Who's Paying the Price? The Legacy of the Part 201 Program in Michigan

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What is a contaminated site?

"Any area, place, or property where a hazardous substance in excess of the established state cleanup standard for residential property has been released, deposited, disposed of, or otherwise comes to be located."

- MCL 324.20101

What is a contaminated site really?

Image: Countryside Magazine

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Image: CORDIS - EU

What is a contaminated site really?

Image

Image: Google Maps

Sites are more common than you might expect:

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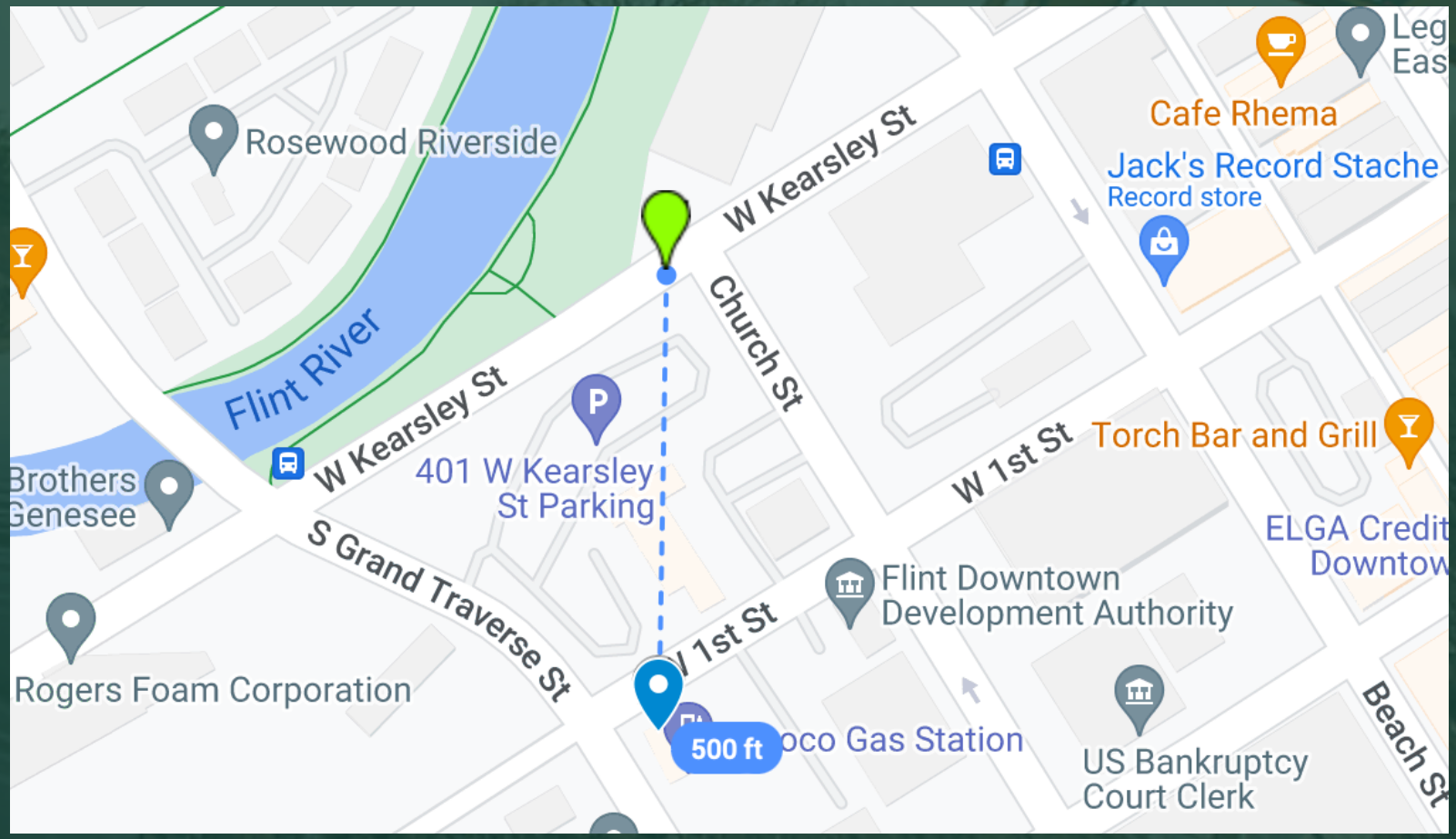

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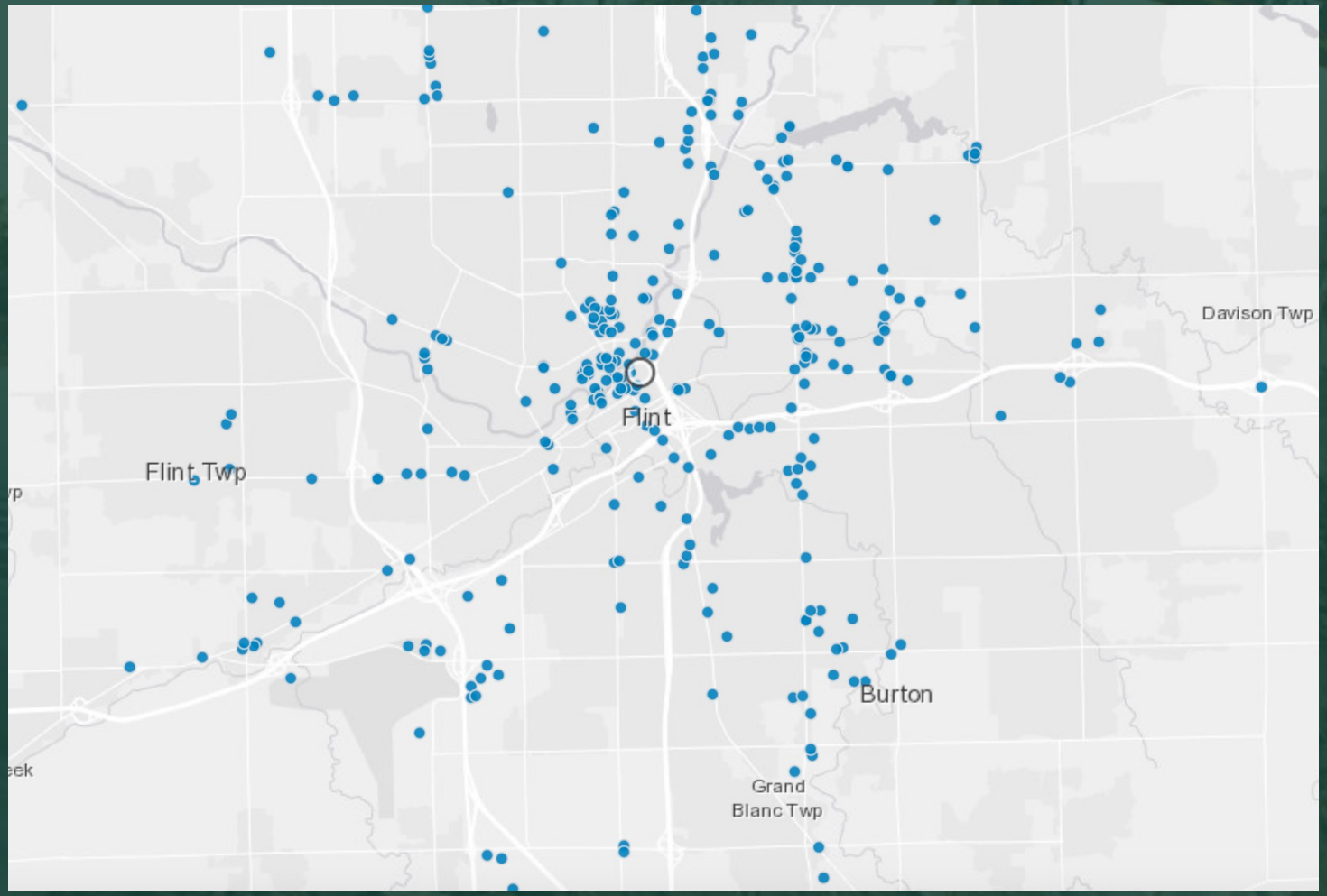

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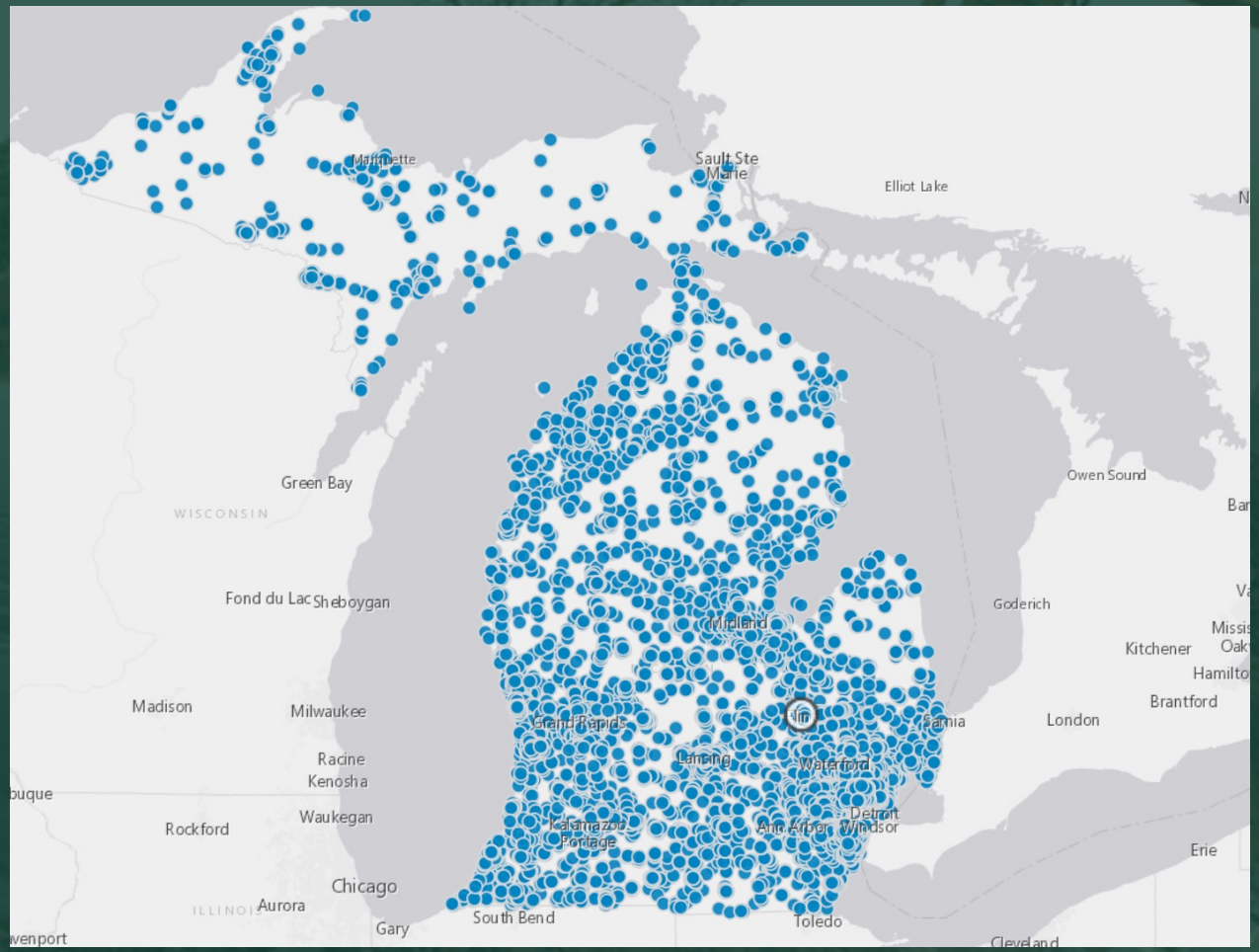

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Contamination negatively impact health:

Adverse Pregnancy Outcomes

Source: Brender et al. 2011

Contamination negatively impact health:

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Childhood Cancer

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Contamination negatively impact health:

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Cardiovascular Illnesses

Source: Brender et al. 2011

Have we always had this many sites?


5,070
contaminated sites in 1991


17,413
contaminated sites in 2023

Which policy choices explain the increasing number of sites?

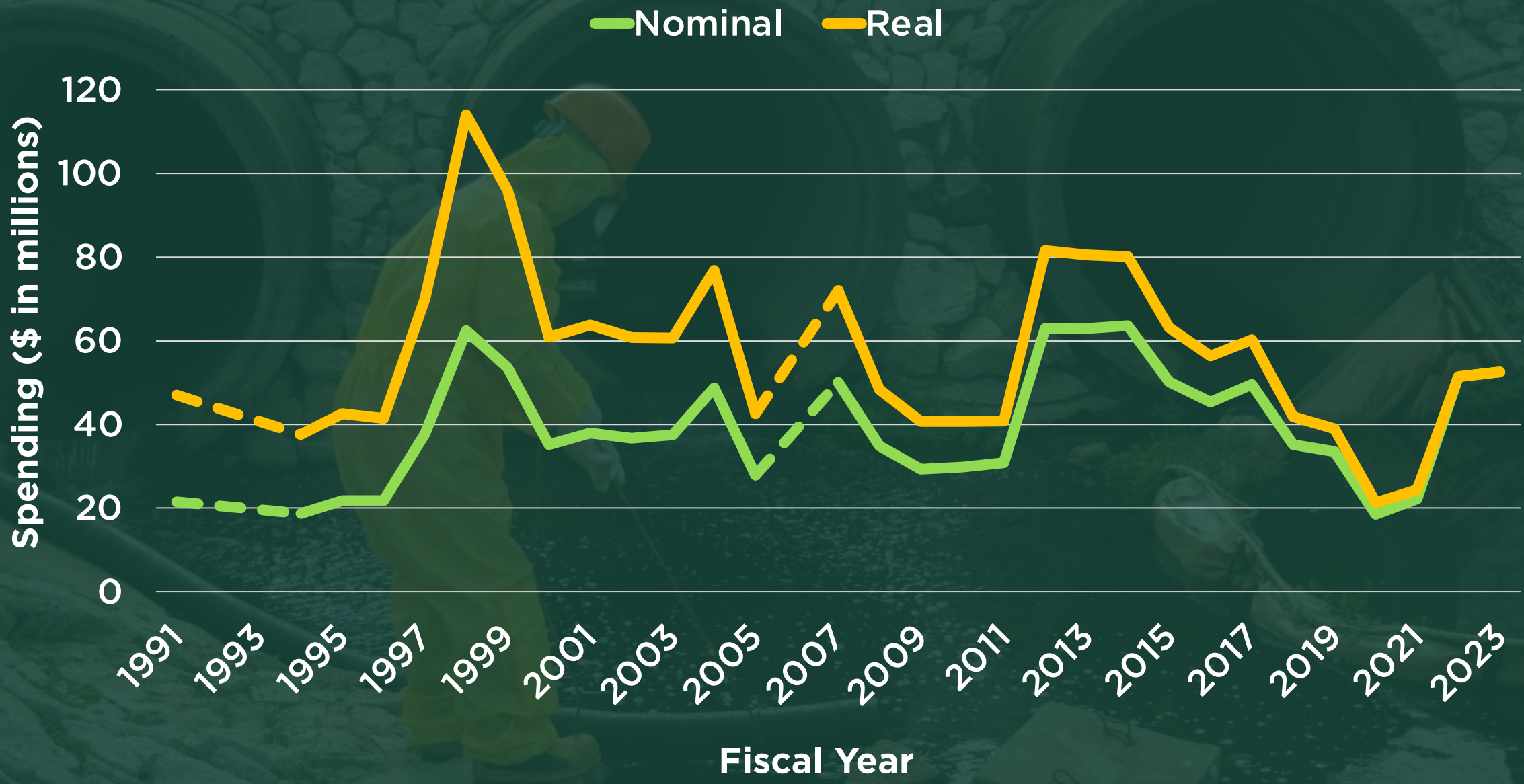
Between 1990-1995, Michigan had the nation's strongest polluter pay law.

- Strict liability and burden of proof
- High cleanup standards
- Public transparency standards

In 1996, amendments weakened liability and cleanup requirements for polluters.

- Only initial owners responsible for pollution
- Burden on state to establish liability
- Increase the allowable risk for carcinogens
- Allowed contaminated groundwater to remain untreated

Part 201 Appropriations, FY 1991-2023



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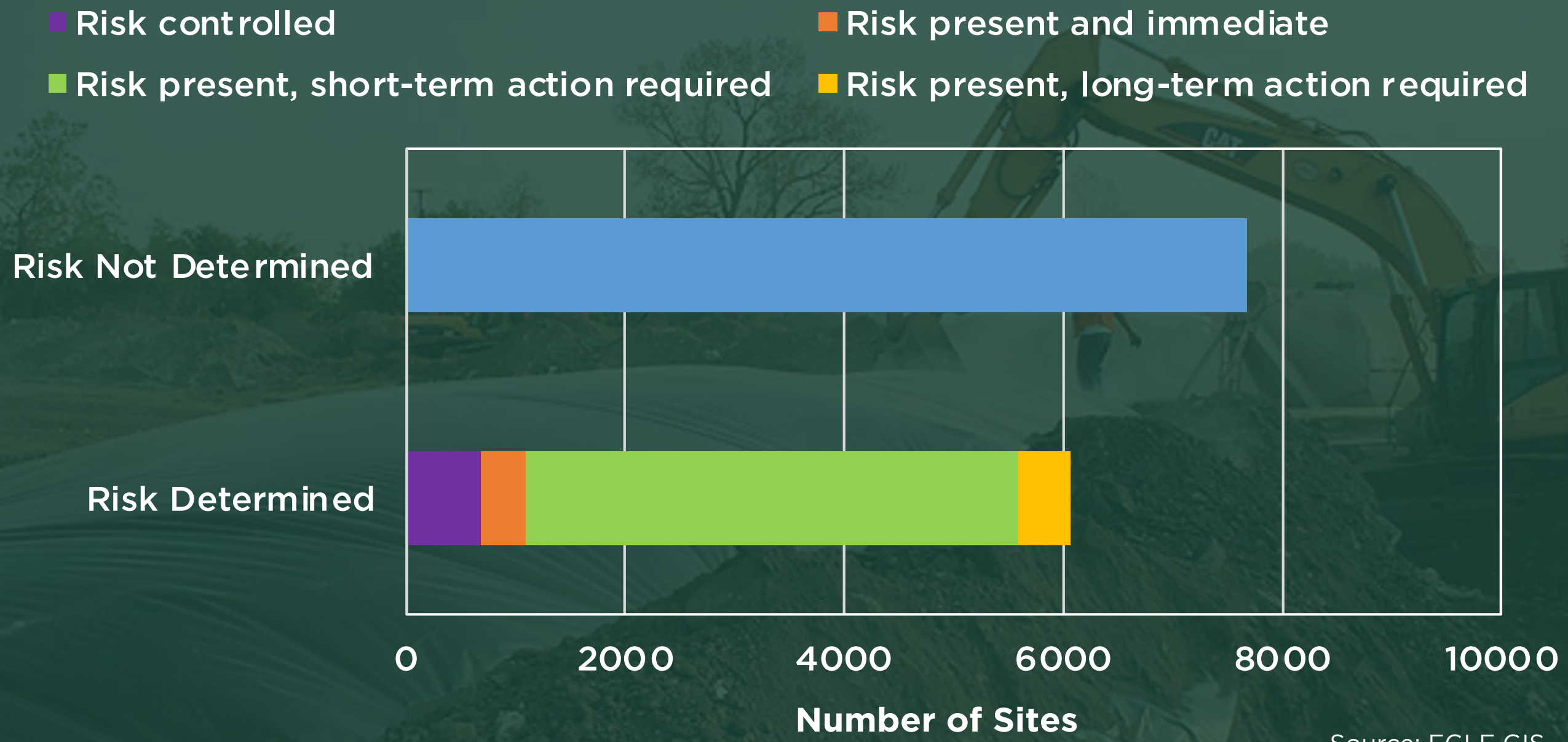
• DNR required to submit a list and rank all known sites (including those receiving state funding) by relative risk annually	• MDEQ required to annually submit a list of sites where public funds are being received (sorted in alphabetical order)

Risk Classification of Part 201 Sites



Source: EGLE GIS

3 key issues identified:

1. The number of contaminated sites in Michigan has risen enormously
2. Part 201 operates with less overall funding than Act 307
3. Removal of transparency and reporting requirements

Without solving these issues, we cannot adequately address contaminated sites:

Decreasing funding

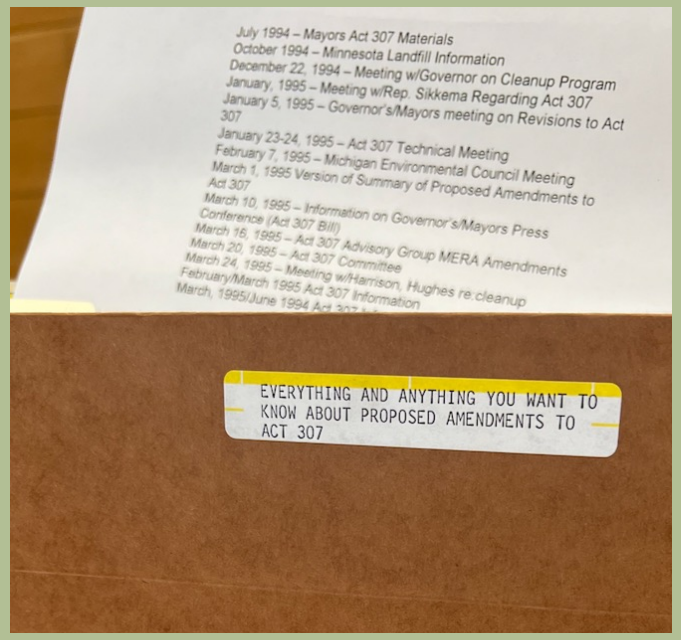
Lack of reporting and transparency

Sites are not remediated

Number of sites continues to increase

Methodology

Evaluatory Framework



35 Public Acts

Remediation Components

Legal Components

Administrative Components

33 Programmatic Components

+1 Expansive
0 No change
-1 Restrictive

Scoring System

Programmatic Component Categories

Remediation Components
Legislative provisions relating to the cleanup of sites.

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Approaches to liability, property interests, and civil action.

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Administrative Components
Impacts to program operations (funding, modeling, oversight bodies).

Results

Between 1990-2018, most programmatic components were restricted:

76%

Experienced a contraction.

1%

Experienced no change.

33%

Experienced an expansion.

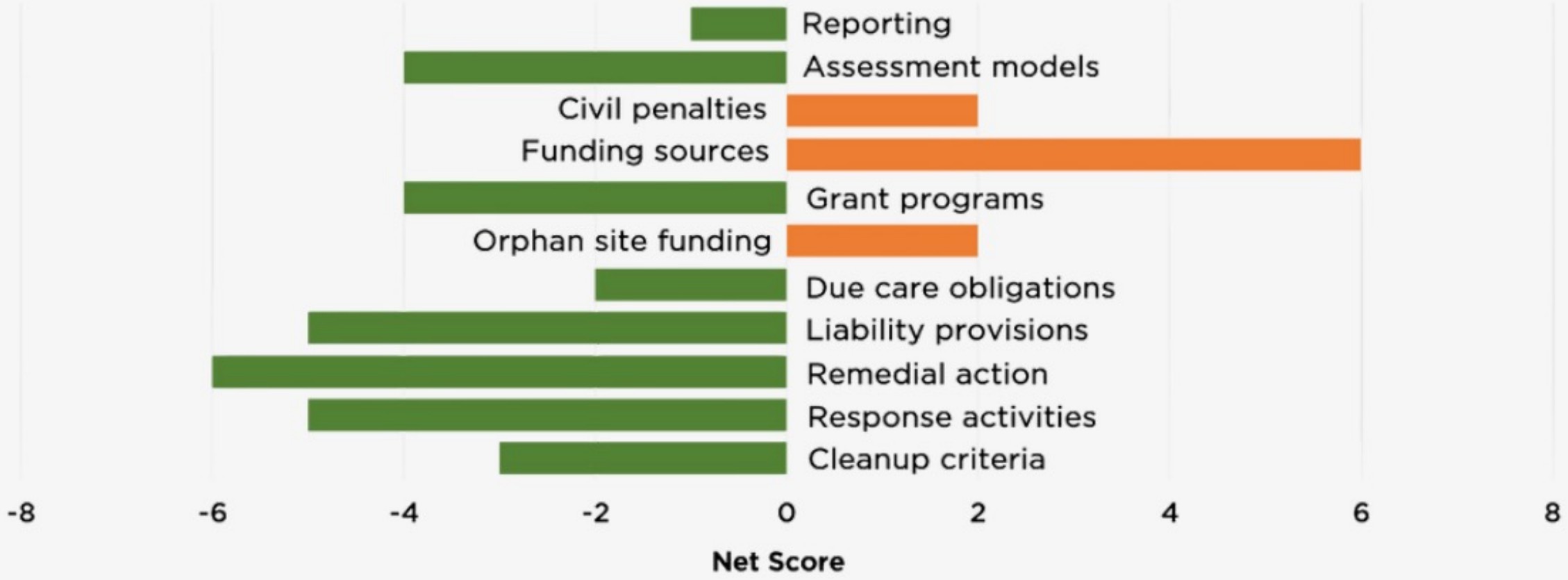
Net scores broken down by component categories:

Remediation Components: 82%

Legal Components: 64%

Administrative Components: 82%

Result summary, by key program components:



Takeaways

- Expanded components mostly related to funding arrangements
- Altering liability provisions, cleanup requirements, due care obligations, and reporting requirements → difficult to establish liability and exact payment
- Fundamental changes are needed to how we regulate and remediate sites

Policy Recommendations

- Strengthen monitoring and reporting requirements
- Expanding liability and reduce allowable exemptions
- Limiting the utilization of institutional controls over full remediation
- Alter cleanup criteria, shifting away from land-use categories
- Develop a new fund for Part 201

Thank you!

Any questions or comments?

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References

Brender, J. D., J. A. Maantay, and J. Chakraborty. (2011). "Residential Proximity to Environmental Hazards and Adverse Health Outcomes." American Journal of Public Health 101, no. 1 (Suppl 1): S37-S52. doi: 10.2105/AJPH.2011.300183.

Michigan Department of Environment, Great Lakes, and Energy (EGLE). “Part 201 Environmental Contamination Sites.” Retrieved from https://gis-egle.hub.arcgis.com/datasets/egle::part-201-environmental-contamination-sites/explore