

# Minnesota Water Resources Conference

October 14–15, 2025

Saint Paul RiverCentre  
175 West Kellogg Boulevard  
Saint Paul, Minnesota

[ccaps.umn.edu/water](https://ccaps.umn.edu/water)

Water Resources Center  
UNIVERSITY OF MINNESOTA

College of Continuing  
& Professional Studies  
UNIVERSITY OF MINNESOTA



# Our Commitment

The conference planning committee is committed to promoting diversity, equity, inclusion, and justice (DEIJ) within all aspects of the Water Resources Conference. It is critical that the conference planning committee serves all communities equitably, without bias or discrimination, in both its programming and physical environment.

The committee will call upon and use our collective skills to prioritize:

**Diversity**, by addressing systemic and institutional barriers that add layers of disadvantage and environmental injustice to Black, Indigenous, Hispanic/Latino, Asian, and other people of color; LGBTQIA+ communities; persons with disabilities; and other historically excluded groups. We aim to incorporate diverse perspectives and experiences from across the region.

**Equity and Access**, by creating a conference environment that facilitates equitable participation and engagement among all attendees, equitable access to funds and resources for attendance, and equitable access to information shared in presentations and discussions.

**Inclusivity and Belonging**, by fostering a space for learning that is respectful and open so that all participants have a voice, can fully participate, and benefit from the conference.

**Justice**, by acknowledging past inequities in water protection and management, naming inequitable policies and practices, and ensuring new wrongs do not occur.

We acknowledge that our efforts and actions are a work in progress, and we commit to training and educating our members on implicit biases and historical environmental injustices so that we may continuously improve how we amplify under-represented voices and support opportunities for the broader water community.

The University of Minnesota shall provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.

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01-CFS-WaterResources 8/25

# Welcome

We are pleased to welcome you to the 2025 Minnesota Water Resources Conference, October 14–15 at the RiverCentre in Saint Paul.

The past year has highlighted the importance of building technical knowledge, professional relationships, and political resilience to address Minnesota’s most pressing water challenges. The conference provides opportunities to do all of that by gathering our water professionals and decision-makers. There are more than 100 presentations highlighting new research, practical case studies, and the ongoing challenges in water science, planning, policy, and management. This year’s special sessions include conversations around groundwater, science communication, and stream restoration, among other timely topics. One change this year is that the poster session will be held immediately after the awards luncheon session on Tuesday, 12:30–1:30 p.m. The first day will end with a reception that will provide rich opportunities to network and share insights with colleagues from across disciplines.

We are excited to offer an outstanding slate of keynote presentations. Speakers include Dr. Anna Cates, who will share information about Minnesota’s soil health opportunities and challenges; Michael Waasegiizhig-Price, a leader in Native American higher education and research; and a panel on Minnesota’s updated Nutrient Reduction Strategy (NRS). A new feature this year is that we will follow up two of these keynotes (soil health and the NRS) with related special sessions to continue the conversation.

Another highlight of the conference is the recognition of outstanding contributions to the field. The Dave Ford Water Resources Award, honoring those who have made an indelible impact on Minnesota’s environmental landscape over the course of their careers, will be presented to Ceil Strauss. Alycia Overbo will receive the Deb Swackhamer Early Career Award in recognition of her authenticity and service to others. These awards honor individuals whose efforts have significantly advanced our shared mission to protect and improve Minnesota’s water resources.

Attendees will be eligible for up to 13.5 professional development hours for participating in conference sessions. Be sure to note which presentations you attend in order to calculate your continuing education credits and receive your PDH certificate.

We look forward to welcoming you—along with more than 800 water professionals, researchers, and policymakers—for two days of learning, inspiration, and connection.

*Joel Larson*, Water Resources Center, University of Minnesota  
*Katy Thompson*, PE, CFM, Senior Water Resources Engineer  
Conference Co-Chairs



# General Information

Immerse yourself in innovative, practical, and applied water resource engineering solutions, management techniques, and current research about Minnesota's water resources. The Minnesota Water Resources Conference is an opportunity to address:

- lessons learned from the implementation of engineering projects.
- best practices discovered in the design and application of water resource management techniques.
- implications of water policy decisions.
- research into current and emerging issues.

## Registration and Fees

### Early registration (before September 16)

Two-day – \$500  
One-day – \$400  
Student – \$95

### Regular registration (starting September 16)

Two-day – \$550  
One-day – \$450  
Student – \$120

The registration fee for the Minnesota Water Resources Conference includes access to all plenary, luncheon, and concurrent sessions, special sessions, poster sessions, conference materials, lunch and refreshment breaks each day, and the Tuesday evening reception. Participants may register online for one or both days.

## Cancellations

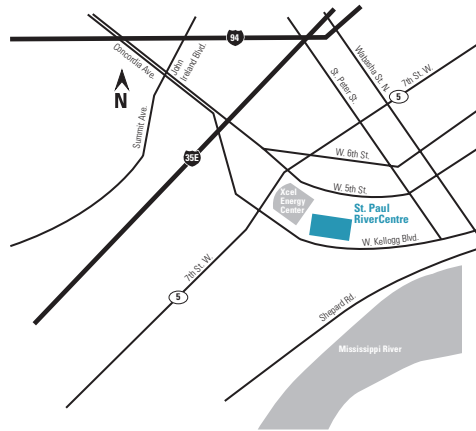
If you need to cancel your registration, a refund will be issued if you cancel on or before September 30, 2025. Cancellations after this date will not be eligible for a refund, but we may be able to substitute a colleague in your place. Please email [ccapsreg@umn.edu](mailto:ccapsreg@umn.edu) to cancel your registration.

## Continuing Education Units (CEUs); Professional Development Hours (PDHs)

Conference attendees will receive 0.675 CEUs/6.75 PDHs for each day of the Minnesota Water Resources Conference. Participants who wish to receive full credit must attend all scheduled hours of the event.

## Location and Parking

The Minnesota Water Resources Conference will be held at the Saint Paul RiverCentre, 175 Kellogg Boulevard, Saint Paul. Parking is available in the RiverCentre parking ramp, located on Kellogg Boulevard across the street from RiverCentre. Please see the map for the location of RiverCentre. Convenient bus service to the RiverCentre is available: call Metro Transit at 612-373-3333 for specific route information.



## For Registration Questions

612-625-2900  
[ccapsreg@umn.edu](mailto:ccapsreg@umn.edu)

## For Program Questions

Professional Continuing Education  
University of Minnesota  
[ccapspce@umn.edu](mailto:ccapspce@umn.edu)

#MNWRC25  
to continue this  
year's conference  
conversation online.

# 2025 Water Resources Planning Committee

*Ann Banitt*, US Army Corps of Engineers

*Kari Benjamin*, Burns & McDonnell

*John Bilotta*, Water Resources Center, University of Minnesota

*Erik Brenna*, Minnesota Department of Transportation

*Tina Carstens*, Ramsey-Washington Metro Watershed District

*Cassandra Champion*, Metropolitan Council Environmental Services

*Susan Colvin*, Minnesota State University, Mankato Department of Biological Sciences

*Brent Dalzell*, US Department of Agriculture

*Erick Francis*, City of St. Louis Park

*Leah Gifford*, SRF Consulting Group

*Lorin K. Hatch*, Widseth Smith Nolting

*Ryan Johnson*, City of Roseville

\* *Joel Larson*, Water Resources Center, University of Minnesota

*A. Marcelle Lewandowski*, Water Resources Center

*Salam Murtada*, Department of Natural Resources, Division of Waters

*Alycia Overbo*, Source Water Protection, Minnesota Department of Health

*Jeffrey Peterson*, Water Resources Center, University of Minnesota

*Wayne Sicora*, Natural Resource Group

*Hilarie Sorensen*, University of Minnesota Sea Grant Program

*Jim Stark*, Minnesota State Legislature

*Jared Trost*, US Geological Survey

\* *Katy Thompson*, PE, CFM, Senior Water Resources Engineer

*Holly Wellard Kelly*, Natural Resources Research Institute, University of Minnesota Duluth

*Marcey Westrick*, Minnesota Board of Soil and Water Resources

*Steve Weiss*, Minnesota Pollution Control Agency Watershed Division

*Greg Wilson*, Barr Engineering Company

*Nazli A. Yilmaz Wodzinski*, Minnesota State University, Mankato

\*Committee Co-Chairs

# Dave Ford Award

The Dave Ford Award honors a person for significant long-term achievement or public service in Water Resource management who exhibits the collaborative leadership style of Dave Ford. While the award is generally for lifetime achievement, it (or some other recognition) can be given to an individual for a particularly important one-time contribution to Minnesota Water Resources. The award is for professionals and other related disciplines working in water resources. Nominees can be from any discipline and can represent work such as research, administration, engineering, etc. Politicians and current members of the Planning Committee are excluded.

## Recipients of the Earl Kuehnast Award

Year	Recipient
1986	Earl Kuehnast
1987	Ed Bowers
1991	Peter Fischer
1992	Howard Midje
1999	Ron Nargang

## Recipients of the renamed Dave Ford Water Resources Award

Year	Recipient
2003	Heinz G. Stefan
2005	Marcel Jouseau
2006	Ron Harnack
2007	Patrick Brezonik
2008	Steve Heiskary
2009	James L. Anderson
2010	Nels Nelson
2011	Timothy Scherkenbach
2012	Barbara Liukkonen
2013	John Gulliver
2014	Roland Sigurdson
2015	Bruce Wilson (RESPEC)
2016	Cliff Aichinger
2017	Dan R. Engstrom, Kent Johnson
2018	Suzanne Jiwani
2019	Al Kean, Bruce Montgomery
2020	Deb Swackhamer
2021	Mike Trojan
2022	Rebecca Flood, Andrea Hendrickson
2023	Mark Doneux, John Nieber
2024	Joe A. Magner, Randy Nephraash
2025	Ceil Strauss, CFM, Minnesota Department of Natural Resources

*For more information on the award, recipients' bios, and how to nominate, go to [ccaps.umn.edu/minnesota-water-resources-conference/dave-ford-award](https://ccaps.umn.edu/minnesota-water-resources-conference/dave-ford-award)*

## 2025 Dave Ford Award Recipients

### Ceil Strauss

CFM, Minnesota Department of Natural Resources

Ceil Strauss is the Minnesota State Floodplain Manager. Ceil has been in the Floodplain Program at Minnesota DNR since 2002 and worked with the Minnesota DNR an additional 14 years, mainly as an Area Hydrologist in the western Twin Cities area. She is past chair of the national Association of State Floodplain Managers (ASFPM).

Before coming to DNR, Ceil spent over three years as a Peace Corps Volunteer in Kenya (East Africa) working with farmers on building ponds and raising tilapia. She has a BA in biology from Lawrence University (Wisconsin) and an MS in water resources management from the mUniversity of Michigan.



# Deborah L. Swackhamer Early Career Award

A longtime professor and administrator at the University of Minnesota, Deborah (Deb) Swackhamer was among the leading voices in the nation at the intersection of science, policy, and water resources. She conducted influential scientific work on the behavior of organic pollutants and endocrine-disrupting chemicals. In the broader water resources community, she is remembered for her advocacy of scientific integrity and for incorporating science-based knowledge into policy making. This work elevated her to numerous leadership roles at the state, national, and international levels. During her career, Deb mentored students and young faculty and ardently supported them, challenging them to conduct rigorous science, guiding them to successful careers and connecting them with colleagues in her network.

Following Deb's untimely passing in 2021, the Minnesota Water Resources Conference committee approved a new award to be given in her name. In remembrance of her commitment to early career scientists and professionals, as well as her example of authentic leadership, the Deborah L. Swackhamer Early Career Award is meant to spotlight future leaders in the understanding, management, and care of our water resources.

## Recipients of the Deborah L. Swackhamer Award

Year	Recipient
2022	Dr. Bridget Ulrich
2023	Madeline Nyblade
2024	Xue Feng, Stephanie Hatzenbihler
2025	Alycia Overbo

*For more information on the award, recipients' bios, and how to nominate, go to <https://ccaps.umn.edu/minnesota-water-resources-conference/swackhamer-award>*

# 2025 Deborah L. Swackhamer Award Recipients

## **Alycia Overbo**

Minnesota Department of Health

Alycia Overbo received her MS in public health from the University of North Carolina at Chapel Hill in 2014. In 2015 she was appointed as a research fellow at the University of North Carolina, conducting a systematic literature review on sanitation policy and programming for development of the World Health Organization Guidelines for Sanitation and Health. She worked on a huge environmental challenge for the State of Minnesota: the fact that we are polluting our streams and lakes with chloride by using road salt, water



softener salt, and—Alycia discovered—chloride salts in agricultural applications. Alycia developed a chloride budget for the State of Minnesota through compiling and analyzing various spatial, monitoring, sales, and survey data to estimate contributions of point and nonpoint chloride sources to Minnesota surface waters and groundwater. She then interpreted her findings to identify best management practices for salt use and recommendations for monitoring, research, and policy.

Alycia's research has become an important part of the Minnesota Pollution Control Agency's chloride reduction and education practices. It has helped Minnesota better understand on a state level all the sources of chloride impacting our water resources, and revealed that fertilizer and livestock facilities are a much more significant source than was previously known. This prompted the MPCA to develop new resources to address this particular source of chloride. Her work is referenced and highlighted regularly in MPCA's reports and presentations and has encouraged related research at the University of Minnesota.

In February 2019 Alycia was offered and took a job at the Minnesota Department of Health as the Strategic Initiatives and Communications Planner in the Source Water Protection Unit, and has already been promoted to a supervisor position in the Drinking Water Protection Section, leading special projects on the dissemination of information on complex topics, such as PFAS and contaminants of emerging concern. As a supervisor in this role, she is already providing leadership as the Communications and Strategic Initiatives program expands.

# Program Schedule Tuesday, October 14, 2025

<b>8:00-9:30</b>	<b>Welcome and Morning Plenary</b>				
	<p><b>Welcome</b> Joel Larson, Water Resources Center, University of Minnesota, Planning Committee Chair</p> <p><b>Morning Plenary Session: Minnesota Nutrient Reduction Strategy Progress and Future Directions</b> Glenn Skuta, Water Division Director, Minnesota Pollution Control Agency</p>				
<b>9:30-10:00</b>	Poster and Vendor Refreshment Break				
<b>Concurrent Session I - See the Book of Abstracts for the full description of sessions.</b>					
<b>Tuesday</b>	<b>Track I</b>	<b>Track II</b>	<b>Track III</b>	<b>Track IV</b>	<b>Track V: Special Sessions</b>
	<b>Meeting Room 4-6</b>	<b>Ballroom A</b>	<b>Ballroom E</b>	<b>Meeting Room 7-9</b>	<b>Meeting Room 1-3</b>
<b>10:00-11:30</b>	<b>The Real State of Flooding</b>	<b>Lake Management</b>	<b>Engaging Urban Residents in Conservation and Recreation</b>	<b>Preservation and Restoration of Wetlands</b>	<p><b>Closing the Groundwater Governance Gap</b> This session involves a conversation about how Freshwater, and others, modeled discussions around groundwater governance in aquifer areas. There will be no speakers, but people will participate in a mock discussion like those we hosted across the region.</p> <p><b>Participants:</b> Carrie Jennings, research and policy director, Freshwater Alyssa Fabia, Tribal outreach and research coordinator, Freshwater Rosie Russell, founder and facilitator, Community Kinetics</p>
<b>10:00-10:20</b>	<b>Closing the Groundwater Governance Gap</b> Andrew Erickson, St. Anthony Falls Laboratory, University of Minnesota	<b>Recreational Powerboat Hydrodynamics and Their Impacts on the Water Column and Lakebed</b> Jeffrey Marr, St. Anthony Falls Laboratory, University of Minnesota	<b>Engaging Community in Stormwater Efforts ...</b> Ann Zawistoski, Hamline University Center for Global Environmental Education	<b>Large-Scale Aquatic Habitat Restoration in the St. Louis River Estuary</b> Emma Burgeson, Stantec	
<b>10:20-10:40</b>	<b>Downstream Effects of the Rapidan Dam Breach on Blue Earth River Water Quality</b> Eileen Campbell, Minnesota Pollution Control Agency	<b>In-Lake Management Improves Water Quality Trends in Shallow, Impaired Urban Minnesota Lake</b> Grace Neumiller, Stantec	<b>Community-Driven Water Quality Action</b> Henry LaBounta, Green Guardians MN, East Isles Neighborhood Association	<b>Fen Sustainability: Balancing Rare Wetland Communities ...</b> Jennifer Mocol-Johnson, Young Environmental Consulting Group	
<b>10:40-11:00</b>	<b>Flooding and Resilience at the Intersection of Rural and Urban Communities</b> Jacob Rischmiller, ISG	<b>Adaptive Management in Action: Evaluating Lake Health with NMCWD's Post-Project Framework</b> Janna Kieffer, Barr Engineering Co.	<b>Immigrants Weigh In on Water-Based Recreation Along Lake Superior's North Shore</b> Zoe Barany, University of Minnesota	<b>Enhancing Suburban Wetlands: A Data-Driven Approach to Buffer Restoration in Minnetonka</b> Sophia Risch, Minnesota GreenCorps/City of Minnetonka	
<b>11:00-11:20</b>	<b>Investing in Change: The Evolution and Resilience of District-Wide Models</b> Bret Zimmerman, Houston Engineering, Inc.	<b>Dredging Doesn't Have to Suck, or Does it? An Alternative Dredging Process in Lake Minnetonka</b> Luke LaMoore, AE2S	<b>The Creative Watershed: Art as a Powerful Tool in the Engagement Toolbox</b> Abby Moore, Mississippi Watershed Management Organization	<b>Improving Water Quality Through Wetland Restoration (and Stormwater BMPs Too!)</b> Laura Rescorla, WSB	
<b>11:20-11:30</b>	Q&A	Q&A	Q&A	Q&A	
<b>11:30-12:15</b>	Lunch				

# Program Schedule Tuesday, October 14, 2025 continued

<b>12:15-12:30</b>	<b>Luncheon Session</b> Dave Ford and Deborah L. Swackhamer Early Career Awards Presentation and Poster Highlights				
<b>12:30-1:10</b>	Poster Session				
<b>Concurrent Session II - See the Book of Abstracts for the full description of sessions.</b>					
<b>Tuesday</b>	<b>Track I</b>	<b>Track II</b>	<b>Track III</b>	<b>Track IV</b>	<b>Track V: Special Sessions</b>
	<b>Meeting Room 4-6</b>	<b>Ballroom A</b>	<b>Ballroom E</b>	<b>Meeting Room 7-9</b>	<b>Meeting Room 1-3</b>
<b>1:15-2:45</b>	<b><i>Sensing and Modeling the Climate Future</i></b>	<b><i>Private Wells to Public Systems: Minnesota Water Quality</i></b>	<b><i>Lessons Learned in Soil Health</i></b>	<b><i>Best Practices for Stormwater O&amp;M</i></b>	<b><i>Science Communication: Planning, Plain Language, and Accessibility</i></b> <i>Anne Nelson, Sophia Walsh, Minnesota Department of Health</i>
<b>1:15-1:35</b>	Simulations of Past and Future Water Budget Components for Building Community Resiliency to Climate Change in Minnesota <i>Jared Trost, USGS</i>	What Drives Well Water Testing Behavior Among Private Well Owners in Minnesota? <i>Amit Pradhananga, University of Minnesota</i>	Soil Health Practices for Vegetation Establishment and Stormwater Management and Treatment <i>Warren Tuel, Office of Environmental Stewardship, Minnesota Department of Transportation.</i>	Iron-Enhanced Sand Filter Performance and Maintenance <i>Levi Burrows, St. Anthony Falls Laboratory, University of Minnesota</i>	
<b>1:35-1:55</b>	Prediction of Future River Floods and Droughts in Minnesota <i>Nigel Pickering, Geosyntec Consultants</i>	Modeling Aquifer-Lake Interactions Under Ambient Conditions at Sentinel Lakes <i>Cliford Ndiweni, Minnesota Pollution Control Agency</i>	To Underdrain or Not to Underdrain ... A Bioretention Lesson Learned <i>Andy Erickson, St. Anthony Falls Laboratory, University of Minnesota</i>	Being WISE About Snow and Ice <i>Jack Distel, City of Bloomington</i>	
<b>1:55-2:15</b>	Optimizing Sensor Placement for Urban Flood Reconstruction: A Data-Driven Sparse Sensing Approach <i>Anu Wille, University of Minnesota; Zihang Ding, University of Minnesota Duluth</i>	Advancing Private Well Safety: Innovative Approaches to Testing and Mitigation in the TAP-IN Safe Drinking Water Program <i>Caitlin Meyer, Soil &amp; Water Conservation District, Olmsted County</i>	Decompaction and Compost Addition Have Clear Urban Soil Health Benefits <i>Pat Sauer, ISWEP and RootWise Environmental</i>	Partners in Grime: Stormwater Facility Maintenance Collaboration <i>Forrest Kelley, Capitol Region Watershed District</i>	
<b>2:15-2:35</b>	Enhancing Water Resource Management Through Climate-Responsive Demand Assessment <i>Harsh Anurag, Geosyntec Consultants Inc.</i>	Investigative Monitoring For Cyanotoxins in Minnesota Public Drinking Water <i>Shelby Kassuelke, Drinking Water Protection, Minnesota Department of Health</i>	Soil Health of Newly Constructed Soils and Lessons in Compost Topdressing <i>David Bauer, Alliant Engineering/City of Roseville</i>	Updating the Minnesota Stormwater Inspection and Maintenance Resource Guide <i>Andy Erickson, St. Anthony Falls Laboratory, University of Minnesota</i>	
<b>2:35-2:45</b>	Q&A	Q&A	Q&A	Q&A	
<b>2:45-3:15</b>	Poster and Vendor Refreshment Break				

# Program Schedule Tuesday, October 14, 2025 continued

Concurrent Session III - See the Book of Abstracts for the full description of sessions.					
Tuesday	Track I	Track II	Track III	Track IV	Track V: Special Sessions
<b>3:15-4:45</b>	<b>Flood Response and Resilience Planning</b>	<b>Efforts in Ground/Drinking Water Protection Against Contaminants</b>	<b>Aquatic Invasive Species and Lake Management</b>	<b>Uses and Benefits of Stormwater Practices &amp; Green Infrastructure</b>	<b>Improving Water Quality Through Building Soil Health</b> Minnesota Pollution Control Agency
<b>3:15-3:35</b>	Staying Above Water: MnDOT's Approach to Increasing Flood Resilience by Leveraging Research and Developing New Water Resources Design Guidance <i>Rachel Pichelmann, MnDOT</i>	Private Well Pesticide Sampling Project Results and Mitigation Efforts Focused on Total Cyanazine <i>Kim Kaiser, Minnesota Department of Agriculture</i>	It's 10 Below, Do You Know Your DO? <i>Jenna Olson, City of Eagan</i>	Using Regional BMPs on Linear Projects to Meet Project and Watershed Goals <i>Laura Wehr, AE2S</i>	
<b>3:35-3:55</b>	Stormwater Resiliency: From Study to Implementation of Resilient Stormwater Improvements <i>Sam Larson, AE2S</i>	Regional Nitrogen Leaching Loss Model for Minnesota (RNLL-M) <i>Solomon Folle, Minnesota Department Agriculture</i>	Time Is of the Essence: Testing the Effect of Various Message Frames on Boating Angler Time Spent Performing AIS Prevention Behaviors <i>Brock Bahlmann, University of Minnesota</i>	From Floods to Flora: Enhancing Water Quality and Habitat at Sylvan Hills Park <i>Alex Schmidt, Houston Engineering</i>	
<b>3:55-4:15</b>	Using Nature-Based Solutions for Flood Control: How Much Do You Need? <i>Caroline Burger, Carollo Engineers</i>	Emerging Contaminants in Source and Finished Drinking Water Across Minnesota and Potential Health Implications <i>Aliesha Krall, US Geological Survey</i>	Goldfish Management in a Shallow Urban Lake: Familiar Tactics for a New Foe <i>Jordan Wein, Nine Mile Creek Watershed District</i>	A Restorative Approach to Righting Historic Wrongs <i>Della Schall Young, Young Environmental Consulting Group</i>	
<b>4:15-4:35</b>	From Forecast to Action: Leveraging Real-Time Data for Coordinated Flood Response <i>James Wisker, Minnehaha Creek Watershed District</i>	Empowering Private Well Users: Educational Tools and Outreach Strategies <i>Anne Nelson, Minnesota Department of Health</i>	Evaluating the Effectiveness of Carp Management in Minnesota <i>Jake Walsh, University of Minnesota Twin Cities</i>	Optimizing Green Infrastructure for Urban Flood Management and Water Resource Conservation <i>Samrat Dahal, Geosyntec Consultants, Inc.</i>	
<b>4:35-4:45</b>	Q&A	Q&A	Q&A	Q&A	
<b>4:45-5:45</b>	Reception, Vendor and Poster Session				

# Program Schedule Wednesday, October 15, 2025

<b>8:00-9:30</b>	<b>Welcome</b> <i>Katy Thompson, Planning Committee Co-Chair</i>				
	<b>Morning Plenary Session: Soil Health</b> <i>Dr. Anna Cates, University of Minnesota</i>				
<b>9:30-10:00</b>	Poster and Vendor Refreshment Break				
<b>Concurrent Session IV - See the Book of Abstracts for the full description of sessions</b>					
<b>Wednesday</b>	<b>Track I</b>	<b>Track II</b>	<b>Track III</b>	<b>Track IV</b>	<b>Track V: Special Sessions</b>
	<b>Meeting Room 4-6</b>	<b>Ballroom A</b>	<b>Ballroom E</b>	<b>Meeting Room 7-9</b>	<b>Meeting Room 1-3</b>
<b>10:00-11:30</b>	<b><i>Nitrate Dynamics in Agricultural Systems</i></b>	<b><i>Modeling Frameworks, Data Collection and Trends</i></b>	<b><i>Lake Management and Ice Impacts on Primary Producers</i></b>	<b><i>Bioaccumulation, Biological Spread, and a Campaign for the Future</i></b>	<b><i>Recent Chloride Trends in Minnesota's Urban Lakes, Streams, and Stormwater</i></b> <i>Ben Janke, University of Minnesota</i>
<b>10:00-10:20</b>	Modeling Hydrologic Impacts of Land Use Changes in the Straight River Watershed Using SWAT+ <i>Harprabhjot Kaur Dhaliwal, Department of Bioproducts and Biosystems Engineering, University of Minnesota Twin Cities</i>	Minnesota's Forward-Thinking Framework for Statewide Green Stormwater Infrastructure Integration <i>Della Schall Young, Young Environmental Consulting Group</i>	Defining Successful Lake Vegetation Management Plans: Long Lake Eurasian Watermilfoil Case Study <i>Jimmy Marty, Emmons &amp; Olivier Resources, Inc.</i>	Monitoring Microplastics in an Urban Watershed <i>Eoghan O'Neill, Capitol Region Watershed District</i>	<b><i>Beneath the Surface: Exploring Chlorides in Shallow Groundwater as a Stressor to Aquatic Life in Impaired Urban Streams</i></b> <i>Justine Dauphinais, Erik Bye, Coon Creek Watershed District</i>
<b>10:20-10:40</b>	Stochastic Estimation of Regional Nitrate Source Apportionment in Minnesota <i>Xiang Li, University of Minnesota</i>	Bringing It All Together - Integrating Surface Hydrology, Hydraulics, and Groundwater to Understand Minnesota's Water Complexities <i>Nicholas Thomas, HDR</i>	Seasonal Shifts in Primary Production Across Trophic Gradients in Diverse Lakes <i>Anthony Chukwubueze Okoboshi, University of Minnesota Duluth</i>	Mercury in Northern Minnesota Watersheds: An Update on the State of Science Regarding Mercury Cycling and TMDL Implementation <i>Spencer Washburn, Geosyntec Consultants</i>	<b><i>Simulation of Chloride Transport Through Shallow Groundwater to Creeks in the Coon Creek Watershed District, Anoka County, MN</i></b> <i>Andy Leaf, Colin Livdahl, USGS</i>
<b>10:40-11:00</b>	Nitrate Leaching in a Winter Barley - Soybean Double-Cropping System <i>Jason Hickman, University of Minnesota</i>	Seasonal Water Quality Trends in Minnesota Rivers: Nitrate, Phosphorus, and Sediment Trends for Open Water Months <i>James Jahnz, Minnesota Pollution Control Agency</i>	Source Water Protection and Management: Comprehensive HAB Mitigation <i>Alex Gerling, Hazen and Sawyer</i>	2026 Mississippi River Campaign Sacred Water, Shared Future <i>Cassandra Champion, Metropolitan Council Environmental Services</i>	<b><i>Overview of the Minnesota Pollution Control Agency Chloride Reduction Program</i></b> <i>Chandi McCracken-Holm, Minnesota Pollution Control Agency</i>
<b>11:00-11:20</b>	Demonstrating the Nitrate Tradeoff Exploration Tool <i>Philip Margarit, Department of Bioproducts and Biosystems Engineering, University of Minnesota Twin Cities</i>	Ditch Those Soggy Field Forms: Modernizing Data Collection at the Minnesota Pollution Control Agency <i>Benjamin Lundeen, Minnesota Pollution Control Agency</i>	The Relationship Between Chlorophyll and Nutrients Under Ice: Diverse Systems Across Seasons <i>Drew Check, University of Minnesota Duluth</i>	From Soils to Streams: Characterizing the Spread of Chronic Wasting Disease in Minnesota Watersheds <i>Anu Li, University of Minnesota</i>	
<b>11:20-11:30</b>	Q&A	Q&A	Q&A	Q&A	

# Program Schedule Wednesday, October 15, 2025 continued

<b>11:30-12:15</b>	Lunch				
<b>12:15-1:00</b>	Luncheon Session				
<b>Concurrent Session V - See the Book of Abstracts for the full description of sessions</b>					
<b>Wednesday</b>	<b>Track I</b>	<b>Track II</b>	<b>Track III</b>	<b>Track IV</b>	<b>Track V: Special Sessions</b>
<b>1:15-2:45</b>	<b>Water and Phosphorus Storage in Tiled Landscapes</b>	<b>Monitoring and Removal of Contaminants of Emerging Concern</b>	<b>Improving Stormwater Pond Performance</b>	<b>Addressing Chloride and Water Quality in Urban Settings</b>	<b>Lessons Learned in Stream Restoration Practice and Research</b> <i>Dr Karen Gran, University of Minnesota Duluth</i> <i>Luke Lunde, WSB LLC</i> <i>Mark Prancus, Inter-Fluve (TBD), Minnesota Department of Natural Resources Fisheries</i>
<b>1:15-1:35</b>	Dual Benefits of Water Storage: Water Quality and Crop Productivity <i>Jeffrey Strock, University of Minnesota</i>	Removing Frequently Detected Contaminants of Emerging Concern (CECs) from Stormwater with Augmented Biofilters <i>Zihang Wang, University of Minnesota</i>	Update on Spent Lime as an Alternative for Sediment Phosphorus Inactivation <i>Greg Wilson, Barr Engineering Co.</i>	Source Water Protection in MN: Establishing a Surface Water Program <i>Danielle Luzinski, Minnesota Department of Health</i>	
<b>1:35-1:55</b>	Economic Analysis of Drainage Water Recycling Systems: Costs, Benefits, and Next Steps <i>Spencer Pech, ISG</i>	Bioeffects-Based Approach to Evaluate Attenuation of Stormwater Toxicity by Best Management Practices <i>Dalma Martinovic-Weigelt, University of St. Thomas</i>	Riparian Vegetation: A Secret to Pond Function <i>Jack Distel, City of Bloomington</i>	A Hidden Source: Investigating Dry Weather Chloride Spikes in an Urban Stream <i>Chase Vanderbilt, Coon Creek Watershed District</i>	
<b>1:55-2:15</b>	Storage in Rural Landscapes: Lessons Learned from 20 Years of Storage Implementation in the Minnesota River Basin <i>Chuck Brandel, ISG</i>	Passive Sampling and High-Resolution Mass Spectrometry for Enhanced Contaminant Monitoring in Minnesota Waterways <i>Ian Mundy, Natural Resources Research Institute, University of Minnesota Duluth</i>	Ten Years Evaluating Success of the Salo Pond Alum Treatment System in St. Anthony Village <i>Alicia Nelson, WSB</i>	Minnesota Adopts Low Salt Design in Stormwater Manual <i>Connie Fortin, Bolton &amp; Menk</i>	
<b>2:15-2:35</b>	Investigating Sediment and Phosphorus Patterns Through Baseflow Separation and Concentration Discharge Analysis to Determine Characteristics of Loading in Midwestern Agricultural Watersheds <i>Ashlyn Cowgill, University of Minnesota.</i>	Feasibility of a an Upscaled Electrode-Integrated Biofilter for Sulfate Treatment and Sulfur Recovery <i>Jack Thompson, Natural Resources Research Institute, University of Minnesota Duluth</i>	Optimizing Urban Water Quality: Filtration Bench Retrofits in Existing Stormwater Systems <i>Emily Jennings, SEH</i>	The Cold Climate Center of Excellence for Stormwater Infrastructure Technology (CCCESIT) <i>Andrew Erickson, St. Anthony Falls</i>	
<b>2:35-2:45</b>	Q&A	Q&A	Q&A	Q&A	
<b>2:45-3:15</b>	Poster and Vendor Refreshment Break				

Concurrent Session VI					
Wednesday	Track I	Track II	Track III	Track IV	Track V: Special Sessions
3:15-4:45	<b>Soil Health, Irrigation, and Nutrients</b>	<b>Evaluations of PFAS Fate and Removal Strategies</b>	<b>Lake Water Quality Trends</b>	<b>Stream Restoration &amp; Habitat Benefits</b>	<b>Effectiveness Monitoring in Minnesota/Understanding &amp; Discerning Change</b>
3:15-3:35	What Do Farmers Think About Soil Health Practices? <i>Marcelle Lewandowski, Water Resources Center, University of Minnesota</i>	Trace Organic Contaminants in Urban Stormwater and Removal by Biochar and Iron-Enhanced Sand Filters <i>Sarah Elliott, USGS</i>	Utilizing Satellite Imagery and Machine Learning to Improve the Minnesota LakeBrowser: Incorporating Near Real-Time Updates and 4.6 Million New Water Quality Measurements Through High-Performance Computing <i>Leif Olmanson, Department of Forest Resources, University of Minnesota</i>	Comparing Fish, Invertebrates and Stream Habitat Between Full-Channel Realigned and Less-Disturbed Stream Reaches <i>Valerie Brady, Natural Resources Research Institute, University of Minnesota Duluth</i>	Effectiveness monitoring is fundamental to quantifying the impact of conservation efforts. This session will highlight efforts by agencies, researchers, and conservation groups to quantify the impact of BMPs on water quality, habitat, and biodiversity. Case studies and tools that connect implementation to impacts will be addressed by presenters. Some of the topics include reducing nutrients and sediments, the benefits of habitat restoration, and emerging technologies for monitoring.
3:35-3:55	Evaluating the Impact of Irrigated Agriculture on Water Resources in Minnesota's Central Sands <i>Isabella Radler, University of Minnesota Twin Cities</i>	Assessment of Long-Term Effectiveness of Particulate Amendments for In-Situ Remediation of PFAS in Mixed Contaminant Plumes <i>Amber McRae, Natural Resources Research Institute, University of Minnesota</i>	Legacy Phosphorus and Eutrophication in Our Border Waters - Steps Toward Understanding Dynamics and Implications for Management in the Rainy River-Lake of the Woods Watershed <i>Anna Baker, USGS Upper Midwest Water Science Center</i>	Floodplain Excavation as a Cost-Effective Technique for Stream Restoration and Natural Channel Evolution <i>Lucius Jonett, Midwest Wetland Improvements</i>	
3:55-4:15	A Nutrient Study in the Groundwater-Fed Straight River (Becker/Hubbard Co.) <i>Kevin Stroom, Minnesota Pollution Control Agency</i>	PFAS Distribution and Water Quality in Landfill Leachate, Compost Contact Water, and AFFF-Impacted Sites: Implications for Adsorption-Based Separation <i>Tadele Haile, Natural Resources Research Institute, University of Minnesota</i>	Phosphorus Offset Planning in the Red River Basin <i>Ted Preister, Red River Basin Commission</i>	Bioengineered Streambank Restorations on Morrison County Streams and Rivers <i>Mike Becker, Morrison SWCD</i>	
4:15-4:35	Assessing Soil Residue Cover, Cover Crops and Erosion using Remote Sensing and Modeling <i>Eduardo Luquin Oroz, University of Minnesota</i>	Evaluating the Fate of PFAS During Anaerobic Digestion of Food Waste <i>Neda Amanat, Natural Resources Research Institute, University of Minnesota Duluth</i>	Examining Complex Water Quality Trends in Metro Area Lakes <i>Catherine Polik, University of Minnesota</i>	Big Lessons from Little Creek: Fish Passage and Stream Restoration for the Recovery of Topeka Shiner in Missouri <i>Steve Herrington, The Nature Conservancy</i>	
4:35-4:45	Q&A	Q&A	Q&A	Q&A	
4:45	Conference Adjourns				

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## Poster Display

The poster session with poster presenters will be held on Tuesday evening, during the reception. The full list of poster presentations is available in the book of abstracts and on the Minnesota Water Resources Conference website.