

MRWA 45th Annual Conference and Tradeshow

SESSION DESCRIPTIONS

TUESDAY, DECEMBER 9th

6 – 7:30 P.M.

KEYNOTE SESSION

Skills of Successful Communication

*Heather Somers, Executive Director, North Carolina Rural Water Association
(W/VSWS/Admin/WW Mgmt)*

Effective communication is at the heart of successful leadership, employee engagement, and organizational performance. This session, Skills for Successful Communication, explores the vital components of communication, with a particular emphasis on non-verbal cues, active listening, and navigating difficult conversations. Presented by Heather Somers, Executive Director of the North Carolina Rural Water Association, the training is rooted in practical examples and real-world workplace scenarios relevant to the rural water industry.

Participants learn that only 7% of communication is verbal, while 93% is shaped by vocal and non-verbal elements—tone, gestures, body language, and facial expressions. The presentation demystifies non-verbal communication by examining how gestures (like hand movements), proximity, posture, and micro expressions influence trust, transparency, and connection. Through visual examples and data from TED Talks, attendees understand how purposeful gestures can increase engagement and clarity.

The training also highlights the role of active listening, encouraging leaders to validate both the facts and feelings of the speaker. Techniques such as the triangle method for eye contact and the use of probing questions are presented as strategies to deepen understanding and strengthen interpersonal rapport.

To address common workplace challenges, the presentation includes practical scenarios that demonstrate how communication breakdowns can result in frustration or misunderstanding. For example, the case of a Circuit Rider feeling burned out and dismissed underscores the importance of recognizing emotional cues and responding with empathy.

WEDNESDAY, DECEMBER 10th

8 – 9:30 A.M. SESSION 1

Wastewater Collection Systems Operation & Maintenance

Loyd Rawlings - USA BlueBook
(WW)

This class covers collection system types from gravity flow to forced mains. Tools such as draw down math for lift station troubleshooting and flow calculations for gravity sewer mains will give the attendee tools for everyday use in the field. Inflow and Infiltration with different methods for locating and repairing common issues will be covered.

DWP & MMBB SRF Funding: From the Flow of Funds to Financial Application & Reimbursement

Jeremy McDaniel – MMBB, Kristi Lamoreau – MMBB, McKenzie Parker – DWP, Eduard Chenette – DWP, Sofia Licht - DWP
(W/Admin/WW Mgmt)

We will cover the SRF financial process from the flow of funds to and from the SRF, to submitting a financial application, to closing and reimbursements through payment requisitions

From Contamination to Cleanup: Charting the Course for PFAS Treatment

Phil Farina - Clear Creek Systems, Inc.
(W/WW/VSWS/Admin)

This presentation provides a comprehensive overview of per- and polyfluoroalkyl substances (PFAS) contamination and remediation strategies in the United States, with a focus on practical treatment solutions and regulatory developments. Led by Clear Creek Systems, a national leader in water purification, it addresses the scope of PFAS pollution, affecting an estimated 253 million Americans, and highlights the challenges posed by evolving federal and state regulations, including recent and anticipated changes to Maximum Contaminant Levels (MCLs) for drinking water.

Key PFAS treatment technologies are introduced, including granular activated carbon (GAC), ion exchange resins, multi-functional media (such as Fluoro-Sorb), reverse osmosis, and foam fractionation. The comparative advantages, operational considerations, and cost analyses of these methods are detailed, emphasizing the importance of technology selection based on water source, target contaminants, and required treatment levels.

WEDNESDAY, DECEMBER 10th

8 – 9:30 A.M.

SESSION 1, continued...

The presentation outlines a stepwise, holistic approach to PFAS remediation—from source assessment and water analysis to technology selection and system installation—ensuring compliance with regulatory mandates and facilitating effective risk reduction. Real-world case studies demonstrate successful system deployments across diverse environments, including community water supplies and construction dewatering projects. The session concludes by highlighting the critical roles of sequestration, destruction, and proper management of treatment residuals in safeguarding public health and ensuring regulatory compliance in PFAS mitigation.

Instrument Calibration

Ken Johnson - MRWA
(W/WW/VSWS)

This course provides water and wastewater professionals with the knowledge and practical skills necessary to perform accurate instrument calibration in treatment plant and laboratory settings. Participants will learn the principles of calibration, the importance of maintaining accuracy for regulatory compliance and process control, and the proper procedures for calibrating common instruments such as pH meters, turbidity analyzers, chlorine analyzers, and laboratory equipment. The class will include both classic instruction and a real-time calibration demonstration, emphasis on troubleshooting techniques, and best practices to ensure reliable and repeatable results.

The Importance of Accountability in the Workplace

David Cuillo - Career Management Associates
(W/Admin/WW Mgmt)

Accountability is a cornerstone of high-performing teams and successful organizations. In this training, participants will learn how to take ownership of their roles, meet expectations, and foster a culture of trust and responsibility. By understanding the value of accountability, individuals will be equipped to contribute to team goals, address challenges proactively, and support colleagues in achieving collective success.

WEDNESDAY, DECEMBER 10th

9:40 – 11:10 A.M.

SESSION 2

PFAS: What they are, why we should care, how they get into water and what we can do about it

*Jean McRae - University of Maine
(W/WW)*

This presentation will cover the basics of per and polyfluoroalkyl substance (PFAS) chemistry, their characteristics, uses, and effects on humans and the environment. We will then explore how they get into the aquatic environment, and methods of remediation – current, and in development.

Learning objectives include: 1) understand the characteristics of PFAS and what makes them unique, useful, and hard to treat, 2) understand how they get to the environment, and how they move around, 3) understand how current technologies can remove them from water, 4) review technologies under development for PFAS destruction

PFAS - “forever chemicals” have negative health effects at extraordinarily low concentrations, which makes them both difficult and expensive to treat. This presentation will help you understand why, and how the technologies we have (and a few in development) work to remove them

Money Talks

*Jason Simocock - Northeast Bank, Bob Hartley - Maine DEP, McKenzie Parker - Maine DWP, Robert Nadeau – USDA, Jeremy McDaniel – MMBB, Kristi Lamoreau – MMBB, Terry Ann Holden - State of Maine
(W/WW/Admin)*

This class will give funders the opportunity to provide information on how their lending packages help the industry. They will each talk briefly about their individual programs, with a focus on how their programs work in conjunction with the others. For example, how can utilities utilize the different agencies to provide match funding. This class will aim to provide information on how to best layer funding options to the benefit of the utility.

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9:40 – 11:10 A.M.

SESSION 2, continued

SCADA Systems for Small and Very Small Systems

Jeff Twitchell - Air & Water Quality
(W/WW/VSWS/Admin)

This course will review the capabilities of a unique system that provides SCADA capabilities for small and very small water systems. The main focus will be the many ways this system can be configured to provide remote data collection and remote operation of treatment equipment. This includes:

- Using meters to study use patterns for better system design and protection of single use systems
- How multiple pumps can be monitored and controlled through a single remote connection
- How a paced to flow pulse type solution feed pump can simulate a 4-20 capable pump system
- Progressive flow capabilities for both softeners and filters and the advantages these systems offer
- Demonstration with live equipment on location and connecting to existing remote systems

How to Achieve Compliance with WET and Chemistry Tests, and Steps to Take after a Failed Test

John Tipping - Haley Ward
(WW)

You've managed your WET test and chemistry logistics but received an adverse result. What to do next? Fortunately, there are guidelines that can help keep you in compliance. Join Haley Ward Senior Project Scientist John Tipping to come away with a better understanding of testing controls, receiving water guidelines, sampling techniques, and what to do with an adverse WET test or chemistry result.

WEDNESDAY, DECEMBER 10th

9:40 – 11:10 A.M.

SESSION 2, continued

Threat and Risk Analysis 101

James Pratt - NRWA
(W/WW/VSWS/Admin)

This class is designed to expand on critical infrastructure assessment, threat, and risk analysis by quantifying risk data as a primary step in disaster management.

12:40 – 2:10 P.M.

SESSION 3

Pressure Sewer Design

Daryl Coppola- F.R. Mahony & Associates
(WW)

Learn to design and layout pressure sewer systems with a focus on: Pump and piping system sizing, hydraulic principles such as flushing velocity and total dynamic head calculations, comparing materials and their applications in pressure sewer systems, hands on practice with design software. Additionally there will be real examples of projects in the area.

DWP Updates

Amy LaChance - DWP
(W/VSWS)

Amy Lachance, Maine CDC Drinking Water Program Director, will provide updates on current issues important to Public Water Systems. Topics will include a brief overview of the new Lead and Copper Rule Improvements (LCRI), an update on the lowered Maximum Contaminant Levels for PFAS and state rule status, a discussion of other new drinking water rules on the horizon, the status of the Drinking Water State Revolving Fund Loan and Grant Applications, and other relevant issues.

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12:40 – 2:10 P.M.

SESSION 3, continued

10 Top Tips to Improve Your Chemical Feed System!

Danny Smith - TiSales
(W/WW/VSWS)

This session will focus on the ten most common challenges faced with chemical metering and feed pumps—and, most importantly, how to solve them. We'll walk through practical solutions that operators can apply directly in the field to keep systems running smoothly. Topics will include:

- Preventing loss of prime.
- Proper pump calibration.
- Troubleshooting pumps that aren't performing as expected.
- ...and several other real-world issues.

In addition to these key topics, the class will be interactive: attendees are encouraged to bring their own questions and real-world problems for group discussion. Whether you're dealing with a persistent priming issue, struggling with calibration, or troubleshooting your chemical feed loop, this class will give you practical strategies you can take back to your facility.

Building Capacity: The Case for Employee Development

Peter Osborne - Maine Municipal Association, Charles Collins, Ed.D - Maine Community College System
(W/Admin/WW Mgmt)

In today's fast-paced and resource-constrained workplaces, employee development often takes a backseat to immediate operational demands. Yet investing in employee growth is one of the most powerful tools available to strengthen your organization. This session will explore the wide-ranging benefits of prioritizing employee development—from boosting retention and performance to building a resilient talent pipeline and fostering a more inclusive, agile workplace culture. Participants will also learn about valuable training resources available through the Maine Municipal Association and the Maine Workforce Development Compact, administered by the Maine Community College System. Whether you're an individual contributor, leading a small team, or managing a utility, this session will offer practical strategies and accessible tools to help you invest in yourself, your people, and your future.

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12:40 – 2:10 P.M.

SESSION 3, continued

Giving and Receiving Employee Feedback

Katie Hadiaris - Career Management Associates
(W/Admin/WW Mgmt)

Effective communication and feedback are essential tools for leaders and supervisors to drive performance and build strong teams. This training provides practical, actionable skills for mastering the art of feedback. Participants will learn the four types of feedback, how to structure feedback using proven frameworks, and techniques to ensure feedback is clear, and actionable.

2:20 – 3:50 P.M.

SESSION 4

Opioid Exposure in Utilities - Recognition, Response, & Prevention

James Pratt - NRWA
(W/VSWS/WW Mgmt)

This awareness class is designed to help participants identify and protect from the emerging danger of opioid exposure.

Exposure to PFAS from contaminated biosolids: Health considerations

Dr. Rachel Criswell - Redington-Fairview General Hospital
(W/WW)

Per- and polyfluoroalkyl substances (PFAS) have become a growing concern for public health and the environment, particularly within the water and wastewater sector. This course provides an overview of how PFAS move through treatment systems and how contaminated biosolids can serve as a route of human exposure. Attendees will learn about current methods for estimating or testing PFAS levels in individuals and gain insight into the potential health effects associated with elevated PFAS exposure. The session will also discuss ongoing research and regulatory perspectives aimed at reducing risk and improving community health outcomes. Learn to:

- Explain how contaminated biosolids can be a route of human exposure to PFAS
- Name at least one way to estimate or test an individual's blood level of PFAS
- Name at least one health condition that high levels of PFAS is a risk for

WEDNESDAY, DECEMBER 10th

2:20 – 3:50 P.M.

SESSION 4, continued

Tips and Tools for Operating a Successful Small Water System

DWP Staff

(W/VSWS/Admin)

Have you ever received communication from the Drinking Water Program that you didn't understand or experienced confusion regarding required approval processes? Have you experienced an emergency at your water system and didn't know how to handle it? Have you ever not found the correct person at the DWP or information on the DWP website? Then this is your session! Join DWP Staff while we cover a wide array of topics spanning from proper documentation for public notices, what happens after a positive bacteria sample, identifying an emergency, all the way to how to be successfully compliant with schedules. This will be a fast-paced training session that covers many topics within the 90-minute time window. But we will make sure to also include time for questions and will include a 'tour' of our updated website!

Understanding the Use of AI as it's Related to Cybersecurity for Water and Wastewater Utilities

Dave Savage - Sawdey

(W/WW/Admin)

As artificial intelligence becomes increasingly integrated into information and operational technologies, understanding its role in cybersecurity is critical for protecting vital water and wastewater infrastructures. This course explores how AI is being used to both strengthen and threaten cybersecurity systems within the utility sector. Attendees will learn how AI tools can assist in detecting anomalies, responding to cyber incidents, and enhancing operational security, while also examining the risks posed by AI-driven attacks and misinformation. The session will cover current trends, real-world examples, and practical steps utilities can take to implement AI-based security solutions safely and effectively. Learning objectives include:

- Review the foundational infrastructure needed to apply AI technologies within utility environments.
- Understand the fundamentals of AI and its relevance to utility infrastructure and cybersecurity.
- Identify how AI enhances threat detection, incident response, and network monitoring.
- Recognize potential vulnerabilities and risks associated with AI technologies.

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2:20 – 3:50 P.M.

SESSION 4, continued

Operator Ethics

Loyd Rawlings - USA BlueBook
(W/VSWS/Admin/WW Mgmt)

In a world full of operational and regulatory challenges, daily decisions reflect an operator's ethics and training. This class explores how ethics and training shape decisions, how operators respond to unethical leadership demands, and teaches the skills needed to be a great operator, decision-maker, and leader in the water and wastewater community.

THURSDAY, DECEMBER 11th

8 – 9:30 A.M.

SESSION 1

Alternative Disinfection

Loyd Rawlings - USA BlueBook
(W/WW)

Are disinfection byproducts causing you grief, or is chlorine just not meeting your needs? Check out what other chemicals or processes may suit your system better. We will cover UV, ozone and other options available today.

EJPs Smart Utilities: Technologies that Help Solve Problems

Nick Bates - E.J. Prescott, Liam Flaherty - E.J. Prescott
(W/WW/Admin)

Non-Revenue water is an issue that utilities are trying to solve. From inaccurate meters, billing errors, leaks, etc. the challenges can be numerous. Join EJPs Smart Utility Professional's team to see what technologies we have to solve problems facing utilities across the state. We will look at specific projects and their outcome.

THURSDAY, DECEMBER 11th

8 – 9:30 A.M.

SESSION 1, continued

Maine Utility Accommodation Rules and Permitting Rules

Douglas Brown - Maine DOT, Ron Cote - Maine DOT

(W/Admin/WW Mgmt)

This comprehensive course covers the full scope of Utility Accommodation Rules, providing participants with the knowledge and skills needed to manage utility installations safely and in compliance with MaineDOT standards. Topics include proper depth, warning tape, encasement, detection methods, open trench practices, and installation of gate valves and manholes.

Participants will also learn how to complete the Highway Opening Application Form, including understanding permit fees, escrow, bonds, and funding agency requirements. The course covers Utility Location Permits, detailing when and how to apply, as well as preferred utility locations within MaineDOT rights-of-way and moratorium requirements.

Practical guidance will be provided on using the MaineDOT Map Viewer to locate right-of-way information and on developing Traffic Control Plans (TCPs) in accordance with MaineDOT expectations. This course is ideal for utility engineers, contractors, and public works professionals seeking a thorough understanding of permitting, compliance, and best practices for utility work within MaineDOT right-of-way.

The Art of Delegation: Empowering Teams and Enhancing Leadership Effectiveness

David Cuillo - Career Management Associates

(W/Admin/WW Mgmt)

This training program is designed to equip leaders and managers with the skills needed to delegate effectively, empowering their teams while enhancing productivity. Participants will learn the difference between delegation and simple task assignment, understand common barriers to delegation, and discover how effective delegation drives team growth, innovation, and overall performance. Through practical exercises leaders will identify high-impact tasks, learn effective time management strategies, and prioritize effectively.

THURSDAY, DECEMBER 11th

8 – 9:30 A.M.

SESSION 1, continued

Hooper Ledge Water Storage Tank - Design & Construction Case Study

Dustin Lacombe - Wright-Pierce

(W/WW)

This presentation consists of a case study for a drinking water storage tank replacement project in South Paris, ME. The Paris Utility District selected Wright Pierce to assist with the design and construction of this important infrastructure improvement for their water system. The Hooper Ledge Tank is a 500,000-gallon prestressed concrete tank which was constructed in 2022 to replace an existing 1909 vintage cast in place concrete tank which was well beyond its useful service life. This case study reviews the need for the project, the various alternatives considered, tank design criteria, and an overview of the tank construction.

11:45 A.M. – 1:15 P.M.

SESSION 2

Clamps, Couplings, Fittings, & Restraints: Applications & Installation Methods

Seth Dickinson - E.J. Prescott

(W/WW)

This course provides a practical overview of the components used to join, repair, and secure water and wastewater piping systems. Participants will learn about the different types of clamps, couplings, fittings, and restraint devices, along with their specific applications and limitations. Instruction will cover proper installation methods, common mistakes to avoid, and best practices for ensuring long-term system integrity. Real-world examples and hands-on demonstrations will highlight how to select the right product for the job, improve reliability, and reduce maintenance issues.

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11:45 A.M. – 1:15 P.M.

SESSION 2, continued

Water Tank Inspections & Common Deficiencies

Scott Kelley - Advanced Tank & Infrastructure Solutions
(W/WW/Admin)

The presentation will review water storage tank inspections, common deficiencies, best practices, and associated state and federal regulations, and AWWA guidelines. Each of the five main categories of evaluation will be discussed: 1) Sanitary, 2) Safety, 3) Security, 4) Structure, and 5) Coatings. The purpose of the training is to provide an understanding of the inspection report so it can be used as a maintenance tool for optimal performance of the tank asset at the lowest life cycle cost.

Risk Reduction to Cyberattacks for Water & Wastewater

Jeff Hewson - ARIA Cybersecurity Matt Anderson - Rexel USA
(W/WW/Admin)

Attendees will learn about cyber attack data and some local examples. The class will cover the various types of cyber attacks and the challenges to protect against them. We will share why water and wastewater facilities are a prime target and how ARIA's solution can stand alone or compliment other IT administered solutions.

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11:45 A.M. – 1:15 P.M.

SESSION 2, continued

From Test Year to Tariff: A Practical Guide to Maine Water Utility Rate Cases

Jonathan Dunitz - Verrill Associates, Sam Hamilton - Verrill Associates, Nick Henry - Henry Solutions
(W/Admin)

This class will include explanation and understanding of the following:

- When and why to file a rate case: triggers, timing, and aligning with capital plans and funding.
- Anatomy of a Maine PUC water rate case: notice, intervention, discovery, technical sessions, stipulations/settlement, and hearing.
- Building the revenue requirement: test year selection, pro-forma adjustments, rate base, depreciation, and cost of capital.
- Cost-of-service and rate design fundamentals (incl. public fire protection/hydrant charges) and communicating customer impacts.
- Working effectively with your accountant and engineer: exhibits, typical data requests, and dealing with the Office of the Public Advocate.
- Practical tips for small and mid-size systems: project management, customer communications, and common pitfalls to avoid

Engaging the Generational Divide

Katie Hadiaris - Career Management Associates
(W/Admin/WW Mgmt)

You may wonder why we discuss different generations in the workplace. Many conflicts arise from two people seeing the same situation through different lenses. Each of the four current generations in our workplace have different general characteristics, communication styles, and needs. Understanding each generation can help any employee better navigate workplace relationships and interactions. In this training, we will discuss the generational characteristics as well as how each prefers to work and communicate to bridge the gap between the generational divides.

THURSDAY, DECEMBER 11th

1:25 – 2:55 P.M.

SESSION 3

Thickening & Anaerobic Digestion Basics

Loyd Rawlings - USA BlueBook
(WW)

A review of common equipment used for the thickening process and the advantages and disadvantages of each. Learn the warning signs of digesters upsets, why they occur, and what to watch for to avoid them.

Protective Coatings and Linings for Steel Potable Water Storage Tanks

Rick Goyette - Sherwin Williams
(W/WW)

This presentation will cover coatings and linings for steel potable water storage tanks. In this presentation, we will discuss everything from surface preparation requirements and standards, AWWA D102 systems for steel water storage tanks including the different (ICS) Inside Coating Systems, (OCS) Outside Coating Systems, and also Exterior Overcoat Systems which AWWA does not have standards for. We will discuss industry standards, optimum life cycles and common challenges. This will be beneficial for understanding options to extend the service life of steel potable water storage tanks.

Pressure Management & Advanced Leak Detection

Paul Lander - 64 Seconds, Inc.
(W/WW/Admin)

This session will introduce the elements of a modern water system, focusing on pressure management, pipeline integrity, and continuous leak surveying with permanently installed intelligent vibration sensors. We'll explore the theory and practice of acoustic leak detection and present a simple protocol for minimizing non-revenue water. The presentation will show how cloud analysis, using statistical signal processing, can find inaudible and non-surfacing leaks on distribution and service pipes. We'll illustrate implementation of an efficient, proactive pipe maintenance program with examples from several utilities in the north eastern US.

THURSDAY, DECEMBER 11th

1:25 – 2:55 P.M.

SESSION 3, continued

Water-Energy Nexus: Solar Projects In or Adjacent to a Wellhead Protection Area

Joshua Laufer - DWP
(W/WW/VSWS/Admin)

The session will focus on DWP guidance for the development of solar energy in or adjacent to wellhead protection areas (WHPAs), with insight from a solar developer and a PWS with a solar array partially in Zone 1 of their WHPA. The guidance covers several topics, including planning and design, construction, operations and maintenance, and decommissioning of solar arrays in or adjacent to WHPAs. Class learning objectives include enhanced knowledge of DWP recommendations for solar development in or adjacent to WHPAs, benefits and risks associated with solar development in WHPAs, and approaches to risk mitigation. This session is relevant to PWSs because they will have greater insight into how to evaluate proposals to develop solar arrays in WHPAs under their jurisdiction.

Usable GIS - The Real Cost

Brad Folta - Honey Badger Analytics, LLC
(W/WW/Admin)

You're being lied to, and it's not your fault. It's ours (Contractors), making you successful rarely helps our bottom line. GIS isn't that hard, it just takes time. Join us for a discussion on the cost and time it takes to create a geospatial branch to your utility and how it can save you even more money as you decrease the training costs of new staff and operational costs, as you know where to dig when everything goes haywire.