### Appendix D

# **Michindoh Aquifer Workshop Summary**

#### **Author: Freshwater**

## Introduction

In early May of 2024, a group of thirteen people including Indigenous leaders, community advocates, and scientists gathered at the North American Indian Association of Detroit (Figure 1) for a two-day workshop facilitated by <u>Freshwater</u>. The purpose of this workshop was to identify regional issues, current practices, and sustainable groundwater governance strategies for the Michindoh aquifer, a groundwater feature spanning the ancestral homelands of the Potowatomi and other Anishinaabe nations, the three states of Michigan, Indiana, and Ohio, and numerous local government units.

This workshop was designed to bring diverse voices together to discuss governance challenges, needs, and strategies for sustaining the Michindoh aquifer and the many communities it supports.

The four questions that guided this two-day workshop included:

- I. What concerns are you working on within the Michindoh Aquifer?
- II. What current groundwater stressors are you hoping to address in a better way?
- III. Do you have any input on sustainable governance practices that could be implemented multiregionally?
- IV. What other experts do you think should be a part of this process, and part of the continuing conversation?



Figure 1. Front entrance to the North American Indian Association of Detroit

### Who Was Invited?

The initial invitation list included water experts from Tribal governments, community activists, and hydrogeologists. The objective was to develop a contact list that was balanced and representative of affected communities within the Michigan-Indiana-Ohio tri-state area while maintaining a smaller, focused workshop group of 12-25 local and regional experts.

The prospective list of invitees was divided into several categories to promote maximum representation and to identify people who were likely to be community nodes, people with specific regional, technical, or cultural knowledge who have strong connections to their networks and are well-connected to how information could be distributed for the best effect.

Invitees were categorized by residence (state), organizational affiliation (Tribal, state, federal, nonprofit, community, academic, other), and knowledge or expertise (earth science and technical, cultural, regional, organizational operational, legal and policy). A selection of the water professionals who attended were interviewed during <u>phase 1 of the project</u>. Other participants were identified through local news sources, active nonprofits and community organizations in the region, outreach to Tribal communities, and recommendations from other invitees.

During this process, people were sent initial emails to alert them about the workshop and its objectives to gather participant availability and interest. Formal invitations were then sent out about a month before the workshop, and included an agenda, travel logistics, and more information about the financial support available for Tribal participants.

Before attending the workshop, each of the thirteen participants responded to a survey sharing their reasons for attending. Some were hoping to get more connected to others in the region, like one participant who wanted to meet and learn from Tribal members about their water concerns and ongoing work, while also expressing interest in furthering collaboration across state lines. Some were hoping to get more knowledge about groundwater, like one who wanted to receive education on groundwater and aquifers, or another who was seeking more regional knowledge of groundwater sources, policy restrictions, and what can be done to address the issues. Some were more interested in workshopping the issues, like one participant who wanted to work through the needs for investigation and research, or another who wanted to brainstorm for sustainable groundwater sources. Overall, people joined us to share knowledge, learn more, and work through the challenges in governing the Michindoh Aquifer equitably and sustainably across the region.

### **Community Engagement**

Community engagement is a broad name for research frameworks (also referred to as community action research, participatory research, empowerment evaluation, etc.). Its purpose is to center a community's voices, values, and understanding of issues. Community engagement brings a research problem to the people within a defined scope of focus (e.g. geographic area, demographic group, specific topic interest) and invites participation in the problem-solving. It centers the people impacted and asks researchers and community members to collaborate as part of a single research team (Syed and Palermo 2010).

The role of community engagement is particularly important when working with marginalized communities where different cultures, values, and priorities may have to compete for consideration against dominant frameworks. This groundwater governance workshop included participants from

varying backgrounds and asked participants to respect all knowledge brought into the workshop, including Traditional Ecological Knowledge (TEK) and lived experience.

Academic credentials and Western scientific knowledge are prioritized in policy and law-making settings. TEK and lived experience are typically less common because it is difficult to evaluate the reliability of this expertise under academic or Western Science rubrics of knowledge (Kadykalo et al., 2020).

Traditional Ecological Knowledge (TEK) is described as "observations, oral and written knowledge, practices, and beliefs that promotes environmental sustainability and the responsible stewardship of natural resources through relationships between humans and environmental systems." (White House Press Brief 2021).

Lived experience is firsthand knowledge, or knowledge generated by living through specific events, conditions, or occurrences. Through recollection and retrospection, this firsthand knowledge provides information by situating a problem within a particular context (O'Leary and Tsui 2022).

In recognizing these different ways of knowing as valid, workshop participants were encouraged to speak freely about their personal experiences. They were asked to listen to the wisdom of others without passing judgment, or assuming that one perspective was more credible than another. This was a way to facilitate respectful dialogue throughout the room.

# **Agenda and Topics Covered**

The detailed agenda is included as an appendix to this document.

### Day I in Review

The first day of the workshop was May 9, 2024 at the North American Indian Association (NAIA) of Detroit. A Native-inspired breakfast was available for all who attended, which was catered by Rosie's Food Stand. Freshwater staff were present to facilitate the two-day event.

NAIA Director Brian Moore opened the workshop with a blessing, as is customary protocol for Native gatherings. The blessing was offered in Anishinaabemowin and translated to English for everyone's benefit. He welcomed the group and offered blessings for their mutual health and good presence in that space during the coming days of meetings. Workshop participant Andrea Pierce then offered a blessing and water ceremony, and shared a story about the consequences of mistreating the water and the power that sacred water holds in healing and nurturing communities.

Freshwater staff member, John Roterman, also welcomed the group, As the first point of contact for the invitees, John led the workshop introductions by thanking them for their interest and attendance. He stated the Freshwater goal of amplifying Native voices for this project, and shared his hopes that this initial workshop would grow into future efforts, with new allies blossoming to a formidable grass roots effort to protect our freshwater. John then relayed a story of the Anishinaabe 7th Fire Prophecy and how the Anishinaabe migration journey happened.

Freshwater staff member and facilitator, Rosie Russell then shared a story about how she got connected to water, which kicked off the 2-hour talking circle, where each person was given the opportunity to share their story about their personal connection to water.

Everyone had a story that detailed their relationship to water, and the sharing of these stories had a great equalizing effect around the table. Some came into water through childhood experiences, like one individual who said she watched the Cuyahoga River burning while growing up in Cleveland or another who wanted to watch a Power Rangers movie one day and, to his dismay, his parents brought him to see An Inconvenient Truth.

Some got connected to water later in life, like a participant who became an advocate after economic development threatened the Michindoh Aquifer, the sole source of drinking water in the region. Some formed their relationship to water through farming, like one participant who has been an organic farmer in the region for over a decade and has been a staunch advocate of local water systems and their protection from harmful chemicals applied for pest management.

Some gained an interest in water through their work and academic studies, like a participant whose interest in Tribal history and ecology led to an academic study of historical wild rice beds and detailed GIS maps that included sovereign knowledge held by local Tribes. Some actively work on environmental policies and water governance projects in the region, tackling existing barriers and struggles with multi-jurisdictional governance practices.

Others lost family members to the poor treatment of water which brought them into activist work, like one participant whose mother was lost to health-related issues from PFAS contamination in her drinking water. This led to her involvement in grass roots organizing that promoted sound water management, such as Line 5. Others were raised with a close connection to water and recounted how they observed changes in the environment throughout their life, including eating fish directly from the lake and the water quality impacts that led to health risks from consuming the same fish.

Overall, participants various connections to water brought them to this discussion about the Michindoh aquifer, which they agreed is an important community asset that gives life to all who inhabit the region.

### Presentations

The 2-hour talking circle was followed by a series of presentations about the project background, the geologic history of the Michindoh aquifer (Figure 2), and the state of groundwater policy and governance in the region. The purpose of these presentations was to share information about the project's focus and to briefly summarize the information currently informing the management and governance of the Michindoh aquifer. By empowering the room with knowledge, informational barriers were minimized. Notebooks and handouts of the presentations were provided and allowed people to follow along. Following each presentation, workshop participants were given an opportunity to ask questions or reflect on the topics discussed. Some participants questioned how old the data were and the limitations they have describing the system's holistic nature, while others reflected on the existing policies and their limitations in protecting the ecosystems they set out to protect.



Figure 2. Dr. Carrie Jennings presenting on the geologic history

### **Issues and Topics of Interest**

Following the presentations and brief discussion, participants were asked to brainstorm issues they are working to address in the Michindoh Aquifer, with a focus on groundwater availability. The issues that were suggested were displayed at the front of the room (see Figure 3), and included:

- · impacts to wetlands
- recharge loss
- unaccounted-for withdrawals
- unverifiable assumptions in groundwater models
- monitoring wells and their levels, depth of data
- rights of the aquifer
- rights of aquatic resources
- · quality of discharged water used to grow genetically modified species
- · diluting discharge using groundwater



Figure 3. Whiteboard showing issues of interest in the Michindoh aquifer

The group then voted on the different issues and agreed to combine and consolidate them into three categories (as shown in Figure 3). Impacts to wetlands and recharge loss became the **wetlands and the water table** group. Unaccounted for withdrawals, unverifiable assumptions in groundwater models, and monitoring wells and their levels, depth of data became the **data assumptions** group. Rights of the aquifer and rights of aquatic resources became the **rights of nature** group. The last two topics were excluded from the discussion due to the low interest and loose connection to groundwater quantity.

Attendees were given the opportunity to choose which group to sit in with and notes of topical points were recorded on sticky notes and posted on large flipboards to help participants find common themes and connections. A series of exercises were used to discuss the issue of their choice, and to "admire the problem," as was reiterated throughout the discussion. The first exercise in this process is called the 5 Whys exercise (Figure 4), which encourages people to get to the root of the issue they are discussing while creating a starting point for each person in the group to share and debate their different perspectives.

After reporting the results of their 5 Whys discussion and selecting a more narrowed focus for their topic, each group considered the various ways the issue impacts their communities. Participants were asked, "who or what does this issue impact?" After reporting their results, participants were asked, "who or what impacts the issue?" This exercise brought each group to a deeper understanding and provided the foundation to move into day 2's discussion: policy and governance tools.



Figure 4. Data group prepping the flipboard for the 5 Whys

### Day 2 in Review

On Day 2, most of the invitees returned to continue the dialogue regarding the Michindoh Aquifer. Everyone was given an opportunity to reflect on the previous day's discussions. The diversity of industry professionals, Tribal members, and community advocates made for interesting talking points that seemed to intersect at times and that blossomed into further fruitful conversation.

Some felt apprehension during the first day and were unsure of what this workshop would require personally and professionally and were surprised by the relationship building that had taken place. Some highlighted how their academic training emphasized dispassion and black-and-white viewpoints and appreciated how this workshop allowed space for more nuance, complexity, and dissolved typical silos. Another person stated that they loved to see different perspectives coming together and how this workshop needed to happen.

Some expressed gratitude for being included, and highlighted how these discussions are normally left in the realm of "those with all the titles" and how Native communities are typically excluded from these multi-jurisdictional decision-making spaces despite being stewards of the land. Some noted their lack of interaction with Native communities but appreciated the opportunity to listen and learn from the Native people in the room. Some noted that they were still learning and were taking time to take in all the new information, and their plans included additional learning after this workshop.

Some brought up their age and how they initially felt it disqualified them from this workshop and that their lack of credentials made them nervous to speak among professionals and experts, but that had changed due to being welcomed and respected in the previous day. Some mentioned how nice it was to learn about the work being done by others and to have the chance to learn about their different perspectives.

Overall, the group relayed a feeling that there was a disconnect between governance and the community, but there was also an optimistic tone as participants discussed future opportunities to work together.

### **Technical Presentations**

Discussions were tabled to listen to presentations from Chanse Ford, Ph.D. and Ben Edelstein, J.D. respectively. Chanse presented on the preliminary results of USGS modeling of the Michindoh aquifer but noted that the research was still in review by USGS. As a result, this work is not included in this report. Ben presented on legal tools for governing groundwater in defined jurisdictions, as well as cooperative mechanisms in place for multi-regional groundwater management. Although these talks were technical in nature, they were presented and explained in easy-to-understand language.





Figure 5. Ben Edelstein, J.D. presenting on policy tools

be more at ease in expressing questions and being vulnerable when asking for clarification around scientific and legal topics. The participants were also more aware of each other's backgrounds and social contexts, and this knowledge allowed people to engage in civil and open dialogue.

### **Policy Tools and Interventions**

Following this discussion, participants returned to their respective groups to brainstorm policy and governance tools. Participants were asked to reflect on interventions or policy tools that could be implemented by a local jurisdiction or institutions to either mitigate an existing impact discussed the previous day, or to improve an existing policy that would indirectly address an impact (see Figure 6). During this discussion participants were also asked to identify some barriers that might impede successful implementation. Participants focused on multi-regional approaches using the same process.



Figure 6. Wetlands and the water table group reporting out policy tools

### Debrief

Workshop participants were asked to reflect on their experience during a debrief at the end of the workshop and then again in a short post-workshop survey.

During the debrief, several participants expressed interest in having more participation from legislators and State and Federal agency representatives, especially from Ohio, to better understand how decisions are getting made and why local advocacy groups are experiencing pushback. Others hoped to see traditional healing practitioners and Indigenous people who use medicine or fish the waters to have more first-hand knowledge of how these systems are changing in response to the way the groundwater is being managed.

Many agreed that so much more is needed to better understand the issues present within the Michindoh aquifer region, including getting more clarity on the stories being told with the data, getting more funding to collect meaningful real-time data, consulting more directly with Tribal stakeholders, getting more information about how animals and ecosystems are impacted, and hearing more examples of groundwater management strategies from other regions, such as the Ogalala aquifer area.

Overall, participants reflected that the workshop provided a welcoming and engaging platform to hear new perspectives, to network, and to focus on the Michindoh aquifer.

In the post-workshop surveys, participants reflected positively about their experience. Some expressed gratitude for the quality of information that was shared, including the introductory components and the more advanced education from experts in hydrogeology. Others were happy with the welcoming atmosphere, and the comfort and flexibility to share their stories among a diverse group of backgrounds and professions. Overall, people were pleased with how this workshop brought together a diverse group of people who have a shared interest in the Michindoh Aquifer. The quote below captures this in full:

"As someone who has also organized workshops/events bringing people of diverse backgrounds and professions together, I appreciated this workshop very much. Bringing community members, scientists, and activists together and using small group discussions all made for a thought provoking 2 days. It also provided all of us a chance to form some relationships with new people who also care deeply about water, nature and in this case the Michindoh aquifer. Well done!"

# **Groundwater Governance Issues and Strategies Discussed**

Three groundwater governance issues selected by the workshop participants became the focus of this workshop. These issues were discussed using the series of exercises described in the preceding section. Following the workshop, the notes from each of the three group discussions were recorded into Miro, an online whiteboard, and analyzed and summarized by Freshwater staff. This section includes summaries from each of the three discussions.

## **Rights of Nature**

The rights of nature group formed to discuss how recognition of nature's rights would positively affect the health and wellbeing of groundwater and the environment. The importance of groundwater to participants' lives was explored and common themes were identified (see Figure 7).

Some of the ideas presented included dissatisfaction with the current paradigm, where monetary concerns always seem to outweigh best practices, and a lack of representation in stakeholder engagement. The health and quantity of the water was also identified as a main concern, but a barrier to that included policy and legal structures, some of those which include the assignment of personhood to corporations while blocking or reversing legislation that granted lakes, rivers, watersheds, and rivers the rights of personhood. Participants expressed a feeling that politics favor the economy over ecology,



Figure 7. Rights of nature 5 Whys

and people shared personal experiences where physical attempts were made by law enforcement to silence water advocacy.

A key barrier was the absence of nature's advocates in stakeholder engagement and water governance and decision-making circles. Unsustainable uses of water, lack of scientific education, lack of connection to nature, differing values, oversight failures by, and lack of cooperative governance, and legal threats like Strategic Lawsuits Against Public Participation (also known as SLAPP suits) to silence advocates were also identified as barriers to development of practices that protect nature.

As populations increase, conservation and sustainable use of groundwater are important to consider. Some states have priority-of-use laws which elevate human consumption, but with or without them end-users can use drinking-quality water for lower priority activities like lawn watering, car washing, and toilet flushing. Harvesting rainwater and graywater were identified as strategies to preserve groundwater for essential uses and reduce overuse of groundwater.

Intense cultural shifts were suggested to implement a sustainable agenda, focusing education on the interdependence of the natural world and its link to human existence. For example, freshwater health in rivers, lakes and streams is determined by surveying the macroinvertebrates present. They are the best indicator of a healthy ecosystem. One example mentioned was the truth, reckoning, and right relationships workshops put on by the Community Environmental Legal Defense Fund.

The lack of knowledge about, and respect for Indigenous knowledge systems and treaty rights is a barrier to moving forward in a more sustainable way. Treaties are the "supreme law of the Land" according to the U.S. Constitution. Consultation with Tribal entities should take place first, but Tribal perspectives are too often neglected or unknown. Having more Indigenous voices in the conversations would promote the rights of nature, but too often, these conversations fail to take place. Treaties and constitutions that incorporated the rights of nature would be specific to each bioregion and include every living entity connected within.

The capitalist system we live in favors economic development and is at cross-purposes with the rights of nature. It requires life sustaining "resources" to be consumed or destroyed to be capitalized upon. Laws are designed and carried out without inclusion or recognition of the rights of nature. Corporations

are granted personhood to have rights afforded to wholly unnecessary entities, while rights and access to clean water, air and food suffer. Limitations of the English language or even specific word choices of "shall" or "may" change everything. In the rights of nature discussion, participants offered that Nature should be considered as important as or more important than the rights of corporations and businesses. The dismissal of Traditional Indigenous Knowledge (TEK) in favor of western cultural values has caused a disconnect to our natural relatives. We don't just live in nature, we are nature.

### **Data Assumptions**

The topic of data was proposed by participants, and became the broader topic of "Data, assumptions, and monitoring" to better encompass the process of how data are generated and used. Data are generally defined as facts that can be analyzed to make decisions or to generate knowledge. Simply, data are assumed to be raw information, devoid of any interpretation.

There was apparent reluctance to join the Data group, and the initial group was the smallest of all three working groups and split between community members and scientists who worked with and modeled data professionally. During the 5 Whys exercise, participants disagreed on the order of the initial 5 whys. It was argued that it was wrong to state that it is "not possible to know all the variables" in a model, because variables are specifically selected or ignored for a model. The counterargument was that nature is so complex, and there are many variables still unknown and undiscovered in nature, so it is impossible to incorporate all variables in model.

The group eventually agreed that the first two whys generated were reciprocal: It is not possible to know all the variables because natural systems are so complex; natural systems are so complex, and so it is therefore not possible to know all the variables (see Figure 8). Because of this, accurate data can be difficult to gather, model, interpret, and verify. However, both scientists and community members desire accurate predictions for decision making. Accurate data are needed to make accurate predictions.

The group identified people, systems, and processes that might result in having better or more accurate data or that would be impacted by having better and more accurate data. Throughout this exercise, the discussion revolved around what was meant by "better" and "more accurate" when applied to

data. Did "better" mean the quality of data, or did it include the quantity of data and the data collection and data storage and data retrieval? Did "more accurate" mean robust or just precise? What is meant by data and was it only meant to reference measurements in the earth science categories? This discussion highlighted the complexities that exist in and between different disciplines and scientific fields.

As this workshop focused on the Michindoh Aquifer and this exercise focused on accurate predictions, "data" referred to precise measurements collected in the earth sciences. The group discussed themes that highlighted specific needs of the aquifer region. Later, the group arranged the identified themes as strategies which addressed identified barriers.



Figure 8. Data group's 5 Whys

Key strategies that emerged in these discussions included a need to increase the public's confidence in science and data; a need for additional staff with professional training in science, technology, engineering, and math (STEM) fields to expand duties and fieldwork; and a need for additional funding to support the additional staff capacity, data monitoring, and data management. For example, well drillers could have access to more training in geology to improve the accuracy of well logs, or funding could be used for installing new monitoring wells in areas where data is limited or where potential concerns exist.



Figure 9. Data group discussing what impacts the accuracy of data

One strategy was to increase funding to support additional staff and staffing capacity, and an ideal outcome would include more trained professionals who would be better able to design, execute, and communicate projects and project results to the public and build trust between the public and scientists. To support increased funding, there would need to be the political will from the legislation and the ability to communicate the need for the funding from the research community. The idealized outcome that emerged in group discussion was a public that felt educated and empowered, and youth who would eventually go into STEM-field careers to continue this cycle of trust and build more collaborative and interdisciplinary research partnerships. For example, it was suggested that the United States Geologic Survey (USGS) could coordinate work across state boundaries to bridge knowledge gaps and therefore build a transparent and collaborative platform for data sharing and comparison.

### Wetlands and the Water Table

During this workshop, participants expressed concerns that there is much that remains unknown about the relationship between wetlands, the Michindoh Aquifer, and those inhabiting the land. How much water is being recharged into the aquifer through wetlands? How are wetlands impacted by high groundwater pumping rates in their local vicinity? How much traditional medicine has been lost to development throughout the region? These questions prompted a diverse group of participants to brainstorm what is happening and what can be done about it from a groundwater-governance standpoint.

The wetlands group was made up of scientists, Indigenous leaders, and community members who all had first-hand knowledge of wetlands within their communities and places of work, but with varying perspectives. Their knowledge of these systems quickly became apparent as they dove into a series of exercises. Given that each person in the group was looking at the issue from a different vantage point, the initial discussion naturally began with a refresher on the mechanics of wetlands. Some did not understand the potential connection between regional-water-table lowering and wetland loss. Some argued that the loss of wetlands impacted the quality of water for well-water consumers. Some advocated for impacted future generations and their ability to hunt and gather food and medicine that occur in wetlands, while others noted the flood-buffering capacity of a landscape with wetlands. Some shared that wetlands have been central to human's relationship with water for hundreds of thousands of years, as they provide medicine and food, filter water, buffer floods during rainstorms, and support interconnected ecosystems.

They discussed how water moves downward through some wetlands, like after a rainstorm, "recharging" the aquifer with filtered water. However, they agreed that the certainty of when and where recharge is happening remains a mystery to them. As a result, governance practices do not sufficiently protect against the development demands that can compete with these important ecosystem features, which may explain why to them it seems like so many wetlands and rivers have been lost throughout the region. Scientists shared that this loss of wetlands alters how the water table is being expressed, how pollutants are making their way into water-table aquifers, and where recharge is taking place. For example, in Indiana, where a portion of the Michindoh Aquifer is located, over 85% of the original wetlands have been lost to development and the remaining wetlands continue to be threatened by state legislation, such as the Senate Enrolled Act 381. It has been found that these changes have endangered wildlife, impacted the quality and quantity of drinking water, and increased the risk of flooding of homes and buildings.

Workshop participants expressed concern over this trend, not just in Indiana, but across the region. They expressed concerns about how wetland loss has threatened the existence of traditional medicines that are found within these wetlands and the availability of sacred wild rice which brought Indigenous people to this region. This is because the pollutants and development practices also impact the functionality of a wetland, like what can grow there. For example, healthy wild rice has been linked to areas where groundwater upwells in the system. However, most data being collected about wetlands does not explicitly pertain to things like traditional medicines or wild rice which is held sacred by Indigenous groups.

As the discussion concluded, the participants expressed a need to change how people in decisionmaking roles perceive the value of wetlands. For example, when trying to advocate for the protection of wetlands, some community members were blocked by Ohio legislation that prevented people from advocating on behalf of nature or ecosystems. Some local governments in Ohio have also forcibly barred community advocates from listening to conversations where science and data were being shared about the Michindoh aquifer's impact on the ecosystem. These are examples of blocking a feedback loop between community and decisions makers. Having the ability to freely communicate in a transparent manner is necessary for effective and democratic decision-making regarding how wetlands are being protected. This communication is also important because it ensures that people have a stake in the decisions being made about the communities in which they live, and there's something in it for them. Another suggestion was to promote better consultation with Tribal governments. For example, United Tribes of Michigan are generally unified in their commitment to protect the environment. One way to increase the protection of wetlands in Michigan, or further, across EPA region 5, would be to consult United Tribes of Michigan to understand how wetlands are protected within their sovereign nations. This consultation should be done respectfully and include the people who have lived knowledge and experience of the many values that wetlands provide, especially as it pertains to Indigenous values that are often excluded from the picture when making decisions.



Figure 9. Data group discussing what impacts the accuracy of data

Others shared that decision makers need more data to understand how the aquifer is being recharged, where recharge is happening, and the role that wetlands play in recharge. The data should also look at how wetlands are impacted by the level of recharge. For example, one participant shared that some wetlands, such as marshes or fens, require that the water table be at least one foot from the surface. A groundwater recharge study of wetlands was suggested to evaluate recharge more comprehensively across the region. The group agreed that Tribes and community members should be consulted when thinking about where that data should be collected. However, data, maps, and models also need to be presented in a clear and easy to understand manner, like this groundwater story map from Michigan, so that politicians making decisions about these ecosystem features can understand the stories behind the data and become more willing to provide funds or resources to protect them, or even conduct the studies to better understand them.

Overall, the group was interested in better communication strategies to incorporate a diverse range of perspectives and values when governing groundwater through the lens of wetlands. They agreed that the largest barriers to achieving this were costs, time, who is in power, and the fact that there's not enough time to get to the point of knowing before decisions get made.

# Participant List

# Workshop Participants

Andrea Pierce	Julie Dye
Chanse Ford	Rochelle (Shelby) Charette
Debra Durall	Rosemary Hug
Ginger Davis	Sherry Fleming
Grant Poole	Sue Franklin
Jack Wittman	Tish O'Dell
Jim Milne	

## **NAIA Hosts**

Brian Moore, Executive Director	Travis Schuyler

### Caterer

Alycia Atkinson from Rosie's Food Stand

### Freshwater

Carrie Jennings	Rosie Russell
John Roterman	Alyssa Fabia

## Water 365

Ben Edelstein

### Appendix

# Workshop Itinerary and Agenda

Workshop Topic	Groundwater Governance in the Michindoh Aquifer
Date	Thursday, May 9, 9am-4pm to Friday, May 10, 9am-3:30pm
Location	North American Indian Association (NAIA) of Detroit

We are looking forward to you joining us at this 2-day workshop. Below you will find some details to make your trip go more smoothly. Please contact Rosie Russell at <u>rrussell@freshwater.org</u> or (652) 571-2696, or John Roterman at <u>iroterman@freshwater.org</u> with questions.

## Arriving at the Hotel

- Hotel: Holiday Inn Express & Suites Detroit Northwest Livonia, 27451 Schoolcraft Rd, Livonia, MI 48150
- Free parking available in their lot.
- Check-in is after 3pm.
- Check-out time is 11am. Please make arrangements if you need the hotel to hold your luggage on day 2.

## Arriving at the North American Indian Association (NAIA) of Detroit

• 22720 Plymouth Rd, Redford Charter Twp, MI 48239

To get there from the hotel, travel south on Inkster Road. Turn left, heading east on Plymouth Road. NAIA will be on the left (north side of the road) between W Parkway Street and Beaverland Street.

- There is plenty of free parking available on the west side of the building
- Enter the building from the south. We will be meeting in the main room upstairs. Please arrive between 9:00 and 9:15.

### What to Expect for the Workshop

- A full breakfast, coffee, and water will be served both days.
- Please dress comfortably.
- Day 1 will begin with an Opening Invocation and Prayer by Brian Moore, Executive Director of NAIA Detroit, and a Water Ceremony from Andrea Pierce. This will be followed by 2 hours of getting to know one another. The rest of the agenda for days 1 and 2 is focused on problem-solving exercises

and plenty of respectful sharing and listening. You can find the agenda on the next few pages.

- The menu of traditional Indigenous food from Rosie's Food Stand is at the end of this document.
- Optional evening activities for May 9th will be shared during the workshop.
- Data Sovereignty norms and expectations will be presented when we kickoff the workshop, but we
  want you to be aware that the meeting will not be live streamed or recorded and participants are
  welcome to ask for any notes to be stricken from the record. If you have any specific questions
  you'd like us to address, please let us know.

## **Workshop Description**

The Michindoh Aquifer is a groundwater feature that supports many community needs and values. Spanning the ancestral homelands of the Potowatomi, three states, and numerous local government units, this shared geologic feature is governed by layers of institutions, organizations, and individuals that own and manage the land above it. Currently, the governance strategy does not acknowledge the Michindoh Aquifer as a communal feature of the landscape. Instead, different communities assign their own values and priorities to their management policies, which may or may not align with others enjoying its many benefits.

Therefore, you are among a multi-jurisdictional group of experts that has been invited to attend this workshop, with a focus on amplifying the voice and representation of Tribal Nations residing in this region. Those in attendance will discuss governance challenges, needs, and strategies for sustaining the Michindoh Aquifer and the communities it supports.

In attending this workshop, we hope you will form new alliances with like-minded individuals who are unified in their commitment to implementing strategies that sustain the Michindoh Aquifer for generations to come. Our goal is that with your contributions, this will be the first of many steps that will ultimately shape the foundation and future of groundwater governance in the Great Lakes region.

The four questions that will guide this two-day workshop include:

- What concerns are you working on within the Michindoh Aquifer?
- What current groundwater stressors are you hoping to address in a better way?
- Do you have any input on sustainable governance practices that could be implemented multiregionally?
- What other experts do you think should be a part of this process, and part of the continuing conversation?

This area (Michindoh Aquifer) is one of three aquifer-action cluster workshops being organized by the Freshwater Society to elevate local groundwater concerns with decision makers.

# Workshop Agenda

### Day I – May 9, 9:00 to 16:00 – 9am to 4pm

9:00	Welcome	Refreshments and breakfast will be available (Coffee and water served all day)
9:15	Opening Invocation and Prayer and Water Ceremony, followed by a talking circle	Brian Moore will start us off with the opening invocation and prayer. Then, Andrea Pierce will conduct a Water Ceremony. Following this, everyone will have the opportunity to share their name, region they come from, and a story or observation about water.
11:15	Kickoff from Groundwater Governance team	This will be a presentation format and will include a background on the history and geography of the Michindoh Aquifer from Carrie Jennings, and background on groundwater policy in this region from Ben Edelstein.
12:00	Lunch (catered)	Menu includes traditional Indigenous food and can be found on the final page of this document.
13:00	Groundwater Governance issues in the Michindoh Aquifer	Participants to brainstorm groundwater governance issues in the Michindoh Aquifer and things they value and want to protect
13:30	Breakout Groups (issue 1)	Define your groundwater governance issue using a series of exercises.
14:20	15-minute break	
14:35	Breakout Groups (issue 2)	Define your groundwater governance issue using a series of exercises.
15:25	Debrief talking circle	What are your initial reactions? What do you hope to get out of tomorrow?
16:00	Adjourn for the day	We will have options for places to gather later in the evening for food and further conversation.

## Day 2 – May 10, 9:00 to 15:30 – 9am to 3:30pm

9:00	Welcome	Refreshments and breakfast will be available (Coffee and water served all day)
9:15	Talking circle	Any thoughts, discussions you had the previous day/evening that you want to share with the group?
9:45	Presentation about groundwater modeling	Presentation by Chanse Ford from USGS
10:15	Background on tools being implemented by other communities	Presentation by Ben Edelstein from Water 365

10:25	Breakout Groups (issue 1)	Return to a groundwater governance issue of your choice Questions: What groundwater stressors are you hoping to address within your own communities? What barriers might you face? Are there any tools that have worked?
11:05	15-minute break	
11:20	Breakout Groups (issue 2)	Return to a groundwater governance issue of your choice Questions: What current groundwater stressors are you hoping to address within your own communities? What barriers might you face? Are there any tools that have worked?
12:00	Lunch (catered)	Menu includes traditional Indigenous food and can be found on the final page of this document.
13:00	Background on tools being implemented multi-regionally	Presentation by Ben Edelstein from Water 365
13:10	Breakout Groups (issue 1)	Return to a groundwater governance issue of your choice Questions: What sustainable governance practices could be implemented multi-regionally? What barriers might we face? Are there any tools that have worked?
13:50	15-minute break	
14:05	Breakout Groups (issue 2)	Return to a groundwater governance issue of your choice Questions: What sustainable governance practices could be implemented multi-regionally? What barriers might we face? Are there any tools that have worked?
14:45	Debrief talking circle	What are your reactions? What data do you think is needed to move forward? What other experts do you think should be at the table/part of this process and continuing conversation?
15:30	Adjourn the workshop	