



Think Statewide - Act Locally (Implementing Michigan's TMDL Vision 1.0)

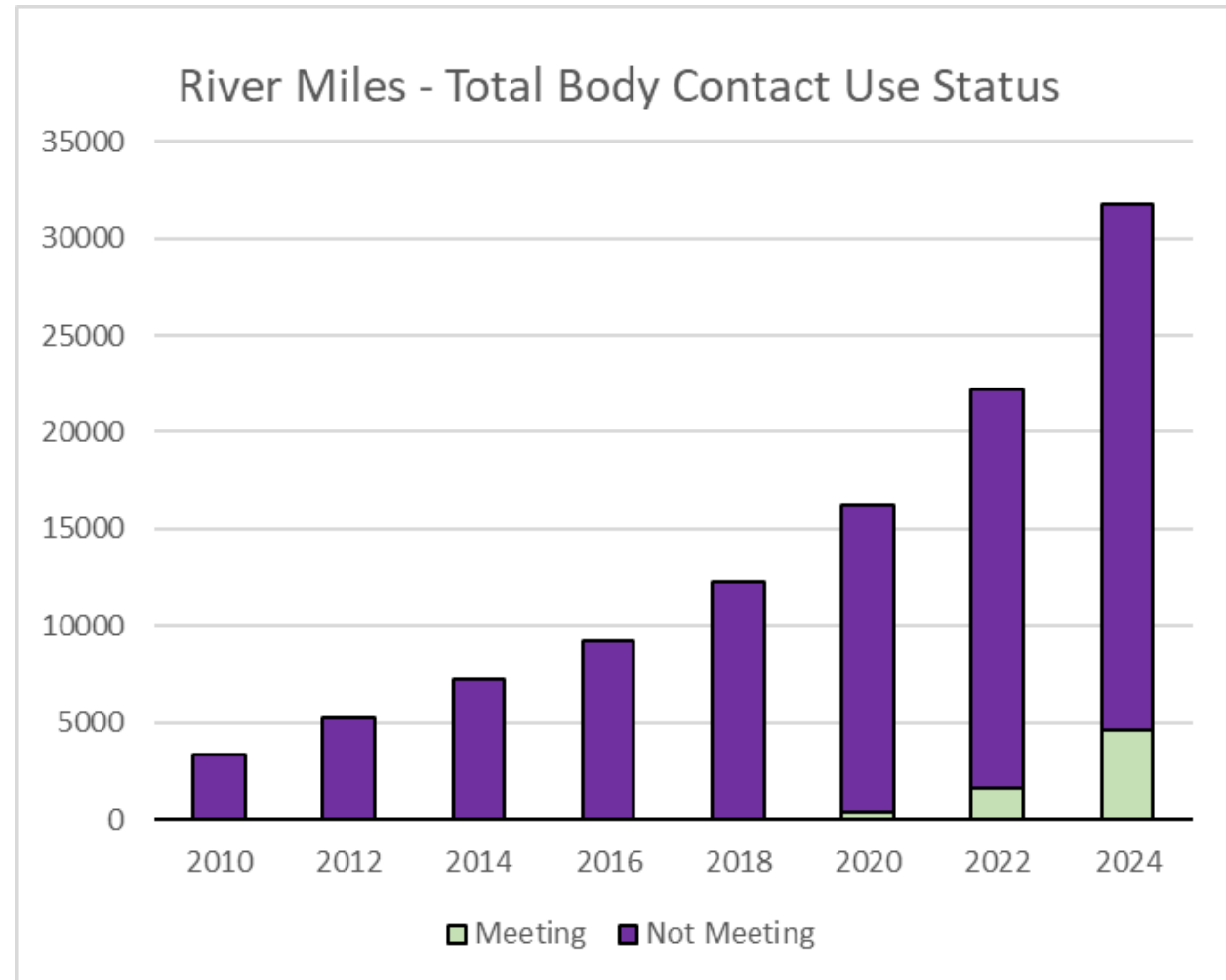
Molly Rippke

Michigan Department of Environment, Great Lakes, and Energy. Water Resources Division

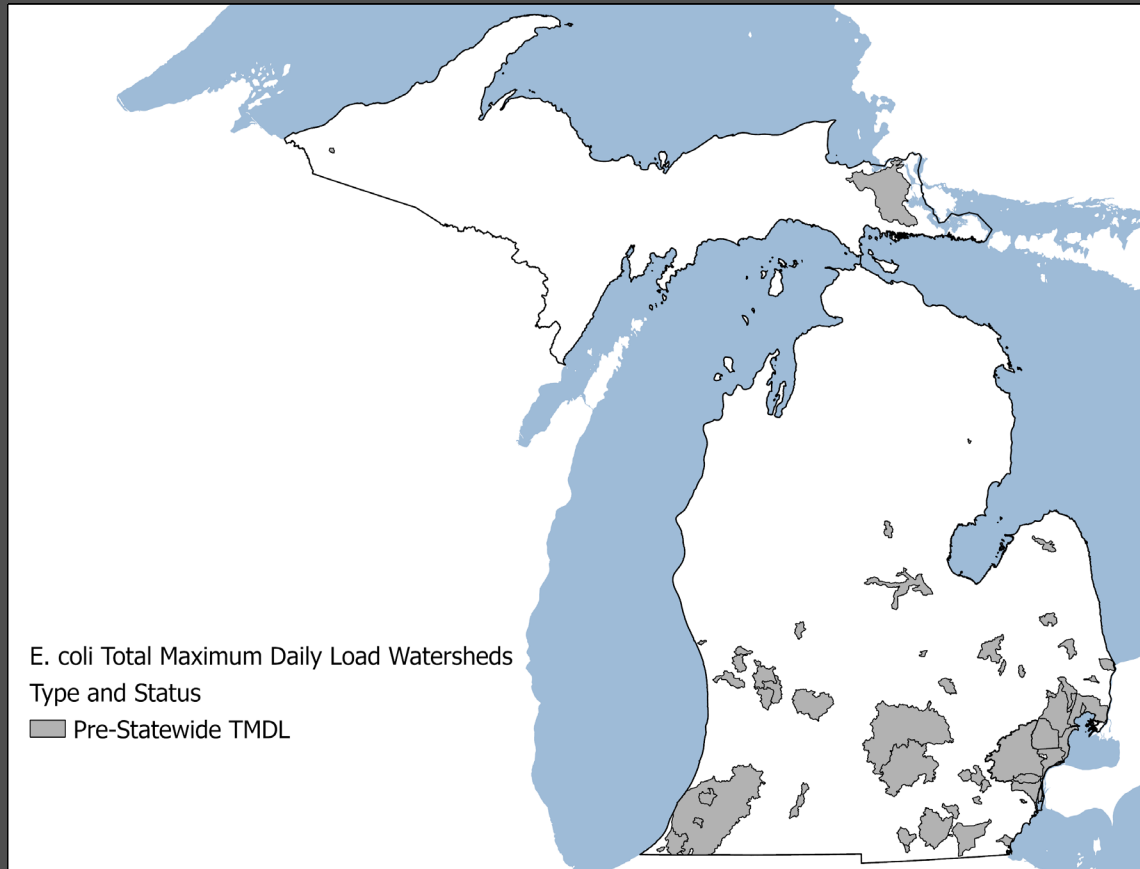
(Image courtesy of the Earth Science and Remote Sensing Unit, NASA Johnson Space Center)

Michigan's 303d/TMDL Vision "1.0"

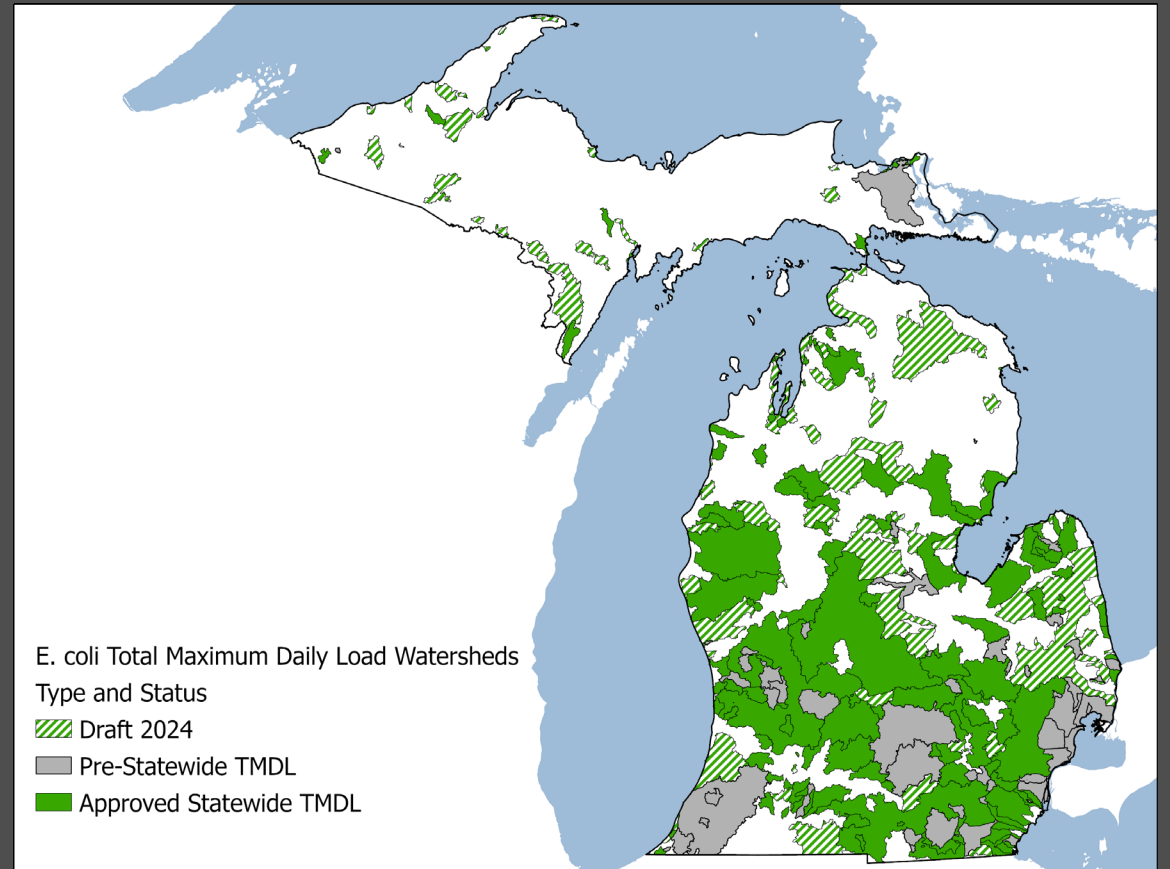
- Clean recreational water is important to public health and our economy
- Develop a Statewide E coli TMDL to address a growing number of known impairments.
- Speed up TMDL development and implementation in NPDES permits
- Assess waters more rapidly



2016

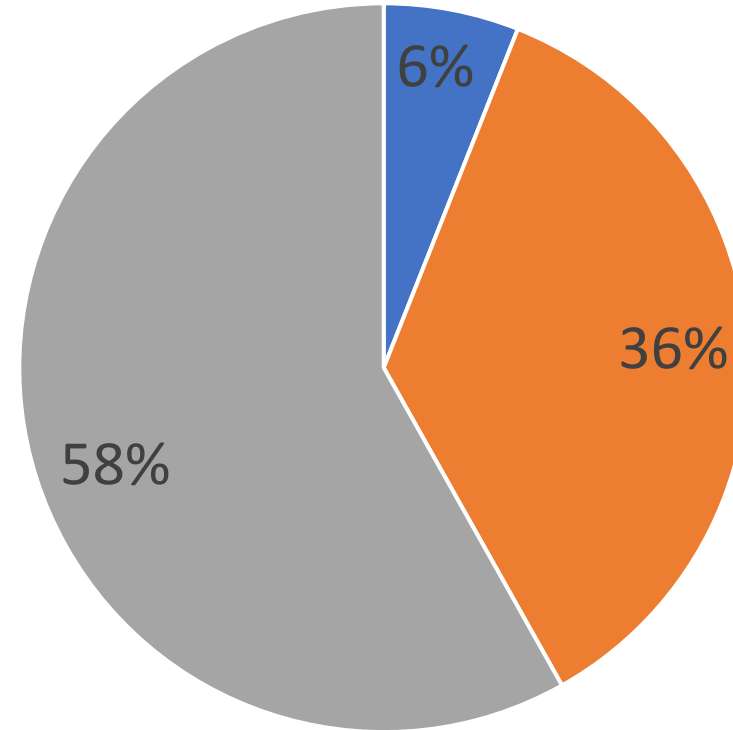


2024



2024

Assessment Status of River Miles - Total Body Contact Use

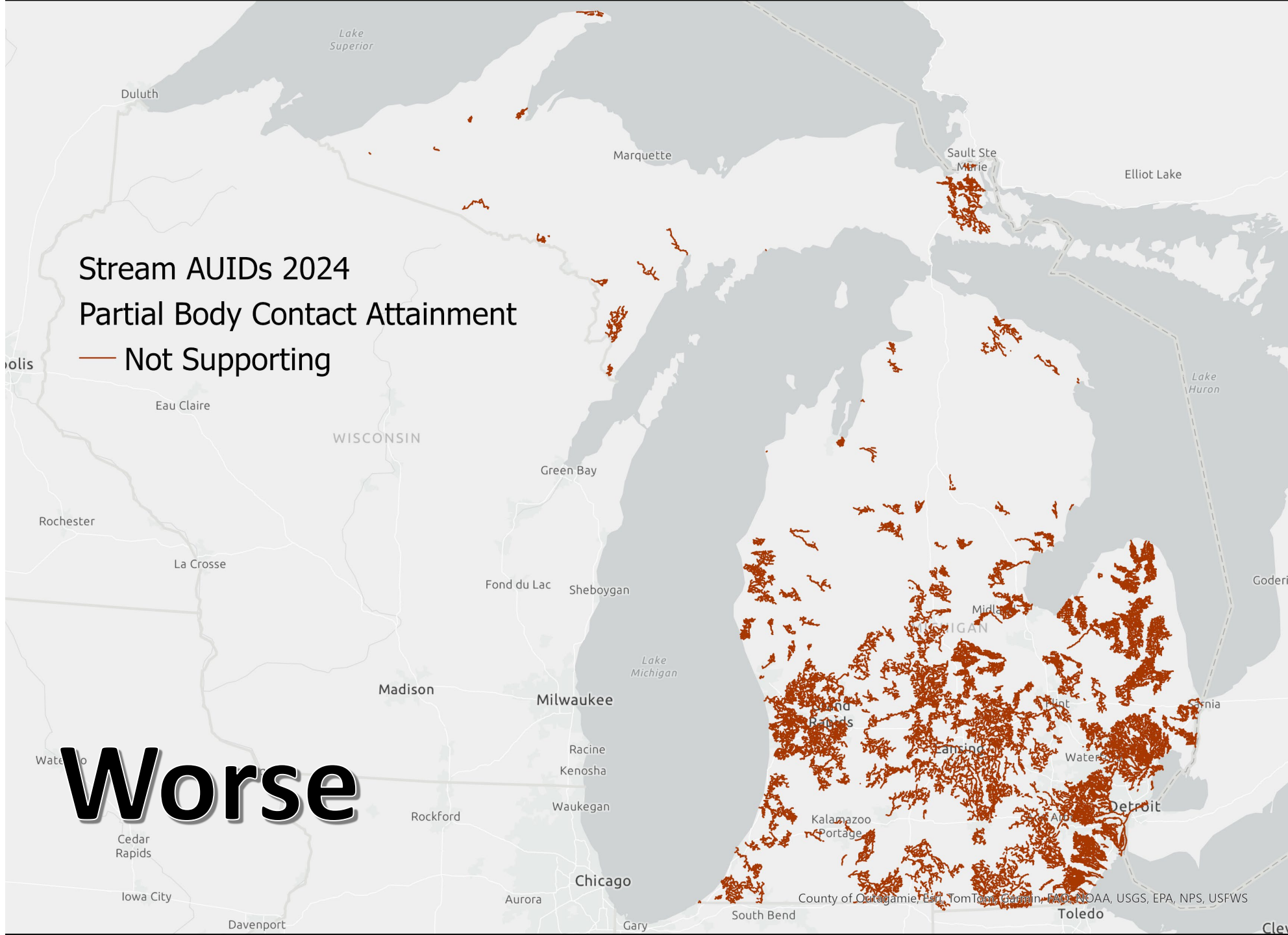


■ Supporting
■ Unknown

■ Not Supporting

Stream AUIDs 2024
Partial Body Contact Attainment
— Not Supporting

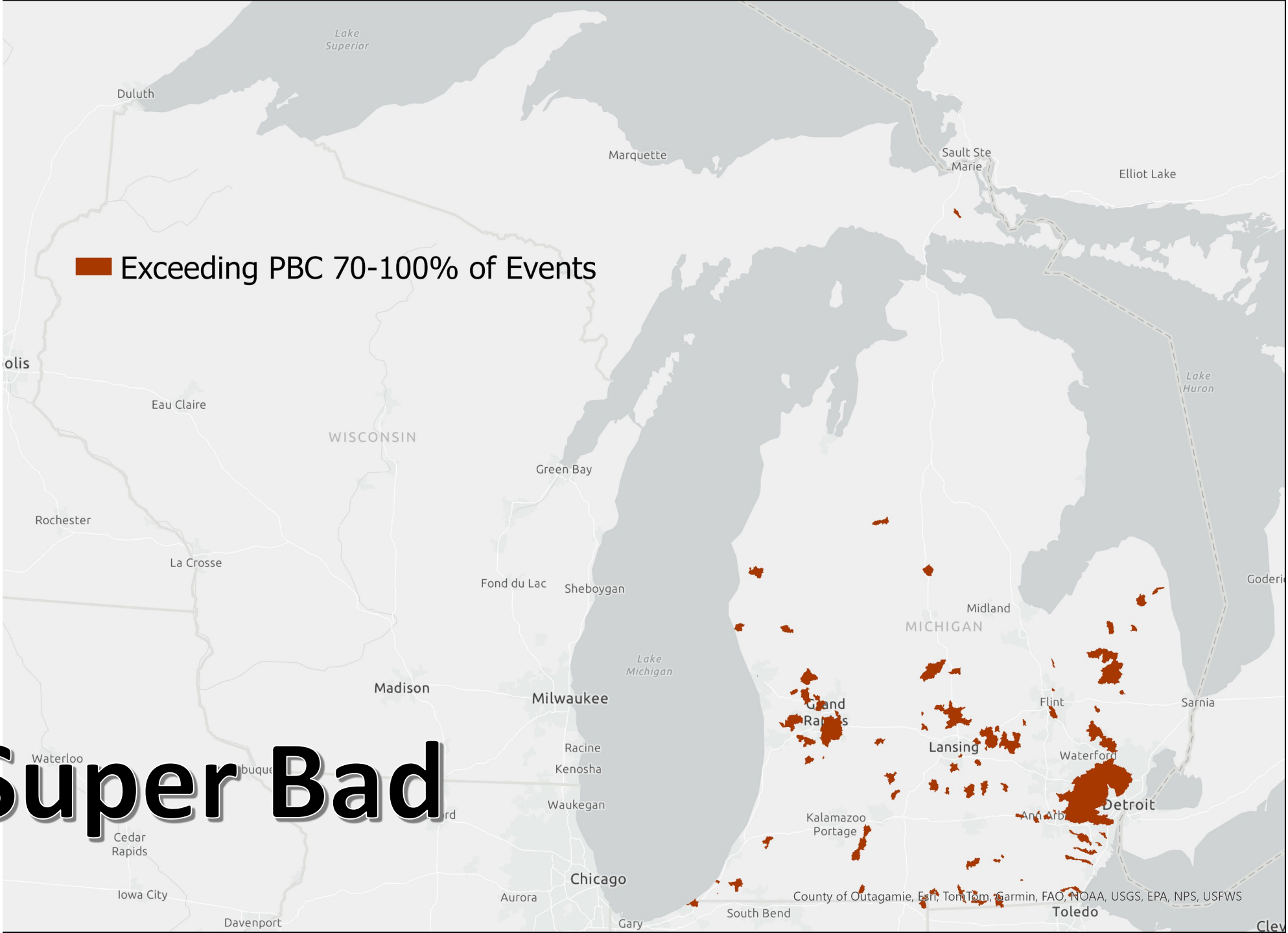
Worse



County of Okemos, Benji Tomlin, Garin, EAO, NOAA, USGS, EPA, NPS, USFWS

■ Exceeding PBC 70-100% of Events

Super Bad

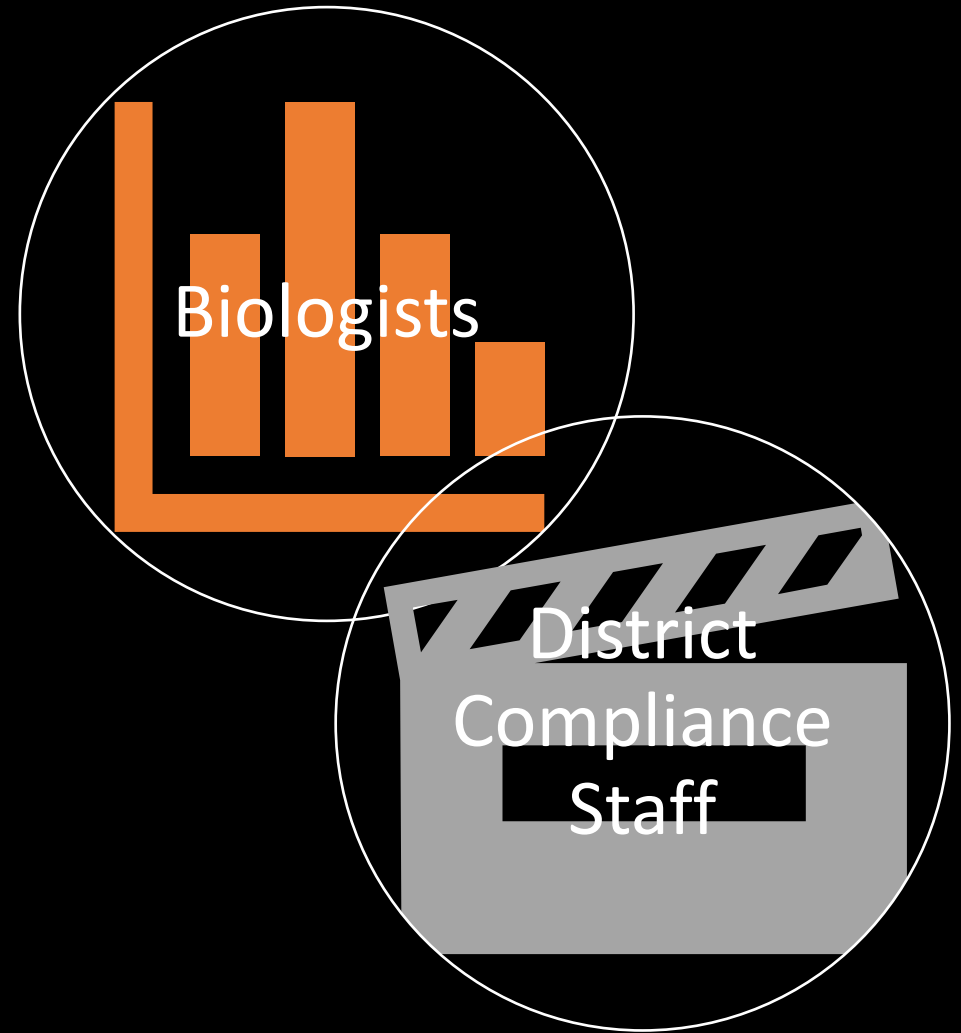




Nearly missed opportunities to identify problems in a severely impaired water

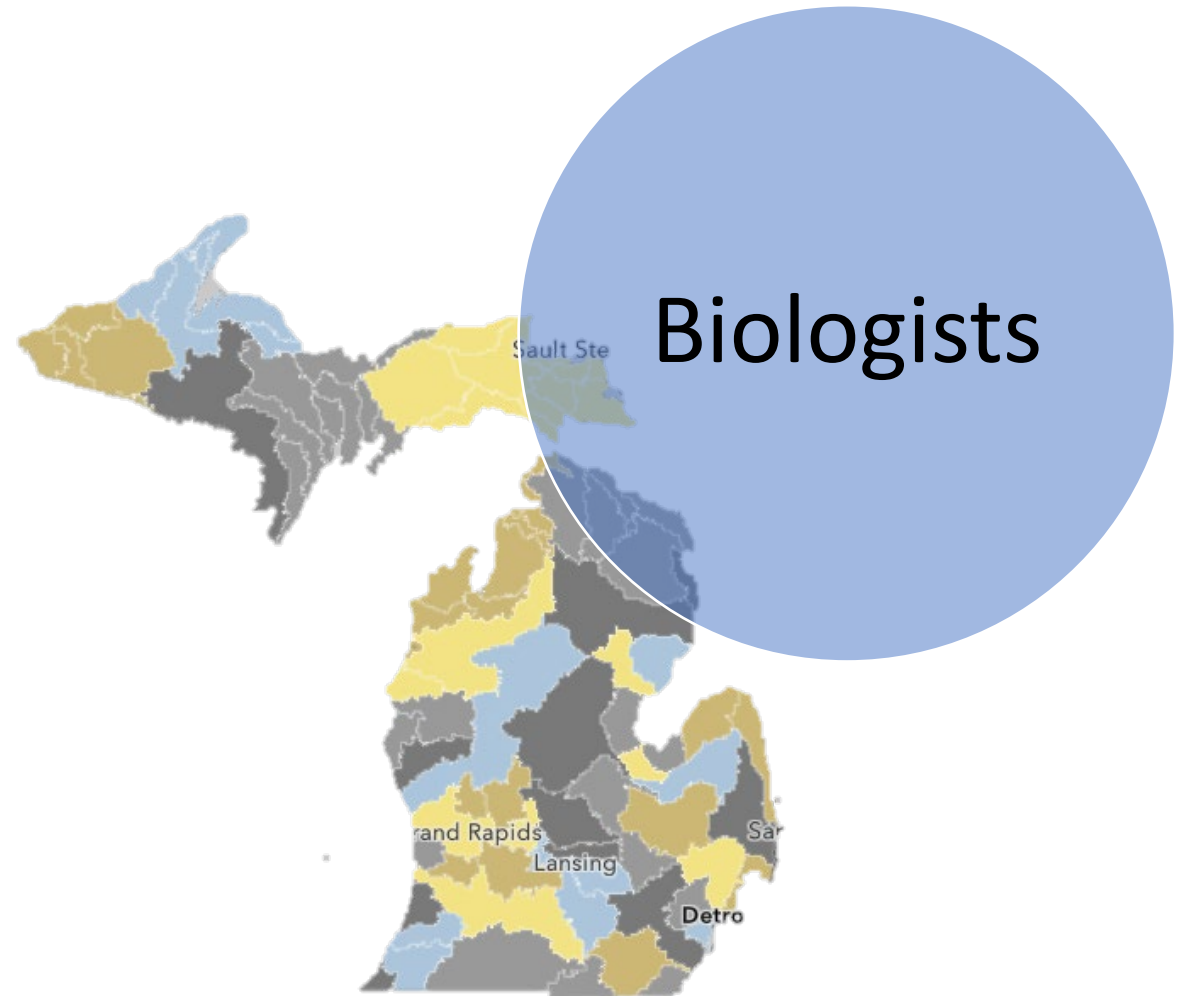
Problem:

How do we communicate major water quality issues that biologists find and turn our **data** into **action**?



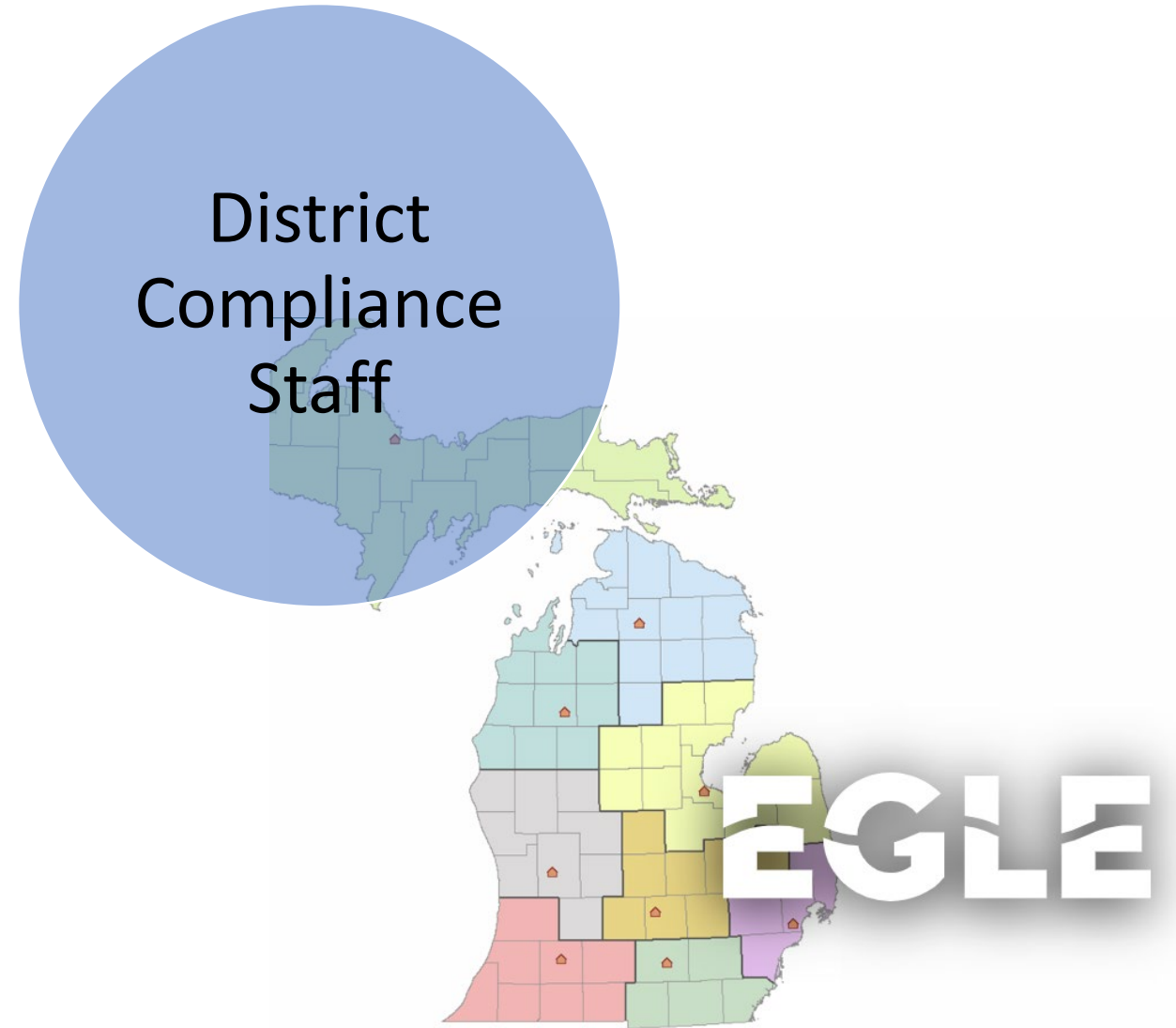
Biologists

- We have some statewide specialists and many “Watershed biologists” which operate within their watersheds (HUC8s) to conduct water chemistry and biosurvey work.
- Data goes into the Water Quality Exchange and ATTAINs.
- Reports due within 1 year, but this is too long and deadlines aren’t always met.



Field Operations (Compliance Staff)

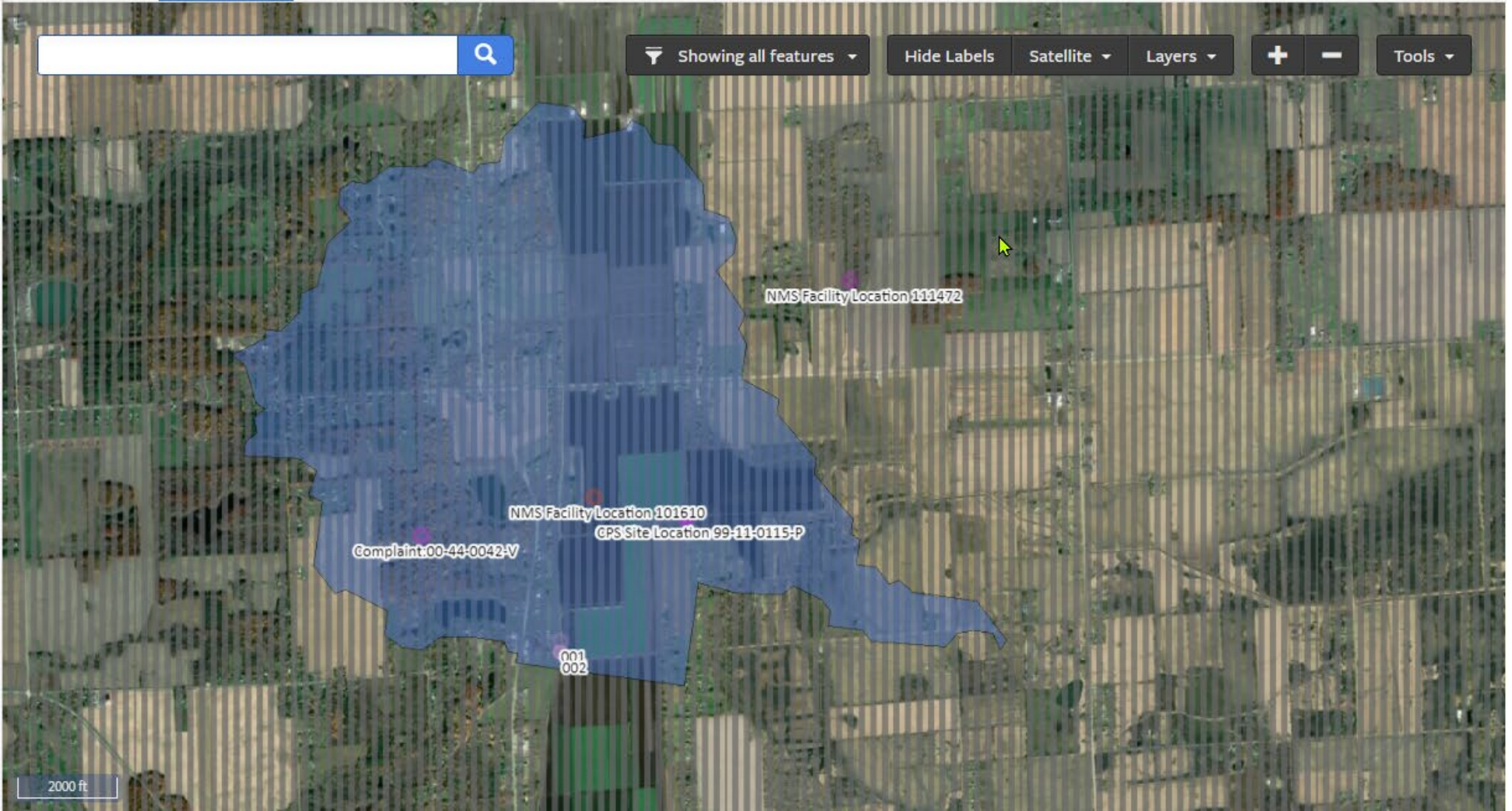
- Many district staff have multiple programs (such as CAFO and MS4; or CAFO and Groundwater) plus respond to spills and complaints.
- All Permitting & Compliance data and work is done through **MiEnviro** (<https://mienviro.michigan.gov/>)
- **Do they check the Water Quality Portal for relevant data? Do they read our reports?**



⚠️ MiEnviro will be offline Tuesday, May 28, 2024, starting at 5:15 pm EST for system maintenance. MiEnviro is expected to be available again by 7:00 p.m. Please exit MiEnviro before this time to avoid losing any work.

Site Details

- Details
- Site Plan**
- Documents
- Events
- Contacts
- Program Components
- Relations
- Preferences



Dashboard

Details

Start a New Form

Submissions

Discharge Monitoring Reports

Permits

Evaluations

Violations

Compliance and Enforcement Actions

Environmental Projects

Financials

Financial Assurance

Documents



2000 ft

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The map interface includes a search bar, a dropdown menu for 'Showing all features', and buttons for 'Show Labels', 'Satellite', 'Layers', zoom in (+), zoom out (-), and 'Tools'. A yellow callout box points to a specific location on the map, which is overlaid with a blue polygon. An alert popup is open, displaying the following information:

Alert

- 1: This location intersects with an E. Coli TMDL Watershed
- 2: Warning: This feature intersects with the Priority Area - E. coli layer.

E. Coli TMDL Watersheds:
 Total Maximum Daily Load (TMDL) Name: Statewide E. coli - Addendum
 Year: 2024

Priority Area - E. Coli:
 Site ID: MI-440284
 Site Description: Hunt Drn - Weyer Rd
 Basis Year: 2022.0
 Most Recent Sampling Year: 2022.0
 Comment: Active Enforcement
 Report Url: DRAFT
 EPA Data Download: https://www.waterqualitydata.us/data/Result/search?siteid=21MICH_WQX-440284&sampleMedia=Water&project=EcoliTMDL&project=WCMPEcoli&mimeType=csv&zip=yes&dataProfile=1
 Collector: EGLE-LTI

Warnings about the Priority Area and E. coli TMDLs



2000 ft

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The map interface includes a search bar at the top left, a filter dropdown set to 'Showing all features', and buttons for 'Show Labels', 'Satellite', 'Layers', zoom in (+), zoom out (-), and 'Tools'. An alert popup is displayed over the map, containing the following information:

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Link to Water Quality Report

Link to download data from Portal



2000 ft



Is this perfect?

- No.
 - Will still require district staff to turn on the GIS layers for each inspection. But it is easier and fewer steps.
 - Still not 'instant' knowledge transfer, but nothing will be.

Next steps:

- Training and communication.
- Adding questions to NPDES inspection forms used by district staff.
- Possible similar nutrient layer for impairments with no TMDLs (nutrient impairments are a priority under our vision "2.0", but the TMDLs are a long way off)

[Molly Rippke](#)

rippkem@michigan.gov

Michigan.gov/EcoliTMDL