MONITORING AND RESEARCH FOR SOURCE WATER PROTECTION

Thousands of substances used in everyday life - from pharmaceuticals to consumer products - may pose threats to source water. While the presence of some of these substances in drinking water sources and their potential health impacts are well documented, many others have only recently been discovered and are much more poorly understood. These are commonly known as emerging contaminants. Understanding the presence and impacts of both emerging and well-documented contaminants and effective methods for their mitigation is critical to ensuring a safe and sustainable supply of drinking water.

- State, provincial and federal laws require that drinking water suppliers monitor for certain regulated and unregulated contaminants.
- Research by universities, state, and federal agencies provides drinking water suppliers with the latest science on potential threats and methods for treating contaminated drinking water.
- Early detection systems can identify the presence of contaminants in source water, allowing treatment plants to get ahead of concerns and adjust treatment methods or supply sources accordingly.

See below for related Investments in monitoring and research

Related Investments

MINNESOTA PFAS TESTING AND MITIGATION
UPDATED ON: MARCH 5 2020

The Minnesota Department of Public Health (MDH) and Pollution Control Agency (MPCA) work together to investigate and mitigate the presence of PFAS in drinking water in both private wells and sources of supply for municipal systems throughout the state.

LEARN MORE ABOUT MINNESOTA PFAS TESTING AND MITIGATION

PENNSYLVANIA PFAS ACTION TEAM
UPDATED ON: FEBRUARY 27 2020

Pennsylvania’s PFAS Action Team is a multi-agency group that was established to address
growing concerns about the presence of per- and poly- fluoroalkyl substances (PFAS) in drinking water.

THE MICHIGAN PFAS ACTION RESPONSE TEAM (MPART)
UPDATED ON: FEBRUARY 27 2020

The Michigan PFAS Action Response Team (MPART) formally brings together several state agencies to investigate and remediate contamination by per- and polyfluoroalkyl substances (PFAS); develop and maintain cooperative relationships among local, state, and federal agencies; understand the science, and inform and empower the public to make educated decisions.

U.S. EPA RESEARCH AND MONITORING FOR UNREGULATED CONTAMINANTS IN DRINKING WATER
UPDATED ON: FEBRUARY 27 2020

The U.S. EPA’s Unregulated Contaminant Monitoring Rule (UCMR) requires all public drinking water systems serving at least 10,000 people and a random subset of smaller public systems to periodically monitor for selected contaminants of emerging concern (CECs). Some of these CECs affect source water quality and drinking water treatment needs.
The city of Toledo works with LimnoTech to maintain a scientific buoy and monitoring sensors in Lake Erie near the City’s drinking water intake to assist with gathering real-time environmental data and to monitor harmful algal blooms.

LEARN MORE ABOUT CITY OF TOLEDO: REAL-TIME INTAKE WATER QUALITY MONITORING

CITY OF MILWAUKEE: CONTAMINANT OF EMERGING CONCERN MONITORING
UPDATED ON: FEBRUARY 27 2020

The City of Milwaukee Water Works Department undertakes water quality monitoring activities that exceed state and federal requirements, including those under the U.S. EPA's Unregulated Contaminant Monitoring Rule.

LEARN MORE ABOUT CITY OF MILWAUKEE: CONTAMINANT OF EMERGING CONCERN MONITORING

THE CITY OF ANN ARBOR'S PFAS RESEARCH AND TREATMENT PLANT UPDATES
UPDATED ON: MARCH 5 2020

The City of Ann Arbor Water Treatment Plant has taken voluntary steps to enhance the removal of per- and polyfluoroalkyl substances (PFAS) from drinking water.

LEARN MORE ABOUT THE CITY OF ANN ARBOR'S PFAS RESEARCH AND TREATMENT PLANT UPDATES
The Great Lakes Water Authority has water quality sensing equipment located at two surface intakes in the Detroit River that contribute data to the Huron-to-Erie Real-time Drinking Water Protection Network.

In addition to meeting all safe drinking water act requirements, Great Lakes Water Authority carries out additional monitoring activities as part of federal programs and research initiatives, state-mandated programs, and voluntary actions.
Great Lakes Water Authority developed a mobile-access, geographic information systems (GIS)-based map that incorporates real-time operational data along its wastewater interceptors and at its rain gauges.

Great Lakes Water Authority has an internal goal of maintaining the phosphorus concentration of their effluent at 80 percent of the permit limit for their Water Resource Recovery Facility.

In addition to meeting all safe drinking water act requirements, Great Lakes Water Authority carries out additional monitoring activities as part of federal programs and research initiatives,
Collaboration between the Lucas County Board of County Commissioners, the Toledo – Lucas County Sustainability Commission, and the City of Toledo, resulted in the Western Lake Erie Nutrient Source Inventory, an interactive GIS-based map showing both urban and rural nutrient sources in the Western Lake Erie Basin.

LEARN MORE ABOUT WESTERN LAKE ERIE NUTRIENT SOURCE INVENTORY