

Remediation & Redevelopment

February 27, 2018

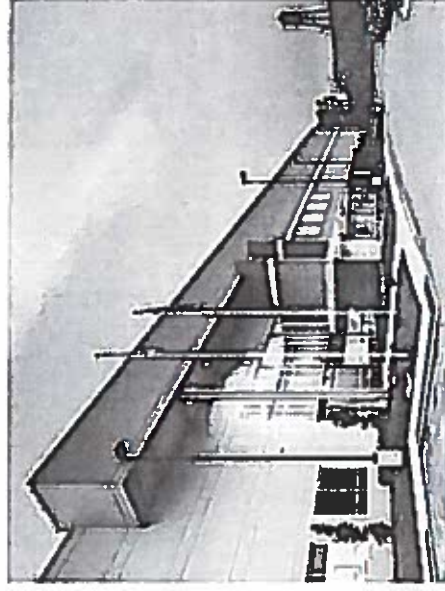
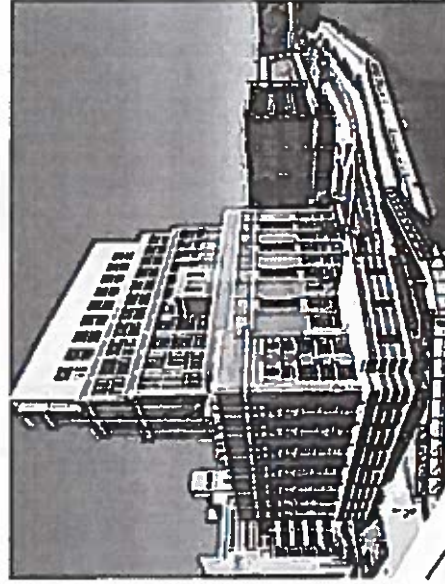
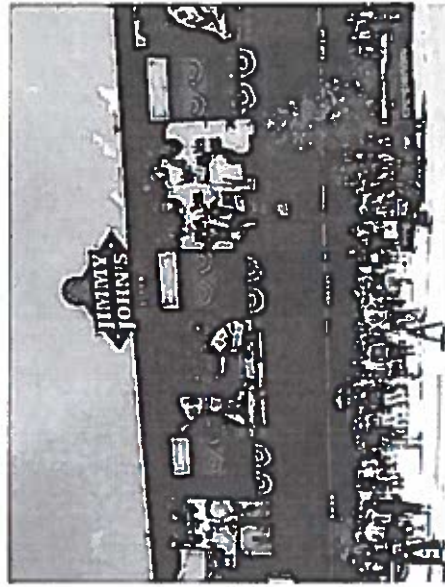
Amy Epkey, Administration Deputy Director

Sue Leeming, External Relations Deputy Director



Vision

Create a future where Michigan's contaminated properties are reliably managed, revitalized, and the environment is protected

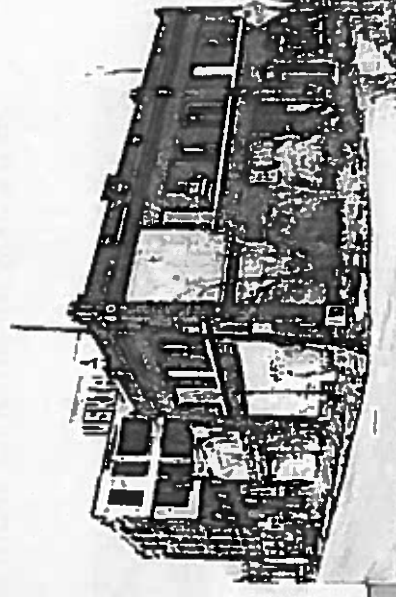
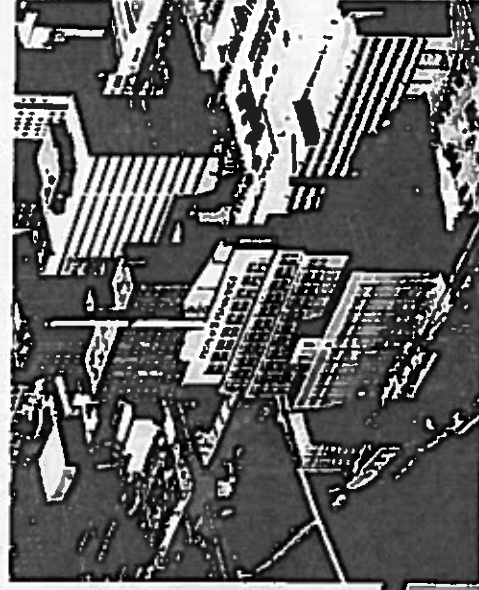


- collaboration
- compliance assistance
- partnerships



Cleanup Programs

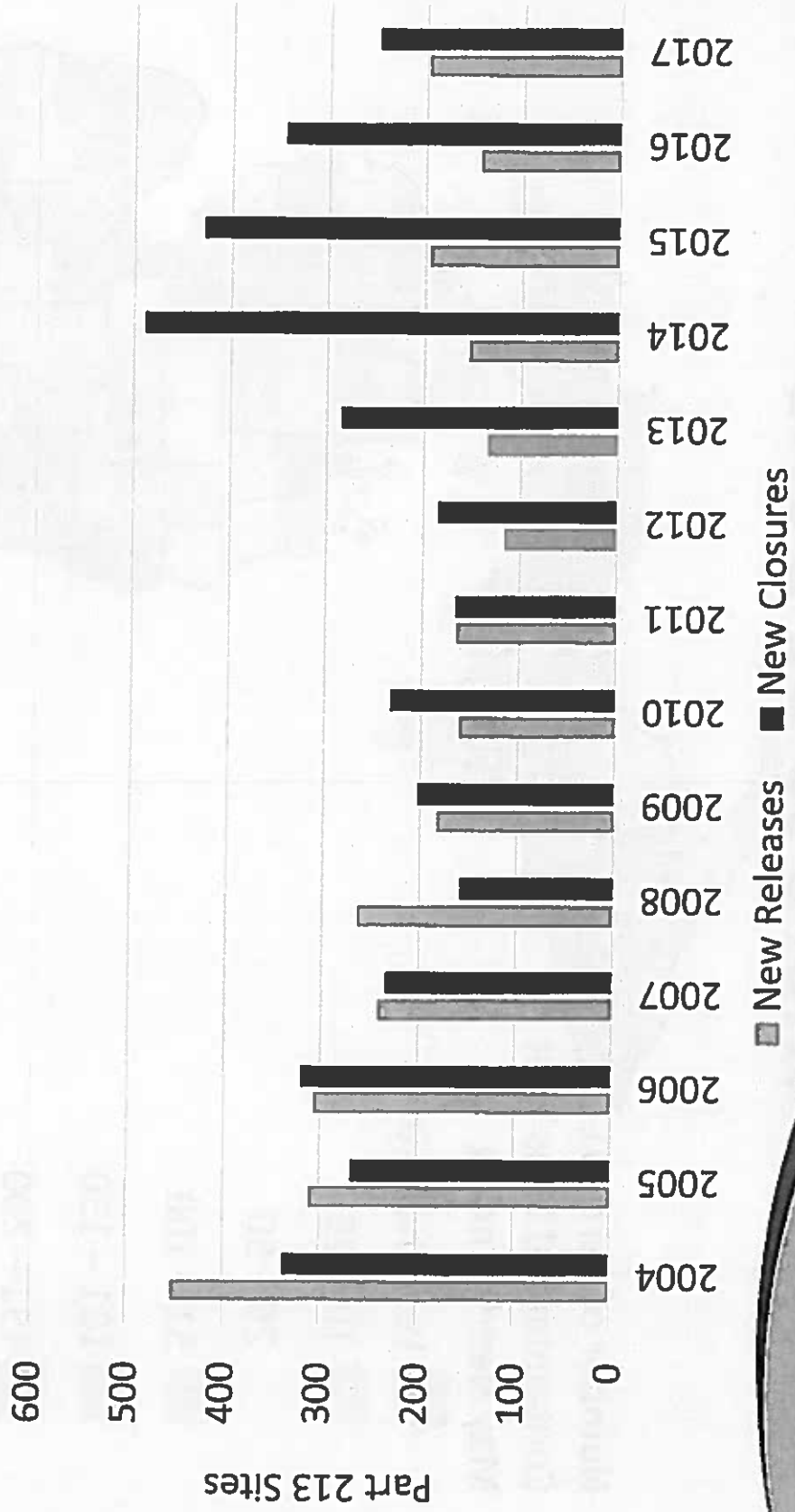
- NREPA Part 201 – Contaminated sites (excluding leaking underground storage tanks)
- NREPA Parts 213 & 215 – Leaking underground storage tanks
- Superfund – EPA highest priority sites



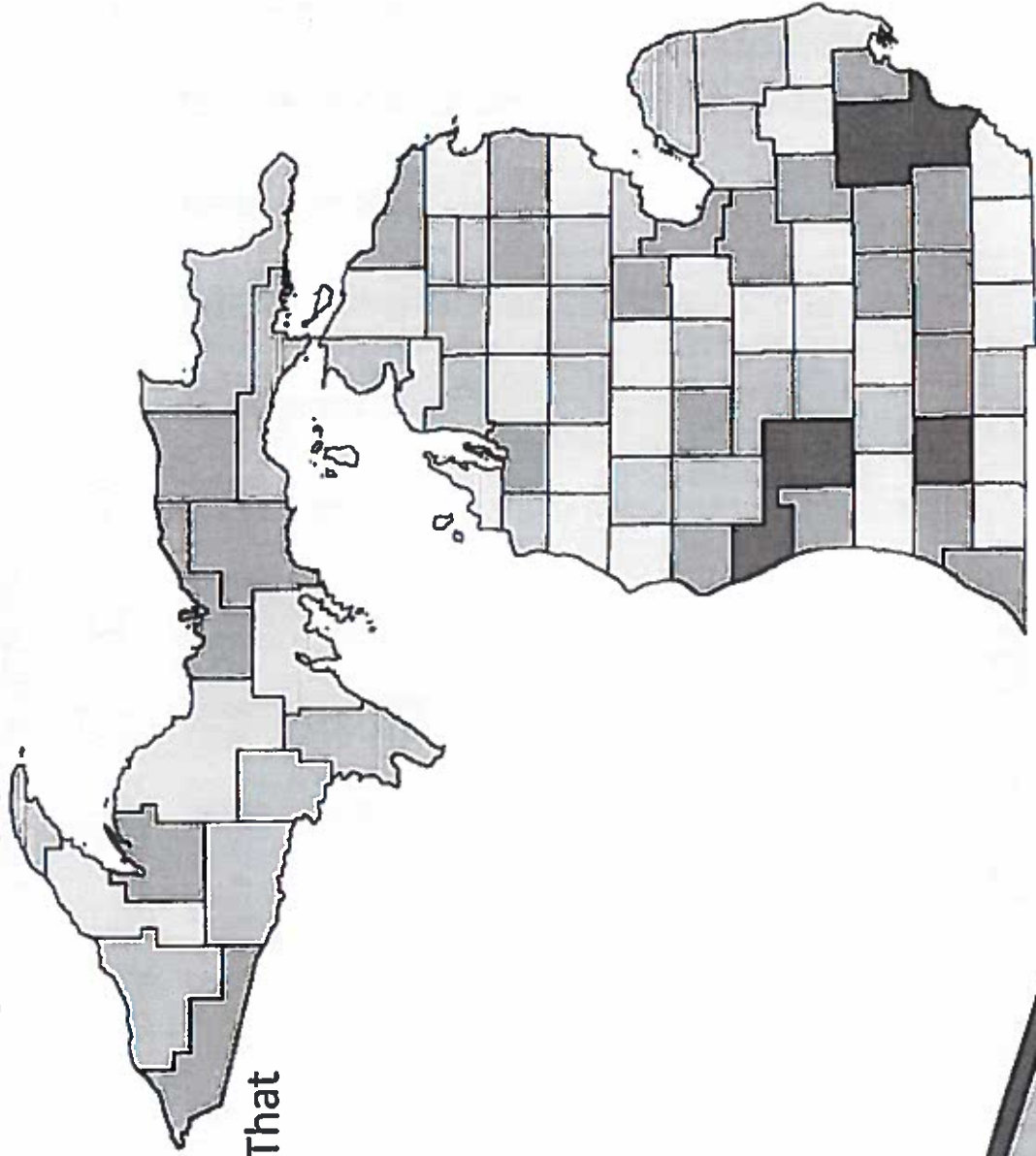
Cleanup Programs

Program	Examples of Sites	Funding
<p>NREPA Part 201: Contaminated Sites</p>	<p>Landfills, chemical plants, dry cleaners</p>	<p>\$17 million primarily for sites with liable party</p> <p>No funding for 3,000 + sites (previously funded by bonds)</p>
<p>NREPA Parts 213 & 215: Leaking Underground Storage Tanks</p>	<p>Gas stations, bus garages</p>	<p>\$50 million refined petroleum funds</p>
<p>Superfund</p>	<p>Kalamazoo River</p>	<p>\$6 million funding</p>

Closures vs Releases



More to be Done

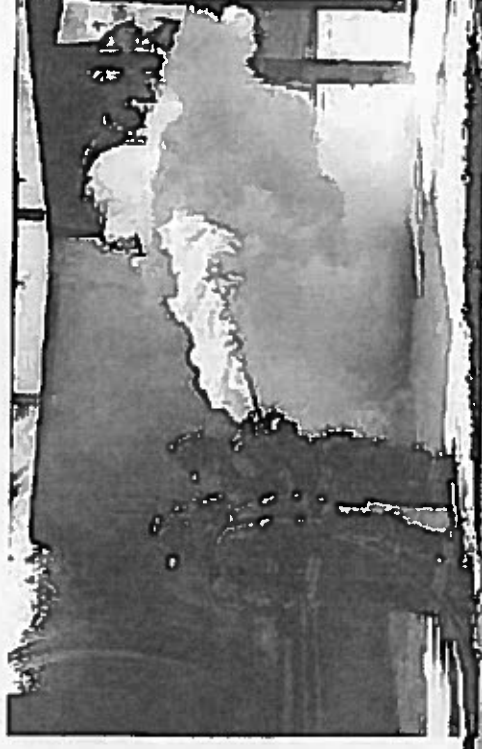


Number of Part 201 Contaminated Sites That May Need Funding

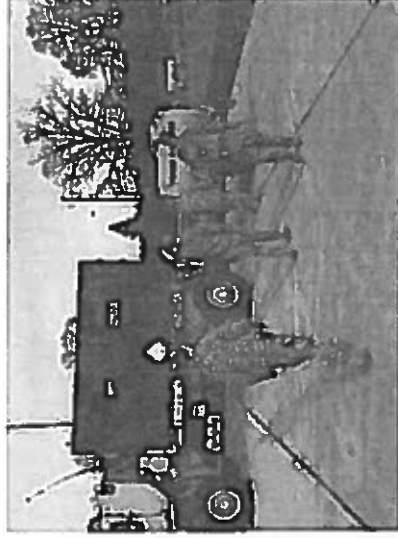
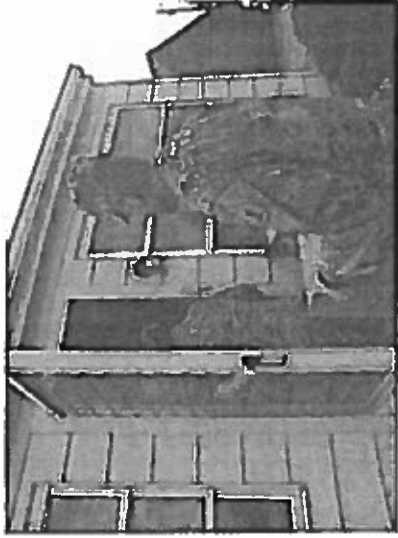
- Less than 10
- 10 - 25
- 26 - 50
- 51 - 100
- 101 - 150
- 151 - 200
- 200 +

PFAS – What is it?

- Perfluoroalkyl & polyfluoroalkyl substances
- Manmade compound that breaks down slowly
- Used in waterproofing, firefighting foams, household cleaning products, and many more items
- High concentrations and high exposure levels may result in public health risks



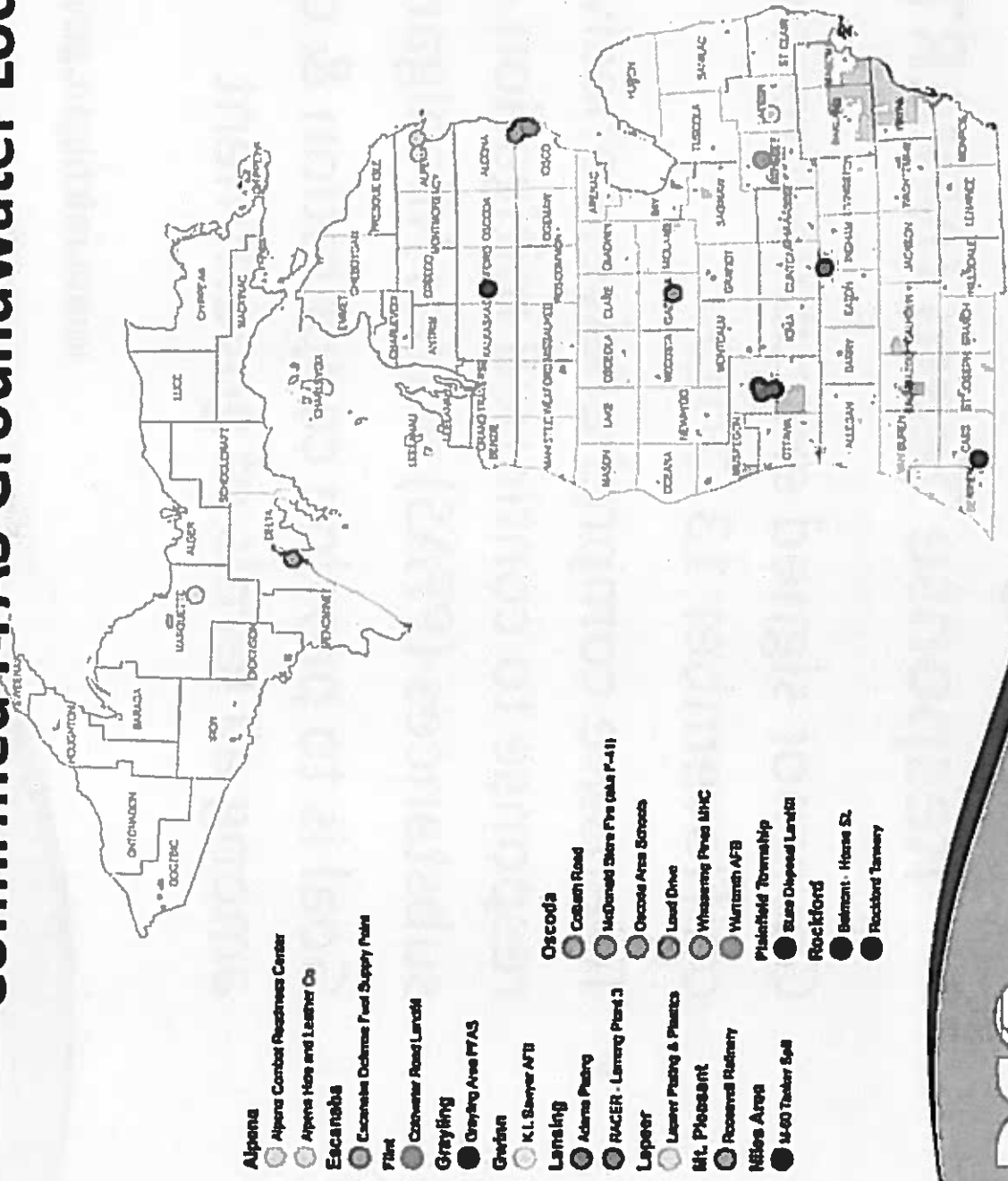
PFAS National Issue



Blades, Delaware - February 2018
Public Water Supply Greater Than EPA Lifetime Health Advisory of 70 ppt



Confirmed PFAS Groundwater Locations



Michigan PFAS Action Response Team (MPART)

- Governor signed executive directive 2017-4 on November 13, 2017
- To ensure comprehensive, cohesive, timely response to continued mitigation of PFAS substances (PFAS) across Michigan
- Goal is to provide cooperation & coordination among all levels of government

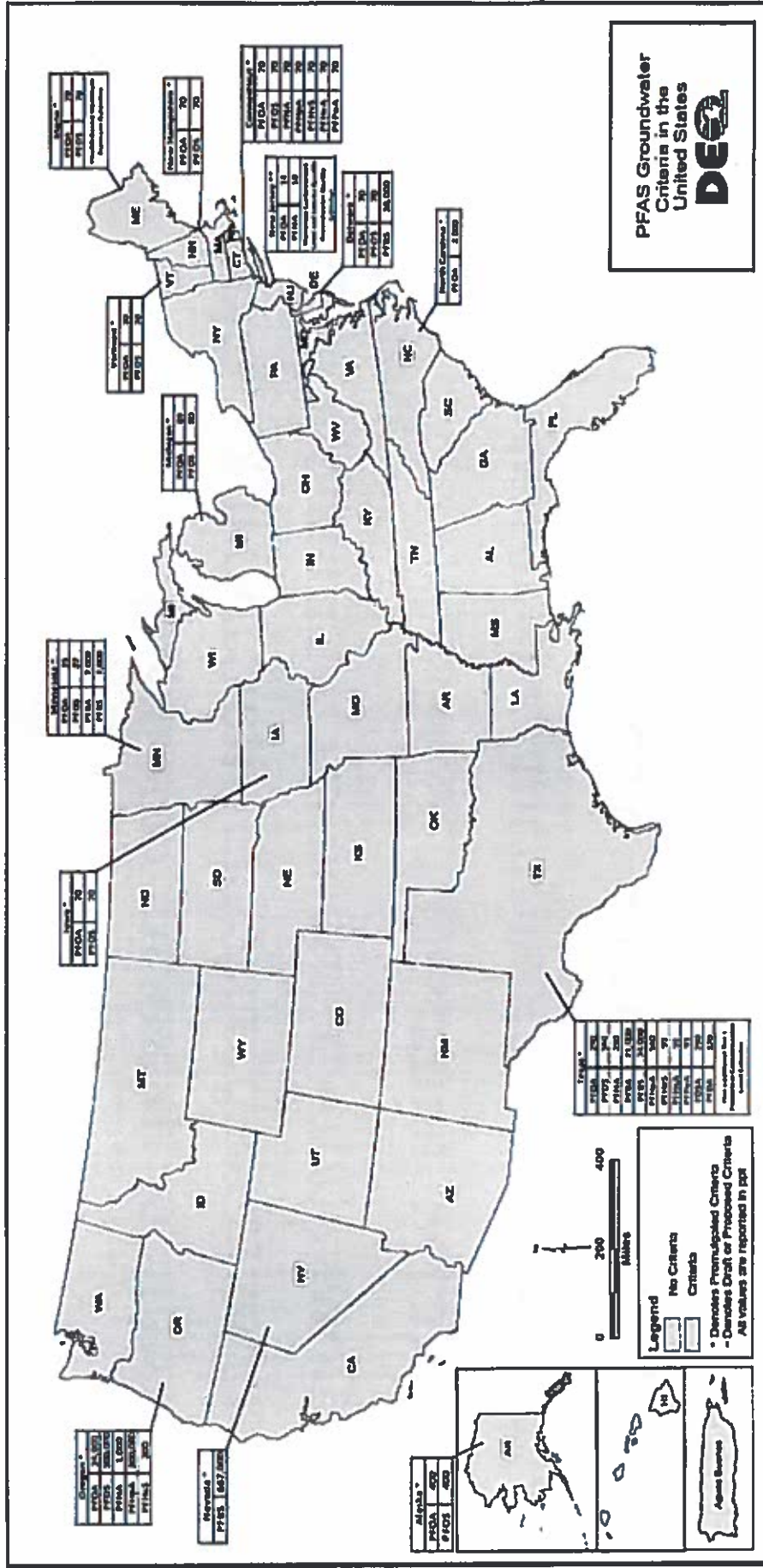
www.michigan.gov/pfasresponse



PFAS Criteria

- 70 ppt PFOA and PFOS combined
- Based on EPA health advisory levels
- Effective January 10, 2018
- Allows state to mandate responsible parties conduct response activities and take legal action for those not complying

PFAS Groundwater Criteria in the United States



PFAS Federal & State Agency Drinking Water Criteria Levels

Agency	Drinking Water Criteria	Year	PFAS (ng/L)
USEPA	Drinking Water Lifetime Health Advisory	2016	PFOA – 70 PFOS – 70
Michigan	Drinking Water Criteria	2018	PFOA – 70 PFOS – 70
New Jersey	Health-Based Drinking Water Value	2017	PFOA – 14
Vermont	Drinking Water Health Advisory	2016	PFOA – 20 PFOS – 20
Minnesota	Health-Based Value	2017	PFOA – 35 PFOS – 27
Delaware	Groundwater Screening	2016	PFOA – 70 PFOS – 70
Maine	Maximum Exposure Guidelines	2014	PFOA – 100
Texas	Groundwater Protective Concentration Level	2016	PFOA – 290 PFOS – 560
North Carolina	Interim Max Allowable Concentration	2006	PFOA – 2000

DEQ PFAS Strategy

- Establish laboratory
- Test public drinking water supplies
- Sample surface water
- Inspect landfills
- Address biosolids



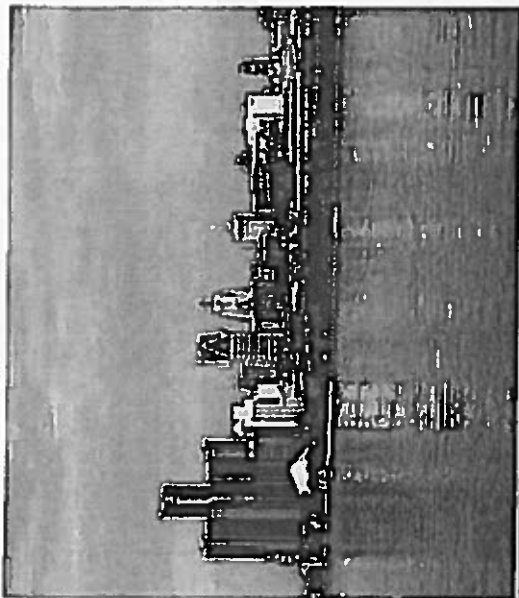
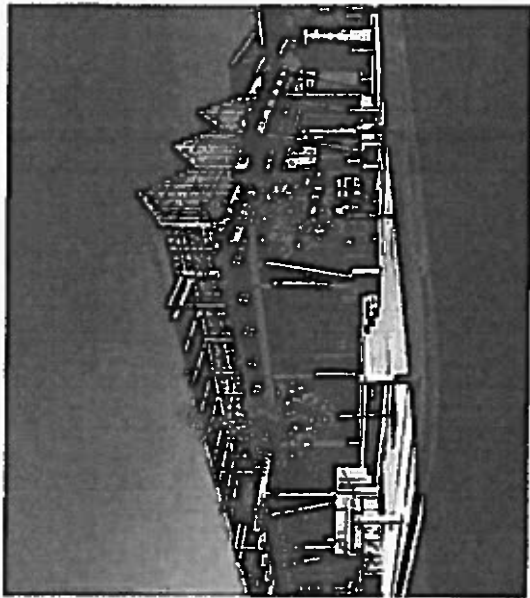
201 Criteria

- Provide cleanup guidelines for 300 hazardous substances
- Criteria last updated in 2002
- Need to update based on current science
- Collaborative stakeholder engagement process occurred

Summary

- Remediation & redevelopment programs
 - Address environmental risks
 - Protect public health
 - Adjust to emerging issues
 - Support brownfield redevelopment
- Renew Michigan's Environment initiative is top priority to assure future success

Our Legacy Forward



DEQ

Questions

