

AWRA-WI at 50: Honoring Our Past, Shaping our Future

50th Annual Meeting of the American Water Resources Association—Wisconsin Section

THURSDAY, April 9, 2026

- 9:30 - 11:00 am** **Registration (Brookfield Promenade)**
- 10:00 - 11:00 am** **Meet and Greet (Brookfield Promenade)**
Informal networking time with light refreshments and opportunities to win prizes. All attendees welcome and encouraged to participate.
- 11:00 - 1:00 pm** **Lunch (Brookfield 4-5)**
- Welcome and Announcements**
- Business Meeting and Board Election**
- Lightning Talk:** *Is it time for a “State of Wisconsin Joint Solicitation for Surface Water Research and Monitoring”?, Tim Asplund, Wisconsin DNR*
- Plenary Session Panel Discussion:** *Coordinating and Supporting Water Work across Wisconsin, Mike Cardiff, facilitator*
- 1:05 - 2:45 pm** **Concurrent Sessions 1A, 1B, 1C**
- Session 1A** **MMSD Water Resources Activities**
Room: Brookfield 1-2
Moderator: Mitch Olds
- 1:05** **Remote Sensing and Machine Learning for Green Stormwater Infrastructure Condition Assessment**
Omar Hegazy,* Marquette University
- 1:30** **PFAS Occurrence and Potential Biological Implications in Lake Michigan Tributaries near Milwaukee, WI during Summer 2022**
Owen Stefaniak, U.S. Geological Survey
- 1:55** **MMSD Flood Management and Reconnecting Communities to the Kinnickinnic River**
Patrick Elliott, Milwaukee Metropolitan Sewerage District
- 2:20** **Building the Milwaukee Estuary Dredged Material Management Facility**
Bridget Henk, Milwaukee Metropolitan Sewerage District

* Student presentation

- Session 1B**
- Groundwater Quality Management**
 Room: Milwaukee 1
 Moderator: Sue Swanson
- 1:05 **County-Level PFAS Response in Private Drinking Water Wells: Insights from Oneida and Eau Claire Counties**
 Anna Hilger, Eau Claire City-County Health Dept
- 1:30 **A Decade of Research on Radium in Wisconsin Groundwater: Key Advances and Remaining Challenges**
 Amy Wiersma, Wisconsin Department of Natural Resources
- 1:55 **The Efficacy of Prohibition Areas for Reducing Atrazine Concentrations in Wisconsin Groundwaters**
 Christopher Zahasky, University of Wisconsin-Madison
- 2:20 **Nitrification within Municipal Community Public Water Systems**
 Jesse Jensen, Wisconsin Department of Natural Resources
- Session 1C**
- Surface Water Quality**
 Room: Milwaukee 2
 Moderator: Tim Asplund
- 1:05 **Sorption Capacity and Removal Rates of Phosphorus from Surface Water Using Sorbents**
 Grace Hiley,* University of Wisconsin-Stevens Point
- 1:30 **A Tale of Two Nutrients: Investigating N and P Limitation in Wisconsin Streams with Nutrient Diffusing Substrates Improved**
 Justin Chenevert, Wisconsin Department of Natural Resources
- 1:55 **Fifteen Years of Surface Water Pesticide Data in Wisconsin**
 Sam Brockschmidt, Wisconsin Department of Agriculture, Trade, and Consumer Protection
- 2:20 **Taxonomy Matters, Water Dominates: Predicting PFOS Concentrations in Freshwater Fish Tissue Across Three States**
 Michael Shupryt, Tetra Tech
- 2:45 - 3:00 pm** **Break (Brookfield Promenade)**

* Student presentation

3:00 - 4:40 pm

Concurrent Sessions 2A, 2B, 2C

Session 2A

USGS MMSD Corridor Study

Room: Brookfield 1-2

Moderator: Matt Diebel

3:00

U.S. Geological Survey and Milwaukee Metropolitan Sewerage District: Monitoring Habitat and Geomorphic Change Associated with Stream Restoration Activities, Milwaukee, WI

Heidi Broerman, USGS Upper Midwest Water Science Center

3:25

Baseline Abundance and Biovolume of Harmful-Algal-Bloom-Producing Cyanobacteria and Indicators of Sediment-Phosphorus Availability in Stream Sediment in the Milwaukee Estuary

Hailey Trompeter, USGS Upper Midwest Water Science Center

3:50

Water Quality Trends in the Milwaukee Metropolitan Sewerage District Service Area

Matthew Diebel, USGS Upper Midwest Water Science Center

4:15

Characterization of Microplastics in Surface Water and Sediment in Two Urban Creeks and in Wet and Dry Atmospheric Deposition Samples from Milwaukee, Wisconsin

James Romano, USGS Upper Midwest Water Science Center

Session 2B

Groundwater Quality I

Room: Milwaukee 1

Moderator: Athena Nghiem

3:00

Cost-Effective Well Depth Estimation for Nitrate Drinking Water Compliance in Wisconsin using Causal Machine Learning

Xindi Lin,* University of Wisconsin-Madison

3:25

Drivers and Mechanisms of Phosphorus Mobility in the Hyporheic Zones: A Random Forest Analysis of a Multi-Year Hydrogeochemical Dataset

Vy Le,* University of Wisconsin-Madison

3:50

Revisiting Molybdenum Sourcing in Southeastern Wisconsin Groundwater through Solid-Phase Geochemistry Analyses

Savannah Finley,* University of Wisconsin-Madison

4:15

Quantifying Neonicotinoid Loss from Potato Production in the Wisconsin Central Sands

Evan Freed,* University of Wisconsin-Madison

* Student presentation

Session 2C	Hydrogeology I Room: Milwaukee 2 Moderator: Ken Bradbury
3:00	Experimental Insight into Frozen Flow Processes: Visualizations of Cryosuction Eleanor Louise,* University of Wisconsin - Madison
3:25	Investigating Driftless Area Hydrostratigraphy using Hydrologic Monitoring and Geochemistry Rachel Breunig,* University of Wisconsin- Madison
3:50	Enhancing Aquifer Recharge with Gravity-fed Drywells in Surficial Till at Token Creek, WI Samantha Kershner,* University of Wisconsin-Madison
4:15	Ecohydrology of Ridge-and-Swale Systems in Door County, Wisconsin Eric Kastelic,* University of Wisconsin- Madison
4:40 - 5:30 pm	Networking (Brookfield 3-4-5, Promenade)
5:30 - 7:00 pm	Dinner (Brookfield 4-5)
	Distinguished Service Award
	Collaborating to Protect Wisconsin's Water Systems Marissa Jablonski, Freshwater Collaborative
	Lightning Talk: <i>The water behind Wisconsin's Data Centers</i> Adam Freihoefer, Wisconsin DNR
	Evening Plenary <i>Duluth to Quebec City: The Great Lakes Compact as a Governance Tool</i> Shaili Pfeiffer, Wisconsin Department of Natural Resources
7:00 - 9:00 pm	Poster Session and Networking (Brookfield 3)
7:00 - 10:00 pm	Networking and Social (Brookfield 3)

* Student presentation

FRIDAY, April 10, 2026

7:30 - 8:30 am Board Breakfast Meeting (Wisconsin 1)

8:30 - 10:10 am Concurrent Sessions 3A, 3B, 3C

Session 3A Climate and Water Resources

Room: Brookfield 1-2

Moderator: Anna Fehling

8:30 **Season-Ahead Statistical Forecasts of Wisconsin Winter Heating Degree Days**
Feliz Boeing,* University of Wisconsin - Madison

8:55 **A National Stream Temperature Model and How it Can be Applied in Wisconsin**
Samantha Oliver, U.S. Geological Survey

9:20 **A Hydrologic Rube Goldberg Machine: Mitigating Water Loss on the Yahara Chain of Lakes**
Madeline Gotkowitz, Wisconsin Department of Natural Resources

9:45 **Beyond the Numbers: Making Sense of Soil-Water-Balance Model Projections for Minnesota's Climate Future**
Stephen Westenbroek, U.S. Geological Survey

Session 3B Urban Hydrology

Room: Brookfield 3

Moderator: Bill Selbig

8:30 **Contrasting Performance of an Urban Stormwater Biofilter for Particulate Versus Dissolved Pollutants**
Bill Selbig, U.S. Geological Survey

8:55 **Evaluating Floodwater Infiltration and Storage in a Restored Floodplain of Underwood Creek, Wisconsin**
Nicholas Corson-Dosch, U.S. Geological Survey

9:20 **Urban Soil Health: Restoring Disturbed Compacted Urban Soils as a Stormwater BMP**
Stuart Schwartz, University of Maryland

9:45 **Quantifying the Hydrological Impact of Urban Forests**
Bob Smail, Wisconsin Department of Natural Resources

* Student presentation

Session 3C	Groundwater Quality II Room: Brookfield 4 Moderator: Sam Brockschmidt
8:30	Data to Model Pipeline for Understanding Geogenic Radium Mobility in Wisconsin Groundwater Madeline Erb Suciu,* University of Wisconsin -Madison
8:55	An Analysis of Regulatory Impacts on the Silurian Aquifer of Northeast Wisconsin Ashley Muench, University of Wisconsin - Green Bay
9:20	The Silurian Performance Standard: How it Came to Be. And is it Effective? Maureen Muldoon, Wisconsin Geological and Natural History Survey
9:45	From Data-Focused Investigations of Groundwater Sustainability to Informing Action in Richland County Athena Nghiem, University of Wisconsin-Madison
10:10 - 10:30 am	Break (Brookfield Promenade)
10:30 am - 12:10 pm	Concurrent Sessions 4A, 4B, 4C
Session 4A	Watershed Management Room: Brookfield 1-2 Moderator: Steve Gaffield
10:30	Changes in Chloride Concentration and Flux from 2011 to 2023 in Major U.S. Tributaries to the Laurentian Great Lakes Dustin Kincaid, U.S. Geological Survey
10:55	Landfill to Lake: Removal of a Landfill for Improved Land Use Steve Sellwood, TRC Environmental Corp
11:20	The History of the Runoff Curve Number Method and How it Limits our Imagination of Potential Watershed Futures Eric Booth, University of Wisconsin - Madison
11:45	A Reconstructing the Eutrophication of Gass Lake near Manitowoc, WI Since European Settlement Using Lake Sediment Chemistry Peter Puleo, University of Wisconsin - Whitewater

* Student presentation

Session 4B	Hydrogeology II Room: Brookfield 3 Moderator: Chris Zahasky
10:30	Using Airborne Electromagnetic Surveys to Aid in the Investigation of Groundwater Resources in the Keweenaw Bay Region of Michigan Bridget Kaemming, U.S. Geological Survey
10:55	Groundwater Modeling of Flood-Prone Seepage Lakes in a Glacial Aquifer: Calibrating to Recent Floods and Assessing Recharge Sensitivity Under Geologic Uncertainty G. Graham, Wisconsin Geological Natural History Survey
11:20	Simulating Contaminant Fate and Transport in the Prairie du Chien and Jordan Aquifers beneath the Twin Cities, MN using MODFLOW 6 Andrew Leaf, U.S. Geological Survey
11:45	A Look at Old Water Use Data in Wisconsin Aaron Pruitt, Wisconsin Department of Natural Resources
Session 4C	MMSD Flood of 2025 Room: Brookfield 4 Moderator: Mitch Olds
10:30	From PLCs to Pixels: A Modern Water Data Pipeline Zac Driscoll, Milwaukee Metropolitan Sewerage District
10:55	An Overview of Impacts and Mitigation of Southeastern Wisconsin's 1,000 Year Storm, August 2025 Mitch Olds, Milwaukee Metropolitan Sewerage District
11:20	A Probabilistic Compound Flood Hazard Assessment for Coastal Milwaukee, WI Adam Bechle, Wisconsin Sea Grant
11:45	Integrating NEXRAD-II into a 20-gage Mesonet to Develop a Spatially Continuous High-Resolution Precipitation Dataset Andrew Brown, Milwaukee Metropolitan Sewerage District
12:10 - 12:30 pm	Closing Announcements and Student Awards (Brookfield Promenade)
12:30 pm	Student Career Lunch (Brookfield 5)

* Student presentation