



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Water Use Advisory Council



June 23, 2020

WUAC Co-Chairs

- Laura Campbell, Manager (Items 1-4)
Agricultural Ecology Department
Michigan Farm Bureau
- Brian Eggers, Principal and Founder (Items 5-7)
AKT Peerless Environmental
- Bryan Burroughs, Executive Director (Items 8-12)
Michigan Trout Unlimited

Co-Chair Laura Campbell

Agenda Items 1-4

WUAC Meeting Materials and Access Information

https://www.michigan.gov/egle/0,9429,7-135-3313_3684_64633-528024-,00.html

**Water Use Advisory Council (WUAC) Meeting
Tuesday, June 23, 2020
1-3 p.m.
On Teams Hosted by
Michigan Department of Environment, Great Lakes and Energy (EGLE)**

AGENDA

- 1. Welcome**
- 2. Roll Call**
- 3. Approval of Agenda-Roll Call Vote**
- 4. Approval of Minutes-Roll Call Vote**
- 5. Public Comment**
- 6. Program Staff Update --Jim Milne**
- 7. Process and Timeline for Completing 2020 Legislative Report--Christine Spitzley**
- 8. Updates**
 - **Data Collection Committee**
 - **Implementation Strategies Committee**
 - **Models Committee**
 - **New Topics Committee**
- 9. Proposed Additional Meeting -- September 15, 2020**
- 10. Open Comments**
- 11. Next Meeting**
- 12. Motion to Adjourn**

Co-Chair Brian Eggers

Agenda Items 5-7

5. Public Comment



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

6. Program Staff Update

Jim Milne, Supervisor
Water Use Assessment Unit
Water Resources Division, EGLE

Outline

- New Phone #'s for Water Use Staff
- Water Use Program Metrics
- New USGS Stream Gages
- USGS Miscellaneous Flow Measurements

Water Use Program Phone #'s

- Jim Milne 517-285-3253
- Hannah Arnett 517-599-9767
- Christopher Gothberg 517-881-7604
- Clay Joupperi 517-881-7807
- Andy LeBaron 517-599-3792
- Mike Osier 517-899-2960
- Alex Pink 517-899-2938
- Nathaniel Shuff 517-599-6259
- Jill Van Dyke 517-881-1607

Program Metrics

- 148 SSRs submitted
- 42 SSR decisions not made \leq 10 days
- 16 total SSRs still pending
- 74.5% of SSR decisions made \leq 10 days
- Average days to SSR decision 9.0

Compliance Metrics

Compliance Communications:

Amended registrations 521

After the fact registrations 137

Missing pump information 167

First Violation Notices 27

Second Violation Notices 2

Violations Closed 14

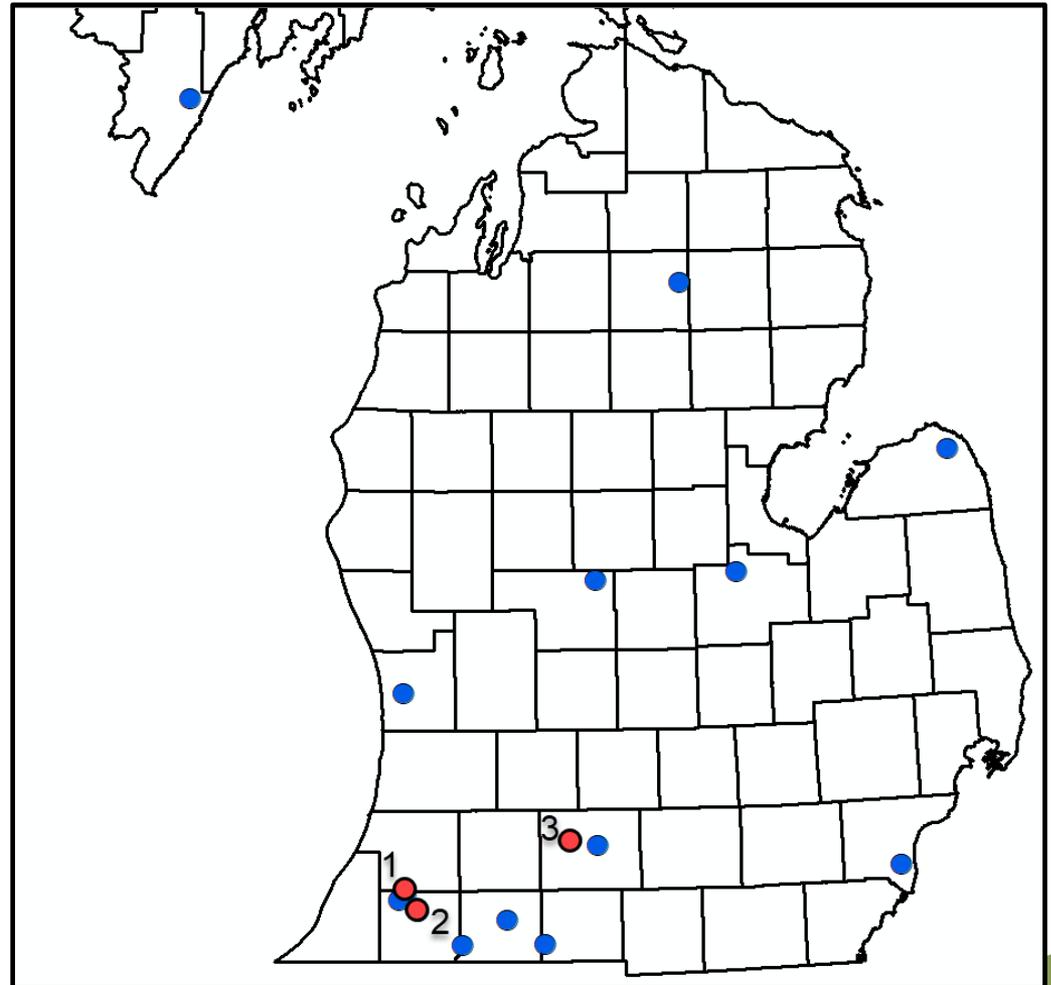
Complaints Received 11

Public Water Supply Pre-Screening Reviews

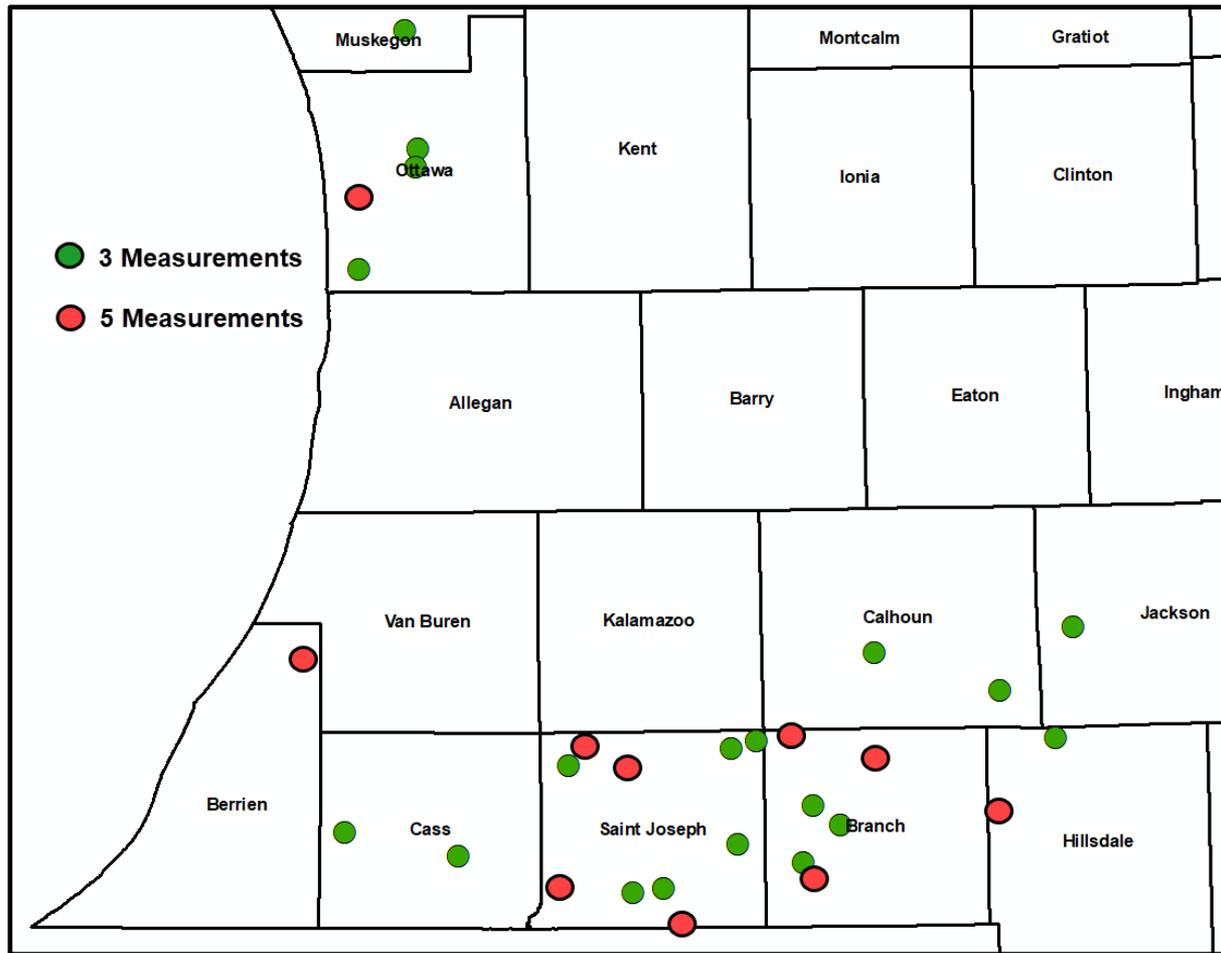
- Passed: Commerce Road-Wolverine Lake, Oakland County
- Passed: Michaywe Senior Housing Development, Otsego County

New USGS Stream Gages

- 1. Osborn Drain at Dewey Lake Road (WMA 19606)
- 2. Dowagiac Creek at Dutch Settlement Road (WMA 21592)
- 3. Dickinson Creek at Historic Bridge Park (WMA 3452)



USGS Miscellaneous Stream Flow Measurements



Questions?

Jim Milne
Water Use Assessment Unit
EGLE Water Resources Division
517-285-3253
milnej@michigan.gov

Michigan Department of
Environment, Great Lakes, and Energy

800-662-9278

Michigan.gov/EGLE



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7. Legislative Report Process

Christine Spitzley, Principal
OHM Advisors

2014 Report

- Comprehensive list of recommendations
- 200 pages
- 69 Recommendations
- Limited cost/budget analysis provided

Goals of December 2020 Report

- More concise
- Easy to understand
- Highlight achievements
- Limited recommendations
- Implementation strategy
- Digital format only
- Goal is to present one clear voice to the Legislature

2020 Legislative Report

- Recommendations will be sorted by topic/data v. Committee
- Committees will not be identified in the report
- First of ongoing series of prioritizations

- Each Committee is asked to provide 3-5 recommendations
- Specific items with budget/costs attached
- Implementation Committee will prioritize recommendations

Recommendation Format

- Recommendation Title/Name
- Synopsis clearly explaining issue, impact and anticipated outcomes
- Recommendation Actions
- Implementing Organization
- Cost Analysis and Funding Recommendation
- Legislative changes if applicable
- Timeframe

Next Steps



Questions/Information

Christine.Spitzley@ohm-advisors.com

517.525.1808

Co-Chair Bryan Burroughs

Agenda Items 8-12

8. Committee Updates

DATA Committee Update

Co-Chair Bryan Burroughs, Ph.D.
Executive Director
Michigan Trout Unlimited

WUAC Data Committee

- Held meetings on April 29, May 29, and next is June 30, 9-11am.
- Discussed all previous rec's, and prioritized addressing all of them to clear implementable status before addressing “new” topics.
- Top priorities revolve around developing actionable plans for data, data acquisition plans, and data storage & use platform.

WUAC Data Committee

- Other work by “workgroups” on other issues, e.g., continued well drillers trainings on geologic information, inland lakes, (each of those has had independent mtgs) and reviewing procedures for reclassification of streams as needed.
- Will need June, and July mtgs at minimum to develop recommendations for full council, may be adding mtgs to help us achieve goals by report writing deadlines.
- Anticipate recommendation proposals in August – September, with report drafting at same time.
- Questions?

Implementation Strategies Committee Update

Co-Chair Douglas E. Needham, P.E.
President
Michigan Aggregates Association

DRAFT Strategic Plan

Water Use Advisory Council Strategic Plan

Vision:

Continuously improve the EGLE Water Withdrawal Assessment Process by studying and making recommendations to Michigan Legislature, EGLE, Department of Natural Resources, and Department of Agriculture and Rural Development.

Mission:

To provide a forum for discussion between stakeholders and agency staff on a variety of topics of interest related to Michigan's Water Withdrawal Assessment Process and to offer effective solutions to problems that are identified within the Program.

WUAC Charge:

- A. Make recommendations to the department of environment, great lakes and energy, the department of agriculture and rural development, the department of natural resources, and the legislature on the implementation of part 327 (Natural Resources and Environmental Protection Act of 1994 Part 327 Great Lakes Preservation), including all of the following:
 - 1) Strategies for collection, verification, and use of data, including geology, aquifer characteristics, and groundwater and surface water hydrology.
 - 2) Improvement, verification, regionalization, and integration of models used in the water withdrawal assessment tool and site-specific review, including models developed by private and public entities, organizations, or individuals.
 - 3) Identification of research, public-private partnerships, training, and changes to the water withdrawal assessment tool needed to improve the department's ability to implement part 327 and to improve the water withdrawal assessment process under part 327.
- B. Study and make recommendations, as needed or as requested by the relevant standing committees of the legislature or the department, regarding the development and refinement of the water withdrawal assessment process under part 327.
- C. Make recommendations on reconciling conflicts in interpretation of state laws related to the use of the waters of the state.
- D. At least every 2 years after the effective date of the 2018 amendatory act that amended this section, provide a report to the senate majority leader, the speaker of the house of representatives, and the standing committees of the legislature with jurisdiction primarily related to natural resources and the environment that makes recommendations regarding how the water withdrawal assessment process under part 327 could be improved. The report shall contain specific recommendations on the use of the assessment tool, the site-specific review process, the permitting process, the staffing, budgetary, software, and other resources required by the departments to successfully implement part 327, and any other measure that the council determines would improve the water withdrawal assessment process under part 327.

June 6, 2020

Implementations Strategies Summary Document

WUAC Implementation Strategies Committee
May 18, 2020

- Improve Communication between Wellog and WWAT
 - Data Committee
 - Standardization of Drillers Input into Wellog, Training and Continuous updated.
 - Standardization of Geologic Logs
 - EM 2.5 Well Drillers and Trainings
 - EM 2.5 The DEQ should continue to collaborate with Michigan Geological Survey and water well drillers on the new tools and training programs being developed to improve geologic data entered into Wellog records and should make necessary changes to Wellog forms to facilitate the entry of more accurate geologic data into Wellog.
 - The primary work included under this previous recommendation, is identification of needs associated with continued training of well drillers, and identification of any necessary changes to Wellog forms to facilitate more accurate geologic data. In discussion of this, it was identified that several of the previous recommendations being pursued by the Implementing Past Recommendations Committee also pertain to well drillers, and that all could be addressed in a series of meetings including them.
 - Implementation Committee TU 2.2
 - Recommendation per 12/12/14 Final Report, "Make the WWAT registration number a required field in Wellog (and on paper well logs) for high-capacity wells."
 - TU 3.1
 - Recommendation per 12/12/14 Final Report, "The process for checking the compliance of 'as built' well construction details with WWAT and/or SSR registrations of groundwater QWs should be automated. Discrepancies between these should be flagged for follow up by staff." EGLE mentioned that there is need for Wellog to communicate with the WWAT tool and MDARD reporting data.
 - It would be beneficial to have a flagging process that identifies discrepancies between 'as approved' and 'as built' wells.
 - This improvement will speed up the time it takes EGLE staff to ensure that the installation details match the authorized details. This will benefit the authorization time of future wells. It will also reduce the workload of EGLE compliance staff, expediting efforts to bring more serious violations of Part 27 back into compliance. It will also result in fewer compliance communications being sent to property owners (with copies to consultants, well drillers, and other agents) to address these violations.

Subcommittee Recommendations

- Please send recommendations to Implementation Committee so they can be incorporated into the summary document and we can ensure continuity among all recommendations.
- Items to include:
 - Problem statement
 - Steps needed to achieve task
 - Desired outcome
 - Estimate of cost

Models Committee Update

David A. Hamilton
Senior Policy Director
Great Lakes Project
The Nature Conservancy in Michigan

Topics for Models Committee

Catchment-scale accounting of large-quantity withdrawals in the Water Withdrawal Assessment Process: status update

Work group: Jim Milne, Andrew LeBaron, David Hamilton, Howard Reeves, Gary Whelan, Dana Infante & lab (Kyle Herreman, Jared Ross, Hao Yu), Troy Zorn (Lead)

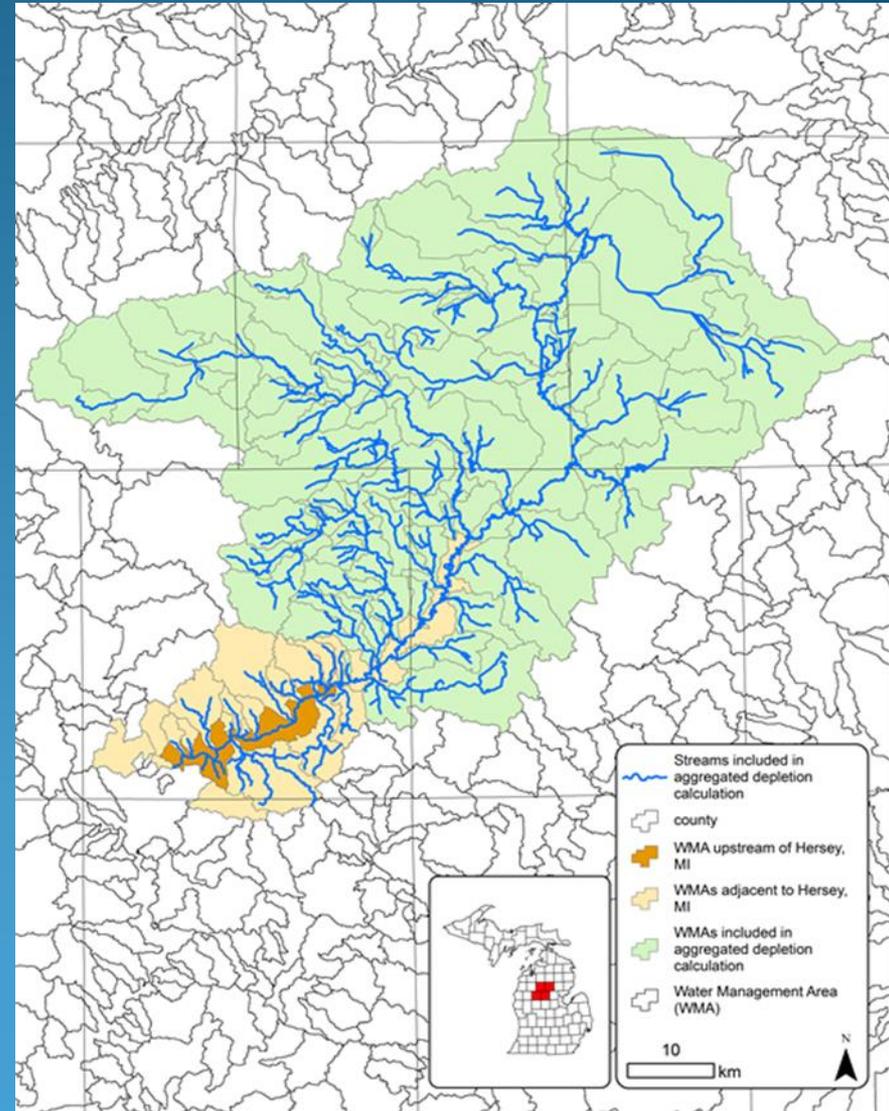
**Water Use Advisory Council meeting
June 2020**

Background

- 2008 Great Lakes Compact: identified a common, resource-based conservation standard of “no significant individual or *cumulative* adverse impacts...”
- Intent and efforts are to prevent individual or cumulative impacts

Cumulative effects, catchments, & WWAP

- When a new LQW is proposed, the WWAP looks at adjacent WMAs.
 - Catchment level accounting for WMAs made up of 1-2 WMAs.
- For larger streams, WWAP could suggest more water is available than is the case since withdrawals in much of the catchment are ignored.
 - e.g., Muskegon R. at Ewart

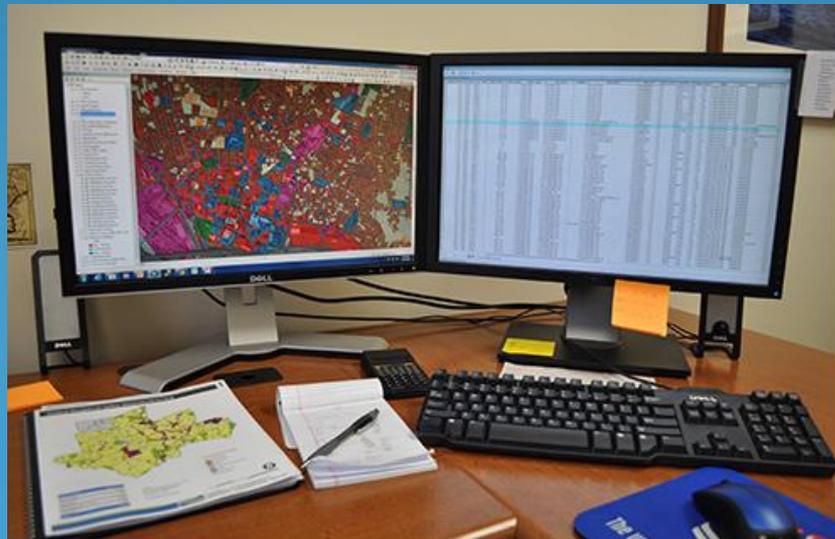


“...understanding cumulative impacts of multiple withdrawals within a watershed is paramount to a sustainable approach for both the aquatic ecosystem and the human users of the resource.”

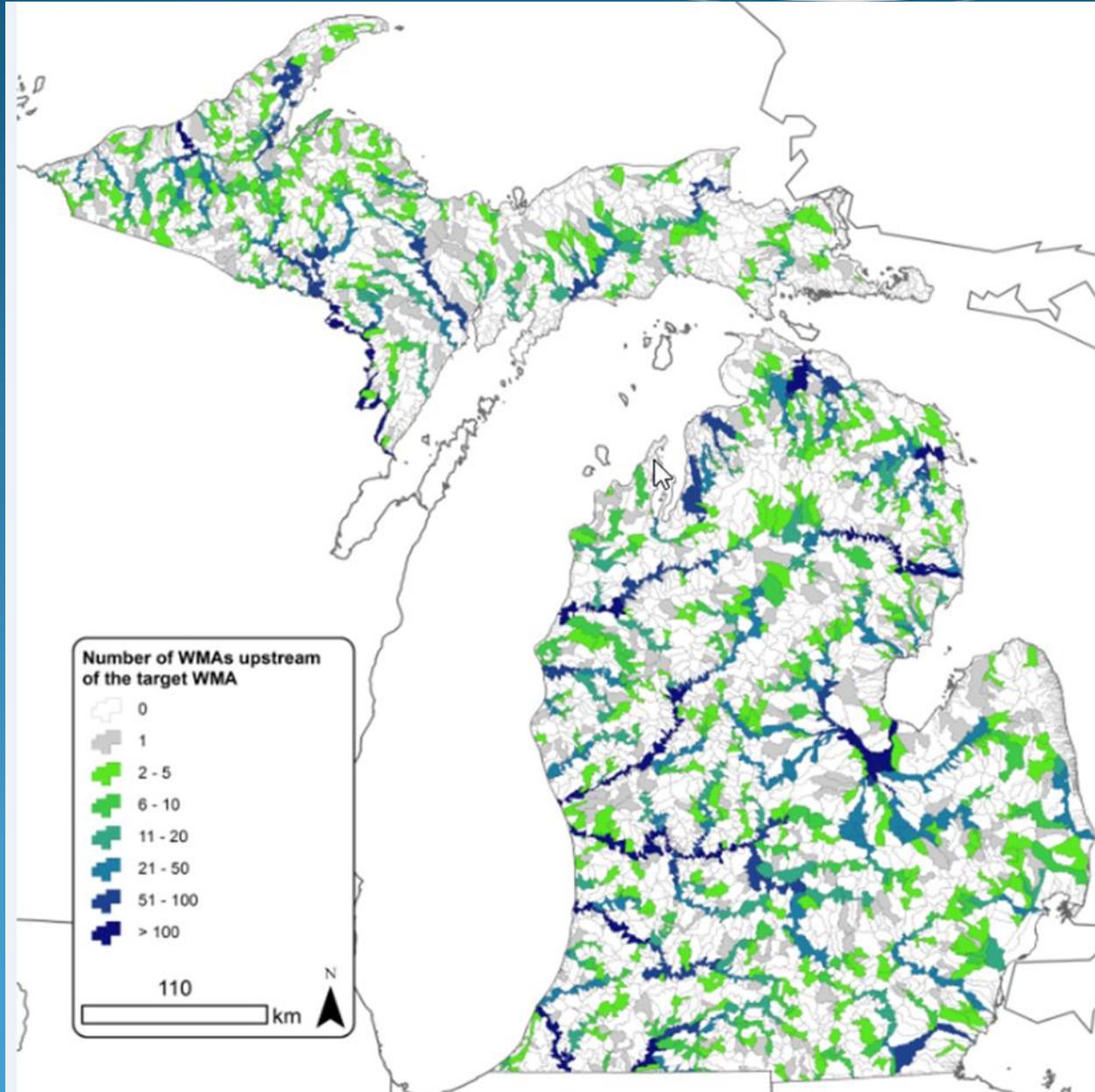
Hamilton and Seelbach (2011)

Steps

1. Acquire data from MDEQ
 1. Volumes of water depleted by WMA
 2. Topological relationships among WMAs for MI river networks
2. Review and reverse topological coding to “look upstream”
3. Run aggregation coding to sum all withdrawals upstream of each WMA



Results: Larger systems potentially more vulnerable to cumulative effects



Summary

- Demonstrated that cumulative withdrawals and return flows can be readily incorporated into the WWAP.
 - It's technically feasible.
- Addressing this deficiency would maintain the public's confidence in the WWAP.
- This information can help fill a key knowledge gap.
- Cumulative withdrawal info can also aid in identifying areas for further investigation.

Status

- Dec. 2018- Final report and WUAC approval to investigate.
- July 2019- WUAC reconfirms previous decision.
- Since then- meetings and calls
- Working collaboratively with Dr. Dana Infante's lab
- Issues
 1. WWAP not addressing cumulative effects in larger systems
 2. Concern about being more restrictive by incorporating catchment-level accounting when not seeing obvious effects in systems with considerable withdrawals. Climate issue?
 3. Incorporate return flows into system

Update

1. Downstream accounting is a technical issue that can be readily addressed. Want increased comfort in implementing it.
2. Predicted index flows in WWAP are estimated from a drier period.
 - Updating index flow model and predicting index flows under different precipitation scenarios to assess the degree to which wetter conditions in recent years influence index flows and obscure withdrawal effects.
 - Increased understanding of our current state will hopefully provide further support to move forward on protecting stream fish communities from effects of cumulative withdrawals.

Update

3. Incorporate return flows. Apply typical return flow values by sector for Great Lakes region to permitted withdrawals in WWAP.

Below: Return flow values for Great Lakes Basin (Shaffer & Runkle 2007)

Water use sector	Return Flow (%)
Industry	90
Commercial	90
Mining	90
Thermoelectric power generation	98
Domestic and public supply	88
Irrigation	10
Livestock	17

Update

- Very limited progress since Covid-19 restrictions were enacted.
- Ability of Dr. Infante's lab at MSU to assist on technical aspects of the project has been paused, but they are hoping to resume within a month.

New Topics Committee Update

Co-Chair Pat Staskiewicz, P.E.
Director
MI Section American Water Works
Association

New Topics Committee Update

- 1) Water User Groups
- 2) Water Conservation and Efficiency

9. Proposed Additional Meeting

September 15, 2020

10. Open Comments

11. Next Meeting

August 18, 2020

Location TBD

12. Adjourn
