

Water Use Advisory Council (WUAC) Meeting

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

Tuesday, February 11, 2025

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

Lee Walker Conference Room, North Atrium, Constitution Hall
525 West Allegan, Lansing, MI 48933

Remote Option Available Via Teams

[Click here to join the meeting](#)

Or call in (audio only)

+1 248-509-0316,,296143542 United States, Troy

Phone Conference ID: 296 143 542#

Meeting Minutes

1. Welcome

Laura Campbell greeted the committee. Quorum was held.

2. Roll Call

Laura Campbell conducted roll call around the room and confirmed online roll call.

WUAC Members In-Person

Laura Campbell, Michigan Farm Bureau (MFB)

Bryan Burroughs, Michigan Trout Unlimited

Katy Lindstrom, Barr Engineering

Doug Needham, Michigan Aggregate Association

Megan Napier, AKT Peerless

Lena Pappas, EGLE GRMD

Adam Wygant, EGLE GRMD

Austen York, Consumers Energy (serving for Rachel Proctor, Consumers Energy)

James Clift, EGLE

Howard Reeves, USGS

Mike Frederick, Michigan Groundwater Association

Megan Tinsley, Michigan Environmental Council

Tom Zimnicki, Alliance of the Great Lakes

Abigail Easton, MDARD

WUAC Members Virtual

Dave Hamilton, TNC
Dave Maturen, Michigan Lakes and Streams Association (MLSA)
Frank Ettawageshik, United Tribes of Michigan
Buddy Sebastian
Elizabeth Morrisseau, Attorney General
Pat Staskiewicz, Michigan American Water Works Association
Sara Pearson, MGS
Steve Kohler, Kalamazoo River Watershed Council
Kelly Turner, Michigan Potato Industry Commission (MPIC)

WUAC Members Not In-Attendance

Jason Walther
Rex Vaughn, MLSA; serving as Dave Maturen's alternate
Michael Ellis, Barr Engineering
Charlie Scott, Michigan Golf Course Owners
Kyle Rorah, Wetlands Conservation
Richard Norton, University of Michigan
Rachel Proctor, Consumers Energy

WUAC Non-Members

Damen, MSPA
Megan Cameron, EGLE
Trisha Hagerman, EGLE
Marian Maier, EGLE
Ross Helmer, EGLE
Tariku Negassa, EGLE
Garrett Link, EGLE
Andrew Gelderloos, EGLE
Andrew LeBaron, EGLE
Anna Baker
Simon Belisle, EGLE
Karleigh Duffield, EGLE
Edward Everett
Joanne Wisely
Joel Henry, Environmental Consulting & Technology, Inc. (ECT)
David Lusch
Katie Mika, EGLE
Quentin Hunsberger
Rick Solle
Sydney Ruhala, EGLE
Todd Feenstra
Jill Van Dyke

3. Approval of Minutes-Roll Call Vote Discussion

Tom Frazier provided an email modification on 2/3/2025, stating the Open Comments on the last page from December's meeting to read the following edit: "Tom Frazier noted this was his last meeting and he had previously notified the tri-chairs. He noted they are looking to get a person to replace his position."

Laura Campbell noted Pat Staskiewicz is coordinating with the Michigan Townships Association to get a nominee to replace Tom Frazier who has retired. James Clift noted he had received a letter of appointment for Richard Norton to take the role to represent local units of government. Bri Hammontree noted she is working with Trisha Hagerman to update the list for newly confirmed WUAC members.

Amended meeting minutes approved.

4. Approval of Agenda-Roll Call Vote Discussion

Agenda approved.

5. Public Comment (Three Minute Limit)

No public comment.

6. Committee Chairs Report

a. Data Collection Committee

Bryan Burroughs noted still determining a date and time for a meeting. Provided an update on the progress of scheduling meetings for the committee. He noted that a solid list of topics has been compiled, which will likely require two separate agendas. He mentioned that the goal is to identify the various projects that are at different stages of implementation, so the committee can assess the level of engagement and support needed for each one. Noted Jim Milne did a good job of determining some of these various stages for projects already. Noted some logistical challenges from a couple of months ago when efforts were made to compile a list of participants for the data committee. He expressed the need to avoid leaving anyone out while ensuring the list doesn't include many people who don't attend meetings. Additionally, Bryan noted that there are still a few emails that need to be addressed to update the mailing list before the meetings are scheduled. He concluded by saying that these initial meetings will help determine how frequently the committee should continue meeting moving forward. Noted this updated schedule will be provided by himself or Megan.

Bryan provided an update on the Inland Lakes Adverse Resource Impact (ARI) Project, which was funded as a 2022 recommendation. The project

involves working with EGLE to begin implementation, and a key question raised was whether this should be a Data Collection Committee project or a stand-alone group. The project requires conceptual modeling and the Data Committee's participation. Bryan emphasized the need to engage subject matter experts to help brainstorm the work and invited input from those interested in being involved.

David Lusch expressed interest in being part of the project and suggested that it should be a workgroup due to technical reasons. Tom Zimnicki asked for clarification on when the project was funded, and Bryan confirmed it was funded through the 2022 recommendations. Jim Milne provided additional context, noting the 2014 version of the Council had an Inland Lakes Committee and one of the recommendations coming from that committee led to the MSU inland lake bathymetry mapping project. Bryan concurred, noting that in the past, the project was handled by its own committee.

Kelly Turner raised a question about whether the workgroup would be a subset of the current committee or made up of new members. She suggested that if outside experts are involved, it might be better to form a separate committee. Bryan acknowledged that outside expertise would be required and explained that the project is not about developing a finished tool but rather about identifying pathways for the lake, determining relevant data for modeling, and thinking through the tool's functionality. The product will be presented to the Council, which will decide whether to create an Inland Lakes ARI Committee for future steps.

Tom Zimnicki supported the idea of a workgroup, and Bryan confirmed that the project's funding was \$200,000 for facilitating the team and conducting background research. David Maturen wants to be a part of the project discussions as well. Laura suggested further thinking and discussions with the Quality of Life agencies. Bryan noted that the matter would be addressed in the upcoming Data Collection Committee meeting. He invited those interested to attend the meeting.

Laura asked if there were any questions for data group. Noted no additional questions.

b. Models Committee

Katy Lindstrom provided an update on behalf of Dave Hamilton regarding three ongoing projects: the Michigan Hydrologic Framework, the Michigan Integrated Water Management Database, and updating aquifer properties used by the WWAT's groundwater model. While there were no significant

updates for this meeting, it was mentioned that more detailed updates would be available during the April Water Use Advisory Council meeting.

Katy Lindstrom noted additional information about the 3D Glacial Mapping project, which is being carried out in three phases. The first phase, which involved the collection and cleaning of data for mapping, has been completed. Phase two, which focuses on transition probability mapping, is currently underway and is expected to be completed within the month. Following this, a written report summarizing the process and results will be prepared. The third phase, which involves summarizing the results and evaluating the model's accuracy, is scheduled for completion by June. This work is being conducted under contract with EGLE by Barr. A more detailed update on the project will be presented at the June Water Use Advisory Council meeting. Bri Hammontree verified which phase would be in June. Katy confirmed it was the third phase.

Laura asked if there were any questions for modeling group. Noted no additional questions.

c. Conservation and Efficiency Committee

Emily Finnell noted the committee has continued to meet monthly, with meetings held in January and February. Noted the focus has been on finalizing the annual work plan, which includes implementing the 2020 recommendations, advancing the 2022 recommendations, and continuing the speaker series to foster collaboration and broaden knowledge within the committee. There is also an emphasis on integrating water conservation with energy efficiency and sustainability in water infrastructure investments. The full work plan is available for review, with ongoing revisions from the February meeting. Noted is happy to share full workplan with those interested.

Noted the committee received an update from the Alliance for Water Efficiency on their ongoing project, which aims to explore innovations in water conservation, specifically in business and industry sectors. The project addresses one of the 2020 recommendations and is expected to be completed by August 2025. Noted their findings showed some of the water sectors were not familiar with the voluntary best management practices in 2008, because of factors such as turnover of staff or their own industry/business has its own day-to-day practices. Noted findings showed an educational need and revealed that water conservation efforts are primarily driven by sustainability and cost savings. A recording of the presentation is available for those who attended the meeting, though access for others may be limited.

Noted upcoming meetings and schedules. Noted the committee will transition to a bi-monthly meeting schedule, with the next meeting set for April 3, 2025. This adjustment is designed to accommodate ongoing projects and ensure better alignment with the committee members' workload and commitments.

Noted several key projects are progressing. The Water Conservation Investment Manager Practice Project, managed by the Office of the Great Lakes (OGL), continues with stakeholder participation. The MSU Extension has also made significant strides with the hiring of two full-time irrigation specialists who are presenting at winter meetings and engaging with growers/equipment suppliers. Recalled the purpose of this project was to develop a broader strategy for enhancing water conservation and efficiency and adding animal industries to the water conservation practices. Noted the committee is looking forward to a debrief on their findings in the fall. Noted there is also an advisory stakeholder group who is supporting by advising the group on agricultural irrigation specialists and the implementation of their work. Additionally, a new pilot program for irrigation retrofits is being funded by the 2022 recommendations, with a \$600,000 grant to demonstrate water and energy efficiency savings through retrofitting. Noted it will help tell the story of water and energy savings to increase water conservation efficiency practices. Noted Office of the Great Lakes will administer the grant and will work with the MSU Extension to get the grant in place.

There has been growing regional interest in a proposed research project concept focusing on climate migration and water demand forecasting. Noted the concept has been finished, with a growing regional interest in it. The committee is coordinating with other states and nonprofit organizations to ensure the research is not duplicative, and further regional discussions will determine the next steps. Noted the project would integrate existing data on static groundwater levels and water use trends to create predictive models for Michigan, potentially building off the Joyce Foundation's groundwater study completed a couple years ago, addressing the challenges posed by climate change.

Emily Finnell deferred to Kelly Turner for additional notes. Kelly Turner suggested that once the Alliance for Water Efficiency project is completed, the committee should consider inviting them to present to the full Water Use Advisory Council (WUAC). The presentation would be valuable, as some of the recommendations from the project are particularly enlightening, especially in terms of understanding the policies and motivations that drive individuals

and organizations to take action on water conservation. There are some interesting insights that could benefit the entire council.

Emily Finnell provided an update on the MSU Integrated Assessment Project, which is focused on developing water user committee guidebooks and conducting case studies. The MSU research team has submitted draft guidebooks, which have been reviewed by an interagency project leadership team. The team includes members from EGLE, DNR, and the water use program (Abby Eaton, Jay Wesley, Jim Milne, Andy LeBaron, James Clift, and Emily Finnell). Based on the initial drafts, a working document is being created to seek additional input from water users and to include important information about how the water use program operates.

These drafts will be further reviewed by the agencies over the next month for feedback. The MSU team is expected to submit a final draft report by February 21, 2025. The final report will undergo additional review and edits before being shared with the Water Use Advisory Council, likely by late spring. Internal discussions about lessons learned from the project will also take place, and further discussions will be held with the Council to decide how to move forward with the project.

Laura Campbell raised a question regarding regional projects and water use, specifically asking if there were any existing studies or if the review process was still ongoing. Emily Finnell responded that the discussions were still in the early stages. The current focus is on examining existing water demand, and it will be necessary to consider the current administration's perspective to help shape the narrative moving forward. Emily emphasized that the committee is still waiting for those regional groups to continue their conversations before proceeding further.

Tom Zimnicki mentioned that work is currently being done with the Alliance for Water Efficiency, with a focus on examining water use from a state policy perspective and understanding how it impacts water users. The project is also looking into how the industry is evolving in response to these policy shifts. Tom noted that they are aiming to have a small report available by early summer that will provide an examination of these issues.

Adam Wygant highlighted that the discussions align with ongoing efforts, particularly the focus on examining scientific data in the coming years. He emphasized that this science should help address the work Tom Zimnicki is doing and identify areas that could face pressure or impact from policy changes and procedures. Adam suggested that it would be important to link

these efforts as effectively as possible to ensure alignment and comprehensive understanding.

Laura asked if there were any questions for water conservation group. Noted no additional questions.

d. Implementation Committee

Doug Needham noted no new additional updates. Noted will need to meet to discuss new recommendations and tracking the progress of them.

Laura asked if there were any questions for implementation group. Noted no additional questions.

e. New Topics Committee

Laura Campbell noted his may become the new Inland Lakes committee while currently serving as a placeholder.

7. Legislative Report Recommendations Outreach Plan

Bryan Burroughs discussed the importance of sharing ideas and exchanging information, noting that there is currently no drafted plan in place. He mentioned that a communication was sent in December and resent this week to representatives, thanking Laura for the reminder, ensuring that the minimum obligations have been met. He emphasized the importance of reflecting on the success rate, particularly regarding the delays in recommendations, such as those from 2020 when funding appropriations didn't begin in 2022 and the later funding in 2022 wasn't provided until 2024. Bryan stressed the need to be as effective as possible in these efforts and encouraged water council members to provide testimony and do more to ensure funding is expedited as promptly as possible. He also highlighted the necessity of formulating plans to ensure funding and underscored that a proactive approach would be essential in securing this support. Noted if encouraged to provide a presentation or level of education for the recommendations, to participate if possible.

Laura Campbell mentioned reviewing the budget but not seeing any specific allocation for the WUAC. She asked whether funding had been allocated to the Michigan Geological Survey (MGS), to which Sara confirmed that funding had indeed been allocated. Adam Wygant wanted to clarify the amount. Mike Frederick and Sara Pearson added that the base funding amounts to \$3.0 million.

Bryan Burroughs then noted that a placeholder was being created for ongoing EGLE initiatives and inquired if there was any clarity regarding the funding

situation. Adam Wygant responded, highlighting the need to consider this when developing the FY2027 proposal for budget changes or new funding requests as well as coinciding with the WUAC's own advocacy efforts.

Laura Campbell pointed out that the report had left out the agreement between EGLE and MGS because it hadn't been sent yet. James Clift confirmed that the agreement had been signed and emphasized that it should be considered in future budget discussions. Laura also thanked Dave Maturen for his efforts in pushing for WUAC recommendations. She suggested that WUAC should aim to present and speak at budget hearings to advocate for their work, noting that Dave's insights on how to effectively push for this were valuable.

Tom Zimnicki raised a question about whether the requests should be broad or specific. Bryan Burroughs explained that the approach had varied in the past. It used to be more formal, with all three co-chairs presenting the requests. During the COVID period, WUAC members participated in a Senate meeting and provided consensus recommendations. Bryan noted that this year's request would be straightforward, with only one new recommendation and the rest supporting previous recommendations for ongoing support of their activities

Laura Campbell shared that Dave had mentioned in the chat that WUAC should work with EGLE to serve as the vehicle for making the request and to ensure key committee members appear to advocate for it.

Bryan Burroughs concluded that pursuing this route is critical to secure funding in a timely manner to keep progress moving forward.

During the meeting, Adam Wygant raised two main concerns. First, he highlighted a lag in the Proposals for Change process, noting that while these proposals are set for June, they are due earlier in the summer, and there is uncertainty about where the funding will come from. Second, he pointed out the lag in implementing the 2020 recommendations, specifically the gap between when funding arrives and when activities take place, stressing the importance of avoiding a situation where funding and timing don't align.

Laura Campbell asked how the council could be helpful in supporting EGLE during budget discussions, to which Adam Wygant emphasized the importance of ongoing conversations with outside stakeholders, noting that the committee is already engaged in these discussions.

Bryan Burroughs then asked if there were any further questions, but none were raised.

8. Wellogic Triage Update

Adam Wygant provided an update on the Wellogic triage, mentioning a \$1.8 million grant for the project. He highlighted that Sara Pearson and John Yellich, along with their team from MGS, have gathered a substantial amount of data from the dataset. He also noted that the project is coming to an end and that the data collected should have a significant impact on the reliance and application of the data moving forward.

Sara Pearson provided an update on the Wellogic data, stating that they are in the homestretch of the project. She mentioned that they have processed 1.2 million well logs, with only a few requiring manual input. She noted that most of the data migration went smoothly, and over 90% of the work is completed, with the team on track to finish by the end of the contract this year. Sara also mentioned that they have worked with 46 priority counties and are now finishing up the remaining counties. Additionally, she highlighted that they have developed tools to support data sweeping and are currently doing a final touch-up across the counties.

Laura Campbell inquired about how incorrect or inconsistent data is being handled. Sara Pearson explained that the approach depends on the nature of the inconsistency. She noted that if the issue relates to location, which is a primary focus of the project, it is addressed accordingly. She acknowledged that some data may be inaccurate due to the outdated methods used in previous processes for recording information. When discrepancies are found, the team provides the corrected data back to EGLE staff. If errors are identified, annotations are made to highlight them. Sara clarified that while paper records are input into Wellogic and updated based on the paper logs, lithologies are not being changed, but terminology updates are being made where necessary.

Adam Wygant shared that error statistics had been reviewed, revealing that the data showed at least 60% or more errors. Todd compared Michigan's data with other states, noting that Michigan is in much better shape and that it has been a pleasure to work with. He also asked if there were any ongoing programs or initiatives to verify lithology. Sara responded that she would love to see such efforts and mentioned that when working with EGLE, the EQulS system could potentially help accomplish this, though it would require a log of previous information. She added that MGS is currently conducting borings to verify lithology, particularly in Kent, Ottawa, Muskegon, and other counties. These borings, combined with other logs, could provide more supporting data. Todd then asked if there was any interest in a program to gamma log existing wells that are to verify lithology. Sara expressed interest in this but noted that it is not currently being done. Todd suggested that this could be a good topic for the Data

Committee. Adam Wygant clarified that there is funding in the EGLE budget for data, and they are considering slug testing and gamma logging, based on current conversations. He mentioned that this data will be stored in the EQulS database, and they are working on ways to make the database more beneficial. Adam further noted that this could lead to individuals having easy access to the data at their fingertips.

Laura Campbell asked if the state is considering pursuing additional data for lithologies and whether they are looking for opportunities, such as an RFP, agreement, or contract, to gather data collected by hydrologists. Adam Wygant confirmed that all options are on the table and emphasized that they are being thoughtful about data input. He noted that for the data to be valuable, it must come from professional sources. He also mentioned that with the current data, they may be able to develop tools that would make it easier to integrate into existing systems.

Jim Milne pointed out that MGS has a data gap analysis project underway, which is reviewing existing data and prioritizing areas where data gaps exist.

Bryan Burroughs suggested that state databases could be used for this effort and emphasized that when writing up the results, it would be important to include the time spent recording inaccuracies, the tools used to streamline the process, and a breakdown of the time required to evaluate scalability. He added that documenting this process would be valuable for other divisions or agencies.

Laura Campbell noted that Buddy Sebastian had a question. Buddy Sebastian made a general statement emphasizing the importance of the right people submitting accurate data. He acknowledged that Todd is on the right path with the focus on getting correct location information and utilizing gamma logs. However, Buddy pointed out a key issue in the current system, where well drillers—who often have less experience—are required to submit logs, while experienced scientists and engineers, who are more knowledgeable about the terminology and processes, are not required to submit this data. He stressed that this creates a challenge for the Council in helping the water resource unit understand and manage resources effectively. He urged everyone to consider this issue as they move forward, ensuring that the right people are inputting the right and accurate information into the system.

Doug Needham mentioned that the Michigan Department of Transportation (MDOT) has done a lot of exploratory work, and Adam Wygant confirmed that they are collaborating with MDOT. Sara Pearson added that MDOT is willing to share geotechnical boring data for mapping purposes, especially for bridges.

Bryan Burroughs shared insights regarding the permitting system for fisheries assessments, explaining that a permit is required to conduct activities such as electrofishing surveys or fish sampling. This permit system mandates that those requesting permission to sample fish are also required to report data from their activities. He noted that while this mechanism may not apply directly to all situations, it serves as an example of how requiring data reporting can facilitate conversations about data collection.

Bryan also mentioned the importance of protocols and quality assurance and quality control (QA/QC) in data collection, acknowledging that sometimes the rigorous QA/QC processes can prevent valuable data from being entered into storage systems. While these quality controls are important, he pointed out that this can also result in data being excluded from storage, even though it could still be useful for those who are aware of its existence. He added that sometimes this data is the only data point in a specific area, and even though it may have a greater level of uncertainty or softer accuracy, it still holds value. If this data is not stored, it essentially no longer exists. He expressed a preference for everyone submitting data, even if it comes with notes about any potential issues or warnings about how it was collected, since if it's not stored, it won't be accessible or usable in the future.

Adam Wygant responded that they share a similar philosophy on data sharing. He acknowledged that some data sets under their control, like Wellogic, require a certain level of oversight, but the goal is to ensure that useful data is included in the system. He emphasized that even though not all data may meet the highest standards, having it in the data management system with proper metadata and documentation can still be valuable. Adam noted that they believe in the power of the data, even if there are uncertainties, if the necessary context and documentation are provided alongside it.

Finally, Doug Needham noted that for public lands, data sharing is not an issue, but for private lands, it would be at the discretion of the landowner. Laura noted that's why she likes carrots more than sticks, as sticks become complicated quickly.

Todd Feenstra agreed with Bryan's points, acknowledging the importance of grading data quality, noting that this process is already in place for stream profiles and stream discharge measurements, where data is rated as excellent, good, fair, or poor. He emphasized that when using this data for analysis, it's important to consider these quality grades.

Todd also commented on the importance of verifying data sources, particularly for irrigation wells, which represent about 85% of large quantity water withdrawals. He pointed out that these wells are heavily regulated, making it crucial to collect as much information as possible in those areas. However, he noted that there is currently a lack of data in this area, and it can be easy to overlook. He stressed that when considering a comprehensive system for the entire state, it's important to remember that valuable information already exists at locations under the most stringent regulation, such as those monitored by the Michigan Water Watch program.

Bryan Burroughs noted additional comments. David Lusch raised a concern about ensuring that oil and gas well records are included in the Environmental Quality Information System (EQulS). He acknowledged that this is likely already part of the project but wanted to confirm. David explained that oil and gas well logs typically focus on logging the bedrock, starting at around 400 feet, and often overlooking the glacial deposits above it. He suggested that it would be valuable, especially in areas with thick drift in the northern Lower Peninsula where water wells don't typically go, to mandate the logging of glacial deposits down to bedrock. This additional data would help in identifying previously unknown resources. David highlighted the potential benefits of applying relevant authorities, such as the Mineral Wells Act, to ensure that the oil and gas industry logs these glacial deposits. He noted that this would align with efforts like the MGS drilling-to-bedrock project currently underway for county or quadrangle mapping. Ultimately, David emphasized the importance of not only capturing the data but also using applicable authorities to ensure the oil and gas drilling industry includes information about the glacial deposits in their records.

Bryan Burroughs noted this requirement could be included in lease conditions on public lands, but lease conditions on private land is different. Adam Wygant noted that oil/gas well logs are not included in the initial data upload for EQulS but could figure out ways to link oil and gas records into EQulS. Adam Wygant noted that, in addition to the points raised by Sara and Buddy, there is a continued focus on educating water well drillers to improve consistency in data collection. He mentioned that efforts are underway to work with the Wellogic input factors to enhance the quality and reliability of the data submitted by drillers.

No noted additional questions.

9. EGLE Update

Jim Milne provided the EGLE update. Noted will be providing update on WUAU staffing, funded projects (WUAC recommendations and other funding sources), 327 metrics, Michigan Potash, and lastly any questions.

Jim provided a Water Use Assessment Unit (WUAU) personnel update. Noted Garrett Link filled one SSR Geologist and Mike Jugle to start March 3rd for the other vacant SSR Geologist position. He mentioned that he would make sure to bring Mike to the April meeting to introduce him to everyone.

Noted funded projects. Explained that the first group of funded projects are IT-related initiatives. He noted that some of these projects are funded through legislative appropriations to implement recommendations from the Council, while others are supported by different funding sources specifically for IT projects. Noted this includes the Groundwater Data Management System, which utilizes the EQuIS software. Provided an update on a Council recommendation to enhance the online Water Withdrawal Assessment tool (WWAT). He mentioned that improvements would include upgrades to the User Interface, as well as updates to the depletion tools—referred to previously as “batch tools.” Another key recommendation is to update the aquifer properties used by the tool's groundwater model, including factors such as transmissivity and storage coefficient.

Noted that there are several legislative appropriations for the Council, which utilize federal American Rescue Plan Act (ARPA) funding. He noted the recommendation for EGLE to become a new data provider to the National Groundwater Monitoring Network, managed by USGS. Jim noted that they have secured a USGS grant for this initiative, and EGLE is in the second year of a two-year implementation period. Noted another funded project, the Michigan Hydrologic Framework and the Michigan Integrated Water Management Database. Noted Emily previously discussed the recommendation to increase water conservation and efficiency in agriculture, and the recommendation to advance Michigan's water conservation and efficiency efforts. James Milne also mentioned the MGS project for data gap analysis, which aims to make recommendations for future data collection priorities. He added that Katie briefly discussed the ongoing transition probability mapping project being carried out by Barr in Calhoun and Cass Counties.

James Milne outlined additional ARPA-funded projects, including the cumulative downstream depletion tracking, also referred to as a complex water budget by Jim. This project will track cumulative streamflow depletions from the headwaters to the mouth of major watersheds, as well as recharge back to the stream. Howard Reeves has a complementary USGS research project in water management areas. USGS also has the geologic data enhancement project. This project consists of four components: an aerial magnetic or AEM geophysical survey, drilling additional monitoring wells, installing additional stream gauges, and performing groundwater modeling. James showed a photo of the AEM antenna,

which is hoisted by a helicopter to collect information about glacial geology and the depth to bedrock.

Noted other funding sources. Noted the first of which was the Groundwater Proposal for Change. Noted is \$15 million that includes PFAS soil fate project that's being run by Michigan PFAS Action Response Team (MPART), historical PFAS by Water Resources Division, sampling and analytical by Materials Management Division, and groundwater mapping and monitoring wells by Geologic Resources Management Division (GRMD).

Noted several joint funding agreements with USGS for water use data collection, which includes stream gauges, miscellaneous streamflow measurements, and the ongoing Michindoh-aquifer modeling project. He also showed a photo of one of the miscellaneous stream flow measurements.

Noted GRMD has a grant to support the Michigan Geological Survey (MGS) operations. Noted Emily also discussed the funded project for the Water User Committee Guidebook [overseen by the Office of the Great Lakes (OGL)].

Noted between 1/1/2025 to 2/6/2025, there have been 24 site-specific review (SSR) registrations & 26 WWAT registrations. Noted the water management area depletion zone status as of February 2025. Noted the map shows the total numbers of Zone A/B/C/D water management areas. Specified the water management areas, noting that Zone A, marked in green on the map, consists of 4,187 water management areas. Zone B, marked in yellow, includes 882 water management areas, which also covers cold-transitional water management areas that require SSRs, like Zone C (marked in orange) with 204 areas, and Zone D, which has 25 pending review water management areas.

Jim Milne provided an update regarding Michigan Potash, mentioning that the comment period for revisions to the proposed air permit is set to close by midnight on 2/13/2025, with a link provided in the slidedeck. EGLE held a public information meeting on 2/5/2025, featuring presentations from staff across the Air Quality, Geologic Resources Management, and Water Resources Divisions, focusing on existing and proposed permits and registrations. The Water Resources Division (WRD) is also hosting a virtual public hearing on 2/13/2025 for their wetlands permit application. Milne noted that the public comment period for the air quality permit revisions ends on 2/13/2025, and he will summarize Michigan Potash's Part 327 status in the next slide.

Noted the WWAT registrations have two current registrations. Noted the first registration, registration id 9325-20242-56, debits the Pogy Creek (6282) and Big

Stone Creek (10557) Water Management Areas, , with a pump capacity of 380 gallons per minute. He mentioned that this registration expires by August 16th of this year if the pump is not installed and connected to a power source, despite the well being drilled. There is a log in Wellogic, but no pump has been installed yet, and the pump has not been hooked up to a power source.

Milne continued the update, noting the second registration for Michigan Potash, number 9326-20242-18, with a 1,000 gallon per minute pump capacity, debiting WMA 10557. This brings the total registered pump capacity to 1,380 gallons per minute, which is just below the 1,389 gallons per minute threshold that would require a Part 327 permit application.

Milne clarified that tool and SSR registrations are valid for 18 months, but the withdrawal must be capable of being put into operation. This means the well needs to be drilled, the pump installed and hooked up to a power source within 18 months to keep the registration valid. If not, the registration will expire, and the process must be restarted.

He noted that historically, Michigan Potash has had multiple registrations expire and reregistered.

Noted the Water Management Areas (WMAs). Noted the WMAs 6282 (Pogy Creek) and 10557 (Big Stone Creek) are both classified as cool streams and deposit into the Muskegon River. Noted WMA 6282 is currently in Zone A and has 221 gpm available. Noted WMA 10557 is currently in Zone C and has a 291 gpm available.

Noted on the map Michigan Potash's 2 LQW registrations, 9325-20242-56 & 9326-20242-18, are the large red squares in the center of the map. Water Management Areas 6282 & 10557 are the red polygons.

Jim asked if any questions.

Laura requested clarity on the WWAT user interface updates and updates on the depletion tools. Jim commented that the information technology (IT) projects include both improvements to the WWAT user interface and the depletion tools. The WWAT user interface improvements will provide information on the debited WMAs and their depletion status.

Lena added that the technology behind the tool is dated but reassured that it should still function as it has in the past. She emphasized that the update process

should not become overly complex, ensuring that it remains user-friendly and effective while incorporating the needed improvements.

James Milne explained that the depletion tool currently uses the Hunt 1999 analytical solution behind the scenes. The depletion tools are based on several analytical solutions, including the Hunt 1999, Hunt 2003, and Ward and Lough 2011 analytical models. As part of the IT project to update the tool, these depletion tools will be refreshed.

The tool will continue to use the Hunt 1999 model, but the Hunt 2003 and Ward and Lough 2011 models will also be updated. The goal is for external users to be able to specify if they want to use these other models (Hunt 2003 or Ward and Lough 2011) for their requested SSR. Users will be able to provide the relevant parameters for those models, and the tool will run them to provide more accurate results.

Lena noted there will likely be a presentation at the next meeting.

Adam Wygant acknowledged the department's ability to allow consultants or other individuals to use the batch tools and interact with the SSR, which helps improve transparency and address any issues. Bryan also expressed his admiration for this capability, highlighting it as an important factor.

Lena noted that this was a significant focus for her. She emphasized that she took the feedback from the council into consideration and focused on meeting their expectations in this update.

Laura is looking for additional information on the work being done on PFAS and other details regarding the soil and water for current legacy sites.

Dave Lusch asked to go back to the last slide regarding water management areas. Noted when showing the 221/291 gallons limited available, does this include the registrations already completed? Jim confirmed it does.

Bryan Burroughs noted that he would like to get a sense of what the federal funding looks like this year. He mentioned that ARPA and other funds are currently frozen. Howard Reeves noted that the situation changes day by day, and there are periodic freeze-ups. Adam Wygant added that there were indeed freeze-ups, but now things are starting to unfreeze. However, he mentioned that most meetings with federal partners are paused indefinitely, which has made it difficult to plan. He expressed hope for progress but acknowledged that it is hard to make plans under the current circumstances. James Cliff noted it is in flux. Noted able to have an

open account, but not able to access it. Noted at this point it is day to day and depends on the department.

Bryan Burroughs noted that they are trying to keep on deadlines, but given how things shake out, they will need to pause at some point if payments are not being made.

Adam Wygant mentioned that they just started a project with ARPA funding for MGS and expressed hope that this hiccup doesn't impact the project, as the funding must be spent by fall 2026.

Buddy Sebastian requested an update on Dickinson Creek. Adam Wygant mentioned that the next steps would be to talk to Todd and his client before providing additional notes. Lena noted there is a big difference between what is being registered and what is being used, which can impact what the tool is measuring. She also mentioned that there have been a lot of lessons learned.

Adam Wygant noted a surprise regarding why Zone D WMA may be overdrawn and highlighted that these situations will lead to tough conversations about the data.

Howard Reeves discussed the airborne Geophysics project, noting that it involves a very visible data collection activity, with a helicopter flying just a couple hundred feet over the ground, carrying a large hoop. He explained that they plan to make a presentation to the Council in a future meeting to provide more details about what the project entails, what they aim to accomplish, and set expectations. He emphasized that it's a great data collection activity that can cover a large area cost-effectively and works well in rural locations where infrastructure and wells are limited, filling in the gaps in data.

This method will help map unconsolidated materials down to bedrock. Howard mentioned working with the USGS geology and geophysics group in Denver, which, although a contractor that flies the equipment, will partner with EGLE's team for geophysical inversion and design the survey area.

He noted the importance of collaborating with local stakeholders who want to expand the survey area and ensure that people are informed well in advance so they aren't surprised when the helicopter flies over. Howard also highlighted the necessity of communicating with local stakeholders, travel entities, and farmers in the area, suggesting that it would be helpful to send out notices ahead of time to avoid confusion.

Howard Reeves mentioned the importance of working through the council to get the word out about the project, utilizing contacts in various agencies, local government, and the Farm Bureau to ensure transparency and gather feedback. Howard Reeves added that they could provide progress updates as the project develops.

Noted shared insights from conversations with colleagues in Wisconsin, who had run a similar project near Door County. In Wisconsin, the Department of Agriculture and Trade and Consumer Protection (DATCP) created a website to track the flights, providing real-time updates on the helicopter's progress, including flight zones and estimated times for when it would pass specific areas. This model could be applied to their own project to keep the public informed.

Noted the excitement about the data collection opportunities, noting that this project would complement existing work, such as well-logging and direct borings. He acknowledged that while this aerial technique doesn't replace direct sampling, it will help connect well spacing over large distances and provide insights into how wells may be linked to subsurface formations.

Noted the outreach efforts that will be needed, including working with local contacts, stakeholders, and travel communities to ensure they're informed about the project and can voice any concerns, especially regarding areas like reservation lands or other sensitive regions. Additionally, he highlighted that although this technique is promising, it comes with logistical challenges, especially around safety and legal considerations when flying equipment by helicopter.

The team discussed the potential benefits of partnering with other stakeholders to share flight time and reduce costs, especially given that mobilizing the equipment is one of the biggest expenses. Lastly, Howard mentioned the need to engage with local communities in a way that addresses concerns, even humorous ones, like those related to unconventional techniques.

This is all part of the broader effort to ensure transparency and effective communication as the project progresses.

Bryan Burroughs agreed, noting it would take a lot of logistics. Adam Wygant added EGLE will be working with tribal communities.

Frank Ettawageshik expressed concern that tribes are notified and can provide input regarding the flight survey, referencing issues faced in Wisconsin. He inquired about the plan for involving tribes in this project.

Howard Reeves responded that they would begin connecting with the tribes and would reach out to Frank for assistance in identifying the appropriate contacts for discussions. Adam Wygant clarified that they expect the survey to avoid reservation lands and will focus on remote areas where the surveys can be conducted.

Jim Milne added that the EGLE tribal liaison would work with the USGS to help facilitate outreach to tribes. Frank raised an additional point, asking whether other bodies of water would be included in the survey.

Howard Reeves explained that the survey generally flies over a corridor to assess the sediment in the water, but it doesn't analyze the bathymetry (depth contours) of the lakes or rivers. He mentioned that a similar large survey was done in the Mississippi area, where river corridors and parallel lines were used to determine sediment connections.

Dave Lusch asked about the vertical resolution of the survey. Howard noted that the resolution could be adjusted based on the target area. He added that they would work with geophysicists in Denver to determine the resolution of the bedrock data. He explained that the survey would need to decide whether to go deeper or shallower, as deeper surveys may not capture shallow features as well and vice versa.

Dave Lusch suggested that the survey could be particularly applicable in Cass or Calhoun County, given the current Transition Probability work in those areas.

Bryan Burroughs highlighted the value of overlapping work, especially the efforts made by USGS, and the work done in the northern areas. He emphasized that this overlap would help fill gaps in less populated regions.

Adam Wygant noted there is additional funding for the project and that it might be used for other issues, such as fisheries concerns. He clarified that this is ARPA funding, and much of the acquisition would likely take place after the ARPA funding period.

Howard emphasized that the survey is not a direct measurement and that everyone involved should be mindful of that throughout the process.

Bryan suggested that Howard or another similar expert provide an update on this project.

No noted further questions.

10. Senate Bill 1181

Bryan noted that this was not a presentation but rather a discussion where individuals could share knowledge due to its relevance.

Adam Wygant explained that the bill addresses the need for system upgrades in areas with large water usage. The intent of the bill is that new users who consume over 2 million gallons must draw from a Great Lakes source or a municipal system connected to the Great Lakes. He noted the focus is on understanding who this would negatively impact, particularly data centers that could use up to 5 million gallons. The bill aims to ensure large consumptive users draw from the Great Lakes, eliminating concerns over groundwater usage.

Andrew LeBaron mentioned that consumptive use would only apply to that sector. Adam Wygant acknowledged the potential risks and negative impacts, including what would happen if someone, such as those in Grayling (not near a Great Lake), needed water.

James Clift clarified that nothing has been approved yet and that this discussion is just for input. He also noted that EGLE has no experience or interest in regulating water rates.

Laura expressed concern over conflicts with the Great Lakes Compact (Compact), emphasizing her discomfort with a system that would limit users who already require a permit to only draw from the Great Lakes. She pointed out the potential issue of creating a "winners and losers" scenario.

Frank highlighted the large negative impacts of a lack of water regulations in certain areas, stressing the importance of understanding the current system within the context of the Compact. He also mentioned that many people do not fully understand this issue, which has a lot of complexities.

Dave Lusch raised a concern that the proposal might violate regulations for Great Lakes water use and property rights.

Kelly Turner acknowledged that the bill's heart seems in the right place but noted the lack of involvement from key stakeholders in the conversation. She pointed out that the blanket language in the bill is still confusing and not ready for review by the legislative body. She expressed an interest in hearing more perspectives.

Tom Zimnicki agreed with the need to avoid picking "winners and losers." He brought up the question of the long-term plan for identifying areas in the state better suited for large water withdrawals. He noted the importance of balancing the

drive to attract new businesses with understanding how local and state-level economic development interacts with water resource management. He also noted that some states are further along in developing such plans and suggested that this body could play a role in spearheading these conversations.

Bryan reiterated that WUAC could contribute to these discussions, highlighting the disconnect in water use. He mentioned that people tend to use water where they want to, and while some planning happens, it is not usually related to water use. He stressed that the Council should provide advice on the matter to the legislature.

Pat Staskiewicz mentioned that American Water Works Association (AWWA) is scheduled to meet with a Senator in early March, appreciating at being a part of the table.

Dave Maturen added a comment that most power plants were historically located on the Great Lakes or nearby bays due to the need for large water withdrawals.

Mike Frederick noted the bill states that the Great Lakes or connected bodies of water are the source. He then raised a scenario, asking, if I were to set up a data center here in Lansing, what would be the impact on the Grand River if I take 5 million gallons of water a day.

James Clift and Jim Milne responded by clarifying the understanding the bills language needs to be updated, with a later review saying it would only apply to rivers or major bodies of water, like the Great Lakes, and those connected channels (i.e., the St. Marys, St. Clair, and Detroit Rivers).

Adam Wygant agreed regarding the clarification. Noting that the bill applies to new users with a capacity of 2 million gallons or more. He expressed concern about the efficiency of how individuals are selected. Laura Campbell mentioned that aside from the conversation surrounding the measures of 327, Bryan Burroughs acknowledged that people are struggling to understand what is reasonable, but the sector dictates what is reasonable.

Adam Wygant pointed out that Laura Campbell suggested they could permit with 327, though Andy LeBaron noted it would be unclear. He also mentioned that it is a criterion in water permits and adheres to water conservation principles.

Tom Zimnicki highlighted the wide range of water use, particularly for data centers. He emphasized that there are other opportunities but expressed concern about reaching a point where the department would be deciding what is feasible for the industry.

Adam Wygant acknowledged that this could be a difficult conversation from a feasibility standpoint. Tom Zimnicki expressed interest in understanding how the economic conversation would be taken into consideration, noting the reality of economic factors when companies move into space.

Adam Wygant stressed that without regulation, this will lead to an ugly conversation.

David Lusch asked whether the bill was proposed because the senator was unaware of 327 or if they believed 327 was insufficient. James Clift confirmed the senator believed it was insufficient. Andrew LeBaron noted that the bill proposed amendments to Part 327.

Bryan Burroughs reiterated that an ongoing responsibility of the WUAC is to help educate stakeholders.

Dave Lusch suggested that whenever groundwater issues arise in the legislature, the council should be immediately contacted. He expressed interest in learning more about how 327 might not be sufficient.

No additional questions or comments noted.

11. Future

a. 2025 Meeting Dates (at Con Hall unless others offer to host) (*Quorum critical meetings)

- April 8
- June 10
- August 12
- October 14
- December 9

Laura Campbell noted Frank potentially hosting on one of these days. Frank noted will meet with tribes next week on where these could be hosted. Noted will discuss it offline before the next meeting.

b. Formats

c. Quorum

12. Open Comments (Three Minute Limit)

James Clift noted will be his official last meeting. Bryan noted thanks to James and Dave Hamilton for helping him with the council.

Laura Campbell noted thanks for his service with the State and the council.

Bri Hammontree noted a reminder to sign in.

Sara Pearson noted online congratulations for James.
Frank Ettawageshik noted appreciation for James.

13. Motion to Adjourn

Bryan Burroughs noted the motion to adjourn. Tom Ziminicki and Katy Lindstrom seconded at 3:52 pm.