis', World Bank Group, Retrieved on 30 January, 2020 from https://openknowledge.worldbank.org/bitstream/handle/10986/32245/9781464814594.pdf?sequence=8

³ 'Health', Michigan PFAS Action Response Team, Retrieved on 30 January, 2020 from https://www.michigan.gov/pfasresponse/0,9038,7-365-86509---,00.html

⁴ Berg, Kim and Rumpler, 2018, 'Troubled Waters'

⁵ 'PFAS Cycle Diagram', Michigan Department of Environment, Great Lakes, and Energy, Retrieved on 30 January 2020 from https://www.michigan.gov/documents/pfasresponse/PFAS Cycle Diagram 670769 7.pdf