

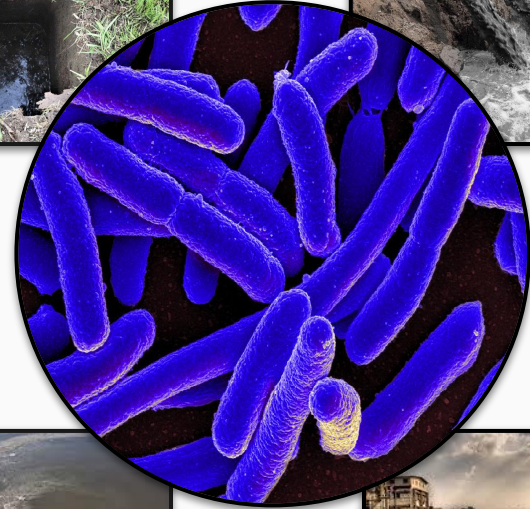


# **The Problems Behind Wastewater Management In the State of Michigan**

By Maximilian Thompson, Brooke Liberto, Isaac Davis, Wyatt Rogoff, and Milenka Eterovic

# Background & Statistics

- 15, 864 miles of rivers and streams are unsafe for swimming
- Roughly half of rivers and streams contain unsafe amounts of E-coli bacteria
- 10% of homes within Detroit have no access to running water



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# Statistics - Flint Water Crisis



(Flint Water Pickup Station)

- Result of cost-reduction attempts
- Crisis received national attention in 2014
- An estimated 1 in 4 households were cut off from clean running water.
- Hundreds of thousands of citizens were cut-off from clean running water
- Roughly 9000 of those citizens being children
- Hundreds of Flint Citizens fled to Water Pick-up Stations daily

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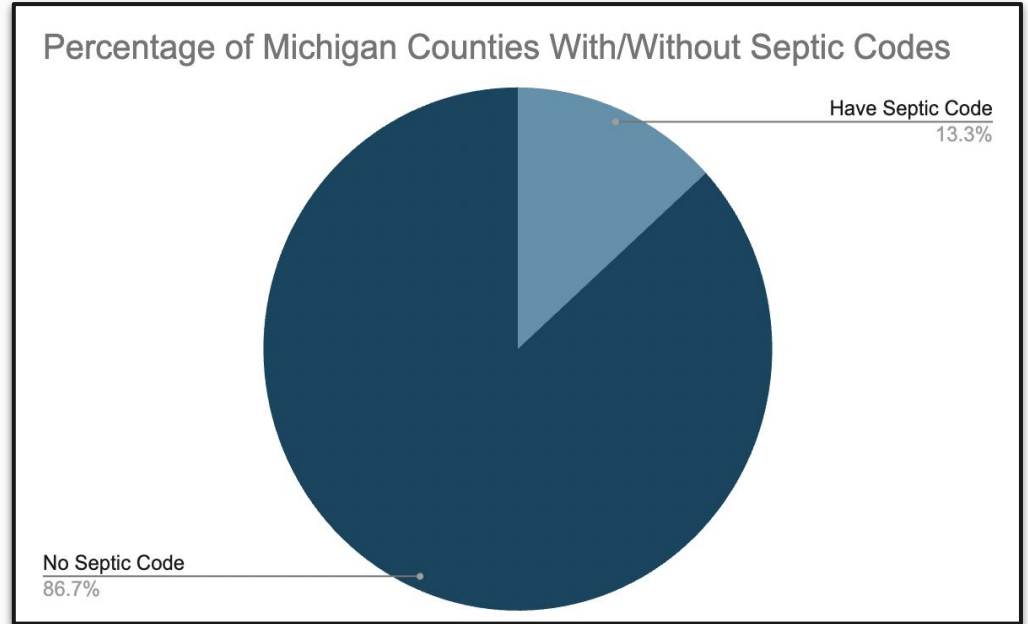
# State regulation

- Michigan is the ***only state*** without a standard septic code
- A recent estimate placed the number of failing septic systems within Michigan at the hundreds of thousands mark



*Decaying sewage pipes and septic systems contaminate water and give rise to leakages*

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- Only 13.3% of city ordinances require a septic system inspection when a property is sold
  - 11/83 Michigan Counties have created septic system codes



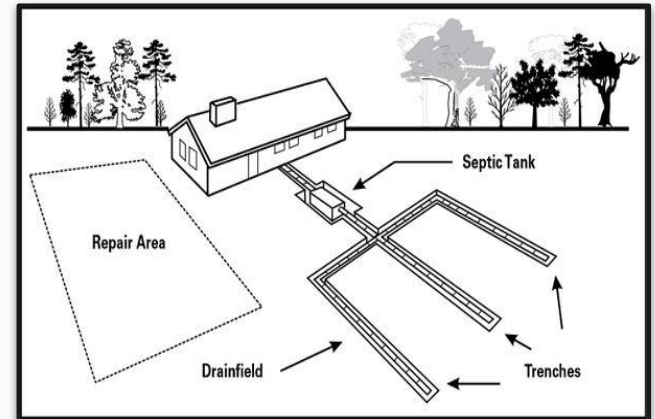
**The state of Michigan *needs* standardized policy.**

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# **The Policy Options We Propose**

# Option #1

- Implement a statewide septic system code
- Follow framework laid out in house bills 4479 and 4480
- Installs inspection database, advisory committee, and inspection schedules, etc.



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# Affordability?

- Allocate greater funding for water treatment
- Gov. Whitmer outlines 600 million dollar budget for clean water & climate efforts for the fiscal year 2024





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# Option #2

- Subsidy proposal to MEDC
- MEDC recommends economic policy to government officials
- End goal: subsidy and collaboration between state government and private companies
  - Either tax subsidy for private companies to replace out-of-date tanks OR direct subsidy to private citizens to replace their out-of-date tanks



**MICHIGAN  
ECONOMIC**  
DEVELOPMENT  
CORPORATION

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# Our Recommendation

Option 1: To address this issue, Michigan Congress should pass Bills 4479 and 4480.

## **4479:**

- Sets regulations for onsite wastewater treatment systems, covering definitions, approval processes, and inspections
- Grants authority to local health departments and the Department of Environment, Great Lakes, and Energy for enforcement
- Covers proprietary product registration, inspection procedures, and penalties for misinformation.

## **4480:**

- Establishes a technical advisory to advise on onsite wastewater treatment systems, in order to recommend standards, guidance, and technologies for system management
- Creates an onsite wastewater treatment system fund, designated for administration, grants to local health departments, and aid to homeowners below a specified income threshold.

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# Why Option 1?

**Preventative Focus:** Bills emphasize research and prevention to stop septic tank failures before they occur.

**Long-Term Solutions:** They aim for lasting fixes rather than just offering subsidies for post-failure repairs.

**Resource Efficiency:** Preventative measures save costs and resources by avoiding frequent repairs.

**Expertise and Analysis:** Establishing research teams allows for in-depth understanding and informed solutions.

**Holistic Approach:** They encompass education, community engagement, and tech advancements for comprehensive prevention strategies.

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# Thank you!

Questions? Comments? Contact us:

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# Communities in Michigan with Established Septic Codes

Established Code



No Established Code



