

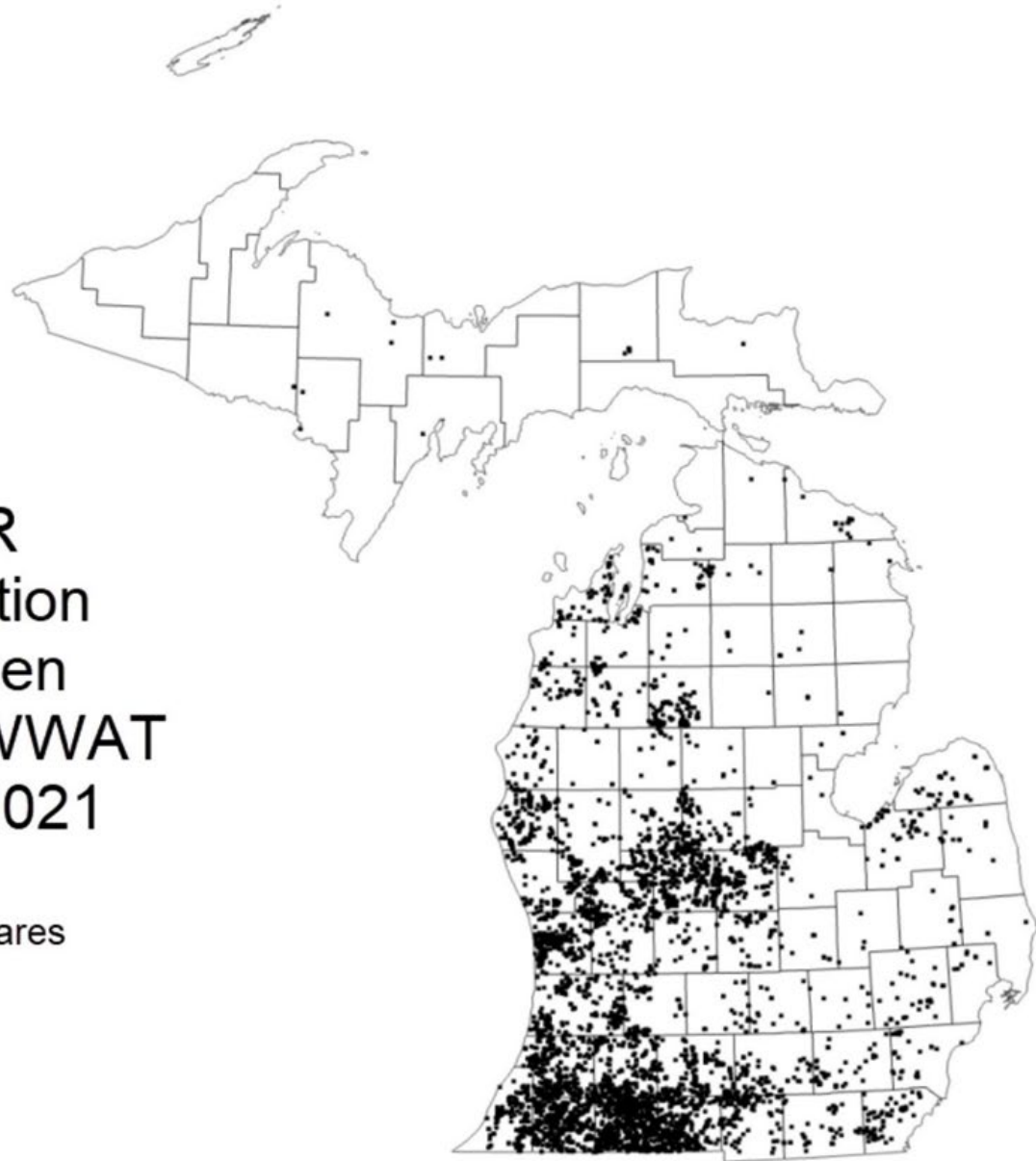
A large center pivot irrigation system is shown in a field of green crops. The system consists of a long metal pipe supported by a series of metal towers, with smaller pipes and nozzles extending from the towers to the crops. The sky is a clear, bright blue, and the overall scene is well-lit, suggesting a sunny day. The crops are arranged in neat, parallel rows, and the irrigation system is positioned in the middle of the field.

Groundwater Resources in Michigan

Improving regulatory decisions with better data

**5,814 WWAT/SSR
registrations for irrigation
withdrawals have been
requested through the WWAT
as of November 15, 2021**

Locations indicated by black squares



The Proposal

The State of Michigan, through MPIC, partners with a professional hydrogeologic consulting firm(s) to create a new public-private partnership for a monitoring well network with shared data

The legislature provides:

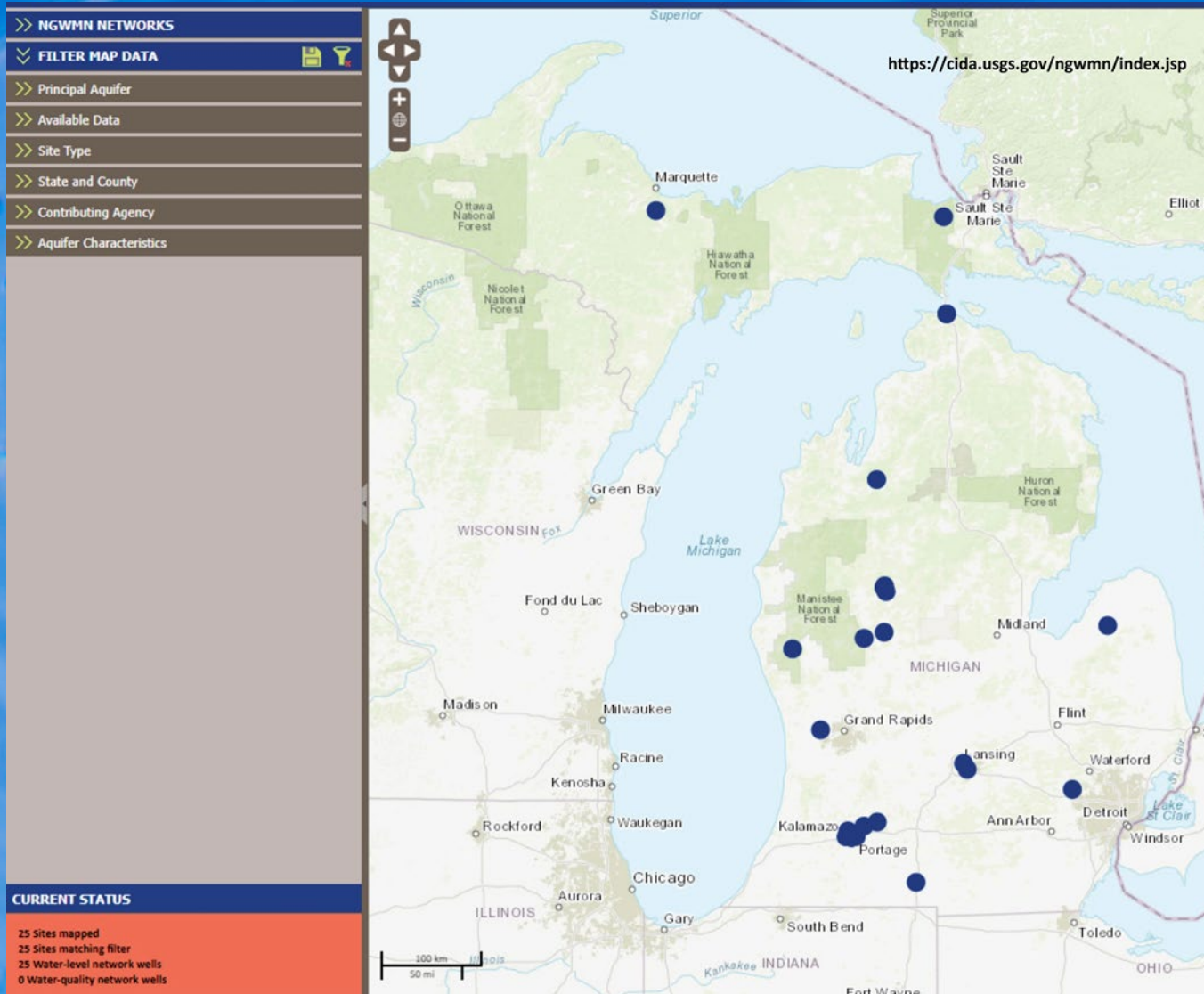
One-time funding of \$25 million for the installation of up to 500 monitoring wells and 3 years of data collection

A hand is shown watering a small green plant with two leaves growing out of a mound of brown soil. The background is a soft, out-of-focus green and yellow gradient.

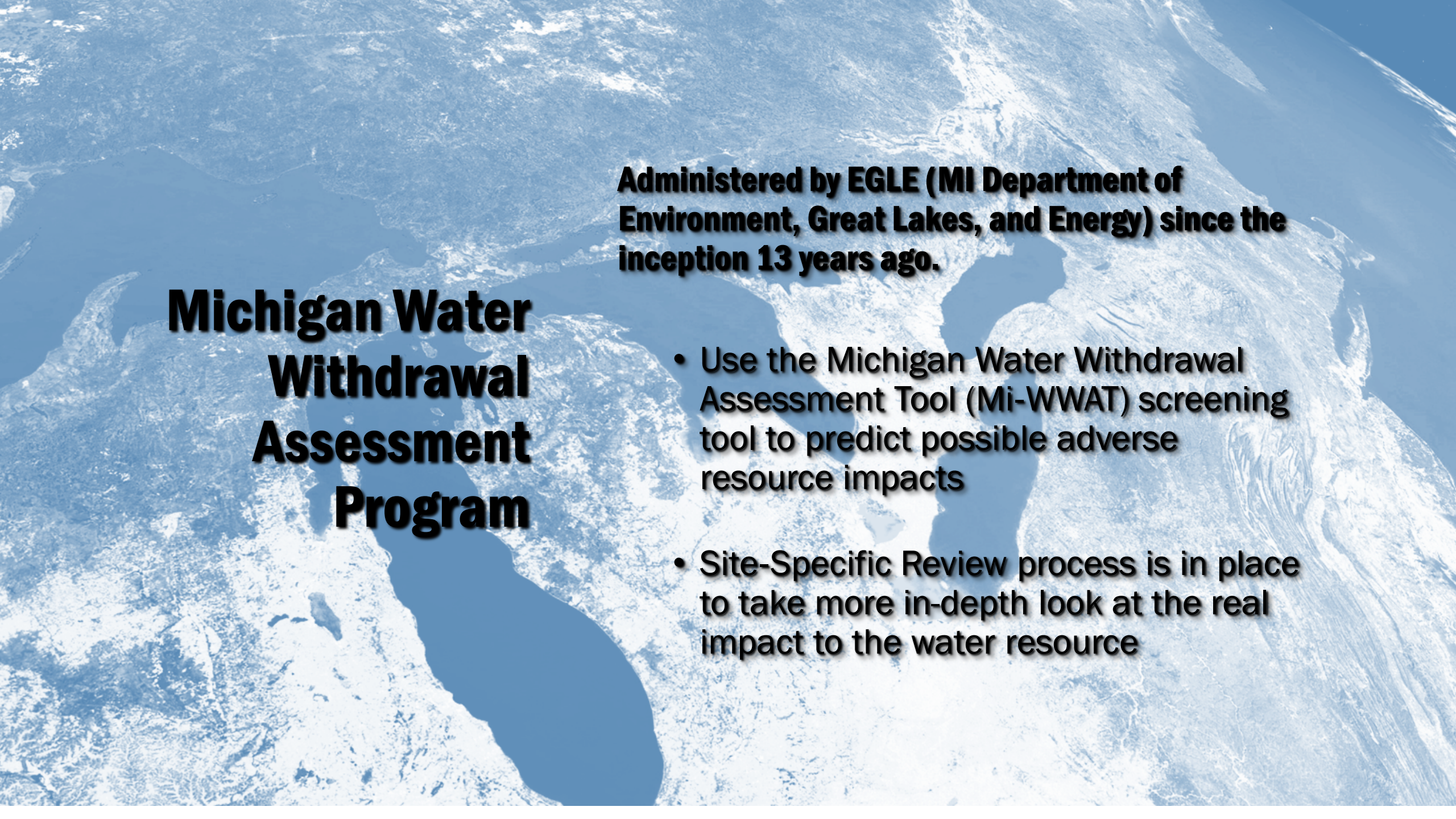
The Issue

Why is GW Monitoring needed?

- Michigan just enacted an economic development incentive package - \$1B to compete and win transformational projects
- Access to suitable water resources becomes critical to economic development efforts to secure and win jobs for Michigan



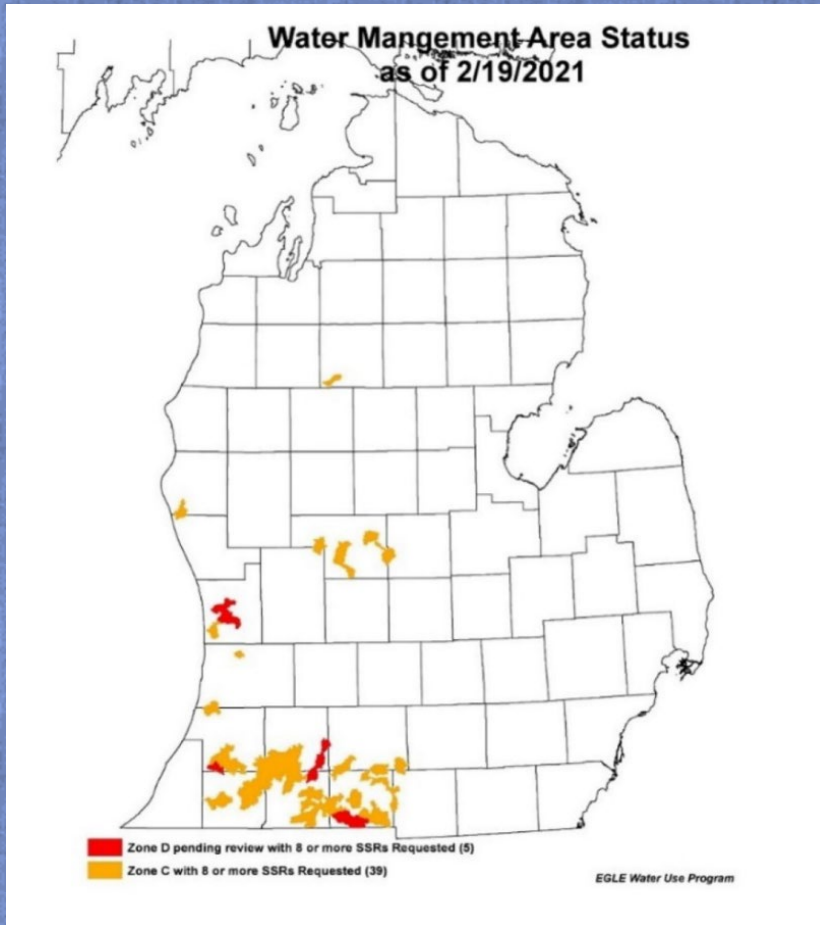
The State is regulating large quantity water wells using an unverified stream depletion model and an active network of only 25 monitoring wells.



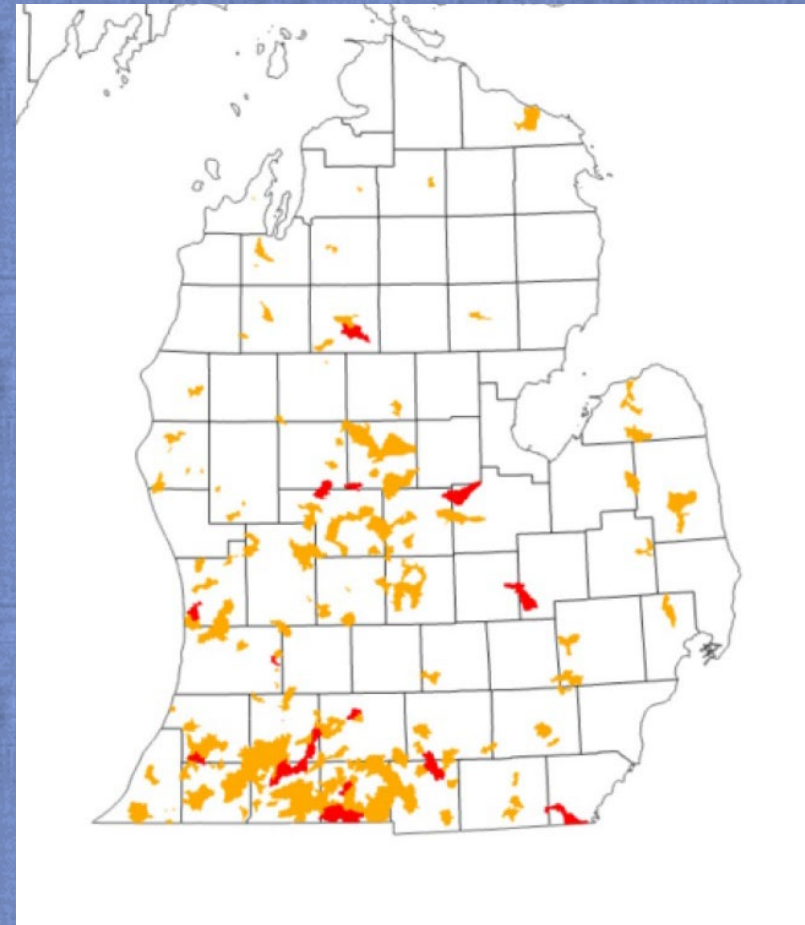
Michigan Water Withdrawal Assessment Program

Administered by EGLE (MI Department of Environment, Great Lakes, and Energy) since the inception 13 years ago.

- Use the Michigan Water Withdrawal Assessment Tool (Mi-WWAT) screening tool to predict possible adverse resource impacts
- Site-Specific Review process is in place to take more in-depth look at the real impact to the water resource



FEBRUARY, 2021



NOVEMBER, 2021

The Issue

Why is GW monitoring needed?

- Need for additional groundwater data is urgent to ensure:
 - ✓ Ability to optimize management of groundwater resources
 - ✓ Environmental protection of ground and surface water resources

A man in a light-colored button-down shirt and blue jeans stands in a field of green crops, looking down at a tablet computer. In the background, a large metal power line tower is visible against a bright, hazy sky. The overall scene is outdoors during the day.

The Deliverables

Network consisting of a minimum of 500 wells and a minimum of three years of data collection with no legacy costs to the taxpayers of Michigan and will:

1. Verify the local geology
2. Directly measure the impact of the high-capacity wells
3. Demonstrate the seasonal and long-term water level trends
4. Determine the aquifer storage and hydraulic conductivity values
5. Serve as a warning system for depletion.

The Group



Questions?



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