

# Michigan's PFAS Action Response Team Fiscal Year 2022 Update

In fiscal year (FY) 2022, the Michigan legislature supported the PFAS response by appropriating funding across the seven state agencies that make up the Michigan PFAS Action Response Team (MPART). This funding allowed MPART to continue to be a national leader in addressing PFAS.

As of the end of FY 2022, MPART had identified **228 MPART PFAS Sites** where PFAS contamination has been found in groundwater above Michigan's criteria.

## For Every New Site: *Drinking Water Exposure is Evaluated*

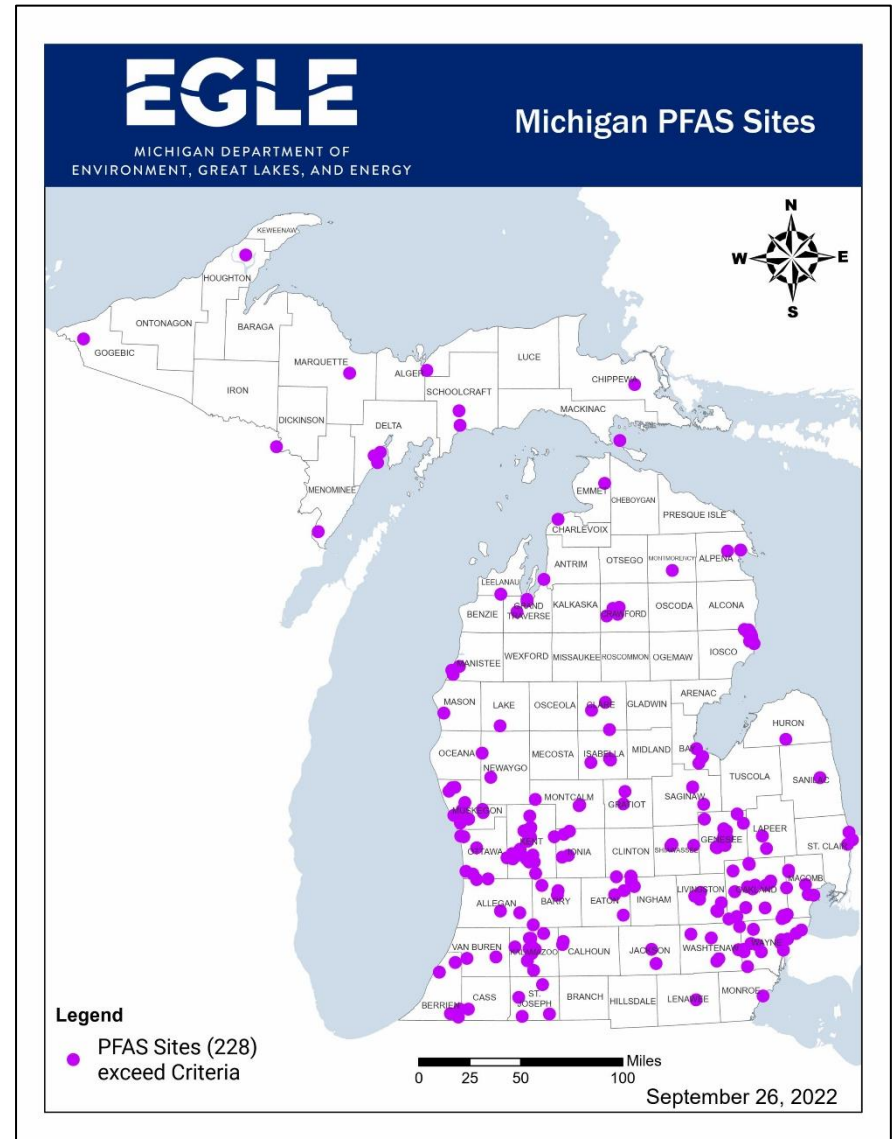
MPART works with the local health departments to:

- Determine if there are residential/private drinking water wells nearby.
- Review well records.
- Access property and conduct water sampling if there are wells deemed to be potentially impacted by PFAS contamination.
- Share results with well owners and among agencies, and filters are provided if necessary.
- Expand sampling areas if results indicate additional potential impact.

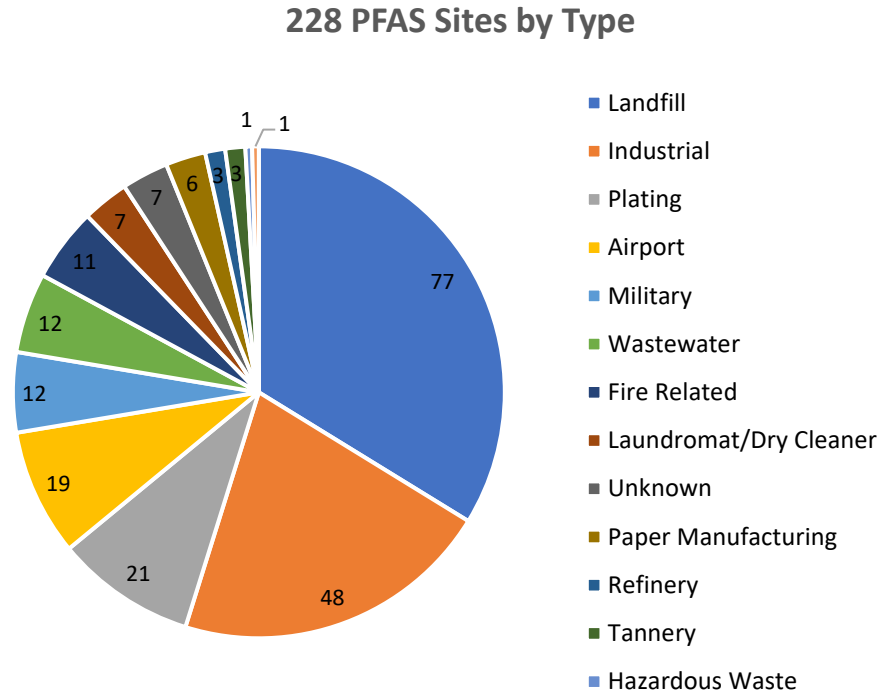
## Outreach

In addition to contacting local health departments and informing potentially impacted private well owners, MPART does public outreach to ensure awareness of:

- Local officials
- Legislators
- Tribal governments
- Weekly MPART Update GovDelivery emails to **over 4,000 subscribers**



The chart below shows PFAS sites by type from sampling done by regulated industry, environmental assessments conducted during property transactions, MPART's PFAS monitoring activities, and focused studies.

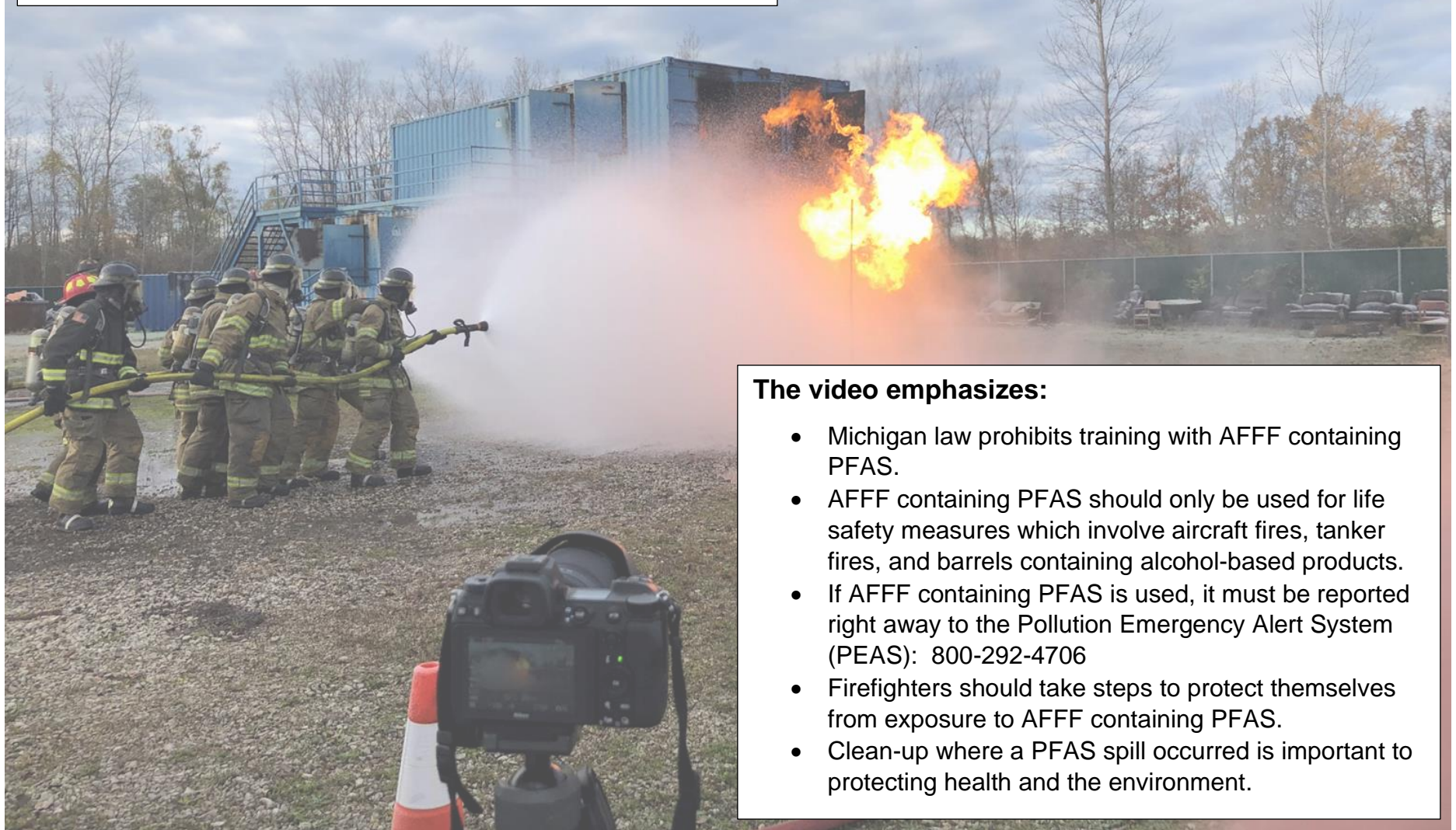


**Transparency and Communicating with the Public:**

- **Citizen Advisory Workgroup (CAWG)** members met 10 times with MPART, in addition to meetings of four subcommittee groups: Engaging the Public; Web Review; Preventative Measures; and Membership.
- Launched the **MPART Geographic Information System** online, which provides PFAS sites, surface water data, and public water supply data on an interactive online map.
- MPART hosted the December 2021 **Great Lakes PFAS Summit – 1,649 registrants** from **42 states** and **9 countries**.
- MPART leaders testified at two Congressional Hearings and presented to various associations, local governments, and other stakeholder groups.

As part of MPART's Fiscal Year 2022 successes, a **firefighter training video** was produced to clarify the laws regarding use of firefighting foam (AFFF) containing PFAS as well as how firefighters can best protect themselves on the job. All firefighters in the state of Michigan are required to view the video. As of mid-September, the video had **over 11,000 views**.

**Video:** [Michigan Firefighter Class B AFFF PFAS Training](#)



**The video emphasizes:**

- Michigan law prohibits training with AFFF containing PFAS.
- AFFF containing PFAS should only be used for life safety measures which involve aircraft fires, tanker fires, and barrels containing alcohol-based products.
- If AFFF containing PFAS is used, it must be reported right away to the Pollution Emergency Alert System (PEAS): 800-292-4706
- Firefighters should take steps to protect themselves from exposure to AFFF containing PFAS.
- Clean-up where a PFAS spill occurred is important to protecting health and the environment.

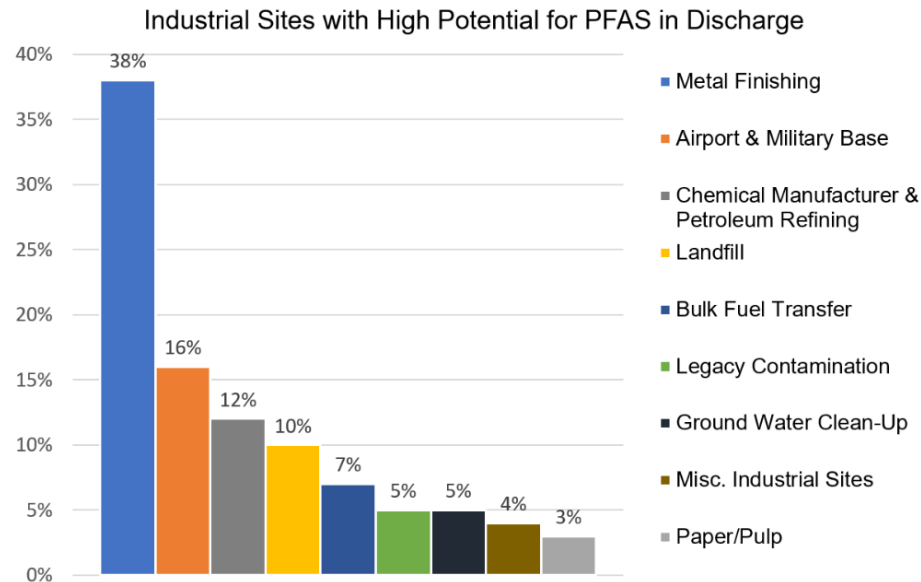


## Monitoring PFAS Around Michigan:

- **18 grants** that supported PFAS testing and monitoring at airports were completed.
- Collected **835 fish** from **42 different water bodies** to determine the need for fish consumption advisories.
- Updated the 2022 **Eat Safe Fish Guide** to include **over 240 new or updated** fish consumption guidelines, which includes over **60 based on PFOS**.
  - **A section of the Huron River Do Not Eat Advisory** was updated to reflect guidelines that vary by fish species.
- **Collected 523 water samples from lakes and streams** from **38 different watersheds**.
- Finalized a Compliance Strategy for addressing PFAS from permitted **public and private municipal groundwater discharges**.
- Continued to address PFOS, PFOA, and PFBS, from **Industrial Dischargers** – currently investigating potential discharges of PFAS to surface water at **105 industrial sites**.



Staff collecting a sample from a river.



Staff electrofishing at Bush Lake in Oakland County.

- Updated the **Land Application of Biosolids Containing PFAS Interim Strategy** which, as of July 1, 2022, decreased the industrially impacted biosolids concentration threshold from 150 parts per billion (ppb) to 125 ppb. All Wastewater Treatment Plants (WWTPs) are still required to sample for PFAS prior to land application.
- Continued to review **legacy land applications** in Michigan.
- A total of 121 NPDES **municipal WWTPs** are routinely monitoring for PFOS and PFOA on a monthly, quarterly, or bi-annual basis.
- Reviewed **50 foam sightings** on Michigan lakes and streams. Reports are used to help guide future lake and stream sampling efforts.
- **Re-evaluated Surface Water Quality Values:** PFOA was lowered, PFBS was added, PFOS stayed the same. These are values used to hold facilities that discharge into our lakes and streams to, and for tracking down PFAS sources.

Surface Water Quality Values in Parts Per Trillion (ppt)					
PFOS if waterbody is a Drinking Water Source	PFOS if waterbody is <i>not</i> a drinking water source	PFOA if waterbody is a drinking water source	PFOA if waterbody is <i>not</i> a drinking water source	PFBS if waterbody is a drinking water source	PFBS if waterbody is <i>not</i> a drinking water source
11 ppt	12 ppt	66 ppt	170 ppt	8,300 ppt	670,000 ppt

### PFAS Studies:

- Partnered on a **PFAS air monitoring study**. MPART installed passive air samplers at 27 locations around the state in September 2021 and left them in place for one month. The University of Rhode Island analyzed the samples, which showed low levels of some PFAS compounds in the air at a few locations similar to other outdoor semi-urban areas, and at concentrations lower than recently reported indoor air samples.
- Completed a **rain bucket “proof of concept” study**. MPART put out inexpensive, PFAS-free rain buckets at five locations and collected two to four rain events. Results showed very low levels of a few PFAS compounds in rain and that it is possible to collect PFAS rain samples inexpensively.



September 2021 - Air Monitor

## Protecting Drinking Water:

- **Infrastructure Projects:**

**\$29 million in grants were awarded** to address PFAS contamination in drinking water. Projects included:

- Watermain extensions to **connect ~973 homes to existing municipal drinking water systems.**
- A \$819,000 grant to the **Village of Pellston** for determining the feasibility of developing a community water supply.
- A \$674,490 grant to the **City of Wyandotte** to treat PFAS.
- A \$292,125 grant to **Central Montcalm Public Schools** to install a replacement well for **school drinking water.**



*Photos provided by Prein&Newhof of Plainfield Township – Water System Extension*

- **Filters and Residential Well Sampling:**

- Provided more than **130 PFAS-reducing filters** to impacted residents.
- Provided more than **880 replacement cartridges** for PFAS-reducing filters.
- Sampled more than **300 drinking water wells** that had not been previously sampled.
- Re-sampled more than **1,670 drinking water wells** that had been sampled in previous years.

- **Other Grants:**

- \$1.7M added onto a grant with Michigan Geologic Survey to fix errant records in **Wellogic**, a well log database used by state agencies, health departments, researchers, and residents. This database is used to help determine which drinking water wells might need to be sampled.



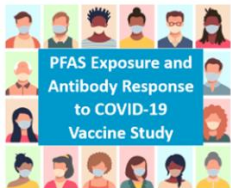
## Health: Research and Biomonitoring:



Over 1,300 people enrolled in the first phase of the Michigan PFAS Exposure & Health Study (MiPEHS) between Dec 2020 and July 2021. Participants learned their blood PFAS levels and results of their health tests and are encouraged to participate in the next phases of data collection.



Michiganders are joining others from around the US in the first national PFAS health study with ATSDR/CDC's Multi-site Health Study. As part of this nationwide PFAS health study, participants will continue to enroll through early 2023. Participants learn their blood PFAS levels and results of their health tests.



Over 250 people have participated in leading edge research on the effects of PFAS exposure and antibody response to COVID-19 vaccines. Participants learned their blood PFAS levels.



The PFAS in Firefighters of Michigan Surveillance project is a statewide initiative with the primary goal of determining blood concentrations of PFAS in Michigan firefighters. The findings will help inform decisions about how to minimize firefighters' exposure to PFAS. Enrolled participants will learn their personal blood PFAS concentrations. The project started enrollment in 2021 and aims to enroll over 900 firefighters.



The Michigan Chemical Exposure Monitoring project is the first statewide effort to gather data on the amount of certain chemicals in the blood and urine of Michiganders, including lead, mercury, and PFAS. This project will help MDHHS understand more about exposures to chemicals, including PFAS, of Michigan residents. Recruitment started September 2022 and the project will enroll over 1,000 Michiganders over the next several years.

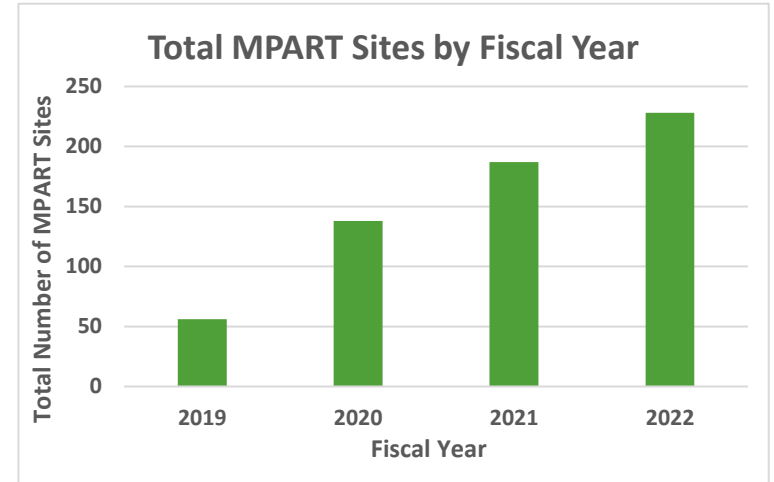


The Oscoda Area Exposure Assessment is investigation to understand exposure to environmental chemicals, including PFAS, among residents of the Oscoda area. The project will measure the Oscoda area population's exposure to environmental chemicals and compare the findings to statewide average levels of exposure as measured by the MiChEM project and national average levels of exposure as measured by the CDC. Recruitment activities began in September 2022 and the is still enrolling participants.

*Current information on MDHHS' studies can be found at [Michigan.gov/DEHBio](https://Michigan.gov/DEHBio)*

## Looking Forward to FY2023 MPART Will:

- Coordinate with youth fishing event coordinators in **environmental justice areas** to collect fish in 20 areas heavily fished by youth. This will inform fish consumption advisories.
- Collect and analyze **blood samples from birds** that live in the Lake Huron watershed and eat fish. Also collect and **analyze herring gull eggs**.
- Analyze **mallard duck tissue** collected in 2022 and share those results with the public.
- Continue evaluating, prioritizing, and reducing or eliminating PFAS at permitted **public and private wastewater treatment plants** that discharge to groundwaters, such as mobile home communities, condominiums, campgrounds, schools, and rest areas.
- Implement proactive sampling where firefighters conducted **fire training** using AFFF, including testing nearby residential wells.
- Continue the **AFFF pickup and disposal program** to remove AFFF from fire departments and airports.
- Work with more communities to apply for and implement **infrastructure projects**, such as connecting more residents to municipal water supplies.
- Continue to **identify sources** of PFAS and hold responsible parties accountable for investigation at sites.
- Continue to **sample drinking water wells** near sources of PFAS.
- Continue to conduct **residential resampling** around select contaminated PFAS sites.
- Continue **implementation of health studies** and roll out the MDHHS mobile lab.
- A second request for proposals for additional testing and monitoring at airport was issued in FY2022 and the grants will be implemented in 2023-2024.



## Needs:

- 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, paper manufacturers, other types of sources, and to evaluate the nearby residential wells that could be contaminated by these sources. Without additional resources, it will take many, many years to identify sites in Michigan.
- Funding and resources to focus on **informing and educating the public** about PFAS.
- Funding **to support municipalities** with contaminated site clean-up identified in their communities.