

# 2026 Spring Joint Regional Conference & Exhibition

## April 1-2, 2026 – Worcester DCU Center

Wednesday Morning, April 1, 2026

### Session 1

**Asset Management/Data Integration**  
**Wednesday Morning, 9:00AM – 11:00AM**

**Moderator:** RENEE LANZA, P.E., Senior Consultant, GEI Consultants

**Assistant Moderators:** REBECCA PAUSTIAN, P.E., Project Engineer, Woodard & Curran

#### **9:00AM “Enhancing Your GIS and Data Environment to Support Next Generation Utility Asset Management”**

JAYSON BRENNEN, GISP, Senior Vice President, Senior GIS Specialist, CDM Smith, Manchester, NH

We live in a data and technology-driven society. With the rapid adoption of advanced technologies and AI-powered tools, the need for accurate and complete utility GIS and asset data management has never been more critical. This presentation will showcase methods that utilities are using to improve data accuracy in support of more effective asset management. In addition, the latest web, mobile, dashboard, and AI technologies that help drive asset management will be demonstrated, with local examples.

#### **9:30AM “Bondsville Capital Efficiency Plan”**

STEVE DAUNAI, P.E., Project Manager, Tata & Howard, Inc., Marlborough, MA

An Asset Management Plan and Capital Improvement Plan was developed for the Bondsville Fire and Water District. The Asset Management Plan utilizes a Three Circle Approach to evaluate water system piping using hydraulics, a critical component assessment, and asset management considerations to rate each water main as good, fair or poor. This will help BFWD plan for system improvements to make the most use of capital funds. The evaluation also reviewed all above-ground assets for repair and replacement needs.

#### **10:00AM “Bulk Delivery of Small System Asset Management Plans in the Adirondacks”**

KEELIN BERGER, Engineer II, Wright-Pierce, Clifton Park, NY

Aging infrastructure, rising costs, and more stringent federal and state regulations have increased the necessity of long-term capital improvement planning for water and wastewater systems. This is especially true for small systems with limited resources. In this presentation we will discuss how Wright-Pierce assisted Essex County to develop 16 distinct asset management plans, simultaneously, for small, municipal water and wastewater systems in the Adirondacks over the course of 18 months.

#### **10:30AM “Let’s Get AMP’d!”**

ERIN HOLMES, P.E., Director of Engineering and Environmental Services, and NOAH WALDRON, EIT, Engineer II, Pennichuck Water Works, Inc., Nashua, NH

By leveraging staff expertise, advanced analytics, and real-time monitoring, Pennichuck is shifting to a more proactive approach to managing and maintaining horizontal and vertical infrastructure. This strategy aims to reduce emergency or unplanned repairs and strengthen trust with customers and regulatory agencies. This talk will outline the challenges, successes, and overall strategy guiding Pennichuck’s “AMP’d” team as they advance this critical work.

**Session 2**  
**Dams**  
**Wednesday Morning, 9:00AM – 11:00AM**

**Moderator:** KEVIN FLOOD, P.E., Associate, Fuss & O'Neil

**Assistant Moderators:** KYLE HAY, P.E., National PFAS Lead, Brown and Caldwell

**9:00AM “Should I Stay or Should I Go – Dam Disposition Feasibility Studies”**

JANEEN MCDERMOTT, Senior Water Resources Engineer, GEI Consultants Inc., Traverse City, MI

It can be difficult for dam owners to see the full picture of necessary repairs, dam regulations; environmental, public, and dam safety concerns; initial, and life cycle costs. Dam disposition feasibility studies are a great first step to help owners make informed decisions based on sound science and real data. This presentation will discuss the general process for completing dam disposition feasibility studies using three real world cases as examples of how these studies can differ.

**9:30AM “Safeguarding Communities: Dam Breach Analysis and Emergency Action Plans”**

BARRY PARFITT, P.E., Project Manager, Wright-Pierce, Middletown, CT

Dams are a common feature across New England. These structures are typically regulated by state dam safety agencies, and Emergency Action Plans (EAPs) are mandated for dams classified as having significant or high hazard potential. This presentation explores the most common causes of dam failure and the parameters considered in a breach analysis. It also provides an overview of the essential components of a dam EAP, highlighting how these plans support emergency preparedness, risk mitigation, and public safety.

**10:00AM “Four Dams in Nottingham: Evaluating the structures impounding Pawtuckaway Lake”**

STEPHEN EISENLORD, P.E., Project Manager, AECOM, Chelmsford, MA

New Hampshire Department of Environmental Services Dam Bureau is investigating the two dams and two dikes that impound water in the Pawtuckaway Lake system in Nottingham, NH. Field investigations and engineering evaluations into these nearly 200-year-old structures have been ongoing over the past couple of years. This presentation will explore the key steps and lessons learned in evaluating how to protect each structure and how to address the need for increased spillway capacity across the Pawtuckaway River watershed.

**10:30AM “Phase 1 – Bemis Pond Dam Removal and Abbey Brook Restoration, Chicopee, Massachusetts”**

COLIN POWERS, Project Manager, Tighe & Bond, Westfield, MA, and LEE M. POULIOT, AICP, ASLA, Director – Department of Planning and Development, Chicopee, MA

The City of Chicopee completed Phase 1 of the Bemis Pond Dam Removal and Abbey Brook Restoration to improve safety and restore natural stream flow through Szot Park. The project removed the aging dam, restored 1,000 feet of channel, and added step-pool and riffle features for stability and habitat. Funded through state and federal grants, the work also created new public access and recreation space. The presentation will review design, construction, and lessons learned from this urban restoration effort.

**Session 3**  
**Distribution I**  
**Wednesday Morning, 9:30AM – 11:30AM**

**Moderator:** AMY COPPERS COSTANTINO, P.E., Technology Leader I, Wright-Pierce

**Assistant Moderator:** EMMA PAGE, P.E. Design Engineer, Boston Water & Sewer Commission, and ALAYNA BIGALBAL, P.E., Civil Engineer, Stantec

**9:30AM “Providing Redundancy and Reliability to the MWRA’s Northern Intermediate High Pressure Zone”**

NICHOLAS BOUTHILETTE, P.E., Civil Engineer, Stantec, Burlington, MA, and DOUG KEMPE, Program Manager, Massachusetts Water Resources Authority, Chelsea, MA

Following the installation of a multi-phase program to complete a redundant 36 and 48-inch water transmission main in the MWRA's Northern Intermediate High-Pressure Zone (NIH), Stantec and the MWRA have worked together since 2018 to replace Section 89 -- the aging -- and original 48-inch prestressed concrete cylinder pipe that served NIH communities for close to 50 years. This pipe replacement project contained many engineering, permitting, and water supply challenges that Stantec and MWRA worked closely together to navigate.

**10:00AM “Trenchless Technologies for Water Mains with Difficult Crossings”**

MARY DANIELSON, P.E., Project Manager, and KRISTEN CHAN, Staff Engineer, Tighe & Bond, Worcester, MA

This presentation will provide an overview and lessons learned from two case studies in Harvard and Winchendon, Massachusetts, where trenchless technologies were utilized to cross structures along a major water transmission main. We will explore the unique design and construction coordination required for pipe jacking and horizontal directional drilling, along with lessons learned that can be applied to future projects. Attendees will learn about available trenchless technologies, design considerations, and explore potential alternatives for complex infrastructure crossings.

**10:30AM “From Plan to Performance: Plymouth’s 16,000 LF Water Main Replacement”**

SRUSHTI SHAH, Project Engineer, Apex Companies, LLC, Quincy, MA

The Town of Plymouth is replacing a 16,000-linear-foot, 12-inch AC water main installed in 1967. Serving as a key connection from the Federal Furnace Well to the town’s distribution system, the project runs along Federal Furnace Road to South Meadow Road, the Plymouth - Carver boundary. As part of the town’s initiative to replace aging AC pipes, Apex provided design, bidding, and construction services. Construction began in 2024 and was scheduled to conclude in December 2025, improving water quality, performance, and community resilience.

**11:00AM “Burlington MWRA Connection - Phase 2B Water Main”**

COLLIN STUART, P.E., Project Manager, Wright-Pierce, Portsmouth, NH

Burlington, MA, has been on a long path to restore lost capacity due to contamination of its groundwater supplies. They chose to permit, construct, and share a connection directly to MWRA through the neighboring community of Lexington, with the goal of delivering up to 6.5 MGD of water. The project was completed in phases, which initially provided 1.0 MGD, 3.0 MGD, and once fully constructed, it will provide up to 6.5 MGD. The third and final phase will be discussed.

**Session 4**  
**Water Treatment I**  
**Wednesday Morning, 9:30AM – 11:30AM**

**Moderator:** THOMAS RENAUD, P.E., CAPM, Project Manager, Massachusetts Water Resources Authority

**Assistant Moderator:** JIHYON IM, P.E., Principal Environmental Engineer, CDM Smith and JORDAN SPITZER-LONDON, Manager, Operations Systems & Efficiency, Aquarion Water Company of Connecticut

**9:30AM “Congratulations – You Can Use Your Existing GAC Gravity Filters for PFAS Mitigation! Now, How to Improve the Process?”**

VICTORIA HAWKES, P.E., Project Manager, CDM Smith, Manchester, NH, and ROBBIE BICKFORD, Water Quality Manager, Kennebec Water District, Waterville, ME

A thorough analysis led the Kennebec Water District (KWD) to the conclusion that their best solution for PFAS treatment was equipment they already have - gravity GAC filters. With the filters pulling double duty, KWD considered improvements to their WTP to maximize the effectiveness of the GAC for PFAS removal and optimize the process of much more frequent media changeouts. We will discuss the projects considered, selected, and overall conclusions.

**10:00AM “Optimizing PAC for PFAS Treatment”**

KYLE HAY, P.E., National Specialty Leader - Drinking Water Filtration, Municipal PFAS, Brown and Caldwell, Portsmouth, NH

In 2023, the Orange Water and Sewer Authority (OWASA) initiated a jar testing program to optimize the PFAS-treatment performance of their existing PAC feed system. From this testing, two more effective, alternative PAC products were identified and have been implemented at full scale. This presentation will cover the PAC testing protocol, results from the bench scale evaluation, as well as 2 years' worth of full-scale results.

**10:30AM “PFAS and Co-contaminants: Considerations for Implementing Pre-Treatment”**

CAITLIN GLOVER, PhD, Senior Environmental Designer, Stantec, Pasadena, CA

This presentation examines how co-contaminants such as iron, manganese, nitrate, uranium, and dissolved organic matter affect PFAS treatment using granular activated carbon (GAC) or anion exchange (AIX) media. For GAC or AIX PFAS treatment, these co-contaminants can impact the operational performance and/or the capacity of the media. This work will additionally discuss the secondary operational impacts that the presence of PFAS may have on other treatment processes, e.g., brine disposal for regenerable nitrate treatment.

**11:00AM “Worcester Street Water Treatment Plant – Tackling Emerging Contaminants in a Complex Groundwater Source”**

DANIELLE TEIXEIRA, P.E., Senior Project Manager, Tighe and Bond, Worcester, MA, and MEGAN OLSEN, P.E., Project Engineer, Tighe & Bond, Worcester, MA

When PFAS contamination was detected in Grafton Water District's Worcester Street Well, an on-site pilot study characterized complex groundwater with elevated manganese, high organic carbon, and variable PFAS levels. A multi-phase pilot evaluated filtration for iron and manganese removal, granular activated carbon (GAC) and Fluoro-Sorb™ adsorption for PFAS removal, and ion exchange (MIEX®, Purolite®) for organic carbon reduction. Results guided treatment selection, system design, and operational strategies for two new full-scale facilities currently under construction in Grafton, Massachusetts.

**Session 5**  
**Cross Connections**  
**Wednesday Morning, 9:30AM – 11:30AM**

**Moderator:** TARA MCMANUS, P.E., Vice President, Weston and Sampson

**Assistant Moderators:** STEPHEN SOITO, P.E., Engineering Manager, Pawtucket Water Supply Board

**9:30AM “Kennebec Water District Backflow Contamination and Emergency Response”**

ROGER CROUSE, General Manager, Kennebec Water District, Waterville, ME

Following a backflow event contaminating its distribution system with fire-fighting foam, the Kennebec Water District audited all fire service accounts to determine the adequacy of backflow protection, corrective actions needed, and to identify the risks of this type of event occurring again. During this session we will review the audit, including on-site inspections of all fire systems, progress tracking, service requirements, and customer notification as well as improvements needed in KWD’s cross-connection control policy and compliance with backflow testing requirements.

**10:30AM “MythBusters: From Hydraulics of Backflow to Flood Protection Systems to Information of Things (IOT) – What are Manufacturers Doing?”**

KRIS MUNSON, General Manager, Water Specialties Company, Charlotte, NC

This MythBusters-style session cuts through industry hype to reveal what’s really happening in backflow hydraulics, flood protection, and IoT-enabled monitoring. Kris Munson breaks down the practical impacts of water hammer, air in the system, and parallel installations, then examines the strengths and limits of today’s flood-protection products – including the often-overlooked role of proper drainage and non-backflow solutions. The session concludes with a candid look at IoT: what your backflow is actually doing, how testing and monitoring are evolving, and how to turn data into meaningful action. Attendees will walk away with a clearer understanding of what manufacturers are delivering – and where the myths still need busting.

**Wednesday Afternoon, April 1, 2026**

**Session 6  
Distribution II**

**Wednesday Afternoon, 2:00PM – 4:00PM**

**Moderator:** KAREN GRACEY, P.E., Co-President, Tata & Howard

**Assistant Moderators:** AMY COPPERS COSTANTINO, P.E., Technology Leader I, Wright-Pierce and LINDLE WILLNOW, P.E., Associate Vice President, Discipline Leader, Hydraulic Modeling, AECOM

**2:00PM “HDPE Compression Fit Lining of PCCP Transmission Main”**

ANDREW MOROSKY, P.E., Senior Project Manager, Tighe & Bond, Inc., Middletown, CT

The City of Waterbury, Connecticut, faced repeated failures of a 42-inch prestressed concrete cylinder water transmission main, a 7.4-mile pipeline built in 1969 that helps supply more than 110,000 residents. A feasibility study for a high-risk 1.5-mile segment compared rehabilitation options—spray linings, CIPP, conventional HDPE sliplining, CompressionFit HDPE, and open-cut replacement—evaluating cost, hydraulic impact, constructability, and community disruption. Trenchless renewal proved more economical than open cut, with CompressionFit HDPE selected for its structural strength and minimal loss of hydraulic capacity.

**2:30PM “Innovative and Traditional Methods for Lead Service Line Identification: Opportunities and Challenges”**

CHRISTIAN LYTTLE, Assistant Engineer, Hazen and Sawyer, Manchester, NH

The LCRI poses significant challenges for many systems, as all service lines must be identified by 2037. This presentation will examine the benefits and limitations of traditional identification methods (hydro-excavation, visual inspection and records review). It will then explore the applicability, advantages, and drawbacks of alternative approaches, including machine learning, probes, water sampling, XRF, and metal detection. Each method will be evaluated using recent field data and/or experiences to highlight strengths and weaknesses and provide thoughts regarding general applicability.

**3:00PM “CVRWD Transmission Main Replacement”**

JUSTINE CARROLL, P.E., Vice President, Tata & Howard, Inc., Marlborough, MA

In the Fall of 2024, Cherry Valley and Rochdale Water District (CVRWD) experienced a main failure on the transmission main, resulting in a disruption in service. As a follow-up to the emergency response, CVRWD had completed an alternatives analysis to determine the most feasible way to replace approximately 6,000 linear feet of cross-country transmission main. Upon completion of the analysis, the design and permitting is being completed and funding sources investigated.

**3:30PM “Growth, Redundancy, and Resilience: Water Storage Solutions in Waterbury”**

RYAN NEILAN, P.E., Senior Project Manager, Apex Companies, LLC, Glastonbury, CT and STEVEN IGNATOWICH, P.E., Senior Project Engineer, Apex Companies, Glastonbury, CT

In 2022, Waterbury, CT, confronted three issues in their boosted service zone at the northern border of their distribution system. Their 1.5 million-gallon (MG) welded steel storage tank required extensive repairs, the boosted zone could not operate without storage, and population projections indicated a growing storage volume deficiency. Apex addressed the city’s storage needs by designing two 1.0 MG prestressed concrete tanks to increase storage capacity, create redundancy, and plan for the city’s future growth.

**Session 7**  
**Water Treatment II**  
**Wednesday Afternoon, 2:00PM – 4:00PM**

**Moderator:** CHARLOTTE ANDREWS, Water Resources Engineer, Kleinfelder, Boston, MA

**Assistant Moderators:** DEVON SMITH, P.E., Project Manager, Underwood Engineers, and EMMA PAGE, P.E. Design Engineer, Boston Water & Sewer Commission

**2:00PM “0–60 NTU in 6 Seconds: Process Selection Under Flashy Water Conditions”**

TYLER HUDSON, Associate and Drinking Water Practice Lead, Hazen and Sawyer, New York, NY and ROGER PARADIS, General Manager, Kennebunk, Kennebunkport, and Wells Water District, Kennebunk, ME

The Kennebunk, Kennebunkport & Wells Water District (KKW) Water Treatment Plant upgrade exemplifies the challenges utilities face as aging infrastructure and changing regulations drive process improvements. KKW evaluated five clarification technologies—Superpulsators®, Trident®, Plate Settlers, Dissolved Air Flotation (DAF), and Actiflo®. The KKW project demonstrates that successful clarification process selection requires a holistic, data-driven approach tailored to local conditions. These lessons learned offer a roadmap for utilities facing similar decisions, emphasizing the importance of critical evaluation and collaborative problem-solving in WTP upgrades.

**2:30PM “Is Ozone the Right Fit for your System?”**

MARC MORIN, P.E., Managing Principal/National Lead Municipal Tanks and Storage Facilities, Brown and Caldwell, Portsmouth, NH, and DENISE R. FUNK, P.E., BCEE, National Specialty Leader – Oxidation and Disinfection, Brown and Caldwell, Atlanta, GA

Ozone treatment has been implemented in water treatment for decades, at over 300 US facilities treating 1 MGD or more. But when is it needed and how much will it cost compared to other treatment options? This presentation outlines a strategic framework for assessing ozone’s suitability at any given site by examining ozone treatment benefits and considering factors such as water quality characteristics, system scale, hydraulic conditions, site limitations, and both capital and operating costs.

**3:00PM “Rapid Deployment of Temporary Membrane Treatment Trailer for Emergency Capacity”**

JOSH TEDDER, Project Engineer, Wright-Pierce, Topsham, ME

The City of Little Falls, New York, operates a water treatment plant utilizing slow sand filtration constructed in 2004 and originally designed for a capacity of 4.0 million gallons per day (MGD). Due to aging infrastructure, filter media degradation, and incidents of algae growth overloading filters, sustainable production capacity had declined to approximately 2.3 MGD. Because the plant could not sustain extended filter outages without exceeding capacity, rehabilitation of the slow sand filters had not been performed. To address this capacity shortfall and facilitate essential maintenance, the city implemented a temporary membrane treatment system. The membrane system will supplement the existing slow sand filtration process and integrate with downstream disinfection via ultraviolet disinfection and sodium hypochlorite. In addition, it will restore system reliability, provide operational flexibility to rehabilitate the existing filtration infrastructure, and serve as a critical step toward long-term water system improvements.

**3:30PM “Electrochemical Regeneration of Manganese Oxide - Coated Media”**

JOE GOODWILL, PhD, Associate Professor, University of Rhode Island, Kingston, RI

Manganese (Mn) in drinking water causes aesthetic, health, and operational issues. This study demonstrates electrochemical regeneration of MnO<sub>x</sub>-coated media as a reagent-free alternative to chemical oxidants. The reactor produced oxidants in situ, restoring adsorption capacity and achieving ~90% Mn(II) removal to below 0.02 mg/L. Regeneration was verified by surface oxidation-state analysis. Performance depended on Mn concentration, voltage, and alkalinity. This approach offers a practical, chemical-free method for Mn control in small, isolated, and point-of-use water systems.

**Session 8**  
**Young Professionals**  
**Wednesday Afternoon, 2:00PM – 4:00PM**

**Moderator:** KYLE HAY, P.E., National PFAS Lead, Senior Engineer, Brown and Caldwell

**Assistant Moderator:** ERIN HOLMES, P.E., Director of Engineering and Environmental Services, Pennichuck Water Work

**2:00PM “Progressive Design Build for Large Chemical Systems”**

CASTINE BERNARDY, PhD, Environmental Engineer, CDM Smith, Manchester, NH

For decades in the United States, municipal water and wastewater projects have delivered through a design bid build (DBB) methodology. Alternative delivery methods, such as Progressive Design Build, are becoming an increasingly popular means to build public infrastructure effectively and collaboratively on a faster schedule. This talk will cover details of large chemical system designs for drinking water treatment plants in Delray and Tampa, Florida, rated for 22 and 145 MGD peak flow, respectively.

**2:30PM “Thinking Ahead: How Forward-Thinking Design Provides Long-Term Flexibility”**

BEN POWERS, Engineer, Project Engineer, and ALSTON POTTS, Project Manager, Apex Companies, LLC, Woburn, MA

In response to declining source water quality at three groundwater supply wells, the Town of Easton engaged Apex to design and construct a new iron and manganese water treatment plant (WTP) in 2019. As Massachusetts began regulating drinking water PFAS concentrations, the town proactively included provisions for future PFAS treatment in the WTP design. Six years later, the town’s thoughtful, forward-thinking design resulted in long-term flexibility and significant cost savings as the town proceeds with PFAS upgrades at the WTP.

**3:00PM “Proactive PFAS Treatment by Sudbury Water District”**

SARA GUGLIELMI, P.E., Engineer, Project Engineer, Weston & Sampson, Reading, MA

The Sudbury Water District has taken proactive steps to address PFAS in drinking water. Although PFAS levels were below the Massachusetts threshold of 20 ppt, the district began implementing treatment systems using GAC at two of their water treatment facilities in 2020. Additionally, design work has begun for a new treatment facility to address PFAS from two other wells, further ensuring compliance with the NPDWR for PFAS. This presentation provides progress updates for this initiative, highlighting successes and lessons learned.

**3:30PM “Wellesley College PFAS Treatment Plant”**

WIKTOR TOMKIEWICZ, P.E., Project Engineer, Tata & Howard, Inc., Marlborough, MA

Wellesley College began their PFAS journey in 2022. Since then, they have installed a temporary treatment system using ion exchange resin and utilized the data collected to design a permanent water treatment system. The PFAS system and existing chemical feed equipment will be moved to a campus utility building. This requires installation of 1,000 feet of raw water pipe through an existing utility tunnel.

**Session 9**  
**Workforce and Operations**  
**Wednesday Afternoon, 2:00PM – 4:00PM**

**Moderator:** CHRISTINA JONES, P.E., Deputy Director of Water Operations, Springfield Water and Sewer Commission  
**Assistant Moderator:** JORDAN SPITZER-LONDON, Manager, Operations Systems & Efficiency, Aquarion Water Company of Connecticut

**2:00PM “What I Learned When the Training Wheels Came Off: An Engineer’s First 18 Months in Consulting”**

DUNCAN D’OLIMPIO, Environmental Engineer, CDM Smith, Manchester, NH

This presentation demonstrates an environmental engineer's professional development during 18 months in drinking water consulting, showcasing how early career engineers bridge academic knowledge to consulting. Attendees will learn how diverse assignments like troubleshooting a nanofiltration pilot at Riviera Beach, coordinating submittals on a Connecticut bridge, and supervising field crews accelerate technical and professional growth. Participants will see the challenge of managing timelines through the lens of a new engineer, revealing that patience is as crucial as engineering and design.

**2:30PM “Smooth Operators: How Utilities can Deal with the Aging Workforce”**

JAY SHEEHAN, P.E., National Business Development Leader O&M, Woodard & Curran, Portland, ME

There are more than 10,000 job openings for water and wastewater treatment plant operators annually, created largely due to current staff retiring. This creates a twofold problem for utilities coast to coast – the generation leaving has a wealth of institutional knowledge with no one to pass it on to because there is a lack of operators entering the workforce to replace them. This presentation explores the urgent need for succession planning and outlines a framework for actionable solutions.

**3:00PM “Water System Startups - Working Together with Operators”**

MOLLIE CALIRI, Project Engineer, Apex Companies, Quincy, MA

The startup phase for a new water treatment plant is always a chaotic and exciting time. Working with and listening to the operators, being present, and showing care matters. Troubleshooting issues on site alongside the operations staff demonstrates commitment to getting things right, interest in the project, and lessons learned for the future. From equipment locations to control logic to screen layout, every aspect should be designed with the operator in mind.

**3:30PM “Data Integrity for Informed Operational Decisions”**

GRACE RONCA, EIT, Environmental Analyst III, MassDEP Drinking Water Program, Boston, MA

In today’s data-driven world, it is increasingly important to collect good quality data that is representative of a water system’s performance. Data integrity, a key component of water system optimization, is the process of maintaining and ensuring accurate and consistent data. Data integrity can help water systems collect reliable data and lead to informed operational decision-making and improved system performance. This presentation will discuss the value of data integrity to optimize water system performance and data integrity strategies and processes.

**Session 10**  
**Corrosion Control**  
**Wednesday Afternoon, 2:00PM – 4:00PM**

**Moderator:** PATRICIA KELLIHER, P.E., Associate, CDM Smith, Manchester, NH

**Assistant Moderator:** ALAYNA BIGALBAL, P.E., Civil Engineer, Stantec

**2:00PM “Preparing for LCRI Non-Lead Service Line Validation Requirements”**

JESSICA SIBIRSKI, Environmental Analyst, and JASMINE STRANGIS, Environmental Analyst, Massachusetts Department of Environmental Protection, Boston, MA

MassDEP will be presenting an overview of the LCRI Non-Lead Service Line Validation Requirements. This presentation will cover validation requirements such as the accepted verification method(s) for validation, which service lines must be validated, which service lines may be excluded from validation, and the deadline that systems must meet to be in compliance with the LCRI. MassDEP will cover the recommended steps PWS should take to prepare for these requirements before November 1, 2027.

**2:30PM “Better Customer Water Sampling Education Today and in Preparation for the LCRI”**

COLLEEN HEATH, P.E., PMP, Project Technical Leader, CDM Smith, Boston, MA

This presentation provides an overview of recommended and required sampling protocols to maintain compliance with the Lead and Copper Rule Revisions and prepare for the Lead and Copper Rule Improvements. As part of the presentation, an educational video demonstrating these protocols, developed by the Corrosion Control Committee, will be premiered. These and other materials developed by the committee could be used by public water suppliers in support of their sampling programs.

**3:00PM Utility Panel – “Innovating Ahead of 2027: Utility Approaches to Lead and Copper Rule Improvements”**

**Panelists:** CHASE BERKELEY, P.E., Chief of Operations, Boston Water and Sewer Commission, Boston, MA, ELAINE SISTARE, P.E., BCEE, Town Administrator, Town of Putnam, Putnam, CT, and TC SCHOFIELD, P.E., District Engineer, Brunswick Topsham Water District, Topsham, ME

**Moderator:** PATRICIA KELLIHER, P.E., Associate, CDM Smith, Manchester, NH

This panel explores proactive utility strategies for Lead and Copper Rule Improvements ahead of the 2027 deadline. Panelists will share approaches to minimizing unknown service lines in their inventories, highlighting their planned methods including potholing, customer identification, and machine learning, offering insights into innovative compliance methods. The discussion will also address plans for meeting non-lead validation requirements. Attendees will gain practical perspectives from utilities leading the way in early compliance and risk mitigation for lead and copper regulations.

**Diversity & Allyship Breakfast Technical Session**  
**Thursday morning, April 2, 2026**  
**8:00AM – 9:00AM**

**Panelists:** SARA MALONEY, Marketing Research Coordinator, AqueoUS Vets, Leicester, MA, LAUREN UNDERWOOD, P.E., Division Manager, Apex Companies, LLC, Quincy, MA, and JASON MCCARTHY, Water Treatment Plant Manager, Town of Danvers, Danvers, MA

**Moderator:** KATIE PORTER, P.E., ENV-SP, Northeast Drinking Water Practice Leader, Brown and Caldwell, New York, NY

**Assistant Moderator:** AMY COPPERS COSTANTINO, P.E., Technology Leader I, Wright-Pierce

The session will examine how effective adaptation tools relates to utility operations. The discussion will include examples of different types of change, including structural or strategic, administrative, cultural, and technological, and how a more inclusive environment benefits all employees. Participants are encouraged to share their personal experiences and observations on how to support these goals and/or how they have been supported in the past that have strengthened their career progression.

**Session 11**  
**Customer Service**  
**Thursday Morning, 9:00AM – 11:00AM**

**Moderator:** CHRISTOPHER DZIDEK, P.E., CCM, ENV SP, Program Manager - Design, Tunnel Redundancy Dept., Massachusetts Water Resources Authority

**Assistant Moderator:** JUSTIN RICHARDSON, GIS and Asset Manager, Kennebunk, Kennebunkport & Wells Water District

**9:00AM “Lead and Copper Rule Revision”**

GLORIA WILLIAMS, Customer Service Manager – Field Service Office, and NILDA GARCIA-DIAZ, Assistant Customer Service Manager, Springfield Water and Sewer Commission, Springfield, MA

New regulations and technology are quickly changing the way utilities must engage and communicate with customers. From new Lead and Copper Rule Revision (LCRR) notifications to advanced metering infrastructure (or “smart meters”), customer service representatives must stay up to date on the latest issues and advances in water while maintaining clear and consistent messaging. This panel provides insight on how various utilities have trained and educated their customer service teams to pivot and respond to new customer outreach and services.

**9:30AM “Keeping It Clear: LCRR Conversations with the Public”**

NICHOL FIGUEIREDO, CEO, Capital Strategic Solutions, LLC, Hudson, MA

This presentation is designed to help water professionals prepare for a Town Hall Talk on the Lead and Copper Rule Revisions (LCRR)—without losing sleep (or their sense of humor). The focus is on anticipating customer concerns, communicating clearly and confidently, and navigating challenging conversations. It emphasizes practical strategies for explaining technical concepts in plain language, addressing health-related questions, and maintaining public trust, all while keeping the discussion productive—even when emotions (or misinformation) start to rise.

**10:00AM “Beyond a Meter Reading: The AMI Advantage”**

JOHN-PAUL NOE, Civil Engineer, Weston & Sampson Engineers, Inc., Foxborough, MA

Discover how a community transformed its water system with a cutting-edge Advanced Metering Infrastructure upgrade—from drive-by reads on aging meters to cellular technology with ultrasonic meters. This session discusses key milestones, implementation strategies, lessons learned, and surprising regulatory advantages, including proactive alignment with LCRR/LCRI requirements. Learn how to drive operational efficiency through AMI and transparency through a customer-facing portal in a rapidly evolving technological landscape.

**10:30AM Panel: “Being Prepared for Customer Inquiries that Result from New Initiatives”**

Panelists: VYCTORIA WALSH, MBA, Utility Billing & Meter Operations Manager, Town of Lexington, Lexington, MA, GLORIA WILLIAMS, Customer Service Manager – Field Service Office, Springfield Water and Sewer Commission, Springfield, MA, NILDA GARCIA-DIAZ, Assistant Customer Service Manager, Springfield Water and Sewer Commission, Springfield, MA, and JOHN-PAUL NOE, Project Engineer, Weston & Sampson, Foxborough, MA

Moderator: MEGHAN CONDON, Project Manager, Wright-Pierce, Marlborough, MA

New technology and more data will result in an increase in customer calls and concerns. This discussion will center around how to prepare your staff and community for system upgrades and initiatives that a water system may be embarking on. The panelists will take on questions and share lessons learned regarding customer concerns that are a result of AMI upgrades, customer portals for billing and water usage, and LCRR data gathering.

**Session 12**  
**Management and Finance**  
**Thursday Morning, 9:00AM – 11:00AM**

**Moderator:** REBECCA PAUSTIAN, P.E., Project Engineer, Woodard & Curran

**Assistant Moderator:** RENEE LANZA, P.E., Senior Consultant, GEI Consultants

**9:00AM “Making the Grade: How Capital Improvement Plans Create Sustainable Water Systems”**

MELISA AVDIC, Engineer, Woodard & Curran, Andover, MA

The 2025 ASCE Report Card for America’s Infrastructure gave drinking water a C-, emphasizing the industry's need for funding and building more resilient infrastructure. This presentation will demonstrate how data and modeling can inform the development of a sound Master Plan and substantiate Capital Improvement Plans for water utilities in New England. The presentation will further examine how these planning documents better position communities for state and federal funding opportunities, effectively reducing the burden on ratepayers.

**9:30AM “From Source to Solution: How EPA Technical Assistance Empowers Communities”**

MAUREEN CROWLEY, Project Manager, AECOM, Rocky Hill, CT

EPA’s Water Technical Assistance (WaterTA) Engineering Support Services offer no-cost expertise to help communities plan and apply for funding. Through this assistance, AECOM has partnered with communities to identify infrastructure needs and recommend solutions for drinking water, wastewater, and stormwater projects. AECOM worked with two communities in Maine (among others, nationally) to improve the water distribution and treatment systems. AECOM evaluated alternatives, developed recommendations, and summarized the results in reports used to request funding to implement the improvements.

**10:00AM “Revitalizing Infrastructure, Revitalizing Communities”**

KATIE PORTER, P.E., ENV-SP, Northeast Drinking Water Practice Lead, Brown and Caldwell, New York City, NY

This presentation will highlight the goals and strategies developed and share some early wins and positive impacts that the Philadelphia Water Department (PWD) has already observed as a result of stakeholder engagement as they embark on implementation of approximately 400 projects, collectively known as the Water Revitalization Plan (WRP). Participants will understand how to balance technical details of projects with other customer concerns and tools for moving community members through the ladder of engagement towards being ambassadors.

**10:30AM “An Update to Kleinfelder’s New England PFAS Treatment Regional Survey”**

KIRSTEN RYAN, P.G., Drinking Water Practice Lead-New England, Kleinfelder, Boston, MA and CHARLOTTE ANDREWS, Water Resources Engineer, Kleinfelder, Boston, MA

In early 2023, Kleinfelder performed a survey of New England community water system managers to gather data on PFAS treatment implementation. The cost data gathered supported national policy advocacy. Three years later, many more systems are up and running; and with EPA MCL compliance on the horizon, many others are in process. We will present an update on the 'state of the NE states' relating to PFAS media type, capital and operation costs, as well as lessons learned.

**Session 13**  
**Distribution III**  
**Thursday Morning, 9:30AM – 11:30AM**

**Moderator:** JOE POPIELARCZYK, P.E., Senior Project Manager, Tighe & Bond, Inc.

**Assistant Moderators:** LINDLE WILLNOW, P.E., Associate Vice President, Discipline Leader, Hydraulic Modeling, AECOM and CHRISTOPHER DZIDEK, P.E., CCM, ENV SP, Program Manager - Design, Tunnel Redundancy Dept., Massachusetts Water Resources Authority and KEVIN M. FLOOD, P.E., Associate, Fuss and O'Neill, Hartford, CT

**9:30AM “A Salty Situation - Water Main Replacement in a Coastal Hampton Neighborhood”**

MEGHAN TRAHAN, Project Engineer, Tighe & Bond, NH, and AMANDA KEYES, P.E., Manager of Capital Delivery, Aquarion Water Company, Bridgeport, CT

A unique and challenging water main design and construction project achieved replacement of ~1,500 feet of existing AC pipe with new PVC C900 pipe in a small neighborhood in Hampton, NH, surrounded by wetlands. Local and state permitting and innovative construction management strategies for dewatering were utilized, including a temporary dam and frac tank. Through a collaborative partnership with the Town of Hampton, the water main was designed around future drainage improvements and was constructed in freezing winter conditions.

**“Processing Potholing: Insight into Methuen’s Service Line Inventory Investigation Efforts”**

ZACHARY AARONSON, P.E., Technical Manager, Woodard & Curran, Canton, MA, and MEGAN WINTOUR, Acting Treatment Superintendent, City of Methuen, Methuen, MA

After development of its initial service line inventory from a detailed review of available records, the City of Methuen leveraged pneumatic air and hydro vacuum excavation to eliminate unknowns and confirm existing service line materials to supplement its initial inventory. This presentation provides a background of the coordination, procedures, cost options and methods utilized to perform a successful potholing program in the City. Additionally, a summary of lessons learned will be provided to provide insight to other utilities who are considering performing potholing for service line investigations or lead and copper rule improvements non-lead validation efforts.

**10:30 AM “Town of Ayer, MA Supplementary Supply Feasibility Study”**

ELLA DEVAULT, EIT, Water Resources Engineer, Kleinfelder, Boston, MA, and KIMBERLY ABRAHAM, Water and Sewer Superintendent, Town of Ayer Public Works, Ayer, MA

The Town of Ayer, MA, is seeking to supplement their current water supply to account for population growth and development, climate impact, and additional quality standards. The town currently maintains three interconnections with a neighboring town and seeks to evaluate the feasibility of an additional interconnection through a nearby community or the proposed expanded MWRA Metrowest Water Supply System. For this evaluation, the focus is an updated hydraulic model and an analysis of interconnection scenarios, projected 40-year demand, and treatment data.

**11:00 AM “Lead Service Line Inventory”**

GABE JAQUITH, Project Engineer, KATIE PELLETIER, Project Engineer, and DESMOND KAGER, Project Engineer, Underwood Engineers, Concord, NH

Underwood Engineers is one of four consultants selected by the New Hampshire Department of Environmental Services (NHDES) to assist small and medium-sized public water systems with assembling their lead service line inventories. Underwood was assigned 175 communities with a combined total of approximately 20,000 service lines. We used ArcGIS Pro and Python to tackle the project. Because we are local to the area, we had a substantial amount of data available. Tracking communications was a big effort.

**Session 14**  
**Water Treatment III**  
**Thursday Morning, 9:30AM – 11:30AM**

**Moderator:** JIHYON IM, P.E., Principal Environmental Engineer, CDM Smith

**Assistant Moderator:** THOMAS RENAUD, P.E., CAPM, Project Manager, Massachusetts Water Resources Authority and ERIN HOLMES, P.E., Director of Engineering and Environmental Services, Pennichuck Water Works, Inc., Nashua, NH

**9:30AM “From Obsolete to Optimized: Upgrading Water Treatment for Three Towns”**

JON GREGORY, Vice President, Tata & Howard, Inc., Marlborough, MA

Faced with an aging ultrafiltration system and operational issues, the Mattapoissett River Valley Water District upgraded its regional water treatment facility serving Fairhaven, Marion, and Mattapoissett. The District procured and installed a new ultrafiltration system for iron and manganese removal and an ultraviolet disinfection system achieving 4-log virus inactivation. This presentation outlines the challenges encountered, the implemented solution, and the construction process. Funding was provided through the Drinking Water State Revolving Fund (DWSRF) Program’s emergency and construction phase support.

**10:00AM “Managing Disinfection By-Product Formation at Norwich Public Utilities Deep River and Stony Brook Water Treatment Plants”**

JUSTIN BLYTHE, Global Principal for Drinking Water Quality, Jacobs Engineering, Atlanta, GA

This study supported Norwich Public Utilities in managing elevated disinfection by-product (DBP) formation at two surface water treatment plants by evaluating alum-based coagulation processes. Water quality data—raw, settled, and finished—were analyzed alongside distribution system DBP concentrations. Correlations between key parameters and DBP formation were identified for use as DBP formation predictors and to guide operations. Bench-scale testing proved valuable for improving organic carbon removal. Findings offer practical insights for utilities seeking DBP regulatory compliance and managing treatment performance.

**10:30AM – “Maintaining Operations at the West Parish Filters for Construction of a new 65 MGD WTP”**

JACOB CANTOR, Engineer, Associate, Hazen and Sawyer, Manchester, NH, and CHRISTINA L. JONES, P.E., Director of Water Operations, Springfield Water and Sewer Commission, Westfield, MA

The Springfield Water and Sewer Commission (Commission) is performing modifications to their existing infrastructure to prepare a project site for the construction of a new, 65 MGD Water Treatment Plant. The Commission engaged in extensive planning to relocate critical utilities while maintaining operations at their existing treatment facilities. The presentation reviews these planning efforts, including hydraulic analysis and construction sequence development, and how this planning allowed the project team to adapt to issues during construction.

**11:00AM “MCC Mongolia Bulk Water Supply Project”**

WILLIAM CLUNIE, P.E., BCEE, Associate Vice President and Technical Leader, AECOM, Chelmsford, MA

Millenium Challenge Corporation, an independent US aid agency, funds infrastructure projects in developing countries. MCC’s Mongolia Bulk Water Supply project addresses water shortages in Mongolia’s capital city, Ulaanbaatar. Groundwater sampling and modeling indicated ground water is influenced by the highly polluted Tuul River. A 24-mgd Advanced Water Purification Plant was designed as a ground water under direct influence facility. The presentation focuses on the treatment plant and highlights the technical and cultural challenges and lessons learned throughout this multiyear program.

**Session 15  
Regulatory  
Thursday Morning, 9:30AM – 11:30AM**

**Moderator:** ALAYNA BIGALBAL, P.E., Civil Engineer, Stantec

**Assistant Moderator:** DEVON SMITH, P.E., Project Manager, Underwood Engineers

**9:30AM – “Corrosion Control Meets PFAS: Managing Treatment Changes Under the LCRI”**

LIZ GARVEY, P.E., Senior Process Engineer, Stantec, Burlington, MA

The LCRI lowered the lead action level and expanded corrosion control study requirements. Beyond exceedances, systems must now evaluate based on new sources and long-term treatment changes (that includes PFAS treatment!!) for corrosivity impacts. This presentation outlines how to conduct corrosion control studies, assess various PFAS treatment methods for corrosivity, and demonstrate compliance. Attendees will learn how to determine when optimized corrosion control treatment (OCCT) is necessary and how to implement it, while navigating evolving regulatory expectations.

**10:00AM “Exploring Untargeted PFAS While Decoding Dark PFAS: A Practical Framework for Water Utilities”**

SOLIDEA BONINA, PhD, PFAS Lead - Technical Expert, GEI Consultants Inc., Chicago, IL

Untargeted PFAS analysis can detect thousands of compounds, but most pose minimal environmental risk. This presentation introduces a defensible workflow that filters out low-toxicity PFAS, like inert fluoropolymers and gases, while prioritizing compounds with regulatory, toxicological, and mobility relevance. By retaining full datasets and applying adaptive filters, utilities gain actionable insights without data overload. The result is a focused, flexible approach that supports treatment decisions and regulatory compliance as PFAS science and standards evolve.

**10:30AM “What is UV-254? The Powerful and Easy Water Quality Parameter You Aren’t Testing For”**

ANNE MALENFANT, P.E., PMP, Principal Project Manager, CDM Smith, Boston, MA

Tired of waiting 2 weeks for an outside laboratory to produce TOC results? What if there was a simple desktop analysis, requiring only a grab sample, no reagents and provides a result in 10 seconds? There is! UV254 measures organic matter in water, and specifically precursors for DBPs and chlorine demand. With changing weather patterns and increasing regulations (such as the upcoming DBPR revisions), this powerful parameter can provide valuable water quality insight and help you be prepared!

**11:00AM U.S. EPA Regulatory Updates**

MICHELLE JENKS, Environmental Engineer, ANDREA TRAVIGLIA, Senior Drinking Water Engineer, EPA, Boston, MA

EPA Region 1 staff will present regulatory updates on the PFAS and Lead and Copper Improvements rules, technical assistance initiatives, EPA funding opportunities, and 2026 priorities.

Thursday afternoon, April 2, 2026

Session 16

Distribution and Storage

Thursday Afternoon, 1:30PM – 3:30PM

**Moderator:** LINDLE WILLNOW, P.E., Associate Vice President, Discipline Leader, Hydraulic Modeling, AECOM

**Assistant Moderators:** TARA MCMANUS, P.E., Vice President, Weston and Sampson, and JOE POPIELARCZYK, P.E., Senior Project Manager, Tighe & Bond, Inc.

**1:30PM “Modernizing Water Infrastructure Management through GIS and Asset-Based Planning in Middleborough, MA”**

TITO SANCHEZ, GISP, Sr. GIS Project Manager, BETA Group Inc., Lincoln, RI

BETA partnered with the town of Middleborough, MA, to transform how the community manages its water infrastructure using a modern, GIS-driven approach. Through data reconciliation, field verification of 4,000 assets, and the implementation of ArcGIS Online as a centralized system of record, the town now has a living, interactive map of its water system. This presentation demonstrates how MA municipalities can leverage Asset Management Grant funding to turn fragmented data into powerful, decision-making tools for smarter investments and long-term resilience.

**2:00PM “Resilience & Sustainability Through Strategic Water Storage Asset Management”**

JOE DUNCAN, P.E., General Manager, Champlain Water District, South Burlington, VT

Drinking water infrastructure faces significant risk without proactive asset management and investment in maintenance, rehabilitation, and replacement. Accurate condition data enables utilities to prioritize maintenance and capital improvements, strengthening resilience and sustainability. Since 2010, Champlain Water District (CWD) has implemented an asset management program for its 21 water storage tanks, evolving from coatings maintenance to a comprehensive strategy addressing safety, water quality, and overall system integrity. This presentation will highlight the program’s development, implementation, and anticipated future refinement.

**2:30PM “Work Smarter, Not Harder: Optimizing Distribution Operations and Mitigating Non-Revenue Water with Technology”**

LIAM FLAHERTY, SUP Northeast Manager, EJP, Gardiner, ME, and JACOB PICCIONI, Northeast US Solution Manager, Kamstrup, Elizabethtown, NJ, and RON BAKER, Water Department Meter Technician, City of Medford, Medford, MA

Learn how utilities have discovered that integrated acoustic solutions within water meters, yes water meters, are not only detecting leaks on service connections but on water main lines as well - at distances up to a half mile! Acoustic noise signatures record and proactively alert utilities of both existing and new or growing leaks within their entire distribution system. This solution includes no additional wires or radio systems and monitors 24/7.

**3:00PM “Do More with Less: Proven Hydrant Strategies Every Utility Can Implement”**

NICK SIGELAKIS, Head of Sales & Business Development, Spartan Fire Hydrants, Oceanside, NY

Doing more with less isn’t a slogan, it’s survival. Across the industry, utilities are improving performance through simple, proven changes that anyone can implement. This session shares real-world examples of how smarter materials, design improvements, and maintenance strategies are reducing water loss, cutting service calls, and extending asset life. Attendees will leave with practical tools and success stories they can apply immediately to save time, lower costs, and strengthen the reliability of their water systems.

**Session 17**  
**SCADA & Operational Technology**  
**Thursday Afternoon, 1:30PM – 3:30PM**

**Moderator:** KAREN GRACEY, P.E., Co-President, Tata & Howard

**Assistant Moderator:** CHRISTINA JONES, P.E., Deputy Director of Water Operations, Springfield Water and Sewer Commission

**1:30PM “Small Utility, Big Data: How the Town of Maynard Balances Cloud Innovation with OT Security”**

JULIA FLANARY, AICP, Environmental Compliance and Data Manager, Water and Sewer Division, Town of Maynard, MA, and MIKE GREELEY, P.E., Data Management Practice Lead, Stantec, Burlington, MA

Like many small utilities, the town of Maynard, MA, finds that their limited resources are increasingly consumed by regulatory demands, which can limit their ability to take on transformative, forward-thinking projects. In response, the town has begun a digital transformation journey intent on maximizing their return on investment in the digital water space. This plan includes establishing a data classification framework, enabling the use of cost-effective cloud-based information systems while preserving strict cybersecurity controls for sensitive operational data.

**2:00PM “Digitizing Daily Routines: The West Parish Filters Operators’ Rounds Application”**

VANCE CANNELLA, Business Intelligence Analyst, and CHRIS HANECHAK, Senior Operator, Springfield Water and Sewer Commission, Agawam, MA

As part of a program to streamline data collection at the Springfield Water and Sewer Commission, its Business Intelligence and Water Operations teams developed an application to enable mobile digital collection of treatment plant data. By digitizing data collection, this application replaced a handwritten process that involved the daily entry of hundreds of data points. Modernizing this process has reduced risk for human error, increased efficiencies and collaboration, and enabled more robust data trending to support future treatment adjustments.

**2:30 PM “OT Data Secure Transmission”**

BEN SCOTT, National Director for Public Sector Critical Infrastructure, Fortinet, Columbus, OH

The presentation will describe how we connected two water plants together securely using internet connectivity.

**3:00 PM Panel Discussion**

JULIA FLANARY, AICP, Environmental Compliance and Data Manager, Water and Sewer Division Town of Maynard, MA, MIKE GREELEY, P.E., Data Management Practice Lead, Stantec, Burlington, MA, VANCE CANNELLA, Business Intelligence Analyst, CHRIS HANECHAK, Senior Operator, Springfield Water and Sewer Commission, Agawam, MA, and MARTIN DIAZ, OT Alliances, Fortinet, CA

The presenters will discuss current trends in SCADA and Operational Technology, data management; and how utilities categorize their operational data and safely shuffle it around to the software packages that need it to provide decision making value. The panelists will also answer additional questions related to their presentations.

**Session 18**  
**Safety / Emergency Preparedness**  
**Thursday Afternoon, 1:30PM – 3:30PM**

**Moderator:** STEVE SOITO, P.E., Engineer Manager, Pawtucket Water Supply Board  
Moderator: RENEE LANZA, P.E., Senior Consultant, GEI Consultants

**1:30PM “Triple Pump Failure: Incidents Review and Lessons Learned”**

SOFIA SAVOCA, EIT, CAPM, Engineer II, Pennichuck Water Works, Nashua, NH

In Summer 2025, three of Pennichuck Water Works’ (PWW) large pumps failed – including an intake pump that had been installed in 2021. After the initial emergency repairs were complete, PWW staff began an investigation on how to better prepare for future pumping equipment failures, as well as how to further evaluate the condition of the remaining pumps. This presentation will review PWW’s incident response and cover the timeline for systematic improvements implemented based on lessons learned.

**2:00PM “OSHA Heat Injury and Illness Prevention 1910.148”**

SCOTT PATRICK SMITH, CSP, LpD., Corporate Safety & Health Director, Tighe & Bond Westfield, MA

Hear a detailed analysis of the proposed OSHA Heat Injury and Illness Prevention standard (1910.148), currently under review. The presentation will cover current climate evidence and measurable changes. It details OSHA's rulemaking process and the rationale for this new regulation. Key terminology will be clarified, heat-related illnesses and injuries will be explored, and the mandatory Heat Injury and Illness Prevention Plan (HIPP) requirements will be examined.

**2:30PM “Workplace Violence Prevention/Active Assailant Response”**

DONALD SCHUMACHER, Certified Protection Professional (CPP), Critical Infrastructure CPP, Consultant, Ivoryton, CT

This presentation will start with identifying the potential for workplace violence and each step on a person's pathway to violence. The pathway is a model of the sequential escalation to an attack: A Grievance, Violent Ideation, Research and Planning, Preparation, Probing and Breaching, Attack. Each stage of the pathway will be discussed in detail along with thoughts on how each step could be stopped. The attack stage will also include recommendations and best practices for surviving an active assailant.

**3:00PM “Health & Safety Compliance Inspections at WTPs - Effective Safety Programs & Avoiding Regulatory Pitfalls”**

MICK BROWN, Health and Safety Manager, Weston & Sampson Engineers, Inc., Reading, MA

We conducted WTP Health & Safety and regulatory compliance inspections for municipal clients in response to Massachusetts Department of Labor Standards (DLS) corrective actions and OSHA regulatory deficiencies. We helped municipalities develop effective Health & Safety Programs and Hazardous Materials Communication Programs addressing real and potential hazards operators face with chemical treatment, responded to DLS Corrective Action letters, conducted required safety training, and build a safer working environment. This presentation highlights common workplace hazards/regulatory deficiencies and how to correct/avoid them.

**Session 19**  
**Groundwater**  
**Thursday Afternoon, 1:30PM – 3:30PM**

**Moderator:** DEVON SMITH, P.E., Project Manager, Underwood Engineers

**Assistant Moderator:** KEVIN FLOOD, P.E., Associate, Fuss & O'Neil

**1:30PM “Town of Westerly, RI Well Site PFAS Preliminary Evaluation”**

MEREDITH SULLIVAN, Project Manager, Jacobs, Boston, MA

The Town of Westerly's drinking water system is supplied by seven well sites, each ranging between 0.33 to 2.09 MGD. Westerly recently detected PFAS compounds in the well system. To achieve compliance with the EPA's finalized MCLs, a preliminary evaluation of treatment options was performed, which included conceptual cost estimates and layouts. The evaluation compared GAC and IX pressure vessel systems for each of the well stations, focusing on site constraints, sewer availability, rinse and backwash requirements, and CAPEX/OPEX costs.

**2:00PM “Treatability of Elevated Lithium in Groundwater Sources for Two Tribal Communities”**

BRYAN SADOWSKI, P.E., Technical Specialist, AECOM, Manchester, NH

The Pueblo of Laguna and the Pueblo of San Felipe recorded some of the highest concentrations of lithium in their groundwater sources during the UCMR5 sampling. Both communities have compounding water quality challenges from their sources including elevated TDS. Using data provided by the Tribal communities, data collected during study, and best practices from the industry, an alternative analysis was developed followed by a life-cycle cost estimate. The evaluation included several alternatives including available treatment technologies and source water management.

**2:30PM “A Unique Solution in NH Results in a Shared Water Supply Saving Peterborough and Jaffrey Money and Resources”**

PETER PITSAS, Senior Project Manager, and KEITH PRATT, President, Underwood Engineers, Inc., Portsmouth, NH

This presentation will show how the Towns of Jaffrey and Peterborough cooperated to develop, fund, construct and operate a shared water supply to supplement their existing supplies. The wells and treatment facility, which went online in 2025, are jointly owned, and costs are shared equally. This unique approach provides a template for other communities to work together to fulfill a need while reducing costs.

**3:00PM “Whitcomb Avenue Wells Water Treatment Plant – Turning a Simple Wellfield Replacement into a Comprehensive Treatment Plant”**

DEREK BELANGER, P.E., Senior Engineer, Tighe & Bond, Worcester, MA

What began as a simple wellfield replacement in Littleton, MA, evolved into a first-of-its-kind comprehensive water treatment solution. Initially designed to remove iron and manganese from the new Whitcomb Avenue wells, the discovery of PFAS at the Spectacle Pond Well prompted a pivot toward a 1.8-MGD combined facility using biological filtration and GAC contactors. This presentation explores the project's evolution and shares performance insights from facility operations since 2023.

**Session 20**  
**Water Resources**  
**Thursday Afternoon, 1:30PM – 3:30PM**

**Moderator:** EMMA PAGE, P.E. Design Engineer, Boston Water & Sewer Commission

**Assistant Moderators:** CHARLOTTE ANDREWS, Water Resources Engineer, Kleinfelder, Boston, MA

**1:30 PM “Hurricane Helene’s Asheville Aftermath – Water Treatment and Community Recovery Reflections”**

ALAN LEBLANC, P.E., BCEE, Senior Vice President, CDM Smith, Manchester, NH

Hurricane Helene dropped over 24 inches of rain in Western North Carolina in September 2024. The unprecedented event, a 1000-year storm, led to widespread loss of life and property throughout the region. Asheville’s North Fork Reservoir was subjected to significant solids being carried down from its mountainous watershed, leading to turbidity values exceeding the direct filtration plant’s solids removal capabilities. This paper will detail the emergency response efforts to restore potable water service to the community.

**2:00PM “Non-Revenue Water Reduction Challenges and Technologies”**

KEN SCHONE, Director of Sales - Distributor Relations, Orbis Intelligent Systems, San Diego, CA

This session addresses the growing challenges of Non-Revenue Water (NRW) in the face of drought, aging infrastructure, and workforce shortages. It highlights emerging technologies—with a focus on unmanned acoustic leak detection innovations, and proactive strategies—that help utilities reduce water loss and improve operational efficiency. A comparative overview of valve-based and hydrant-based monitoring solutions provides practical insights for sustainable NRW management.

**2:30PM “Enhancing Drought Resilience and Operational Efficiency through Forecast-Based Management in the Worcester, MA, Water Supply System”**

ZOE WARREN, EIT, Assistant Engineer, ELIOT MEYER, PhD, Senior Principal Scientist, Hazen and Sawyer, Boston, MA, and KEVIN M. SCHERER, Water Supply Manager, Reservoir Division, City of Worcester Department of Public Works, Worcester, MA

Effective drought triggers provide sufficient time to take needed action while minimizing false alarms. This presentation illustrates a forecast-based drought management framework using historical hydrology (1920–2025), real-time conditions, and simulation modeling for Worcester’s water supply to create forecast-informed pumping rules—improving refill reliability and reducing shortages. The simulation tool (OASIS) was also used to refine safe yield estimates. OASIS can generate easy-to-read dashboards showing ongoing forecasts, long-term plans, and key decisions, helping everyone involved stay informed and respond quickly.

**3:00PM “Oxygen Generation Breathes New Life into Existing Aeration Apparatus in a Large Connecticut Drinking Water Reservoir”**

BENJAMIN BURPEE, PhD, CLM, Limnologist/Senior Technical Specialist, GZA, Manchester, CT, and WILLIAM HENLEY Aquatic Resource Scientist, South Central Connecticut Regional Water Authority, New Haven, CT

The SCCRWA Lake Watrous reservoir (~700 million gallons) is actively managed by one hypolimnetic and two-layer aeration systems initially installed in 2015. Despite consistent aeration, oxygen demand in Watrous increased over time, causing DO declines and manganese spikes. To address this, GZA and SCCRWA designed and installed a supplemental oxygen generator in 2025, boosting oxygen input by ~300 kg/day. The augmented system maintained 7–8 mg/L DO and limited manganese to 0.3 mg/L, demonstrating effective, affordable reservoir management.