



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Cass, Flint, & Shiawassee River Watershed Monitoring

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EGLE

Mission: to protect Michigan's environment and public health by managing air, water, land, and energy resources

Air Quality Division

Drinking Water and Environmental Health

Environmental Investigation Section

Environmental Support Division

Finance Division

Materials Management Division

Office of Climate and Energy

Office of Clean Water Public Advocate

Office of Justice Public Advocate

Information Management Division

Office of Great Lakes

Oil, Gas, and Minerals Division

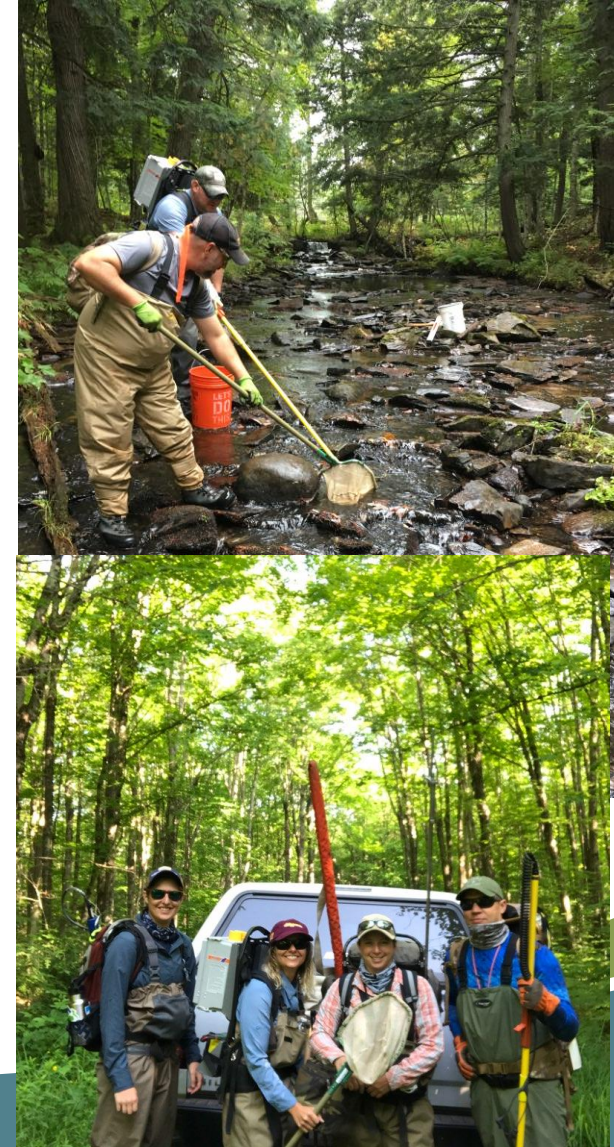
Remediation and Redevelopment Division

Water Resources Division

Who Does What?

Water Resources Division

- Surface Water Assessment Section
 - Lake Michigan Unit
 - **Lakes Superior, Huron, Erie Unit**
 - Nonpoint Source Unit
 - Water Toxics Unit
 - Great Lakes Management Unit



Why we collect data?

- **Monitoring Goals:**
 - Assess current status and condition of waters of the State
 - Measure spatial and temporal water quality trends
 - Evaluate the effectiveness of water quality prevention and protection programs
 - Identify new and emerging water quality problems



Designated Uses

- At a minimum, all surface waters of the state are designated and protected for all of the following uses:
 - Partial body contact recreation (Total Body)
 - Warm water fishery (Cold water Fishery)
 - Fish consumption
 - Other indigenous aquatic life & wildlife
 - Agriculture
 - Navigation
 - Industrial water supply



Support – **Insufficient Info** – **Not Support**

Integrated Report

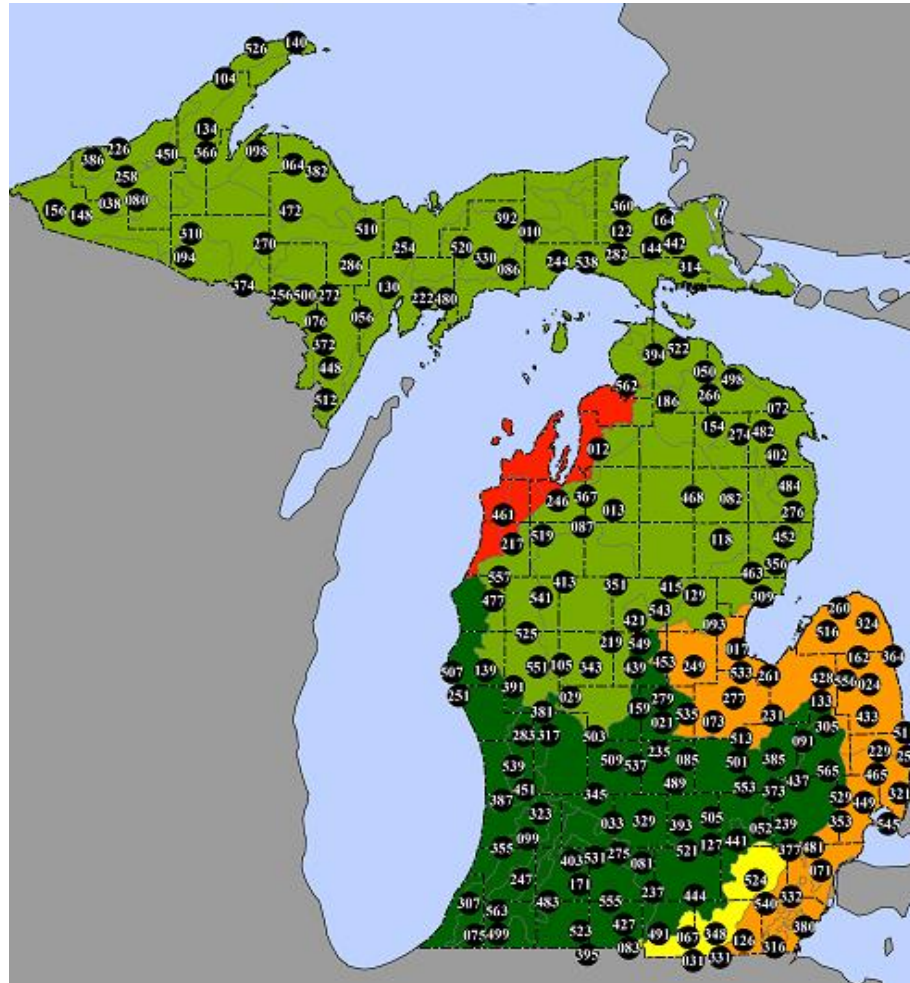
- Federal Requirement as part of the CWA
- Takes monitoring data and translates it to waterbody health

AUID	Designated Use	Use Support	Cause
Cass River Watershed (04080205)			
040802050101-01	Fish Consumption	Not Supporting	Mercury in Fish Tissue
	Fish Consumption	Not Supporting	PCB in Fish Tissue
	Fish Consumption	Not Supporting	PCB in Water Column

Programs



Water Chemistry Monitoring Program



Sediment Chemistry Monitoring Program



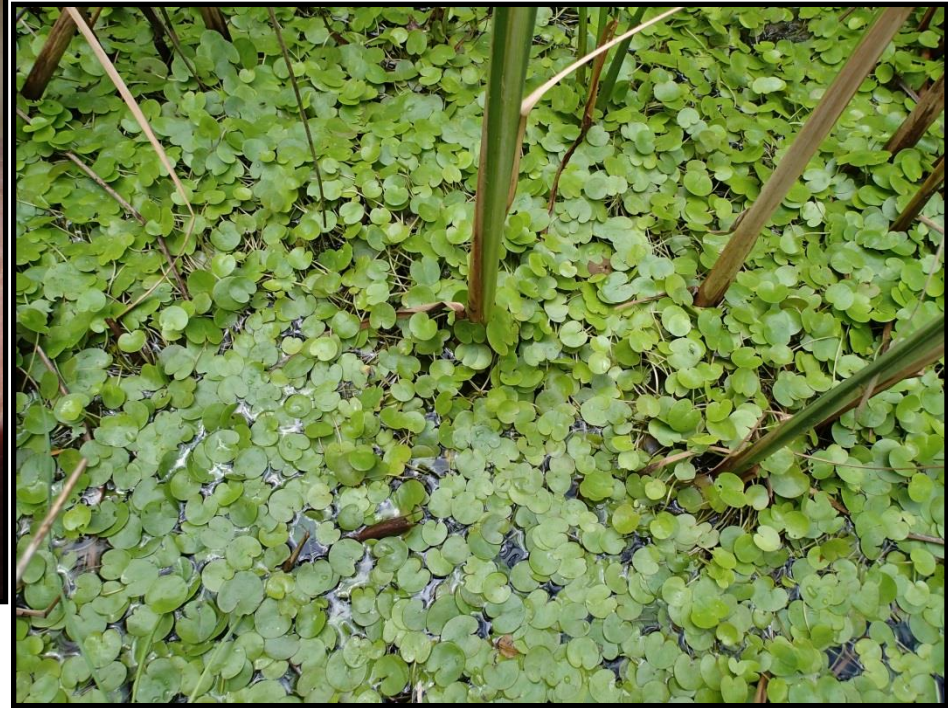
Fish Contaminant Monitoring Program



E. coli Monitoring Program



Aquatic Invasive Species

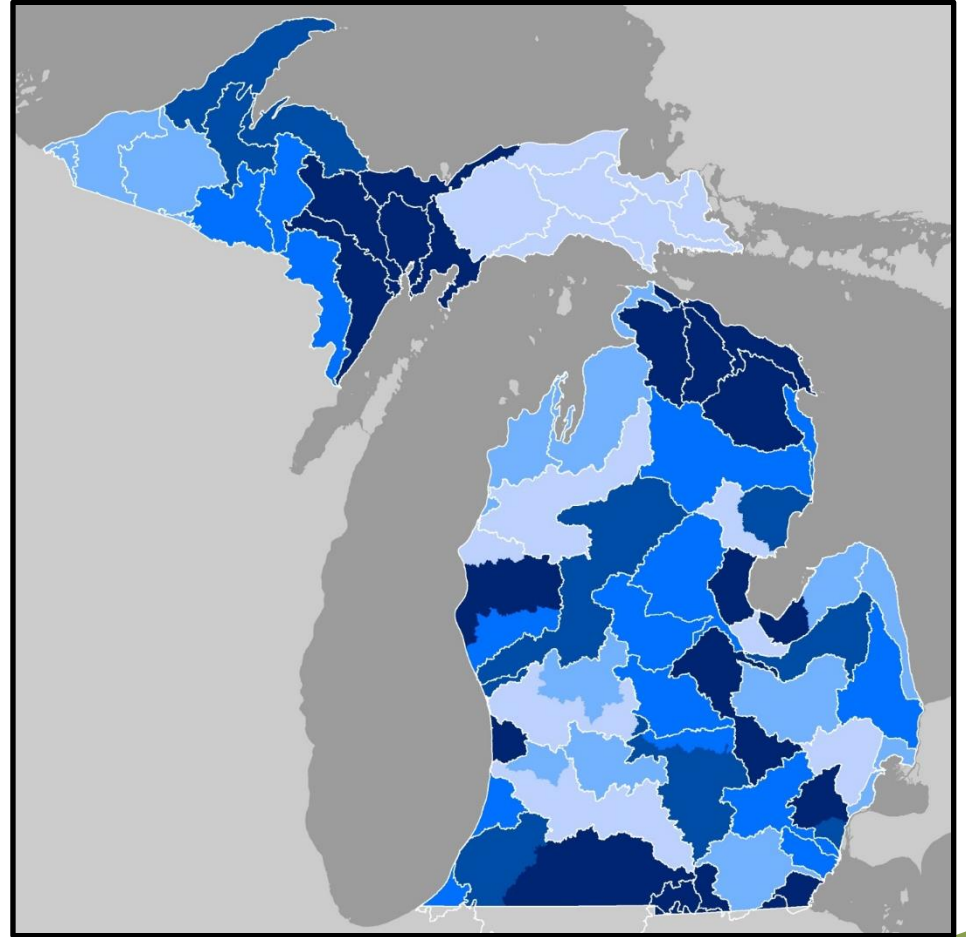


Inland lake Monitoring Program

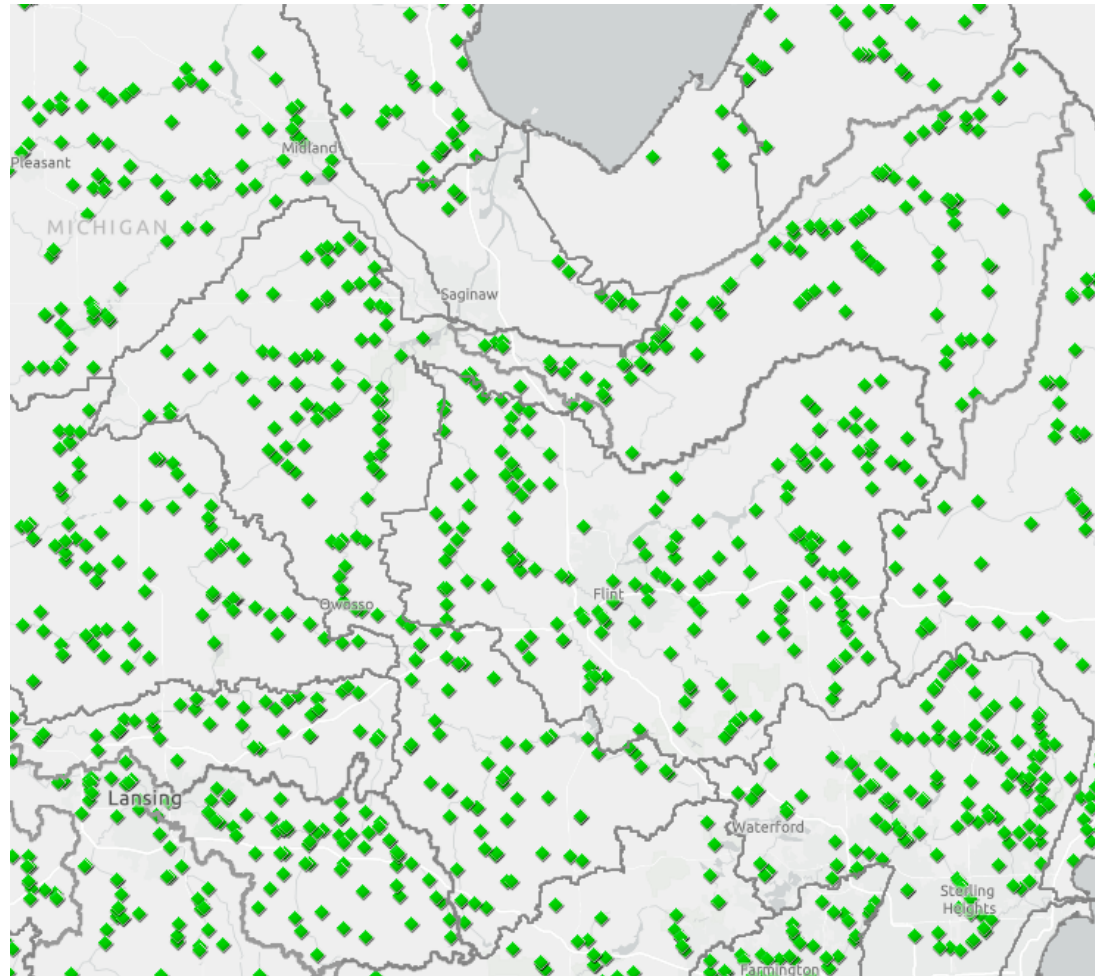


Routine SWAS Biological Monitoring

- 5 Year Rotation
- Random Status Sites and Fixed Trend Sites
- Shiawassee – 2020
- Cass – 2021
- Flint – 2023



Historical Biosurveys



P51 Sampling Methods



P51 Score

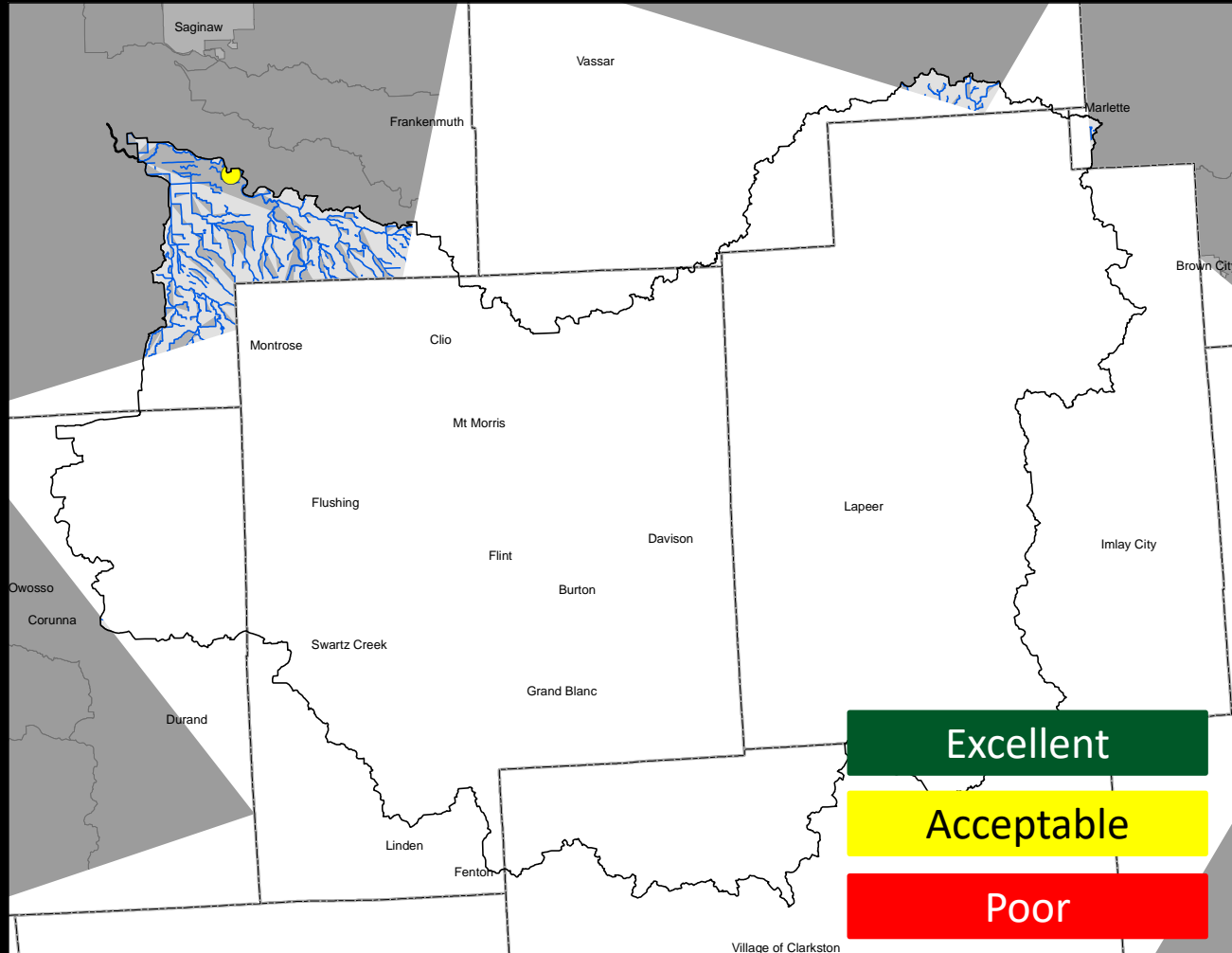
- Number of Taxa
- Number of Mayfly Taxa
- Number of Caddisfly Taxa
- Number of Stonefly Taxa
- % Mayfly Composition
- % Caddisfly Composition
- % Contribution of dominant taxa
- % Isopods, Snails, Leeches
- % Surface Dependent

5 to 9

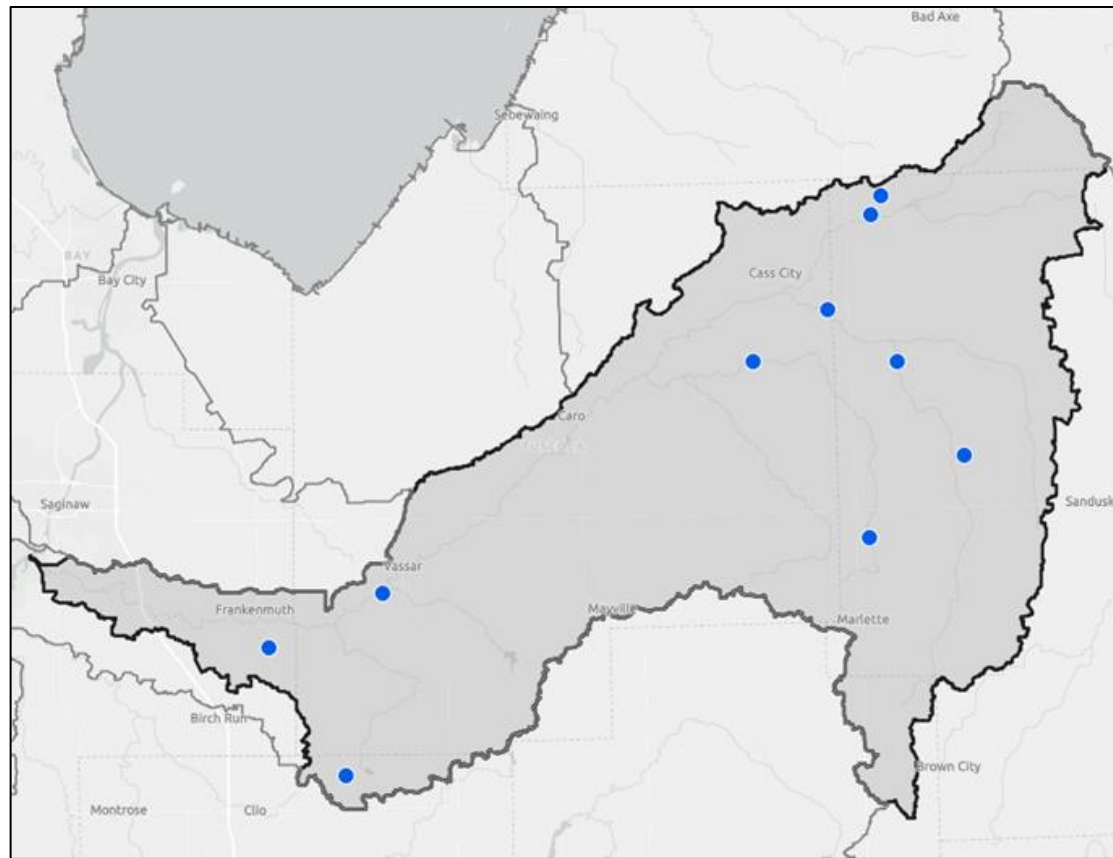
-4 to 4

-9 to -5

Flint River Watershed 2018



Cass River Watershed 2021



- 10 Trend Sites
- ~10-12 Status Sites
- TBD Targeted Requests

Monitoring Request Process

- Opportunity for anyone to submit requests
- **October 31, 2020** deadline for 2021 Field Season
- Requests Evaluated in Jan-March
- Responses in June

The screenshot shows the EGLE (Michigan Department of Environment, Great Lakes, and Energy) Water Resources Division - Water Quality Monitoring Request form. The form is titled "Water Resources Division - Water Quality Monitoring Request" and includes a header with the EGLE logo. Below the header, there is a paragraph of instructions: "The following information will be used to select and prioritize monitoring requests, therefore, please ensure the completeness and accuracy of your request prior to submittal. (Fields marked with an asterisk (*) are required.)". The form is divided into two main sections: "Requestor Information:" and "Monitoring Information:". The "Requestor Information:" section includes fields for First Name *, Last Name *, Organization, Street Address, City / Town, ZIP / Postal Code, Phone Number (e.g., 5175550123), and Email Address *. The "Monitoring Information:" section includes a paragraph of instructions: "In order to prioritize monitoring requests received, it is important to provide accurate information on the desired sampling location. This online form will allow you to request up to 3 different sites. If your request includes more than 3 sites, please fill out an additional Water Quality Monitoring Request form." and fields for Waterbody Name*, County, Location (e.g., road crossing or other description)*, Latitude * (e.g., 42.73194), and Longitude * (e.g., -84.55923).

How to get more information

- Biological Reports & Fact Sheets
 - https://www.michigan.gov/egle/0,9429,7-135-3313_3681_3686_3728-452037--,00.html
- Water Chemistry Reports
 - https://www.michigan.gov/egle/0,9429,7-135-3313_3681_3686_3728-32361--,00.html
- E. coli mapper
 - <https://egle.maps.arcgis.com/apps/MapSeries/index.html?appid=2a060da30e25451292220861632b2c99>
- Fish Contaminant
 - https://www.michigan.gov/egle/0,9429,7-135-3313_3681_3686_3728-12600--,00.html
- Submit a Monitoring Request:
 - https://www.michigan.gov/egle/0,9429,7-135-3313_3681_3686_3728-12735--,00.html
- How's My Waterway
 - <https://mywaterway.epa.gov/>

Report a Problem

- **Pollution Emergency Alerting System (PEAS)**
 - To report Spills, Releases, or other Environmental Emergencies
 - Hotline: 800-292-4706 (available 24/7)
- **Environmental Assistance Center**
 - Non-emergency information and questions
 - Phone: 800-662-9278 (8:00-4:30pm, M-F)



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