

PRE-CONFERENCE WORKSHOP

# Advancing Nutrient Trading within the Circular Water Economy

Wednesday, May 28 | 10:00 am-4:00 pm | Monona Terrace, Halls MNQR

\$30 with Annual Meeting Registration | \$50 for Workshop Only | Limited Space



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# Nutrient Trading Pre-Conference Workshop

In response to the challenges posed by nutrient pollution, some states have implemented water quality trading programs. These programs allow regulated entities to buy offsets for permit compliance. Generally, these programs will remove more nutrients from watersheds as a whole than what is required in effluent limits.

Wisconsin and Iowa have been at the forefront of water quality trading in the Midwest. These programs have focused on reducing nutrient pollution in the Mississippi River Basin. By creating a market for pollution credits, these states have encouraged innovative and cost-effective solutions to water quality problems.

## **Wisconsin's Nutrient Trading**

**Program:** This program allows point source dischargers to buy and sell nutrient credits, which can be generated through various measures, including advanced wastewater treatment technologies, agricultural best management practices, and wetland restoration.

## **Iowa's Nutrient Reduction**

**Strategy:** Iowa has implemented a comprehensive strategy to reduce nutrient pollution, including a nutrient trading program that allows farmers to generate and sell nutrient reduction credits.

## **Now Illinois is beginning a water quality trading program.**

This new approach offers WWTP's Nutrient Reduction Offset Credits for reducing nutrient pollution through the implementation of landscape best

*"As we continue to face increasing pressures on our water resources, it is essential to adopt a holistic perspective that considers the interconnectedness of our waterways."*

management practices. These credits can be used to offset future nutrient discharge limits in its NPDES permits. This creates a partnership between the Districts and area farmers and landowners, and promotes early adoption by including a "nutrient bank" for use in future permit years.

**Join us for a dynamic workshop focused on nutrient trading, addressing agricultural nutrient management through the circular water economy.** Nutrient trading is a market-based approach to reduce nutrients in water bodies by allowing wastewater treatment plants to obtain nutrient reduction credits from farmers and landowners. This system enables entities that can reduce pollutants at lower costs to sell credits to those facing higher reduction costs (EPA).

This event will highlight challenges around nutrient reduction within the framework of the *Clean Water Act* and existing nutrient trading programs, foster a better understanding of the challenges of farmers, and begin conversations around concrete solutions to the existing problems. Experts from IL, WI, and other states in the Mississippi River basin will present their nutrient reduction strategies,

offering insights into successful policies and practices.

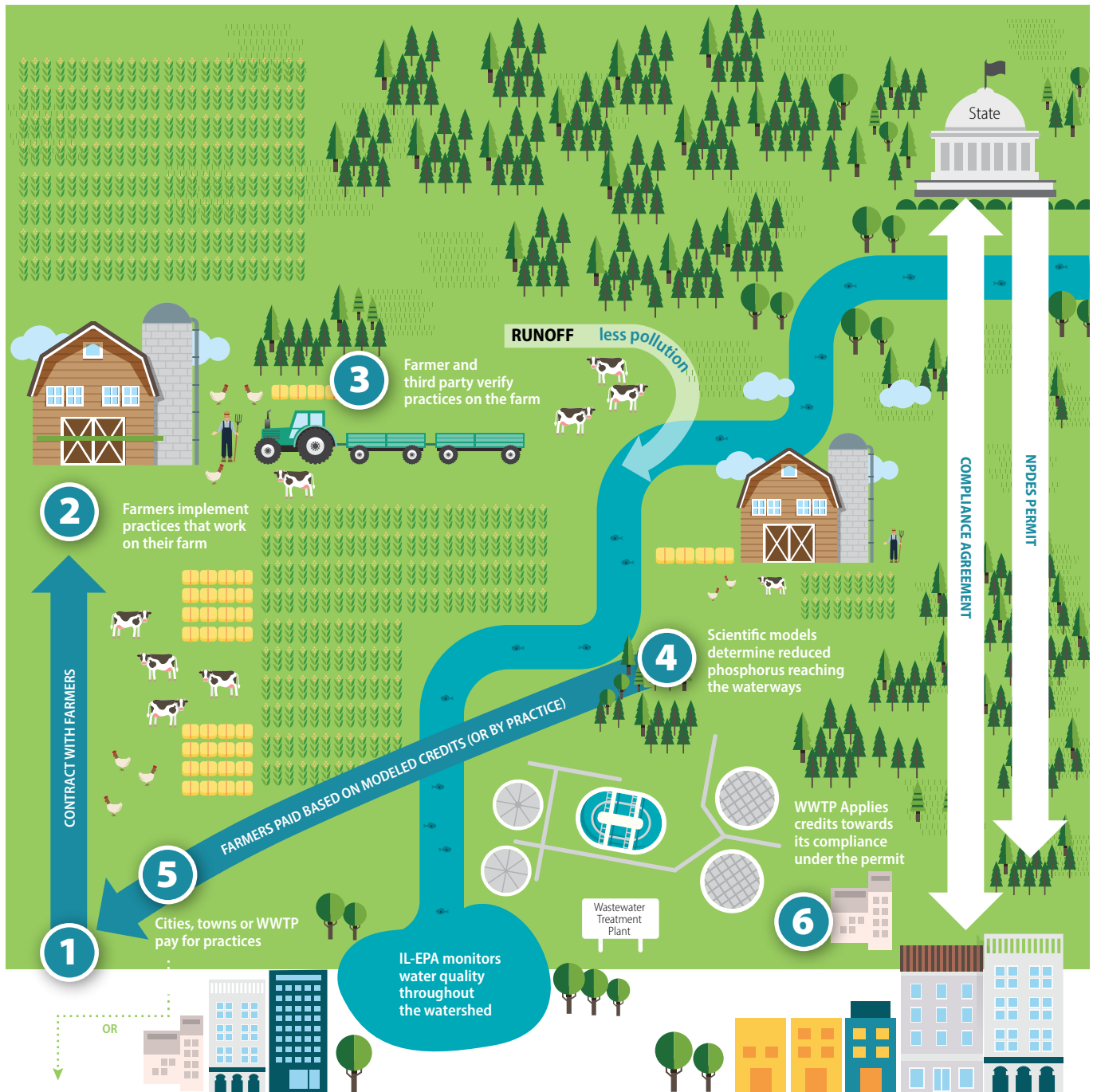
We will examine the science and effectiveness of this approach, implementation in three States, and provide opportunity to take immediate action towards setting up your own opportunities. The watershed approach to water quality management has proven to be a valuable tool in addressing complex environmental challenges. As we continue to face increasing pressures on our water resources, it is essential to adopt a holistic perspective that considers the interconnectedness of our waterways.

This workshop offers unique opportunities for wastewater treatment plant representatives, industry, farmers, landowners and regulators to collaborate and explore actionable solutions for water quality issues.

## **Workshop Goals**

1. Identify concrete lessons in nutrient trading you can implement in your operation.
2. Create multiple connections to follow up on implementation of a watershed-focused program.
3. Help determine opportunities for national water quality efforts.

*"This event will highlight challenges around nutrient reduction within the framework of the Clean Water Act and existing nutrient trading programs, foster a better understanding of the challenges of farmers, and begin conversations around concrete solutions to the existing problems."*



## PAY FOR SUCCESS

This performance-based approach allows contracting for nutrient reduction outcomes that meet state standards and that result from farmer-selected conservation practices.

Payments are made to farmers after outcomes are certified as **credits**. This differs from the standard NRCS payment scheme which pays for a practice.

## REGULATOR-PERMITTEE AGREEMENTS

Formal agreements between state agencies and local government are critical to define what, when, and how outcomes will be counted, leaving local government with the freedom to decide how much watershed-based work to include in their compliance plan.



# AGENDA

## 10:00 am-10:10 am | Welcome

Discuss current and potential future federal water quality policies and directions, and WEF's priorities to advance federal and state policies and funding that benefit the adoption of circular water economy practices.

**Steve Dye, Water Environment Federation**

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## 10:10 am-11:00 am | Molecular Circularity and the Gulf of Hypoxia

### • 10:10 am-10:40 am | Molecular Circularity

Chemical composition/description of water, nitrogen, phosphorus –

1. Wastewater treatment system
2. Cyanobacteria plant growth – harmful algae blooms.

**Eric Booth, University of Wisconsin-Madison**

### • 10:40 am-11:00 am | Gulf of Hypoxia

The second largest zone of coastal hypoxia (oxygen-depleted waters) in the world is found on the Northern Gulf of Mexico, adjacent to the outflows of the Mississippi and Atchafalaya Rivers. The zone is set to increase by 5%. (ResearchGate).

**Lauren Salvato, Upper Mississippi River Basin Association (UMRBA)**

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## 11:00 am-12:00 pm | Mississippi River Basin Perspectives

### • 11:00 am-11:45 am | Panel Discussion with Local Representatives

**Matt Claucherty, Wisconsin Department of Natural Resources**

**Mohammed Haque, Northern Moraine MRD**

**Adam Schnieders, Iowa Department of Natural Resources**

### • 11:45 am-12:00 pm | Q&A with the Audience

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## 12:00 pm-1:00 pm | Lunch Spotlight: Walton Family Foundation

**Amy Saltzman, Walton Family Foundation**

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## 1:00 pm-2:00 pm | Circular Water and Existing Solutions

### • 1:00 pm-1:10 pm | Overview of circular water economy as the framework aimed at improving water sustainability – closing water loops by reducing waste, reusing water, and optimizing nutrient cycles.

**Fidan Karimova, Water Environment Federation**

### • 1:10 pm-1:45 pm | Panel Discussion: A Look at Biosolids, Watersheds, Public-Private-Partnerships

**Kristin Schultheis, Milwaukee Metropolitan Sewerage District**

**Martye Griffin, Madison Metropolitan Sewerage District**

### • 1:45 pm-2:00 pm | Q&A with the Audience

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## 2:00 pm-2:15 pm | Coffee Break

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## 2:15 pm-3:45 pm | Pathway Dialogues

### • 2:15 pm-2:45 pm | Rapid Exchanges | 6 minutes each

**Nicole Blasing, Minnesota Pollution Control**

**Adam Schnieders, Iowa Department of Natural Resources**

**Matt Claucherty, Wisconsin Department of Natural Resources**

**David Farr, McHenry/Lake Soil and Water Conservation District**

**Jamie Heisig-Mitchell, Hampton Roads Sanitation District**

### • 2:45 pm-3:45 pm | World Cafe (Report-Out)

Round-table discussions with reports of the talks.

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## 3:45 pm-4:00 pm | Closing and Next Steps

# SPEAKERS



## **ADAM SCHNIEDERS** **Iowa Department of Natural Resources**

Adam Schnieders serves as the Water Quality Resource Coordinator for the Iowa Department of Natural Resources, where he has worked for more than 18 years.

His leadership helped shape Iowa's Nutrient Reduction Strategy, aligning point and nonpoint sources to improve water quality. Adam previously led the state's NPDES program and water quality standards efforts, and he represents Iowa on several national and regional nutrient reduction initiatives, including the Gulf of Mexico Hypoxia Taskforce and the Upper Mississippi River Basin Association.



## **AMY SALTZMAN** **Walton Family Foundation**

Amy Saltzman is a Senior Program Officer at the Walton Family Foundation, where she leads the Mississippi River initiative to advance healthy soils, clean water, and a resilient river system. Her prior experience

includes work with the International Food Policy Research Institute's HarvestPlus program, the Rural Coalition, and the US Department of State. A former Fulbright fellow in Malawi, Amy holds a BA from Cornell University and an MPA from the University of Colorado.



## **BARTLETT DURAND** **Nature's Registry**

Bartlett Durand is CEO of Nature's Registry and works to build cross-sector partnerships for sustainable water and land use solutions. Trained as an attorney and experienced in food systems and regenerative agriculture,

Bartlett brings a unique blend of legal, entrepreneurial, and environmental expertise. He has led initiatives in local food economies, conservation finance, and ecosystem services, and is deeply committed to aligning policy, community needs, and ecological health.



## **DAVID FARR** **McHenry/Lake Soil and Water Conservation District**

Dean Farr is a volunteer Director with the McHenry/Lake Soil and Water Conservation District, following a 40-year career in federal program delivery and

financial management. He previously served as Executive

Director of the Indiana Association of Soil and Water Conservation Districts and remains active with the Illinois Division of the Izaak Walton League, advocating for conservation policy at state and national levels. Dean holds degrees in Finance, Business Administration, and Public Administration, with a focus on urban and regional planning.



## **ERIC BOOTH** **University of Wisconsin-Madison**

Eric Booth is an Associate Scientist at the University of Wisconsin – Madison, jointly appointed in the Departments of Plant & Agroecosystem Sciences and Civil & Environmental

Engineering. His research focuses on the intersection of water, land, climate, and people, using a transdisciplinary approach that includes field monitoring, computer modeling, and stakeholder engagement. Eric holds a PhD in Limnology from UW – Madison and has led or contributed to numerous projects addressing flood resilience, nutrient runoff, and sustainable agriculture in the Upper Mississippi River Basin.



## **FIDAN KARIMOVA** **Water Environment Federation**

Fidan Karimova is the Senior Director of Circular Water Economy at the Water Environment Federation, where she leads initiatives to advance sustainable, climate-resilient water systems. Her work focuses

on scaling circular solutions, fostering innovation, and aligning cross-sector collaboration to address global water challenges. With a background in environmental management and international business, Fidan is dedicated to accelerating the transition to a more regenerative water future.



## **JAMIE HEISIG-MITCHELL** **Hampton Roads Sanitation District**

Jamie Heisig-Mitchell is the Director of Water Quality at the Hampton Roads Sanitation District, where she oversees the Central Environmental Laboratory, Pretreatment and Pollution Prevention, and

the Technical Service Division. She brings deep expertise in environmental monitoring, regulatory compliance, and permitting under the *Clean Water Act*, *Clean Air Act*, and *Safe Drinking Water Act*. Jamie serves on several national and state-level boards and committees, including VAMWA, NACWA, and the Virginia Biosolids Council. She holds a Master of Science from Old Dominion University.

# SPEAKERS



## **KRISTIN SCHULTHEIS** **Milwaukee Metropolitan** **Sewerage District (MMSD)**

Kristin Schultheis is a Senior Project Planner at MMSD, working with regional partners to reduce flood risk, improve water quality, and preserve farmland.

She facilitates the Milwaukee River Basin Conservation Partnership through a USDA-NRCS Regional Conservation Partnership Program. Kristin holds degrees in soil science and hydrogeology from the University of Wisconsin – Madison and serves on the board of the River Alliance of Wisconsin.



## **LAUREN SALVATO** **Upper Mississippi River** **Basin Association (UMRBA)**

Lauren Salvato is the Water Quality Program Leader for UMRBA, where she leads initiatives on water quality, water quantity, and ecosystem restoration. She

coordinates the UMRBA Interstate Water Quality Program and facilitates multi-state planning and policy development. Lauren previously held roles with the North American Lake Management Society, the National Park Service, and the US Fish and Wildlife Service. She holds graduate degrees in Water Resources and Public Policy from the University of New Mexico and Indiana University.



## **MARTYE GRIFFIN** **Madison Metropolitan** **Sewerage District**

Martye Griffin is Director of Ecosystem Services at the Madison Metropolitan Sewerage District, focusing on pollution prevention and watershed-scale water

quality improvement. He has more than 20 years of experience in both public and private sectors, integrating science and community engagement to manage the relationship between land use and water quality. Martye holds a bachelor's degree from Lawrence University and a graduate degree in biology from the Marine Biological Laboratory.



## **MATT CLAUCHERTY** **Wisconsin Department** **of Natural Resources**

Matt Claucherty is a Water Resources Management Specialist at the Wisconsin Department of Natural Resources, where he focuses on phosphorus

compliance through adaptive management, water quality trading, and variances. He plays a key role in supporting municipal and industrial facilities in meeting water quality goals under Wisconsin's phosphorus rules, and he works with partners to implement cost-effective, watershed-based solutions.



## **MOHAMMED HAQUE** **Northern Moraine Wastewater** **Reclamation District (NMWRD)**

Mohammed Haque serves as the District Manager of NMWRD, bringing over two decades of experience in public utility management. He also

holds leadership roles as Executive Director of the Central States Water Environment Association and as a member of the Executive Committee for the Illinois Association of Wastewater Agencies. Mohammed is a founding member of Global Water Stewardship, an organization dedicated to expanding access to sanitation worldwide.



## **NICOLE BLASING** **Minnesota Pollution** **Control Agency (MPCA)**

Nicole Blasing is the Subsurface Sewage Treatment Systems (SSTS) Supervisor at MPCA, overseeing municipal wastewater compliance and enforcement in the north

central region. Since joining the MPCA in 2007, she has worked extensively on wastewater permitting, particularly related to impaired waters and TMDL implementation. Nicole's career began as a student worker at MPCA and includes experience with the South St. Louis County Soil and Water Conservation District in community outreach and stormwater management.



## **STEVE DYE** **Water Environment Federation**

Steve Dye is the Senior Director of Government Affairs at the Water Environment Federation, where he leads advocacy on water policy and infrastructure before Congress and

federal agencies. With nearly 30 years of experience in government affairs, Steve previously worked on Capitol Hill for a decade and has represented municipal, corporate, and nonprofit clients in the water sector. He holds a bachelor's degree in history from the University of California, Santa Barbara.