

Water Use Advisory Council (WUAC) Meeting

Hosted by the Department of Environment, Great Lakes, and Energy (EGLE)

Tuesday, June 14, 2022

1:00 p.m.- 4:00 p.m.

Con Con Conference Room
South Atrium, Constitution Hall
525 West Allegan
Lansing, MI 48933

Remote Option Available Via Teams

[Click here to join the meeting](#)

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Phone Conference ID: 580 078 897#

AGENDA

1. Welcome

Laura Campbell, Co-Chair, Farm Bureau, welcomed members and guests and shared the logistics for participation in the meeting. She noted she would be sharing the Chair role with fellow Chairs Burroughs and Eggers.

2. Roll Call

Campbell took roll call attendance of members and/or alternates.

WUAC Members/Alternates Present at Constitution Hall:

Abby Eaton, The Nature Conservancy Retired
Dave Hamilton, The Nature Conservancy Retired
Doug Needham, Michigan Aggregates Association
Laura Campbell, Michigan Farm Bureau
Megan Tinsley, Michigan Environmental Council
Brian Eggers, AKT Peerless
Bryan Burroughs, Michigan Trout Unlimited
Kelly Turner, Michigan Agricultural Irrigators
Ben Tirrell, Michigan Farm Bureau
James Clift, Deputy Director, EGLE
Christine Alexander, EGLE

A quorum was not physically present therefore the WUAC could not take any official actions requiring a vote during this meeting.

WUAC Members/Alternates Present via Teams:

Buddy Sebastian, Michigan Ground Water Association
Frank Ettawageshik, United Tribes of Michigan
Margaret Bettenhausen, Michigan Attorney General
Mike Gallagher, Michigan Lake Stewardship Associations

Steve Kohler, Kalamazoo River Watershed Council
Tom Frazier, Michigan Townships Association
Jay Wesley, Michigan Department of Natural Resources

WUAC Members/Alternates Absent:

Charlie Scott, Michigan Golf Course Owners Association-no
Clyde Dugan, Michigan Section American Water Works Association
Grenetta Thomassey, Tip of the Mitt Watershed Council
Jason Geer, Michigan Chamber of Commerce
Jason Walther, Michigan Agricultural Irrigators
Jim Johnson-Michigan Department of Agriculture and Rural Development (MDARD)
Jim Nicholas, Nicholas-H2O
John Yellich, Michigan Geological Survey
Kyle Rorah, Ducks Unlimited
Pat Staskiewicz, Michigan Section American Water Works Association
Rachel Proctor, Jackson Consumers Energy
Rich Bowman, The Nature Conservancy
Sue Hanf, Michigan Aggregates Association

Non-members present:

Adam Zwickle
Andy LeBaron, EGLE
Brandon Ellefson, OHM Advisors
Caroline Liethen
Emily Finnell, EGLE
Hannah Arnett, EGLE
Jacob Sauter
Jay Wesley, DNR
Aaron Asher, MSU
Joel Henry, Fishbeck
Lauren Schnoebelen
Michael Frederick, MGWA
Ralph Haefner, USGS
Sean Hammond
Simon Belisle, EGLE
Todd Feenstra, Tritium

3. Approval of Agenda-Roll Call Vote

Laura Campbell noted there is not a quorum in person today so the approval of agenda could not be voted on.

4. Approval of Minutes-Roll Call Vote

Laura Campbell noted there is not a quorum in person today so the approval of minutes could not be voted on.

5. Public Comment (3 Minute Limit)

There were no comments at this time.

6. Legislative Update

Eggers said that they had round table discussion about legislative updates on work that needs to be done through funding initiatives or otherwise. Any new developments.

Last week Yellich, Michigan Geological Survey (MSG), spoke in front of the local government and appropriations committees. This money was specifically for MSG to be able to get their mapping project under way. State funds will go towards this. There is no conflict with federal funds from Federal recovery act. We are waiting to see what the final recommendations are made for this money before we decide to do with the 10 million that have been awarded for the WUAC to use.

Budget, targets have been set so negotiations have begun. We are hoping to see something happen before legislators break for summer.

Earlier versions of the appropriations bill were mentioned but details were not discussed.

8. Committee Chairs Reports

Burroughs. They reviewed what they have done at the May 23rd meeting. Brian Roth finished up a project for EGLE on lake bathymetry mapping. He discussed different tools (e.g. GPS, number of lakes, sampling intensity) and how spaced the data needs to be for this effort. There may be some next steps involved in this. Discussed revisiting if we need to determine rigor of data collection needed for more inland lakes. Could give us an opportunity to determine if there is a different level of data quality that is adequate for our application.

Todd Freenstra, gave a presentation on Barron lake, in Cass County. The lake has had issues with water level variations and had a history of an augmentation well. Based on ground water and surface water, they found that the lake was very complex with the Groundwater Surface Water interactions. Running the augmentation well was not always good for the lake level. This is not a massive lake. There are portions of the lake that receive and portions that lose groundwater. The takeaway was that the data collection involved was big, but there should be caution in thinking that we can pin down the ground water and surface water interactions in inland lakes and it would take a massive amount of data collection to be accurately quantify this. We are thinking about what the essential pieces are if we were to do this. We may make some recommendations about data collection in the next report given what was found from this study. The lake had a legal lake level specified. Campbell said when we looked at the inland lakes piece of this before, the legal lake levels were a huge obstacle for this effort. How can we even determine the influence if the lakes have a specified legal level? Some are set at the state, some are set in court, some are set a local level. It can turn out to be a huge mess

Burroughs said that we are lagging on our data collection and data use protocols for a system wide audit. We are trying to pin down what is already set and where there are some gaps. Our google docs is out there and we will be looking to see where we can get with that before we get

to the recommendations. Will try to record future meetings on Zoom and share information afterwards.

Campbell asked if this is a whole new project or was this related to past work? The committee indicated that this project was not related to Dr. Pat Serano's work at Michigan State University. A discussion was had about the drivers behind the lake level conversations. Boat access from the public and the impacts to flora and fauna. The later might be difficult to discern.

Burrough stated that legal lake levels are a complication to this but those are a small percentage of the lakes in Michigan. There have been some recent legal decisions that if the court set a legal lake level down to 1/100 of an inch, then it cannot vary outside of that level. If no variance set in the court case, then this poses a big problem. That is not a physical possibility, but it is something that is live in the court system right now. This all interchanges with our streams as well.

A. Models Committee

Hamilton stated that the models committee had a meeting where they were looking at a regional model from Barr Engineering in Minnesota. We want to do more regional models for the state to manage this program and others. One of the new members Katie Lindstrom (Barr Engineering), completed a large regional modeling project. Evan Christianson made a presentation to the modeling committee about their regional model. The overarching cause of this effort was to give the council and land use and water use planners a tool to consider ground water availability during the planting phase of the year. It considered land uses, groundwater, base flows of streams and many other factors.

This is the 3rd iteration of a regional model in Minnesota. They wanted to bring in different hydrologic areas as well as different political areas and increase the complexity of the model. It is a complex 3-D finite element model using MODFLOW. It covers 11 counties. They have a lot of support for this model from policy makers. They use it at this scale for deciding whether to put in a large wells or other similar water usage cases. The twin cities get water from the Mississippi River, but rural areas are on groundwater. The impacts on these water bodies and groundwater could be quantified.

This model could be used to develop more detailed models in a more isolated area. It helps provided the data to develop a finer scale model for more targeted uses. They have done a lot with it, looked at climate changes, looked at policy change impacts, etc. One comment we have is that the models we deal with are not of this size. We are usually looking more at a single county, the model is large, but the points are very good, and it is encouraging that the model they are using is helpful to the local policy makers. He recorded the model presentation, and if anyone else wants to see it we can provide the video. There is also a link to the metropolitan council to see how and where they are using the model.

Campbell asked how did they incorporate the data collection and mapping, and how that fit into the model development?

Hamilton said they are very fortunate to have a very active USGS in the region that helped them set up the regional model. They also used the model to find out where they need to gather more data. They have been actively identifying weaknesses in the model and finding areas

where the model can be improved. It is in a relatively new version of MODFLOW now (MODFLOW6) which is what we would target to use.

Campbell asked how much transmissivity or related data did they collect to develop the model? Hamilton replied they did not collect more data. Where they identified weaknesses and data gaps through modeling, they went out and gathered more data.

They had about 80,000 points of information. This was not being used for regulatory purposes, and it was very cool that the model can be used for future forecasting and such. Maybe for watersheds this can be used, but the model was huge and encompasses 11 counties. If we end up with a regional model, if there is a way to bring together those to get a bigger picture of the state, we could see how things like climate change impacts things and see how legislative changes have impacts on the water and the surrounding watersheds. They used the info that was available and built the model and refined as needed.

Todd Feenstra said the 80,000 points were well logs, but a lot of them had issues, so they were weighted low in the modeling. That was the heart of the model but is a similar issue to what we see in Michigan. The smallest cells in the entire model were 1600 ft x 1600 ft. Took 90 computers linked together running simultaneously to run this model. He mentioned that part of the reason for doing this modeling was that they had observed a 50 ft decline in groundwater levels. The model was intended to identify causes of this decline in the water table. There were so many wetlands in the entire area that the wetlands would just pin the water level to the surface. To deal with this, they had to eliminate all the wetlands to make the model work. If smaller models were to be created, these would have to be added back in.

For the time to run the model, they were running the model as a steady state model. They use it in a planning mode and update this model every month. But the model is so big, that to run it in transient mode, it took too many resources to be useful. In steady state, it could be run in your laptop in a few hours. The transient model is what took so long to run. One of the advantages of this model is that you can take a subset of it and use that to develop a more detailed model in an area which is what we are going to be looking at most of the time.

B. New Topics Committee

Pat was not able to attend but provided an update via email that they have nothing to update. A request for comments was made and there were no comments.

C. Conservation and Efficiency Committee

Turner said that the committee still meets monthly, and the meetings are recorded with links in the meeting minutes if anyone wants to go back and watch. You may be interested in watching the June meeting. We went over the 2020 recommendations, the new funding and working with the implementation.

There were a lot of questions as to whether EGLE was working on Request for Proposals and the processes and next steps. Hopefully, those questions can be answered soon. She updated the Committee on the ideas that the conservation and efficiency committee had at our last meeting and talking with the areas where MSU was already working with EGLE and the possibility joining some of those things up. Also talked about using the \$50,000 as a match in the Michigan Great Lakes Protection Fund.

Kelly Turner said looking at the BMPs for the sectors, agriculture reviews annually but there are other sectors out there have not been looked at in 10 years. We met with Pat and Mike Limo from the Michigan Chamber, and they were interested in finding out what that would look like and getting those Best Management Practices updated. We have some folks who reached out to the aquaculture industry to see if they were interested creating some Best Management Practices. There were some good discussions about how the industry does not have any BMP practices. We were finding that there were people interested in aquaculture structures in Michigan and we need to develop BMPs to protect the industry and water. Hoping for an update next meeting.

Campbell asked is anyone has talked with MSU or MDARD as to whether BMP practices for aquaculture should be included in the Generally Accepted Agricultural Management Practices (GAAMPs)? Turner said that was not part of our discussion. Campbell said there is a structure to develop GAAMPs.

Finnell said the first steps are to reach out to the stakeholders in that industry in Michigan and start the conversation. The other part is to look outside into other great lakes states and see if there is any innovation happening with aquaculture in other states where there are some water conservation practices. This is a discussion that has been happening. This might be something that we need to get a little further along and then bring this up again with the committee. A comment was made that these are varied and most of them are state owned hatcheries and those are flow through systems, so this is interesting.

Kelly Turner said about a year ago our group had a discussion with a group out of South Carolina and Florida where a mobile lab would go around to farms and run tests on irrigation systems to look at efficiencies. Dr. Dong and Lyndon Kelly looked at what other states are doing related to this, and they came up with more of a comprehensive plan for mobile irrigation. The system would evaluate and retrofit existing, add irrigation, and then would be able to demonstrate and remote positive impacts. Positive impacts would include reducing greenhouse gases, saving money, saving energy, and gaining efficiency. Presentation also linked to safety related to irrigation systems as these are the most dangerous areas on the farm. He asked for the safety aspect to be a part of this program as well. Dr. Dong said he has been in contact with Consumers Energy, and they are willing to contribute equipment to monitoring the energy consumption to look at the total dollars and water saved. The committee was favorable to the presentation, but they did not vote on it because they had comments and revisions for the recommendation. Will look at recommendations for the July meeting. If the committee is good for that after it has been revised, it will be sent to the larger council to see if that can be incorporated into the recommendations this year. No concrete ideas for a climate plan but there are several meetings planned to explore the topic.

A question was asked if this is a mobile lab that they take to farms? Turner replied the lab goes around and looks at each of the irrigation systems, looks at water flows, pumping, operation, calibration. And then make recommendations to the owner for what needs to be modified or fixed.

Finnell added that some of the work will move the 2020 recommendations forward. There is a lot of work underway. A couple of projects are emerging from that the DOW fellows report looking at the water infrastructure investments and opportunities to measure water conservation savings and the water energy nexus. We have a meeting tomorrow to start talking more specifically to see if there are more opportunities. For the non-agricultural investments and agriculture recommendations, we may be able to use some of the \$50,000 funding from the 2020 recommendation towards looking at non ag BMP's. We may be broadening our thinking and building in some consideration for how non-agriculture sectors are thinking about the future of climate impacts on their waste and use water conservation practices and climate migration and the potential movement of water intensive industries to the Great Lakes region.

D. Implementation Committee

Needham asked if the funding must be obligated or spent prior to the December 26th?

Clift indicated that the funds have different restrictions. Depending on some of the federal funds to buy American and build American, we are getting helpful answers. We are looking at the admission extension grant and wanted to see if there are any new strings attached with the actual underlying agreement. A lot of the federal money has a timeframe where it needs to be spent. There has been some delay to getting the money appropriated, but we still have 3.5 years left on those funds.

Needham asked if it federal or state funding? Clift said it was federal funding.

Needham said we have 10 million dollars. We are going to have to start moving on these and getting them under contract. We talked about looking at the existing contracts that EGLE has with current entities and see if some of these tasks can be built into there. We have a lot of technical experts on the committee. If our technical experts help craft and draft the RFPs, will they be precluded from participating in the RFP? We do not want to hurt anyone on the council in doing that. There are a lot of things up in the air right now. Companies and committees are ready to move forward, we are just waiting for a few things to go.

Clift said the recommendations included 50 new USGS gauges. The cost was unrealistic and would really be more like 10 or 12 gauges for the money allocated. This will still cover a reasonable amount of ongoing expense to operate them. We are going back to those areas where there is a water tightness issue to see how many are out there and that closely matches up with our 10 or 12 gauges to gain valuable data. We will be refining those recommendations and where to spend those funds.

Needham asked how do we decide who gets part of the 10 million first? Whoever gets the first slice of money, the last slice might not have as much money left over. Clift said prioritization is what we will have to come back to. We might have some priority projects that we want to go after and then take a tiered approach for getting the rest done.

Needham said there is a 2022 report due at the end of this year. Reminded council not to forget what we have done to address the 2020 recommendations with the funding given. This is needed to update the legislature. And what are the new ideas moving forward for our 2022 recommendations. Time is running out so we need to go through the tricky prioritization

process because if we get money elsewhere in other organizations, it might help alleviate some of this stress in distributing our funds.

Chairmen Eggers took over the meeting

7. 2022 WUAC Report Update: Content, Logistics and Timeline

Eggers said monthly meetings start in August. There is no July meeting.

Campbell suggested that members submit rough drafts of their recommendations and have the implementation committee put together a draft like last year. We will view the reports in two parts: new recommendations for 2022 and what has happened since 2020.

Needham said we have a master spreadsheet to see what we have done on past recommendations. New information is added to the master spreadsheet to make it easier for us to get this together next time.

Hamilton said whatever work you can get done this summer is it. We will need to start working on things now so we can get things going in September and get the final recommendations made for the report. It is a pretty short time frame.

8. EGLE Update

Andrew LeBaron said I am taking Jim's place while he is out of town on business.

Christopher Gothberg transferred to the WRD Kalamazoo District Office. We are sorry to see him go but we are happy that he is staying in WRD. A lot of what he has been doing will fall to Hannah here and she is more than capable.

We are looking to add a Geologist 9-11 groundwater modeler position in WUAU should be posted soon. This position will help Lena Pappas with modeling review requests from the rest of WRD.

Compliance communications include after the fact registrations, missing pump information requests, revised registrations, and installation verification requests. If any of these communications cannot be addressed, they may run over into a violation notice.

Complaints include water level drops and new irrigation systems which may or may not be authorized. If multiple complaints were made for the same operation, it was only counted once. Staff conducted a site inspection for a complaint regarding a surface water pump withdrawal directly out of a small lake. At this point, a direction for the complaint has not been determined.

8 pre-screening reviews for community water supplies passed, none denied so far this year, one was retracted.

Six Part 327 permits were issued, a little bit of a busy year for us. Three of these were for temp dewatering, one of these was our first agricultural irrigation permit, one was for a sand gravel operation, and another was a consumer's energy project in Jackson.

Between July 9, 2021, and March 31, 2022, there were 223 WWAT registrations and 164 SSR registrations.

192 SSRs were authorized. 7 were denied. 17 were retracted by the applicant. Another 19 were still pending when this data was queried. Denied and retracted withdrawals kind of get blurred a little bit, someone may decide to retract a SSR as opposed to get a denial letter.

The average number of days to complete an SSR was 13.1. 51% of the SSRs were completed within the 10-business day statutory deadline.

The top graph shows the cumulative trend in the average number of days to complete an SSR. The bottom graph shows the cumulative trend in the percentage of SSRs completed within 10 business days.

Presented an update on depleted water management areas as of June 1, 2022. The term depleted is an on-paper term, these are the watershed we are looking at currently. A few watersheds were added to this list since the last time they were presented. Most of these watersheds have plans in place to collect more data before we contact a water user. There are a relatively small number of reasons that watershed may fall into this category. No questions were asked about these.

Jim Milne and Nat Shuff represented WRD for the EGLE Groundwater Data Warehouse Lean Process Improvement (LPI) Project. New IT projects are required to go through a Lean Process Improvement. The data warehouse will break down the silos separating existing data within the various EGLE divisions.

Hamilton asked where this was at in the process

Very early, the LPI finished last week, presenting to sponsors for approval on June 28

Eaton asked if the process will be strictly a DTMB process or if outside company to develop the database.

At this time, it is unknown.

Andrew LeBaron asked if there were any questions and there were none.

9. Future

a. Meeting Dates

- . August 9 (Tuesday)
- i. September 13 (Tuesday)
- ii. October 11 (Tuesday)
- iii. November 10 (Thursday)
- iv. December 5 (Monday)

Future meetings will be live and it is encouraged that people attend in person if possible.

Turner formally requested that we remove “there is nothing critical in the meeting that we need to vote on” out of the email send to the WUAC.

Campbell said that should have been worded differently to indicate that we are not voting on any critical items today Turner suggested if we have a meeting and we don't have anything that we are voting on, can we use time more wisely and state that this meeting doesn't have any recommendations that we are voting on. It should be clear what our deadlines are and that there is still a process we need to follow. People need to know what that they need to come in on critical dates when voting will occur. Another comment was made that we need to better use our verbiage in the future on when we need a quorum or not in the future. Other members appreciated the information to save long drives when a quorum was not needed.

10. Open Comments (3 Minute Limit)

There were no comments.

11. Motion to Adjourn

There was not a quorum in attendance so no motion to adjourn could be taken and the meeting was ended.