MPART

MICHIGAN PFAS ACTION RESPONSE TEAM

FAST FACTS: Fiscal Year 2024 Update

In fiscal year (FY) 2024, the Michigan Legislature continued to support the state's response to PFAS by appropriating funding across the seven state agencies that make up the Michigan PFAS Action Response Team (MPART). This funding, from many sources, allowed MPART to continue to be a national leader in addressing PFAS.

As of the end of FY 2024, MPART had identified **296 MPART PFAS Sites**. A PFAS site is an area where PFAS contamination has been found in groundwater above Michigan's criteria, and the source of the contamination has been identified (see map below). As of the end of FY2024, MPART had also added **nine Areas of Interest** (AOI) for a total of 30, which are locations where groundwater is over criteria, the source[1] is unknown, and MPART is conducting drinking water sampling. MPART continues to actively conduct investigations at dozens of other areas around the state where the sources of the contamination are still unknown.

MPART's Process

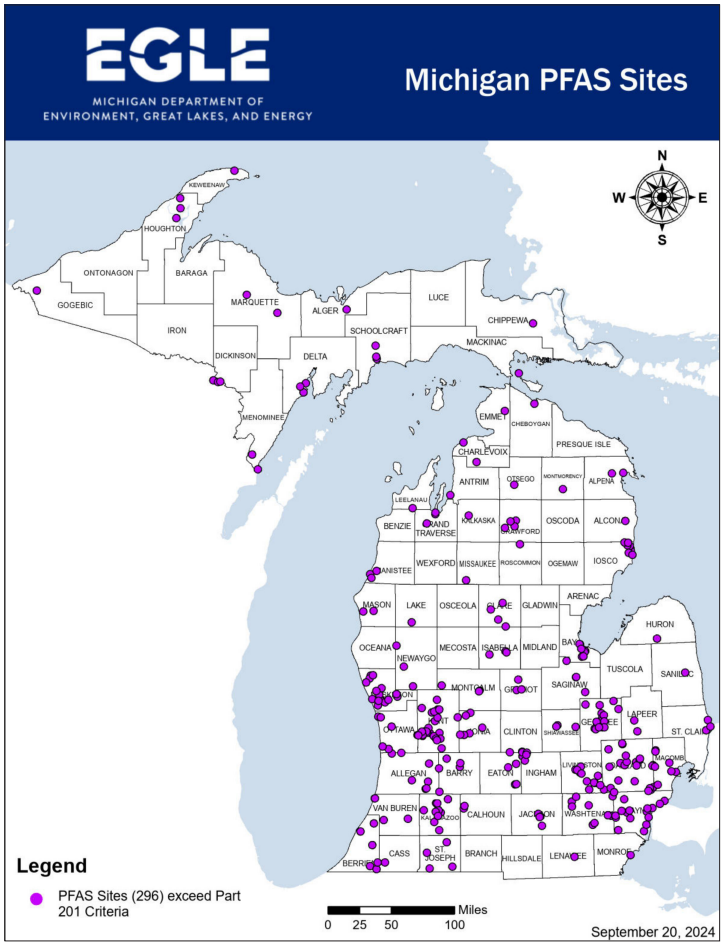
MPART is unique: for every new site and AOI, **drinking water exposure** is evaluated.

MPART works with DHHS and local health departments to:

- Determine if there are residential drinking water wells near the site or Area of Interest.
- Review well records to **identify wells** that are potentially at risk of PFAS contamination.
- Send letters to obtain permission to sample and conduct drinking water sampling.
- **Share results** with well owners and agencies and provide education and sometimes PFAS-reducing point-of-use (POU) filters to residents.
- Expand sampling areas if results suggest additional potential impact to other drinking water wells.

For each new site and AOI, MPART conducts **public outreach** to ensure awareness among:

- Local health and local officials
- Legislators
- Tribal Governments
- Local residents as requested by local officials



[1] *"Source of contamination" means contamination is found on-site and is contaminating groundwater at the site. It does not necessarily mean that PFAS-containing materials were made or used at the site, such as at wastewater treatment plants and landfills.*

Transparency and Communicating with the Public

- **Citizen Advisory Workgroup (CAWG)** members met **10 times** with MPART, in addition to meetings of several subcommittees.
- Continued to update the **MPART Geographic Information System** online, which provides PFAS sites, surface water data, public drinking water data, and, as of FY2024, fish contaminant monitoring data on an interactive online map.
- Added a **"Resources for Residents"** page to the MPART website that provides visitors with information on PFAS basics, residential well sampling, consumer products information, and more.
- Weekly **MPART Update GovDelivery emails** were sent to over 7,200 subscribers.
- MPART hosted and/or attended 25 different **public meetings**, with the goal of raising awareness and answering questions in communities about PFAS contamination.

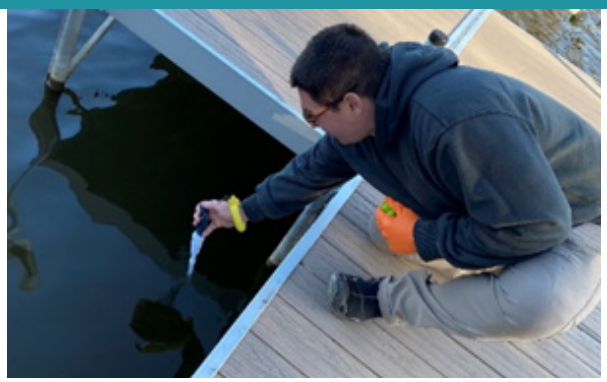
MPART PFAS Collaboration

MPART is regularly called upon to present and collaborate with other states, federal agencies, universities or advocacy organizations. In 2024, MPART presented 19 different times. Notable collaboration events included:

- MPART hosted the December 2023 **Great Lakes PFAS Summit**: A virtual 3-day conference which brings together PFAS experts, researchers, consultants, regulators and citizens from around the world.
  - There were over 2,100 attendees from all 50 states and 8 different countries.
- Presented to the **Detroit River** Canadian Cleanup & St. Clair-Detroit River System Initiative Partners.
- Collaborated with the US Department of Agriculture (USDA), the US Environmental Protection Agency (EPA) & the US Food and Drug Administration (FDA) on **PFAS in agricultural settings**.
- Collaborated with **Great Lakes states** by participating in the Great Lakes PFAS Task Force, and the Great Lakes Water Quality Annex 8 group.
- Collaborated with several **universities**, including:
  - Central Michigan University
  - University of Michigan
  - Western Michigan University
  - Michigan State University, Center for PFAS Research
- Testified in front of the **State of Minnesota Legislature**.
- Assisted the **State of Maine** on an AFFF release from an airport hanger.
- Presented for the **US Army Corps of Engineers (USACE)** Great Lakes Dredging Team
- Collaborated and communicated with **tribal governments** to collect data and analyze results of research on bile acid in fish and its relation to PFAS, including:
  - Bay Mills Indian Community (BMIC)
  - Keweenaw Bay Indian Community (KBIC)
  - Chippewa Ottawa Resource Authority (CORA)
  - Great Lakes Indian Fish and Wildlife Commission (GLIFWC)

Monitoring and Addressing Sources of PFAS Around Michigan

- MPART is administering 18 grants that support PFAS testing and monitoring at airports
- Reviewed and responded to **62 foam sightings** on many different Michigan lakes and streams. Reports are used to help guide future lake and stream sampling efforts.
- Collected **1,385 fish samples** from **63 different water bodies** to determine the need for fish consumption advisories.
- Collected **296 water samples** from lakes and streams from 9 different watersheds
- Received a **Great Lakes Restoration Initiative (GLRI) grant** to conduct fish contaminant monitoring in ten water bodies with youth fishing events in FY25.
- Collaborated with the U.S EPA, tribal governments, and other Great Lakes states to determine the impact of **bile acids on fish tissue PFAS analysis**.
- Partnering with the U.S. Fish and Wildlife Service, other state agencies, and University partners to determine the impact of PFAS on **bald eagle and herring gull populations**. Fish samples were collected from Lake Huron and Lake Superior and select tributaries for a partial food web study. Eaglet blood and herring gull eggs were collected for contaminant analyses. Results are expected in FY25.
- Rolled out updates to the **Land Application of Biosolids Containing PFAS Interim Strategy**.
- Continued to review legacy land applications in Michigan.
- Continuing to work with 75 industrial facilities to identify, characterize, and address PFAS in discharges to surface waters of the state.
- A total of **139** municipal wastewater treatment plants (WWTPs) have monitoring requirements for PFAS.
- As of October 2024, **82** industries that discharge to municipal WWTPs have installed pretreatment and/or have achieved significant reductions through cleaning, equipment replacement, eliminating PFOS-contaminated processes or materials, limiting discharge to specific WWTPs, or isolating contamination. These actions are significant because WWTPs are not designed to treat PFAS. The pie chart below shows the types of industry that have taken action.



Surface water sample collection

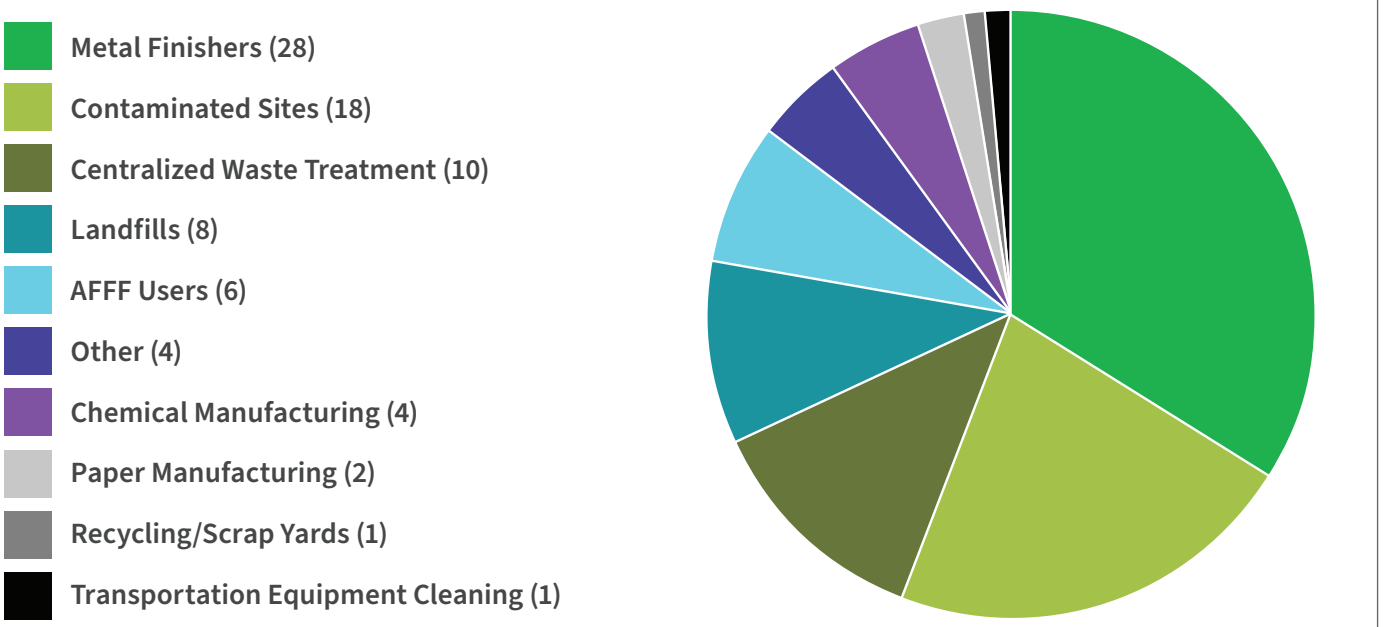
A bald eaglet

Fish being caught for sampling

Smelt collected for sampling

Protecting Drinking and Surface Water

Industries with Pretreatment/Reduction Efforts Prior to Discharging to WWTPs



Wastewater Treatment Plant (WWTP) Grants

In 2024, EGLE's Water Resources Division (WRD) administered grants to several municipalities to support their work to **reduce PFAS in Wastewater Treatment Plants (WWTPs)** effluent, biosolids, and/or groundwater. In addition to the three ongoing grants that began in FY2023, five additional grants were implemented. These grants are funded through the federal Bipartisan Infrastructure Investment and Jobs Act.

FY2024 Grants

- **Bridgeport Charter Township** was awarded $112,507 to assess potential PFAS source areas in the wastewater collection system and at the treatment plant. A plan will be developed to address sources in the collection system and ultimately minimize impacts to the environment and receiving surface waters.
- **Hamburg Township** received $115,131 to assess potential PFAS sources in the wastewater collection system, and evaluate the extent of the PFAS groundwater plume and possible venting to surface water.
- **Multi Lake Water and Sewer Authority** was awarded $192,806. They will use the grant money to evaluate the PFAS impact to groundwater from the rapid infiltration basins at the WWTP and assess potential PFAS source areas in the wastewater collection system and within the treatment plant.
- **The City of Pinconning** received $157,806 to assess potential PFAS source areas in the wastewater collection system and at the WWTP. In addition, the funding will be used to develop a plan to address the sources of PFAS to minimize impacts to the environment.
- **The Village of Kalkaska** will use the $238,000 they received to assess potential PFAS sources in the Village of Kalkaska collection system, evaluate the extent of the PFAS groundwater plume that has impacted residential homes down-gradient to the WWTP discharge area, and evaluate possible PFAS transformation in the wastewater treatment plant.

FY2023 Grants – Work that was Ongoing in FY2024

- **The City of Rockford** is using their $234,000 grant to assess potential PFAS source areas in the city, and potentially begin planning for corrective actions.
- **The City of Cedar Springs** is using their $234,000 grant to assess potential PFAS source areas and groundwater impacts to the Russell Ridge neighborhood, further evaluate the potential PFAS groundwater impacts at the city of Cedar Springs WWTP discharge field and former wastewater lagoon area and conduct a study of the WWTP and sanitary sewer collection system.
- **The City of Bronson** is using their $234,000 grant to assess potential PFAS source areas in the collection system and at the WWTP.

Sewer collection system PFAS sampling

Filters and Residential Well Sampling:

- Sampled **more than 800** drinking water wells that had not been previously sampled, doubling the amount sampled in FY2023.
- Re-sampled more than **1,230** drinking water wells that had been sampled in previous years.
- Provided more than **340** PFAS-reducing filters to impacted residents.
- Provided more than **1,355** replacement cartridges for PFAS-reducing filters.

One of EGLE's contractors collecting a drinking water sample

Proactive Sampling

In addition to sampling potentially at-risk drinking water wells near known PFAS sites, MPART also conducts **proactive sampling of drinking water wells** near sites that are likely to have groundwater contaminated by PFAS.

In the spring of 2024, EGLE received funding from an EPA Small or Disadvantaged Community grant to collect residential well samples in the **City of Jackson** (Jackson County) and **Blair Township** (Grand Traverse County) due to their proximity to several potential PFAS sources, such as airports, fire training areas, and industrial sites. Between these two areas, EGLE's contractor, AECOM, has sent out **over 500 letters** to residents requesting to sample their drinking water wells. As of late September 2024, AECOM had received permission to sample over 75 of these homes.

Health: Research and Biomonitoring

The North Kent County Exposure Assessment is an investigation to understand exposure to PFAS in the Belmont and Rockford areas of Kent County. Over 400 adults and minors participated. Data collection was completed in 2019. All participants learned their blood PFAS levels. The first report of findings was published in 2020 and a second report was published in 2024. The 2024 report can be found here: North Kent County Exposure Assessment - Report 2

The Michigan PFAS Exposure and Health Study (MiPEHS) is a longitudinal cohort study designed to understand the effects of PFAS exposure on health. Over 1,600 people have enrolled in MiPEHS so far. The second phase of data collection has ended and the third and final phase will begin in 2025. All participants have learned their blood PFAS levels and health test results, from each phase they joined. The first summary report of findings has been published, and more publications are underway.

The Multi-site Health Study (MSS) is a national cross-sectional study designed to research the effects of PFAS exposure on health. Over 600 Michiganders joined others from around the US to participate. Data collection for MSS has ended and data analysis is underway. All participants have learned their blood PFAS levels and the results of their health tests. Publications are underway.

The PFAS in Firefighters of Michigan Surveillance (PFOMS) project is a statewide initiative with the primary goal of determining blood concentrations of PFAS in Michigan firefighters. Over 1,000 firefighters were enrolled before the end of data collection in September 2023 and all participants have learned about their blood PFAS concentrations. The surveillance report with aggregate findings is currently in review and anticipated to come out sometime in 2025. Additional data analysis is underway.

The Michigan Chemical Exposure Monitoring project is a statewide biomonitoring surveillance effort with the goal of characterizing the amount of 197 chemicals – including lead, mercury, and PFAS – in the blood and urine of adult Michiganders. Recruitment started in September 2022 and was completed in July 2024; 1,786 Michigan adults participated. Initial findings from Cycle 1 will be available in 2025. CDC awarded funds to MDHHS to complete another cycle of data collection for MiChEM in 2025 and 2026. Participants will learn their results for PFAS and other environmental chemicals.

The Oscoda Area Exposure Assessment is an investigation to understand exposure to environmental chemicals, including PFAS, among residents of the Oscoda area. Over 900 Oscoda area residents are enrolled in the project. Recruitment and data collection is ongoing and will end in December 2024; analysis and aggregate reporting will begin in 2025. Participants will be mailed their results for PFAS and other environmental chemicals.

BALANCE

Behavioral Adaptability: Learning About Novel Contamination in the Environment

BALANCE is a research study that is designed to understand certain characteristics of health and behavior, and how those may be related to learning about blood or water test results for PFAS or other environmental chemicals. Data collection is ongoing in BALANCE and data analysis will begin in 2025.

EMBARC

The Environmental Mediators of Birth-defects and Relation to Contaminants Study

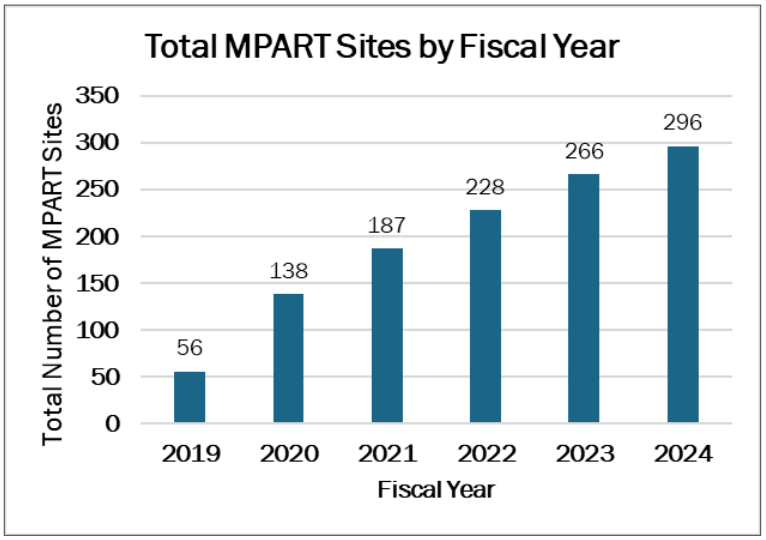
The Environmental Mediators of Birth-defects and Relation to Contaminants (EMBARC) study is funded by the CDC and launches in late 2024. It is now enrolling new participants, by invitation only. The goal of EMBARC is to learn if PFAS might be linked to certain birth defects. Data collection will continue throughout 2025.

MDHHS Mobile Lab

The MDHHS Mobile Lab is designed to support the work of the MDHHS Division of Environmental Health. The Mobile Lab is a 38-foot-long vehicle that enables efficient and equitable sample collection for biomonitoring, surveillance, and research projects in Michigan. It is staffed with Commercial Class A/B drivers, phlebotomists, clinic coordinators, and lab technicians from the MDHHS Bureau of Laboratories. For FY2024, the Mobile Lab has been in communities for 39 weeks and has traveled over 12,000 miles to 126 unique locations throughout Michigan supporting the MiChEM Program and Oscoda Exposure Assessment Project. The Mobile Lab supported other activities such as the CDC H5N1 study in Michigan. It has also been to UP State Fair and Touch a Truck in Saginaw.

IN FY2025, MPART Will:

- Continue to **sample drinking water wells** near sources of PFAS and continue to keep residents informed.
- Continue to conduct **residential re-sampling** around select contaminated PFAS sites.
- Work with communities to apply for and implement **infrastructure projects**, such as connecting more residents to municipal water supplies.
- Continue to implement proactive sampling of drinking water wells near **fire training** facilities where AFFF was used.
- As funding allows, continue the **AFFF pickup and disposal program** to remove AFFF from fire departments and airports.
- Develop and issue a Request for Proposals (RFP) for $2M set aside for replacing equipment or cleaning out fire trucks at **airports**.
- Issue an RFP for final round of **airport grants** for—testing/monitoring, feasibility studies, or implementing remediation practices/interim responses.
- Continue to **identify sources** of PFAS and hold responsible parties accountable for investigation at sites.
- At least an additional 35 facilities will be offered entry into an Administrative Consent Order to address PFAS in discharges from the site.
- Continue to analyze **surface water and fish** for PFAS from unassessed water bodies
- Continue **implementation of health studies**.
- Continue to provide technical support to **public water supplies** that want to proactively address PFAS.



Work for FY2025 is already underway; the image above shows MPART participating in a townhall meeting on November 6th, 2024, to discuss a new PFAS investigation.

Needs:

- Funding and resources to focus on **notifying and educating the public** about PFAS.
- Funding to support residents who want to self-sample their **private residential well**.
- Funding to help MPART be **more proactive** in **sampling types of sources** in a coordinated approach, such as remaining plating facilities, priority landfills and dumps and other sources, and to evaluate the nearby drinking water wells that could be contaminated. Additional resources are needed to sample the 1 million+ private drinking water wells in the state.
- Funding **to support municipalities** with impacts to their water and wastewater treatment plants and contaminated site clean-up identified in their communities.
- Funding to support continued **source tracking** efforts including the assessment of PFAS in both surface water and fish tissue throughout the state of Michigan.
- **Toxicological studies** focused on assessing effects on both human health and aquatic life for PFAS without established water quality values.

11/2024