

Per- and Polyfluoroalkyl Substances

Michigan Department of Environmental Quality

January 11, 2018

PFAS

****Per- and Polyfluoroalkyl Substances****

- USEPA designation - national emerging contaminant
- PFAS - suite of chemicals, thousands of applications
- Used in industrial, food, and textile industries
- Characteristics
 - Incredibly stable
 - Break down very slowly
 - Highly soluble
 - Easily transferred through soil to groundwater

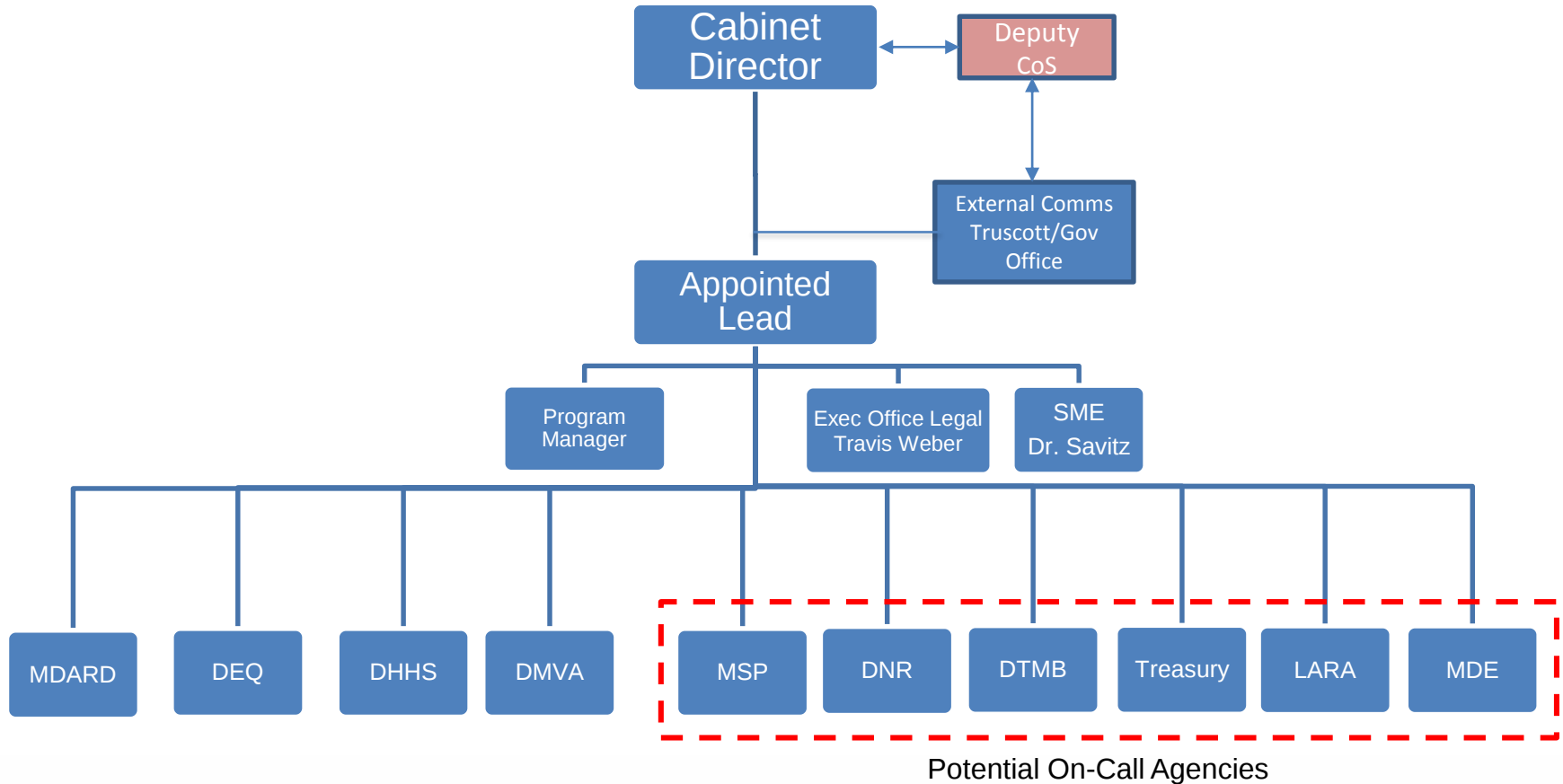
Statewide Concerns

- PFAS contamination identified in several locations in Michigan
- Currently – 14 locations, 29 sites
- Sources include:
 - Current and former military installations
 - Tanneries
 - Plating operations
 - Legal and illegal disposal sites

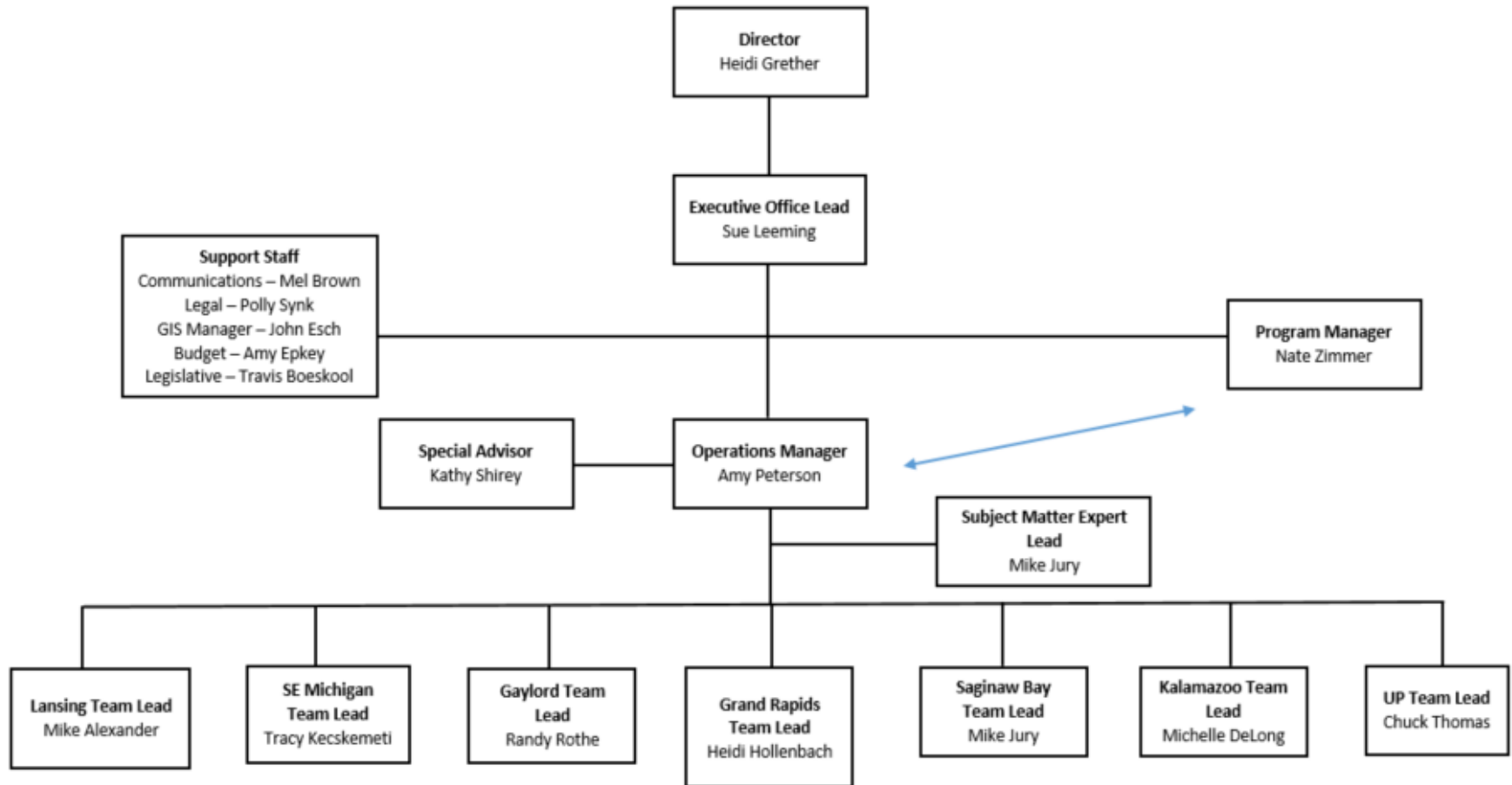
Michigan PFAS Action Response Team (MPART)

- Governor Snyder signed ED 2017-4 on November 13
- Design: ensure comprehensive, cohesive, timely response to continued mitigation PFAS substances (PFAS) across Michigan
- Goal: provide cooperation and coordination among all levels of government

Michigan PFAS Action Response Team



DEQ Action Response Team



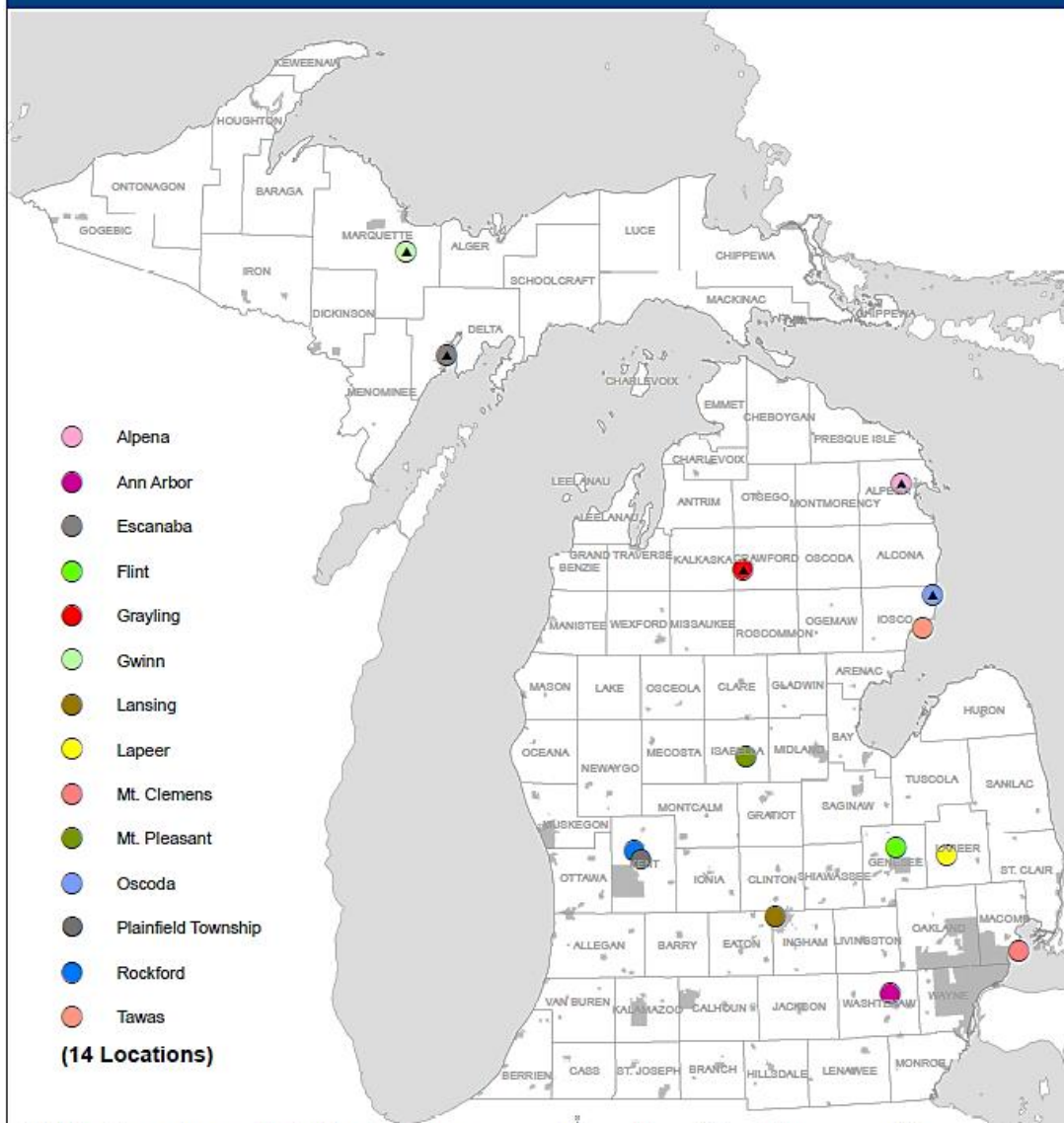
Confirmed PFAS Locations

Alpena
Ann Arbor
Escanaba
Flint
Grayling
Gwinn
Lansing
Lapeer
Mt. Clemens
Mt. Pleasant
Oscoda
Plainfield Township
Rockford
Tawas



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Confirmed PFAS Locations



* Multiple sites may be associated with each location



0 25 50 100
Miles

▲ Military Sites PFAS sites on or impacted by active or former military facilities

December 11, 2017

Confirmed PFAS Locations/# sites

Alpena/2

Ann Arbor/1

Escanaba/1

Flint/2

Grayling/3

Gwinn/1

Lansing/2

Lapeer/2

Mt. Clemens/2

Mt. Pleasant/1

Oscoda/7

Plainfield Township/2

Rockford/2

Tawas/1

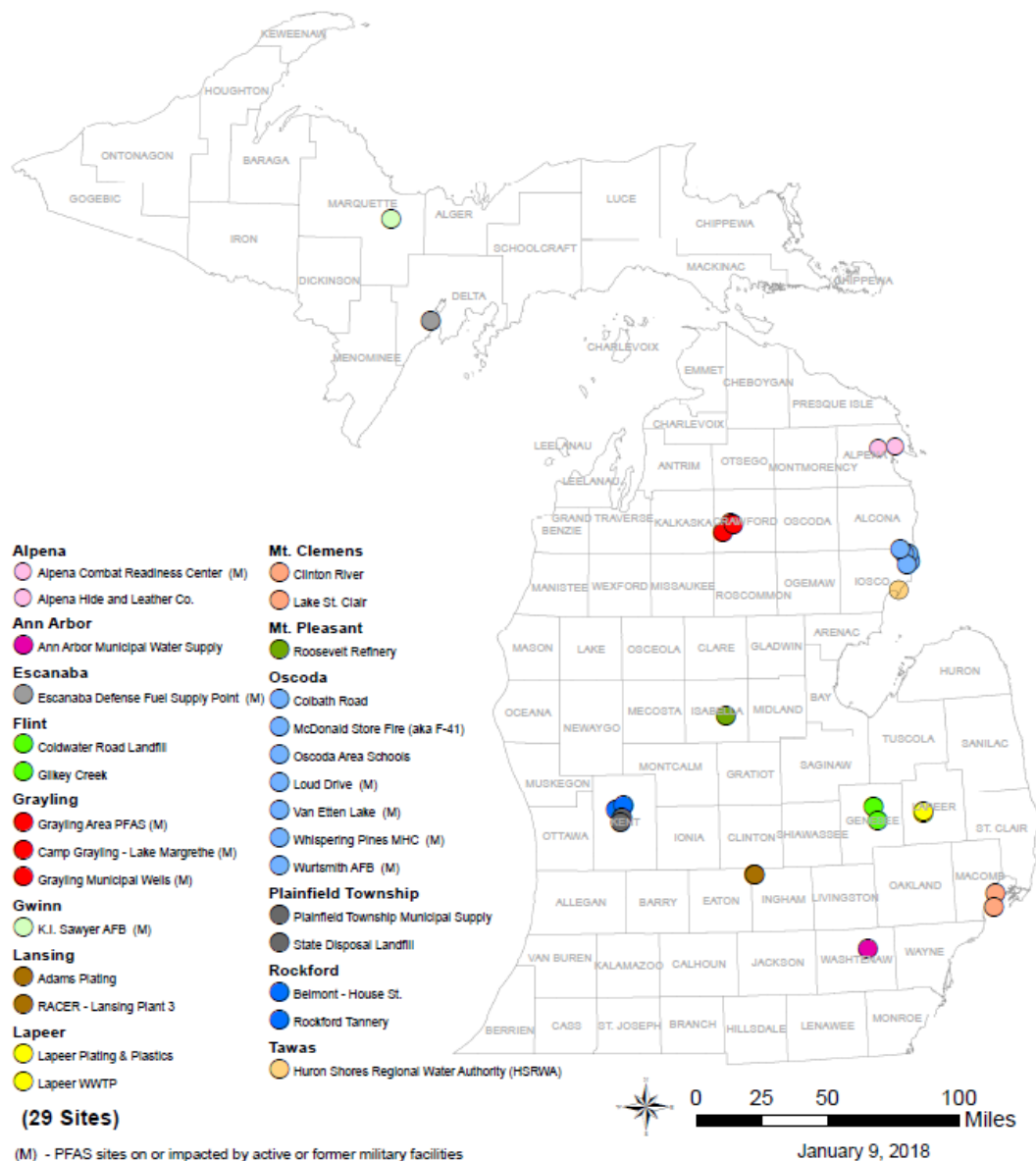
14 locations

29 sites



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Confirmed PFAS Sites



Challenges

- Test analysis time frame
- Unsettled science
- Funding

DEQ's PFOA and PFOS 70 ppt Drinking Water Criterion

- PFAS criterion – 70 ppt PFOA and PFOS combined, established under Part 201
- Took effect Wednesday, January 10, 2018
- Allows MDEQ to:
 - Mandate responsible parties conduct activities
 - take legal action who doesn't comply with MDEQ's cleanup rules
- 70 ppt comes from the health advisory value set by EPA for PFOA and PFOS.

Next Steps

- Stand up state laboratory capabilities
- MPART
- PFAS Multiagency Technical Workgroup
- Scientific Advisory Committee
- Local Public Health Advisory Committee
- Secure ongoing financial support
- Web site: www.michigan.gov/pfasresponse