MWUA
Maine Water Utilities Association
Organized 1925

Wednesday February 5th, 2025 Session Itinerary

7:00 – 8:00
Registration & Breakfast

Opening Session – 8:00
Comedian Juston McKinney
He has appeared on numerous Comedy Central Shows, the Tonight Show, Conan O'Brien, and even a Showtime Special with Rob Gronkowski!

9:15 – 10:15

Session # 1	**Management, Leadership, and Succession Planning** **Presented by Jim Courchaine** Workforce planning has the goal of having the right people, across the organization, in the right place at the right time. Succession Planning is an important subset of workforce planning. Its goal is the same, but its focus is specifically on having the right leadership and key personnel in place at every level of the organization.
Sesson # 2	**More than PFAS and LCRR, Don't Forget About MDBP: The Proposed Rule is Coming - presented by Anne Malenfant, PE, CDM Smith** Remember the Stage 2 Disinfection Byproduct Rule (DBPR) and Long-Term 2 Enhanced Surface Water Treatment Rule (LT2)? The EPA is required to periodically review regulations to identify opportunities for increased public health protection – and they have found eight candidates related to the Microbial and Disinfection Byproducts Rules (MDBP). Big changes could be to strengthen the EPA's goal of providing microbial protection while minimizing exposure to DBPs. Do you struggle to maintain a chlorine residual in your distribution system? Have organics in your finished water? Have a storage tank? Heard the term "Legionella"? Possible MDBP changes to the DBPR will be reviewed to help you be prepared.
Session # 3	**Introduction to Utilizing EPANET Simulations Versus a System Wide Hydrualic Model - presented by Marcus Knipp, PE, Maine Water Company** This brief introduction to EPANET explores the methodologies for beginners seeking to utilize the EPANET hydraulic modeling program, a free software tool provided by the Environmental Protection Agency (EPA) for simulating water distribution systems. The class will outline the significance of EPANET in urban water management and its role in promoting efficient water resource

	utilization and highlight the fundamental concepts of hydraulic modeling and the importance of understanding water flow dynamics for effective infrastructure planning and management. The class will provide a presentation designed for novice users, which includes comprehensive tutorials and case studies aimed at facilitating practical learning experiences. The hope of the class will be to significantly improve user proficiency and confidence in applying EPANET, ultimately contributing to more informed decision-making in water management practices.
Session # 4	**De-Escalation and Active Assailant Awareness Training – presented by Jake Kocek, US Department of Homeland Security** The de-escalation is best for public facing staff with potential interaction with disgruntled customers/visitors; the active assailant training is broader and a little more comprehensive and involved.
Session # 5	**Sebago Clean Waters & Natural Water Treatment - presented by Paul Hunt, Portland Water District** Decades ago the District realized two things, one really good and one really bad. First, it was clear that the quality of Sebago Lake water is exceptional because of the natural filtration provided by the healthy forests that carpet most of the watershed. That's good. As the same time, the District owned 1% of those lands. That's not good. We were benefiting from the water of a natural system which could be developed at any time. And then what? Around this time a local land trust approaches us with a simple question. "We're raising money in order to conserve a 200-acre parcel. It's in the Sebago Lake watershed so you'd like to see it conserved, right? Can you make a donation? From that conversation, Sebago Clean Waters was born. It is now a coalition of 11 non-profit organizations working to conserve forest and undertake other important water quality projects in the watershed. How did this happen? What lessons were learned? Could it be replicated? This presentation will share the back story and try to answer some of those questions and other you may have.
Session # 6	**JEOPARDY: So, Think You Know Drinking Water and Wastewater Treatment - presented by Tom Bahun, Tom's Water Solutions, LLC** Drinking water treatment and wastewater treatment are processes that improve the quality of water for different uses. Drinking water treatment improves the quality of water from a source, like a river, lake, or well, to make it suitable for human consumption and other uses. Wastewater treatment improves the quality of sewage from homes, businesses, and industries to make it safe to release back into the environment. Join Tom from Tom's Water Solutions LLC, as your presenter and game show host, in a fun and interactive presentation that will allow participants to show-off their knowledge of

	drinking water and wastewater treatment methods and processes. A special note to those preparing for their water and/or wastewater certification exams: You are guaranteed to find this session an extremely beneficial review of water and wastewater treatment concepts, terminology and operation.

10:15 – 10:30
BREAK

10:30 – 11:30

Session # 7	**Beyond the Basics: Integrating Holistic Strategies into Asset Management presented by Eric Lemoi, PE, Wright-Pierce** Asset management is essential for water and wastewater systems as it ensures operational reliability, cost efficiency, and regulatory compliance by proactively maintaining and renewing critical assets. It also supports risk management, sustainability, and effective planning, ultimately safeguarding public health and enhancing system performance. This presentation will discuss the dual-focus approach that Wright-Pierce used to assist over 400 facilities across 40 different communities throughout New England. This approach helped them create a detailed and prioritized schedule for renewal and replacement, ensuring their system's resources are allocated efficiently and effectively.
Session # 8	**The Importance of Cybersecurity in Water and Wastewater Environments presented by David Savage, Managed Services** The importance of Cybersecurity in Water and Wastewater Environments, current risks, Regulatory Requirements, Future requirements, How to Report an Incident, Cyber Awareness and Training, Available Resources,
Session # 9	**Federal Judicial Updates presented by David Van Slyke, Preti Flaherty** The presentation will discuss recent decisions handed down by the U.S. Supreme Court that are having, and will have, a direct impact upon the actions of Departments and Agencies in promulgating regulations and enforcing regulatory-based compliance under a broad swath of Federal and State statutes, including the Clean Water Act and the Safe Drinking Water Act. It will include discussion of the history of deference to agency interpretations and actions, the recent dramatic change in that area as a result of the SCOTUS decision in Loper Bright, the implications of that decision for regulators and the regulated, and how the courts and Congress (along with agencies) are impacted by the decision. The discussion also will preview other cases in this area that are in the queue for decision by the Court in the near term.

Session # 10	**PUC Rules and Updates, Service Standards and Other Ops Issues presented by PUC Staff** Dive into day-to-day operational issues, maybe fire protections service levels and associated charges, main extension policies and/or standards and fees for routine and nonroutine service functions
Session # 11	**Fish Tissue and PFAS Concentrations presented by Jerrod Parker, Maine Department of Inland Fisheries and Wildlife and Tom Danielson, Maine Department of Environmental Protection** To better understand Per and Polyfluorinated Substance (PFAS) concentrations of fish throughout Maine, the MDIFW undertook a statewide study in 2022. MDIFW collected +1,000 fish for PFAS testing. These fish represented 16 species and one hybrid obtained from 8 state hatcheries, 38 lakes and 1 river distributed throughout the estate. ETC. Maine DEP collected fish from lakes and rivers across Maine since 2014 to determine the extent and severity of contamination of PFOS - the most common PFOS in fish tissue were PFOS and long-chain PFDA. Lon-chain PFAS bioaccumulate in fish, often reaching hundreds to thousand times higher concentration in the fish tissue than the water.
Session # 12	**DIY Emergency Response Exercises for Water and Wastewater presented by Tom Bahun, Tom's Water Solutions, LLC** Emergency exercises are an important step to ensure water and wastewater utilities are prepared to deal with emergencies that threaten their missions. They are the most practical, efficient, and cost-effective way to prepare and improve emergency response plans. A significant benefit from emergency exercises is the opportunity for people (internal and external emergency responders) to work together practicing their roles and responsibilities and gaining emergency response proficiency. Join Tom Bahun from Tom's Water Solutions LLC as they walk you through the basic steps to plan, design and facilitate your own emergency exercise. In addition, Tom will highlight vital ways to ensure your exercises are successful and beneficial for all participants.

11:30 – 1:30
Exhibitor Time / Presentation during lunch
The New England Work for Water Collaborative Presented by Kirsten King - New England Water Works Association

1:30 – 2:30

Session # 13	**Energy Demand Management as a Source of Income presented by Kay Mann - Maine PowerOptions, Phil Ciulla - Cpower Energy Management, and Jesse Remillard – Efficiency of Maine** Water utility districts are highly suitable candidates to participate in demand response programs that pay them to curtail electricity usage during peak demand times on the regional power grid. Learn what it takes to participate and what other utility districts in Maine have earned through their participation.
Session # 14	**You Can Do IT! Rebuild Your Own Pump Station persented by Rob Pontau, Brunswick Sewer District** This session will detail how the talented staff at the Brunswick Sewer District used their ingenuity to construct an in-house pump station upgrade by converting an existing vacuum lift station into a submersible style station. The project was completed in partnership with Carlsen Systems, who provided a pre-built USEMCO TopVault above grade wet well mounted valve and control chamber with Sulzer/ABS Model XFP submersible pumps. Engineering and design services were also provided by Carlsen Systems as part of the partnership. This uncommon and ingenious approach to pump station reconstruction saved the District more than $100,000 in costs and it will serve as the model for future pump station upgrades. This approach will stretch the Districts funds further as we continue to upgrade stations as part of our 15 years capital improvement program.
Session # 15	**BIA Area Pressure Zone Infrastructure Improvement Project presented by Darrin Lary, PE, Wright Pierce** In the spring of 2020 the Bangor Water District, with the assistance of Wright-Pierce, began the process of designing and implementing improvements to the water system in Bangor for the area adjacent to the Bangor International Airport. A previously completed comprehensive facilities evaluation had recommended improvements to the distribution piping, booster pump station and tank replacement to improve system reliability and water quality as high priority projects for the water system. The project started with a feasibility study to review the best alternatives for sizing a new water tank and adjusting the pipeline pressure zones for optimum fire flow capacity, water age, and pipeline reliability. Upon selection of the best alternative for improvements, three contracts were designed for the replacement of aging water mains, replacement of a sub-standard water booster pumping station, and a new 100-foot tall, 3.2M gallon concrete water storage tank to replace two aging welded steel water tanks. We will discuss the process from feasibility study to design to

	construction of this critical infrastructure replacement project for the Bangor Water District.
Session # 16	**Case Study Treating PFAS, 1,4-dixone, MtBE, and FE/MN in Dover, NH presented by Thomas Page, PE, Underwood Engineers** Construction of the most advanced groundwater treatment facility in the State of New Hampshire was recently completed by the City of Dover. This presentation will share our startup and operating experience with multiple treatment systems, including media preparation, testing, and process control. Tips and tricks will help show what to expect when operating a PFAS treatment or Advanced Oxidation Process facility.
Session # 17	**Maine National Guard Civil Support Team - How Can we help you? presented by LT Jeffrey Holmes and LTC Nehemiah Natress, Maine National Guard** This session will discuss the basics of the Maine National Guard's Civil Support Team mission, which is to support civil agencies with training support to planned events, and response to disasters/incidents involving hazardous materials.
Session # 18	**Water and Wastewater Exams: Tips, Tricks & Techniques to Success presented by Dan Bahun, Tom's Water Solutions, LLC** More and more, we see new faces in the water and wastewater fields here in Maine. As they advance and make this industry a career for themselves, they are looking at obtaining a water or wastewater certification license.This is no easy task! Join Dan Bahun from Tom's Water Solutions to learn about the Water and Wastewater Operator Certification Exams here in Maine and how to set yourself up to pass with tips, tricks, and so much more!

2:30 – 2:45
BREAK

2:45 – 3:45

Session # 19	**Trials, Tribulations, and Triumphs of Siting Overburden Wells in Deltaic Formations presented by Katelyn Cox and Brandt Scott, Wright-Pierce** Glacial outwash deltas serve as important groundwater sources for many public water systems across Maine and New England. Deltaic formations are often stratified and highly variable which can complicate production well siting and design within these deposits. This presentation will discuss two case studies that will provide examples of test well exploration, water quality considerations, and well design for replacement well projects for Maine Water Company in Freeport, ME and Brunswick and Topsham Water District in Brunswick, ME.
Session # 20	**The Role of Innovative PFAS Treatment Technologies for Managing PFAS Waste from Water Treatment Systems presented by Baxter Miatke, PE, Arcadis** The presentation provides insight into an important field-tested technology for PFAS treatment of complex wastewater to reduce reliance on incineration and is of importance to all environmental practitioners and PFAS waste holders.
Session # 21	**Enhancing Municipal Buildings Through Energy Efficiency Upgrades presented by Jess Remillard, PE, Efficiency Maine** This session will focus on how energy efficiency upgrades in municipal buildings help municipalities lower their energy use and save on energy costs, while leading by example in the transition to fossil-fuel-free electric HVAC systems, LED lighting, and efficient water heating. Efficiency Maine has worked with more than 100 municipalities in the past three years to offer financial incentives, technical support, and financing on high-efficiency equipment upgrades. The discussion will provide information on industry trends and technology available today to improve comfort with less operational maintenance costs, energy costs, and environmental impacts, and on how even small changes can make a difference. Participants will learn about federal and state funding opportunities that are now available for municipalities, factors that should be considered when looking at upgrades, and hear about the experiences of other municipalities in Maine that have partnered with Efficiency Maine to upgrade their buildings.

Session # 22	**Stop With the Shiny Stuff…Let Us First Get Back to Basics presented by Chris Cogan and Evan Kane, Portland Water District** The Portland Water District (District) is working to combat aging facility and asset infrastructure to keep their facilities running long into the future. Through a comprehensive review of their wastewater assets, the District has created a structured maintenance approach to emphasize replacement and maintenance of assets with the highest risk to the operation of their plants. Using their asset management software (Central Square EAM), they have begun to store asset 'ratings' with the goal of periodically updating these values as asset condition changes over time. The District has reviewed over 5,500 assets, created over 450 new preventative maintenance tasks, and increased preventative maintenance tasks completed by over 250%. This presentation will review the District's asset management approach and discuss how similar strategies can be implemented at other utilities
Session # 23	**MEMA Process presented by Susan Breau, Maine CDC Drinking Water Program** This session will give an overview of the Drinking Water Program's (DWP) roles, responsibilities, processes, and collaboration with Maine's Emergency Management Agency (MEMA), County Emergency Agencies, and Maine's Public Water Systems (PWSs) before, during, and after an emergency.
Session # 24	**Alternate Methods Lead Service Line Repair presented by Joshua Saucier, PE, Haley-Ward** While we may not have had time to read the entire recently implemented Lead and Copper Rule Improvements, most in the industry are acutely aware of the replacement requirements. In the northeast and especially in Maine, mandated replacement may include some "galvanized downstream of historically unknown" service lines and segments. Moreover, these will likely far outnumber the actual lead service line replacements. Assuming that federal funding is made available and legislation is created to allow service replacement on private property, there will likely be thousands of services replaced throughout the state. Full excavation and replacement can sometimes be the easiest and fastest solution for service line replacement. In many other cases, there are other means of replacement that create far less impact (impacts include traffic, dust, noise, unstable trenches, erosion, etc.), decrease risk to adjacent structures, and reduce the overall cost. Haley Ward will overview common and less common trenchless pipe construction/replacement applications, incorporating direct field experience and discussing design considerations as well as applicability.

3:30 – 6:00
Happy Hour / Reception / Cornhole Tournament

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Thursday February 6th, 2025 Session Itinerary

7:00 – 8:00
Registration & Breakfast

8:00 – 9:00

Session # 25	**High Performance Graphics Making SCADA Visualization Work for You presented by Phill Arnold, Wright-Pierce** Effective SCADA visualization is essential for optimizing system performance, enhancing operator decision-making, and improving overall process efficiency. High-performance graphics go beyond traditional displays, focusing on clear, intuitive designs that prioritize critical data while reducing visual clutter. This presentation will explore the key principles of high-performance SCADA visualization, demonstrating SCADA graphics that improve situational awareness, reduce errors, and enhance system responsiveness. Attendees will gain insights into alternatives to the traditional SCADA graphics commonly seen in legacy SCADA systems.
Sesson # 26	**Have Funding? What's Next with the PUC? presented by PUC Staff** Considerations for various PUC filings needed after a utility receives funding for projects. This class will also include an overview of Chapter 675 (Infrastructure Surcharges and Capital Reserve Accounts).
Session # 27	**Rate Setting presented by Dave Fox, Raftelis**
Session # 28	**Innovative Illicit Discharge Detection Techniques presented by Jeff Spaulding and Cara Belanger, Stillwater Environmental Engineering, Inc.** In this talk we will share practical advice and strategies learned through experience in field investigations. Additionally, we will introduce a new technique recently developed by Stillwater Environmental Engineering. This innovative approach employs an inspection robot coupled with a peristaltic pump, enabling sampling from sections of stormwater pipes between catch basins and from incoming laterals. Through a case study, we will demonstrate the application and effectiveness of this new technique, highlighting its potential to enhance the accuracy and efficiency of illicit discharge investigations.

Session # 29	**PFAS Treatment: More Than Just GAC Vessels presented by Victoria Hawkes, PE, CDM Smith and Doug Martin, PE, Town of Franklin Water and Sewer** The Town of Franklin, MA halted operation of one of their primary groundwater sources after detecting PFAS concentrations above the regulatory limit. Working closely with CDM Smith, Franklin moved quickly to develop a best-fit PFAS treatment solution for putting the well back in service, ultimately selecting a pump station addition to house GAC pressure vessels. There are many considerations beyond the treatment process such as visual impacts of a new building, plumbing and HVAC requirements, operator preferences, and more. This presentation will follow the evolution of design from alternatives evaluation through final design and early stages of construction.
Session # 30	**Prompts and Circumstances (AI) presented by Rob Pontau, Brunswick Sewer District and Nicki Pellenz, Maine Water Utilities Association** Curious about how AI can benefit your utility operations or your personal life? This session dives into generative AI tools, revealing their potential to streamline tasks, improve customer communications and support decision making. Join us to explore real-world applications and be prepared to try the tools on your phone. Whether you're new to AI or looking to expand its use, you'll come away with practical insights and tips for integrating these powerful tools into your daily life.

9:00 – 9:15
BREAK

9:15 – 10:15

Session # 31	**PFAS Characterization and Engineering Approaches for Treatment Using Case Studies from Community Water Public Water Systems in Brunswick, Hallowell, and Sanford presented by Daniel Flaig, PE, Wright-Pierce** In 2024, EPA promulgated a final PFAS National Primary Drinking Water Regulation, which outlines an implementation timeline of five years (2029) for systems to plan, design, and construct capital improvements to mitigate PFAS levels in source of supply. The Maine PFAS standard signed into law in 2021 adopted a MCL standard and required monitoring, which has provided a “head start” with respect to the EPA implementation timeline for public water systems to plan and mitigate PFAS in public water sources. This presentation will discuss the field procedures and analysis of PFAS plume characterization of the Jordan Avenue well field in Brunswick, ME and discuss various technologies and engineering solutions considered to implement treatment for community water system well sources in Sanford and Hallowell, ME.

Session # 32	**Billing Considerations: What's Working and What's Not presented by PUC Staff** PUC staff will facilitate discussions about billing issues, including monthly, quarterly, and other billing periods and common customer issues. This class will include tips on tracking payment arrangements and customer contact tracking.
Session # 33	**When OSHA/BLS Shows Up presented by SafetyWorks!** Inspections aren't necessarily a bad thing, especially when you're prepared.
Session # 34	**Intelligent Software in the Water Industry (AI) presented by Amy Vredevoogd, Weston and Sampson** This presentation explores the potential of AI to change the water industry. It starts by laying the foundation with a primer on AI basics. Then, through a lens of identifying the town's assets, analyzing the available data, and using data-driven predictions, we discuss how AI can reshape the future of water management and offer opportunities for improved efficiency, sustainability, and resilience.
Session # 35	**Eliminating the Wet Well with Direct In Line Pumping presented by Rebecca Turner, Industrial Solutions** Imagine a future with smart pumping stations and no more wet wells. By removing the wet well and lifting influent directly from the gravity invert, fats, oils, and greases, along with wipes and any other culprits, do not have the opportunity to separate and solidify. With direct in-line pumping fibrous material is kept in solution, ejecting it as it arrives. Because the influent is also contained, there is no potential for it to become atmospheric, eliminating all concerns for odor and dangerous gases. Also, removing the wet well eliminates well maintenance. There is no collection of grease on basin walls or fear of leaching into the adjacent solid or ground water. Direct in-line pumping is changing the world one wet well at a time.
Session # 36	**Hands-on Product Use presented by EJ Prescott** This hour-long class will be broken into four 15-mintes presentations in small groups showing you hints and techniques for proper product operation and installation. The sessions will be: • Proper hydrant operations and maintenance practices. • Proper techniques and ways to do new service taps on mains • New products for finding leaks and best practices • Doing Ductile Iron connections and repairs

10:30 – 11:30
Exhibitor Time / Pipe Tapping Competition

11:30 – 12:45
Exhibitor Time / Business Meeting / Awards / Lunch

12:45 – 1:45

Session # 37	**PUC Rate Case Types: How to Choose presented by PUC Staff** Rate cases can be confusing and daunting. This class will walk utilities through the available rate case types. Time will be included for participant discussion.
Session # 38	**Leveraging Your LinkedIn Profile presented by Caroline Bishop, Tighe and Bond** Join us for an informative and interactive LinkedIn training session. Explore the platform's significance to learn how to showcase your technical expertise, build your professional brand, and attract followers. Gain insights into your audience and refine your content strategy. Discover real success stories from industry members who have leveraged LinkedIn for personal and company achievements. By the session's end, you'll have practical insights to maximize LinkedIn's potential for personal and corporate growth on a professional level.
Session # 39	**What Can A Hydraulic Model Do For You? presented by Jacqueline Cobb, PE, Wright-Pierce** Does your system have a hydraulic model? Are you making the most of this resource? Hydraulic models are a vital tool for optimizing construction projects and district funds. This presentation will focus on bais uses for hydraulic models and touch upon more in depth modeling capabilities. Modeling uses covered will include: master planning, fire flow mapping, design reviews, pump station design, and zone and operation optimization.
Session # 40	**Should We Worry About Wildfires in Maine? presented by Andrew M. Barton, University of Maine** In this presentation, he will first review the fundamentals of fire meteorology and fire ecology, focusing on the fire triangle and drivers of wildfire frequency and severity. Then he will summarize the history and the incomplete paleo history of wildfire in Maine.
Session # 41	**Treatment Plant High Flow Event Roundtable presented by various wastewater operators and lead by Alec Buechner, City of Saco** This session is led by operators, for operators. Speakers will be experienced treatment plant operators discussing how their facilities operationally plan for and react to high-flow events, including lessons learned. They will also discuss the forward thinking planning they're doing to manage climate change and the anticipated pattern of continued extreme wet weather events.

Session # 42	**Progressive Cavity Pumps: Technology, Selection and Sizing presented by Chris Davis, Roto Pump** Learn how progressive cavity (PC) pumps work, along with how to properly select the correct size for the right application. These pumps are commonly used for chemical feed and liquid sludges.

1:45 – 2:00
BREAK

2:00 – 3:00

Session # 43	**Roundtable of Metering Issues presented by PUC Staff** Come and discuss metering issues with MPUC staff. This includes meter inspection, meter reading, shutting customers off, and how to check your terms and conditions to encourage customers to comply. Also included: how to fund your meter replacement program.
Session # 44	**Remote Level Monitoring Technology for Collection Systems presented by Joe Krudy, SmartCover** Real-time, remote water-level monitoring gives wastewater collection system operators advanced warning of sewer issues before big problems occur. The technology identifies a location where a sewer system overflow is developing and immediately alerts operations and field staff of changing conditions so they can pinpoint the cause and perform corrective actions. This presentation will explain how satellite-based remote level monitoring can be used for various applications. Various features and benefits of this technology will be discussed along with ideas of where it can be best utilized. Real life examples will be provided, and additional applications for this technology will also be examined.
Session # 45	**Never Say Never: Emergency Preparedness for Changing Conditions presented by Al LeBlanc, PE CDM Smith** Extreme weather events in the past years have resulted in conditions utilities have never seen before, prompting the consideration of emergency preparedness in the context of "Never say nevers!" How do you make your utility resilient to infrastructure and water quality impacts? This presentation will step through several case studies to provide possible next steps for you system.

Session # 46	**Recruitment, Retention, and Volunteerism presented by Kali Boulier, Machias Savings Bank** MSB's strategic plan has an emphasis on recruiting and retaining employees and the things the bank accomplished to make MSB a "best place to work".
Session # 47	**Climate Adaptation presented by Nathan Robbins, Maine Department of Environmental Protection** Sources on data of climate change and adaptation tools.
Session # 48	**Lining Pressure Pipes Using Flexible Fabric Reinforced Pipe (FFRP) presented by Don LeBlanc, DLVEWS** This presentation explores environmentally friendly solutions for rehabilitating pressure-class potable water mains, sewer force mains, gas mains, and mechanical piping. Emphasizing trenchless installation methods, we highlight how minimal machinery use can significantly reduce carbon footprints. By utilizing small excavation pits and chambers, the installation process decreases environmental impact and traffic disruption, making it a more sustainable option for urban settings. This is an ideal solution for piping systems that go under bodies of water, under bridges, or any other challenging environments. Attendees will gain insights through two specific project profiles from the northeast, demonstrating the practical applications and benefits of this approach. By the end of the session, participants will understand how these innovative rehabilitation techniques not only enhance infrastructure integrity but also promote eco-friendly construction practices.