

# Per- and Polyfluoroalkyl Substances

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## 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

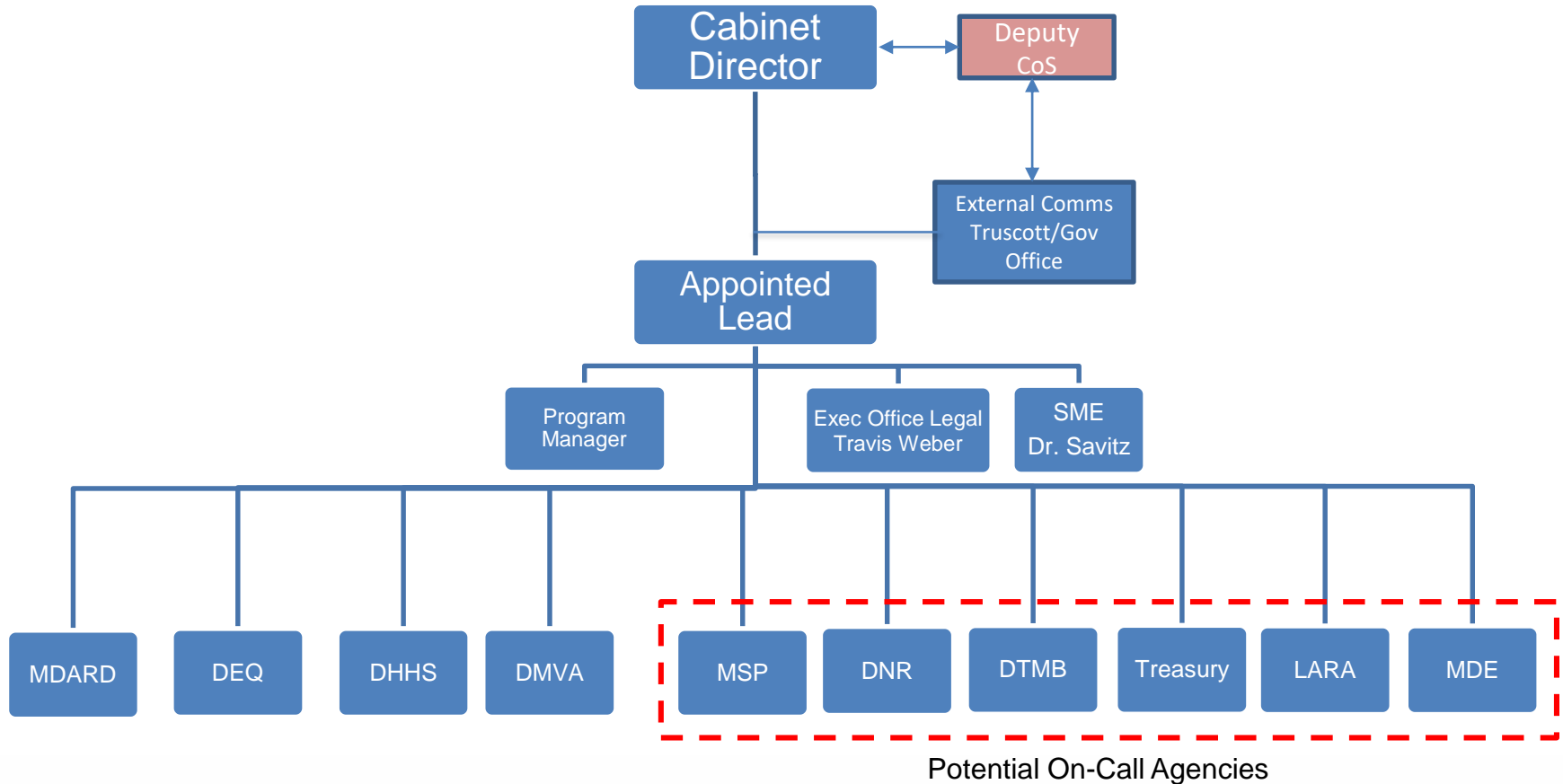
# Statewide Concerns

- 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

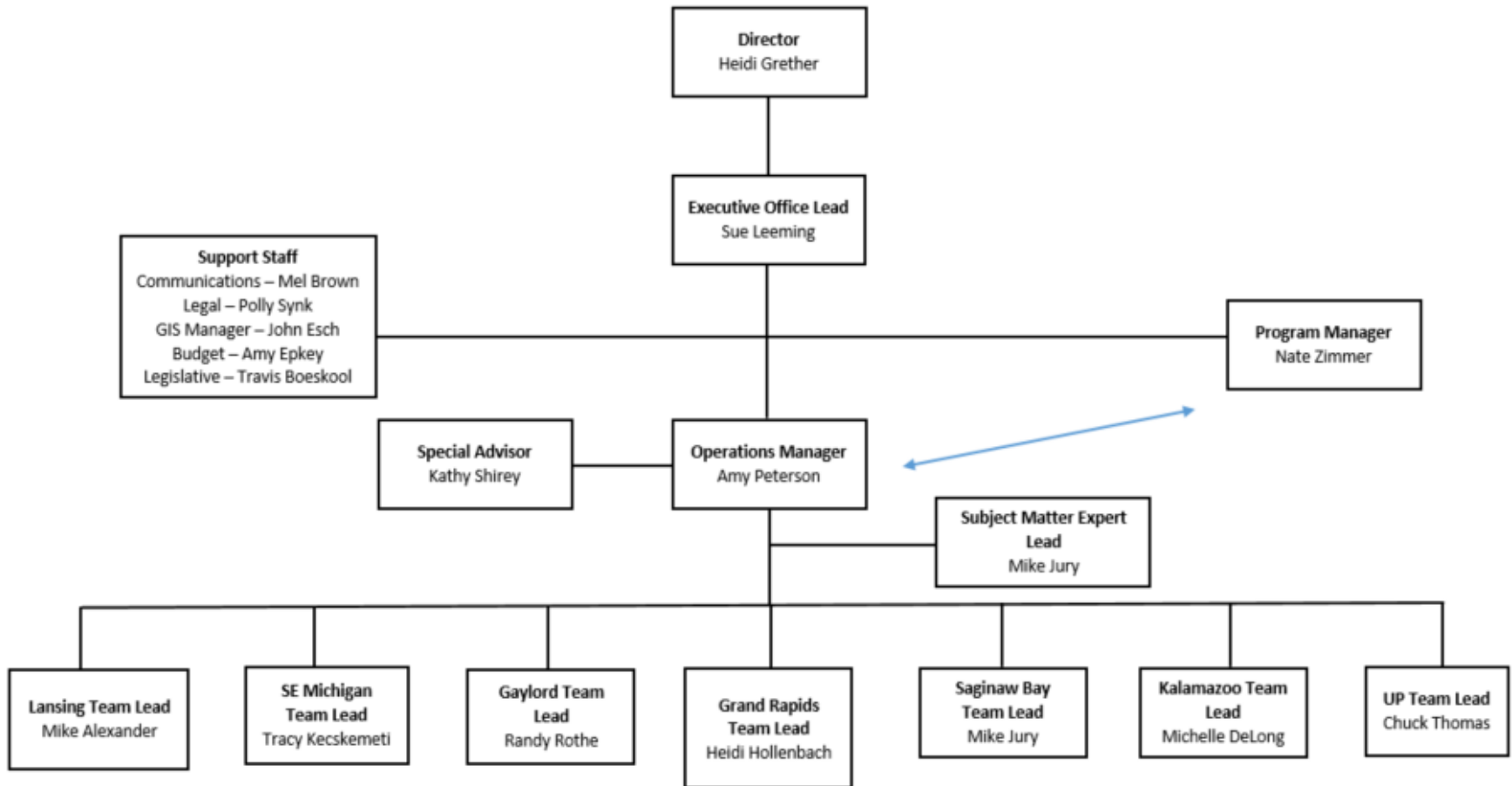
# Michigan PFAS Action Response Team (MPART)

- 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



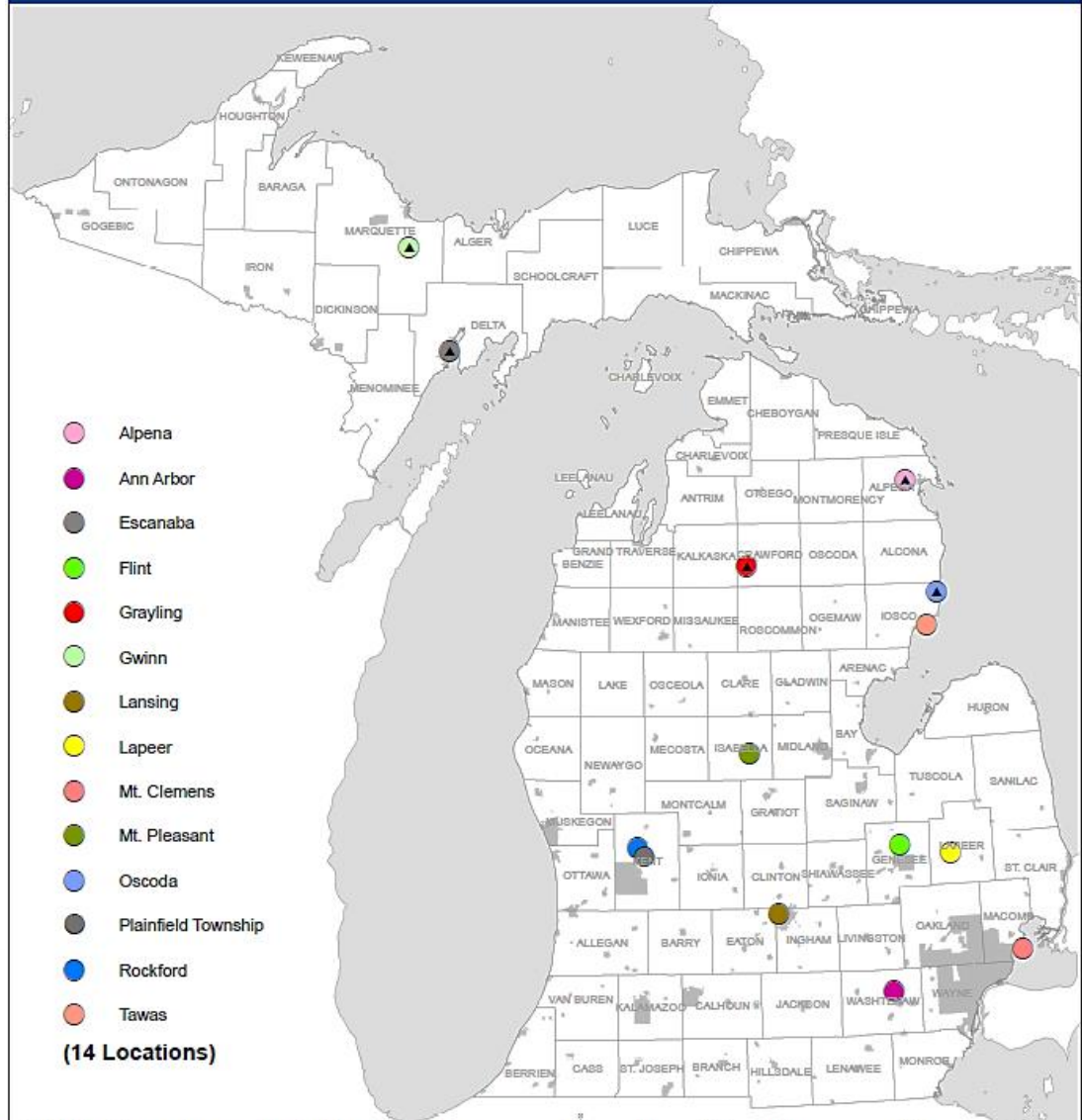
# DEQ Action Response Team





# Confirmed PFAS Locations

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



(14 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

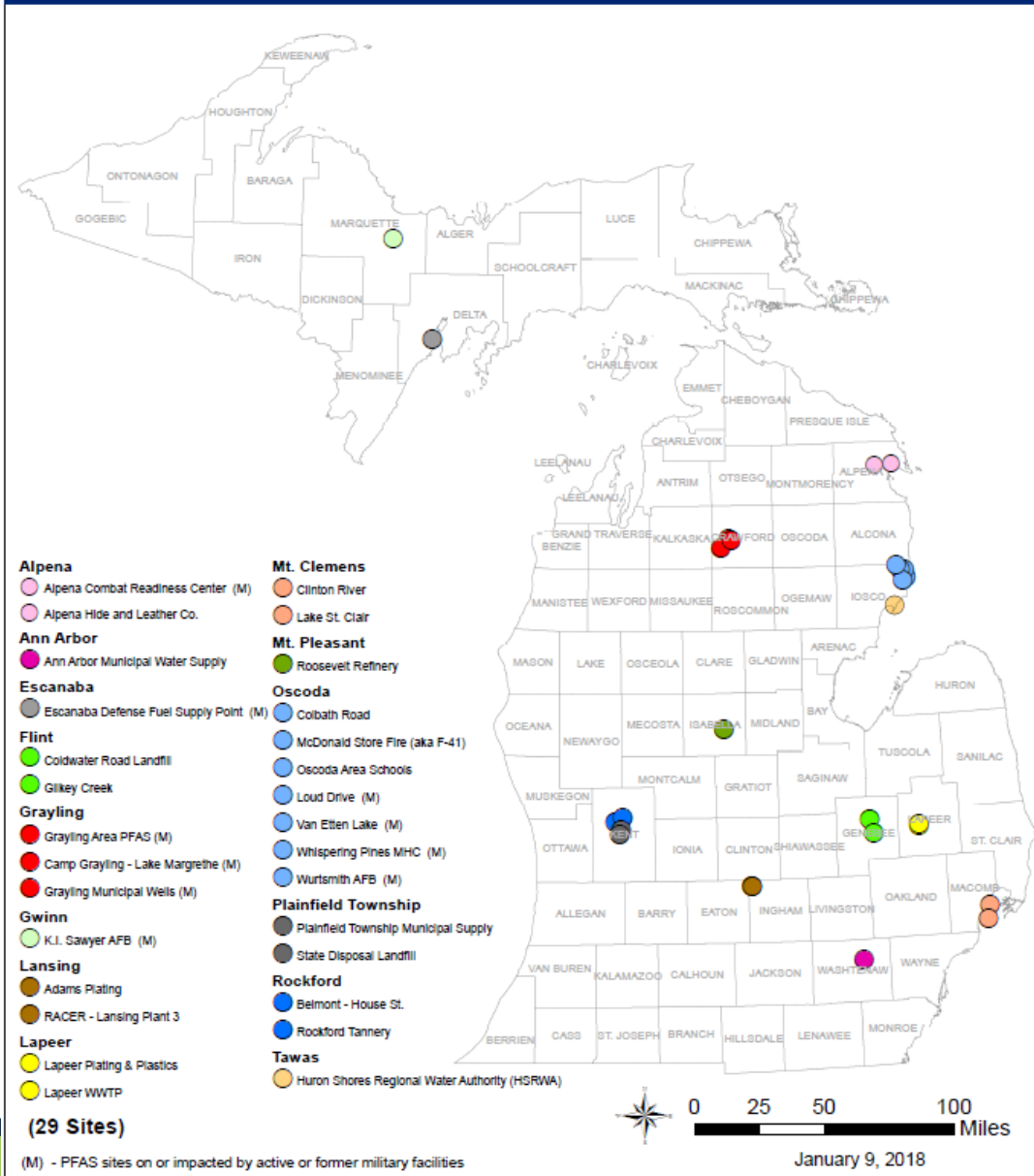




# Confirmed PFAS Locations/# sites

- 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





# 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](http://www.michigan.gov/pfasresponse)