

# **Wisconsin Groundwater Coordinating Council (GCC) Meeting Minutes**

**Date:** May 9, 2025

**Time:** 10:00 AM – 12:00 PM

**Location:** Wisconsin Geological and Natural History Survey, 3817 Mineral Point Rd, Madison, WI 53705 and via Zoom

## **1. Meeting Opening and Approval of Previous Minutes**

- **GCC Members Present:** Steve Elmore (DNR), Brad Johnson (DSPS), Sue Swanson (WGNHS), Tim Anderson representing Robby Personette (DATCP), Sheryl Bedno (DHS), Christy Remucal (UWS), Barry Paye (DOT)
- **Introductions and Agenda Review:** The meeting began with attendee introductions and a review of the agenda. No modifications were made. Members discuss the option of holding the August meeting in Central Wisconsin.
- **Approval of Previous Meeting Minutes:** Motion to approve the February 14, 2025, meeting minutes by Brad Johnson, approved by voice vote. All members voted in favor, and the minutes were approved unanimously.

## **2. FY 2027 Joint Solicitation groundwater research priorities, Jen Hauxwell (UW System)**

An update was provided on the joint solicitation process for Wisconsin's groundwater research and monitoring program, beginning with a summary of the Fiscal Year 2026 cycle. A total of fifteen proposals had been submitted, of which five were selected for funding—yielding an approximate thirty percent success rate. The funded projects included two supported by the University of Wisconsin and three by the Department of Natural Resources, led by researchers such as Dr. Loheide (UW–Madison), Dr. Price (UW–Milwaukee), Dr. Cardiff (UW–Madison), and Dr. Nghiem (UW–Madison).

Turning to the Fiscal Year 2027 cycle, it was noted that the participating agencies—DATCP, DNR, and the UW System—had already finalized and submitted their updated research priorities. These will continue to emphasize core themes such as groundwater quality and quantity, nitrogen management, microbial pathogens, PFAS transport, emerging contaminants, stormwater infiltration impacts, and improved monitoring and data analysis.

In response to longstanding feedback from researchers, particularly the challenges of coordinating student recruitment with proposal timelines, the solicitation schedule is being advanced by roughly one month. The release is now expected in May rather than July, with proposals due by October 1 instead of November 1. This earlier timeline will also require the GCC Subcommittee on Research to adjust its internal review and peer evaluation processes, shifting those activities to December rather than the new year.

A draft version of the solicitation document was distributed in advance for review. Edits and comments were requested by the following Friday, after which a final version will be prepared

for distribution. Attendees were encouraged to disseminate the opportunity widely across their networks to help attract a broad and competitive pool of applicants.

### **3. Technical Presentation: Groundwater and Geology Geospatial Data Development and Delivery - Adam Freihoefer (Department of Natural Resources) & Dr. Amy Wiersma (Wisconsin Geological and Natural History Survey)**

#### **Background**

The presentation was focused on statewide efforts to improve the accessibility, integration, and practical use of geospatial groundwater and hydrogeologic data. These efforts are increasingly important for supporting water resource management, especially in the context of high-capacity well permitting, contamination risk evaluation, and county-level groundwater planning.

Adam F. provided an example involving the review of a proposed high-capacity well near Eau Claire. He explained that evaluating such proposals requires synthesizing data from numerous sources, including well construction reports, groundwater flow models, water quality results, geologic logs, and surface water data. These datasets are often produced and stored by various agencies and institutions, including DNR, WGNHS, UW–Stevens Point, USGS, and individual counties. This fragmentation makes it difficult for end users—regulators, researchers, and local governments—to find and use the full scope of available data.

To address these challenges, DNR partnered with UW–Madison Libraries to develop a shared solution for organizing and linking geospatial groundwater data across organizations. Meanwhile, WGNHS has undertaken a parallel effort to digitize and publish its historical maps and studies in modern GIS formats, and to support county stakeholders with new groundwater atlases.

To address this issue, Adam introduced the framework for a centralized data hub. The conceptual model he presented called for establishing a clearinghouse that would not host all data but instead catalog and link to authoritative sources from various entities. After some trial and error in creating a suitable system internally, Adam collaborated with the UW–Madison library system. Together, they developed a specialized collection within the existing GeoData@Wisconsin platform, titled the “Geology and Groundwater Collection.” This platform indexes published geospatial data products from multiple agencies based on consistent metadata tags. This initiative now enables researchers and policymakers to search a single platform for relevant groundwater datasets, ranging from bedrock geology maps to depth-to-water table data.

Adam demonstrated how this resource is already being used internally at DNR, where high-resolution regional maps have been published as web map services that can be integrated into county or state-level GIS viewers. He also described the gradual process of migrating legacy data, such as scanned PDFs and paper maps, into GIS-ready formats. He emphasized that the transition from analog to digital, and then to interactive web-based services, requires significant effort and collaboration, particularly in georeferencing and attributing spatial features.

Amy Wiersma continued the presentation by highlighting the work underway at WGNHS to support these goals. She explained that her hydrogeologist position was created by the state legislature in 2021, with the objective of developing local and county-scale groundwater data and making that data more accessible. Working with an advisory committee, Amy identified three priorities: developing detailed county studies, improving the accessibility of past and present data, and supporting stakeholder education and outreach.

Amy described the process WGNHS uses to produce hydrogeologic atlases at the county level. These atlases include a suite of maps and datasets: water table elevations, depth to water, depth to bedrock, surficial geology, groundwater recharge estimates, and susceptibility to contamination. She presented the recently completed Burnett County Atlas as an example, explaining how it combined well-verified construction reports, new mapping, and geologic analysis. The data were compiled into a groundwater susceptibility map that will assist the county with land-use planning and groundwater protection.

Amy also provided an update on the digitization status of hydrogeologic data. As of early 2023, many counties still lacked digital GIS data for maps that had been published in hardcopy. Since then, Amy and other WGNHS staff have worked to convert nearly all of these older maps into GIS-ready datasets. Several counties, including Chippewa, Dunn, Brown, and Buffalo, are now in the process of having their data published in geodatabase format.

To further improve accessibility, WGNHS is preparing to launch a new online tool—the Map Status Viewer. This interactive viewer will allow users to search for groundwater and geologic maps by county, theme, and publication status. It will provide direct access to downloadable data and publications, and include filters for spatial scale and map type. The tool is expected to go live by the end of June 2025.

Amy concluded by introducing a new WGNHS staff member, Liz Krznarich, who joined the team as a software engineer and developer. Liz will support further improvements to data dissemination platforms and integration with GeoData@Wisconsin.

Adam closed the technical presentation by outlining next steps. He emphasized the importance of continued prioritization of geospatial data creation, publishing map services, and streamlining metadata workflows. Now that the technical foundation is in place, he said, the GCC Subcommittee on Geospatial Data Management can formally begin meeting to discuss shared priorities, such as what data should be contributed and which datasets agencies most need from one another.

#### **4. Agency Updates**

Each GCC agency and organization provided updates on recent activities, projects, and staffing changes impacting groundwater research, protection, and public health.

##### **Wisconsin Department of Safety and Professional Services (DSPS) – Brad Johnson**

Brad provided an update on DSPS initiatives related to groundwater. The department is continuing work on refining the hydrograph method, which is used to assess suitable locations

for private onsite wastewater treatment systems based on groundwater depth. Dr. Sue Swanson is assisting with this effort, and a draft report is anticipated within the next couple of months. Brad noted that recent data suggests groundwater levels are beginning to recede, returning to more typical seasonal conditions, which may influence the resumption of the suspended method. Additionally, DSPS is engaged in ongoing collaboration with the DNR's Wastewater Program to draft a Memorandum of Understanding (MOU) for coordinating regulatory oversight of large-scale wastewater systems. A public meeting was held a few weeks prior to gather input, and both agencies are now working internally to determine the next steps for the MOU process.

### **Department of Health Services (DHS) – Sarah Yang**

Sarah reported that their team had recently hired Kaylie Mason, a health educator for the site evaluation program. This program provides public health guidance at contaminated sites across Wisconsin, particularly those involving PFAS or other hazardous substances. Kaylie will work on risk communication, outreach, and coordination with communities affected by legacy or emerging contamination. Sarah also shared concerns regarding potential impacts from the federal budget proposal released by the administration. According to the current draft, several environmental health programs under DHS are slated for complete elimination, which could severely impact funding and staffing. These uncertainties are causing delays in planning and execution of ongoing projects, and the department is taking a cautious approach until further clarity is available.

### **Wisconsin State Geological and Natural History Survey (WGNHS) – Sue Swanson**

Sue reported that WGNHS is awaiting the outcome of several major grant applications submitted to the USGS. These proposals support geologic mapping, groundwater research, and digital data infrastructure across Wisconsin. A major milestone was the recent publication of a statewide Quaternary geologic map, a detailed resource that compiles decades of geomorphological work. The map is available for free download and can also be printed. It was featured on Wisconsin Public Radio's "Larry Meiller Show," with contributions from Elmo Rawling and Eric Carson, two of the primary authors. In addition, new bedrock geologic maps are forthcoming, including one for Grant County by Eric Stewart and a series of 7.5-minute quadrangle maps for parts of Crawford County, which were developed in response to DOT interest in evaluating landslide susceptibility along Highway 35. WGNHS is also preparing to launch the Map Status Viewer at the end of June, which will allow users to explore and download available geologic and groundwater maps based on location and theme. This is part of an ongoing effort to modernize the way Survey data are accessed and used.

### **University of Wisconsin System (UWS) – Christy Remucal**

Christy reported that the UW System is focused on preparing for the upcoming joint solicitation but is also closely monitoring developments at the federal level. Of particular concern is the proposed elimination of the USGS 104(b) program, which is a key funding source for water research and supports the Water Resources Institute. The RFP for that program has not yet been released, creating uncertainty about future funding. In addition to federal challenges, UW campuses have also been notified of potential internal budget cuts, with the fiscal year beginning

June 1. These reductions could impact staffing, research capacity, and administrative support related to groundwater projects.

### **Department of Agriculture, Trade and Consumer Protection (DATCP) – Tim Anderson**

Tim Anderson shared updates from DATCP’s agricultural resource management and land and water programs. He reported that the agency is currently working to fill three vacancies within the agricultural management division. Surface water sampling began in March, coordinated in partnership with DNR and other agencies. Private well sampling followed in April, with around 100 wells being tested as part of the targeted sampling initiative. This effort also supports DHS’s ongoing biomonitoring study. DATCP’s Nitrogen Optimization Pilot Program (NOPP) received 13 applications this cycle, representing 34 agricultural producers. The total request exceeded \$1.15 million. Twenty-seven nutrient management strategies were funded, many focusing on optimizing nitrogen use through split applications, cover crops, and reduced fertilizer inputs. The department is also in the third cycle of its Nitrogen Fertilizer Use Efficiency project. This multi-year initiative funds two-year contracts with producers to test strategies that reduce nitrate leaching while maintaining productivity. Emergency rulemaking is required annually to manage this program, and DATCP currently has an open scope statement for updates to ATCP 52, which governs nutrient management and producer-led watershed protection grants. DATCP recently released two reports: the 2022–2023 Producer-Led Watershed Protection Impact Report and the 2024 Conservation Partner Support Summary, both highlighting conservation outcomes and collaborative efforts across the state.

### **Department of Transportation (DOT) – Barry Payne**

No updates.

### **Department of Natural Resources (DNR) – Steve Elmore**

Steve provided a comprehensive update on DNR initiatives. Several administrative rules are currently under revision:

- **NR 507**, relating to landfill groundwater monitoring, was recently approved by the Natural Resources Board.
- **NR 146** and **NR 812**—concerning well driller licensing and private well construction, respectively—are also undergoing updates. Proposed changes to NR 812 primarily address pump installation standards.
- **NR 140** rulemaking has officially begun for six additional PFAS compounds, following new recommendations from DHS. The department received approval for its scope statement in April and is preparing the draft rule and economic impact analysis.
- **NR 809**, relating to new state Maximum Contaminant Levels (MCLs) for PFAS. DNR is drafting the rule.

Regarding the ARPA-funded Well Compensation and Abandonment Program, the DNR has received an additional \$5 million for grants. These funds support private well owners in

replacing, treating, or properly abandoning contaminated wells. Eligibility requirements have been simplified to require only one confirmatory sample for contaminants (excluding bacteria). As of the meeting, 53 well compensation grants and 18 well abandonment grants had been issued. Approximately 75 additional applications are in process. PFAS investigations are ongoing in Oneida County, including the Town of Stella and Sunset Lake areas, where the DNR has sampled over 230 private wells. Thirty-two percent of the wells tested exceed DHS's previous recommendation of 20 parts per trillion. A subset of wells also exceeds the new federal MCLs. The department is working with EPA to extend sampling to additional locations within the county. For public drinking water systems, over 1,800 systems have submitted PFAS compliance samples. About 30% have detections, and less than 2% exceed DHS's previous hazard index. Only three public water systems are currently in formal violation of state MCLs, and efforts are underway to bring them back into compliance. The DNR's Office of Agriculture and Water Quality continues to lead efforts to update the Nutrient Loss Reduction Strategy. This update will involve wide-ranging stakeholder engagement over the next six months, with a specific focus on nitrate reduction. The department has contracted with UW–Madison researchers to complete a science-based assessment of best management practices and a companion social science evaluation. Lastly, agencies were reminded that the GCC's annual report to the legislature is due at the end of August. The DNR will circulate a request for agency updates by the end of May, with submissions expected by late June.

### **Closing remarks**

The council briefly discussed potential locations and formats for the August meeting. Given that the date falls during a common vacation period, the group agreed to circulate a poll to gauge member availability and potentially move the August meeting from August 8<sup>th</sup> to August 15<sup>th</sup>.