

FISCAL BRIEF



STATE FUNDING TO ADDRESS PFAS CONTAMINATION

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FAST FACTS

- Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are synthetic chemicals classified as emerging contaminants.
- PFAS levels exceeding recommended maximums have been found at over 40 sites in 28 locations in the state.
- Since December 2017, state funding of \$51.5 million has been appropriated for PFAS response in Michigan.
- Additional funding is available that may be expended for PFAS response or for other similar purposes.

INTRODUCTION

State funding to respond to perfluoroalkyl and polyfluoroalkyl substances (PFAS) environmental contamination in Michigan was first appropriated by the legislature in December 2017 in the amount of \$23.3 million GF/GP. In the current fiscal year, FY 2018-19, \$28.1 million GF/GP is appropriated for PFAS response activities, with additional funding available which may be expended for PFAS or other similar purposes. The Department of Environmental Quality (DEQ), Department of Health and Human Services (DHHS), Department of Natural Resources (DNR), and Department of Agriculture & Rural Development (MDARD) administer PFAS funding and programs.

PFAS USE AND CLASSIFICATION AS AN EMERGING CONTAMINANT

PFAS are synthetic chemicals used in carpeting, waterproof clothing, upholstery, personal care products, metal plating, cleaning products, firefighting foam, and some food packaging. These chemicals have been in use since the 1940s because of their durability, resistance to deterioration, water and fire resistance, and their nonstick properties.

Because they are also highly soluble and easily transferred from soil to groundwater, PFAS chemicals are now known to be extremely persistent in the environment and are present in most humans and wildlife nationwide due to widespread exposure in soil, air, and groundwater. They have been classified by the United States Environmental Protection Agency (EPA) as emerging contaminants that have been determined to be a real or potential threat to the health of humans or the environment.

Based on numerous peer-reviewed research studies and contamination events that confirm that PFAS can cause human health effects, the EPA has issued a Lifetime Health Advisory (LTHA) recommending that drinking water not exceed 70 parts per trillion for certain types of PFAS; LTHAs are advisory in nature and are not statutory regulations enforceable under federal law. The United States Department of Health and Human Services has issued similar preliminary guidance to clinicians regarding the effect of PFAS on human development and health.

MICHIGAN'S RESPONSE TO ELEVATED PFAS LEVELS

Executive Directive 2017-4 established the Michigan PFAS Action Response Team (MPART) after elevated PFAS levels were found at 28 sites in 14 locations; MPART continues under Executive Order 2019-3. Further testing has yielded additional positive samples exceeding the LTHA of 70 parts per trillion for a current total of 43 sites in 28 locations across the following counties: Alpena, Calhoun, Cass, Crawford, Delta, Genesee, Grand Traverse, Gratiot, Ingham, Iosco, Isabella, Jackson, Kalamazoo, Kent, Lake, Lapeer, Livingston, Macomb, Manistee, Marquette, Montcalm, Ottawa, and Wayne. Additional potential contamination sites continue to emerge. MPART is established to act as a multi-agency collaborative to locate and investigate sources of PFAS contamination, protect the state's drinking water, and keep the public informed about PFAS as new information is discovered. The directors of DEQ, DHHS, DNR, and MDARD are among the members of MPART.

Table 1: PFAS Funding in Michigan			
Budget Area	Department	Year-to-date FY 2017-18	Year-to-date FY 2018-19
Remediation and Response	DEQ	\$11,800,000	--
Contamination Mapping	DEQ	--	\$4,700,000
Drinking Water Infrastructure Remediation	DEQ	--	4,000,000
Community Water Supply and Sampling	DEQ	1,550,000	--
Laboratory Equipment and Supplies	DEQ	1,487,500	--
Laboratory Capacity, Testing, Analysis, and Human Exposure Assessments	DHHS	4,144,000	7,025,300
Local Health Department Response	DHHS	2,500,000	--
Toxicology and Response	DHHS	1,750,000	11,900,000
Wildlife and Fisheries Health Study	DNR	--	115,000
Environmental Contamination & Response Activities	MDARD	100,000	400,000
Total PFAS Appropriations		\$23,331,500	\$28,140,300
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Renewing Michigan's Environment – for non-petroleum cleanups, which may include PFAS	DEQ	--	\$69,000,000
Local Health Department Response – in part for PFAS, in part for other emerging health threats	DHHS	--	4,750,000
Additional Appropriations Available Up To		--	\$73,750,000

STATE FUNDING FOR PFAS RESPONSE – DEPARTMENT OF ENVIRONMENTAL QUALITY

The DEQ's initial PFAS funding was included in 2017 PA 201 which made supplemental appropriations to the FY 2017-18 budget totaling \$14.8 million GF/GP and 7.0 FTEs. During FY 2017-18, \$11.1 million of the appropriation was expended, and the remaining \$3.7 million was carried forward as work project funding to be spent by September 30,

2022. Supplemental appropriations to the FY 2018-19 budget totaling \$8.7 million GF/GP and 7.0 FTEs are included in 2018 PA 618 for contamination mapping and drinking water infrastructure remediation.

PFAS remediation and response activities

- **\$11.8 million GF/GP** in FY 2017-18 (\$8.9 million expended; \$2.9 million work project carryforward)
- Cleanup activities at 14 confirmed PFAS locations (\$7.8 million)
- Cleanup activities at potential future additional PFAS sites (\$4.0 million)
- Activities include water filtration, removal and replacement of contaminated soil, and physical isolation of polluted areas to prevent spreading of contamination

PFAS community water supply and sampling

- **\$1.6 million GF/GP and 7.0 FTEs** in FY 2017-18 (\$950,000 expended; \$650,000 work project carryforward)
- Technical assistance and direct support (\$1.1 million and 5.0 FTEs)
 - DEQ has contracted with AECOM Technical Services to assist in the collection of water samples
- Water sampling (\$425,000 and 2.0 FTEs)
- Samples are collected from drinking water, groundwater, lakes, soils, and wastewater and then set to the DEQ lab to be tested with newly acquired PFAS-specific equipment

PFAS laboratory equipment and support

- **\$1.5 million GF/GP** in FY 2017-18 (\$1.3 million expended; \$175,000 work project carryforward)
- Funding to purchase lab equipment and related costs
 - Provides Michigan the ability to test for PFAS (samples were previously sent out of state)
 - Lab equipment includes machinery specifically designed to assess PFAS levels
 - Related costs include lab staff training for PFAS-specific equipment and testing processes

Contamination mapping

- **\$4.7 million GF/GP and 5.0 FTEs** in FY 2018-19
- GIS mapping of contaminated sites and groundwater flow including PFAS sites (\$4.3 million and 5.0 FTEs)
- Equipment to capture firefighting foam containing PFAS discharged at commercial airports (\$400,000)

Drinking water infrastructure remediation

- **\$4.0 million GF/GP and 2.0 FTEs** in FY 2018-19
- Matching grants to local governments for PFAS contamination remediation and for costs related to connecting residents to alternative water systems

In addition to the PFAS-specific appropriations listed above, locations with elevated levels of PFAS are considered contaminated sites in accordance with Part 201 of the Natural Resources and Environmental Protection Act (NREPA, 1994 PA 451) which qualifies these sites for funding for non-petroleum remediation and redevelopment activities (cleanups). The Clean Michigan Initiative (CMI) general obligation bond has been a primary source of funding for Part 201 cleanups since its passage in 1998, but CMI appropriation authority is almost completely exhausted.

The Renewing Michigan's Environment program created by 2018 PA 588 replaces CMI funding with \$69.0 million in annual income tax revenue for Part 201 cleanup activities beginning in FY 2018-19. However, this funding may be used for any non-petroleum cleanups and is not exclusive to PFAS. The DEQ's Remediation and Redevelopment Division maintains an ongoing database of contaminated sites which are prioritized based on a variety of environmental and health factors. This funding will be used to address all non-petroleum contaminated sites in priority order; PFAS sites will be addressed pending site priority and the continued availability of funding.

STATE FUNDING FOR PFAS RESPONSE – DEPARTMENT OF HEALTH AND HUMAN SERVICES

Initial DHHS PFAS funding was included in 2017 PA 201 which made supplemental appropriations to the FY 2017-18 budget totaling \$8.4 million GF/GP and 8.0 FTEs. During FY 2017-18, \$3.0 million of the appropriation was expended, and the remaining \$5.4 million was carried forward as work project funding to be spent by September 30, 2022.

DHHS PFAS appropriations for laboratory and for toxicology and response are continued and annualized in the FY 2018-19 budget under 2018 PA 207 totaling \$8.0 million GF/GP and 23.0 FTEs, with additional funding under 2018 PA 618 of \$10.9 million GF/GP and 23.0 additional FTEs. The FY 2018-19 budget also includes an increased amount of \$4.8 million GF/GP for local health department response grants which are targeted broadly to address PFAS and also other emerging health threats.

PFAS laboratory capacity, testing, analysis, and human exposure assessments

- **\$11.2 million GF/GP and 16.0 FTEs**
 - \$4,144,000 in FY 2017-18 (\$844,000 expended; \$3.3 million work project carryforward)
 - \$7,025,300 in FY 2018-19
- Supports public health laboratory testing and analysis of PFAS in water, human blood, fish, wild game, and home-raised food, including establishing a bio-monitoring and human exposure assessment program, and purchase of specialized laboratory materials, equipment, and enhanced data sharing technology hardware and software

PFAS environmental health toxicology and response

- **\$13.7 million GF/GP and 30.0 FTEs**
 - \$1,750,000 in FY 2017-18 (\$950,000 expended; \$800,000 work project carryforward)
 - \$11,900,000 in FY 2018-19
- Supports toxicologists, disease registry, drinking water investigations and action plans,, community health education and outreach with residents in affected communities, information technology tracking systems including enhanced data management and mapping, and epidemiology consulting services

Local public health department grants for both PFAS and other emerging public health threats

- **\$2.5 million GF/GP** in FY 2017-18 (\$1.2 million expended; \$1.3 million work project carryforward)
 - For local PFAS response only
- **\$4.8 million and 2.0 FTEs** in FY 2018-19
 - For local response to PFAS and to other emerging health threats
 - Supports local public health department response related to PFAS environmental contamination sites, including staffing, planning and response, public information materials, water filters and installation, bottled water and distribution, and other local needs. Also supports local public health department response to other emerging public health threats including infectious and vector-borne diseases, vapor intrusion contamination, drinking water contamination, and lead exposure.

STATE FUNDING FOR PFAS RESPONSE – DEPARTMENT OF NATURAL RESOURCES

The DNR received \$115,000 GF/GP in 2018 PA 207 to study the effect of PFAS on Michigan’s wildlife and fisheries in FY 2018-19; this study is currently ongoing. However, the DNR did find elevated PFAS levels in tissue samples taken from deer living in close proximity to PFAS sites in Iosco County in the spring and summer of 2018. The current fiscal year funding will allow the department to continue these sampling efforts through September 2019.

STATE FUNDING FOR PFAS RESPONSE – MICHIGAN DEPARTMENT OF AGRICULTURE & RURAL DEVELOPMENT

MDARD received \$100,000 GF/GP in FY 2017-18 to support the department's role in statewide PFAS response activities. Funding was to support the costs of staff assigned to provide agency-wide coordination, research review, updates to department management, and attendance at community meetings related to statewide PFAS contamination issues.

MDARD also received authorization in its FY 2018-19 budget for 2.0 FTE positions and \$400,000 GF/GP to support environmental contamination response activities. Spending authorization was made in a supplemental appropriation act, Public Act 618 of 2018. One FTE position was authorized and \$200,000 appropriated to enhance Geographic Information Systems capabilities to evaluate food, animal, and plant components of the agriculture sector impacted by environmental contaminants, including PFAS. One FTE position was authorized and \$200,000 appropriated to assist the MDARD Emergency Management coordinator in tracking agriculture-related PFAS activities.