PORTLAND WATER BUREAU
FROM FOREST TO FAUCET

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June 24, 2025

OESAC CEU Committee
PO Box 577
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Dear members of the CEU Committee:

Please consider this request for your approval of the American Water Works Association (AWWA) Spring 2025 Webcasts for 0.8 CEU's.

DATE	AWWA Spring 2025 Webcasts	CEU's: 0.8
4/2/25	Investigating Enforcement Mechanisms Beyond Local Ordinances – A Look into AWWA's New Guidance	0.1
4/23/25	AWWA's New Guidebook: Climate Change Impacts in Water Demand Forecasting	0.1
4/30/25	Microplastics 2025: The Health Effects Synopsis	0.1
5/7/25	Water Treatment: Sustainable Solutions for Small and Rural Sites	0.1
5/8/25	PFAS Removal: Novel Adsorbents and Process	0.1
5/29/25	Unlock the Power of Your Distribution Network Data	0.1
6/4/25	Essential Policy Updates from AWWA's DC Office: Second Quarter	0.1
6/5/25	Improving Cyber Resilience Against the Rising	0.1

Thank you in advance for your consideration.

Respectfully,

Brooke E. Gardner

Brooke Gardner
Portland Water Bureau
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Enclosures:
1. Letter of request to review
2. AWWA Webcast Summaries and Speaker Bios

AWWA Spring 2025 Webinar Summaries and Presenter Biographies

AWWA Webinar: Investigating Enforcement Mechanisms Beyond Local Ordinances – A Look into AWWA's New Guidance

April 2, 2025

Overview:

This webinar will outline the findings of AWWA's new guidebook on »Investigation.Current. Enforcement.Mechanisms.in.Water.Utility.Policies.Beyond.Local.Ordinances∫ Conducted by Ricardo as an AWWA Technical and Educational Council-funded project, this guidebook explores utility options for policy enforcement, such as drought restrictions or water efficiency requirements, outside of passing a local ordinance. Acknowledging that local ordinances are not a feasible solution for every utility, Ricardo collected a diverse selection of case studies that highlight alternative enforcement approaches, offering utilities guidance on identifying solutions tailored to their unique needs.

Through a series of interviews, case study utilities provided detailed accounts of their experiences with their applied enforcement mechanisms, including what did and didn't work. In this webinar, attendees will hear from members of the Project Advisory Committee, Ricardo, and selected case study utilities, as they share insights into the guidebook's development, interview findings, and practical takeaways for utilities of all sizes.

Learning Objectives:

- Understand alternative enforcement mechanisms and the selection methodology for those incorporated in the guidebook.
- Explore real-world case studies highlighting diverse enforcement approaches, including their successes, challenges, and lessons learned.
- Identify actionable strategies and tailored solutions for implementing effective enforcement mechanisms in your own utility.

Presenter Biographies:

Susan Pokorny, Manager, Customer Solutions, JEA

Susan has worked at JEA for over 6 years, starting her time there as Associate Project Manager and now serving as Manager of Customer Solutions. In this role, Susan leads JEA's Water Conservation and Energy Efficiency Demand Supply Management Program. Susan has an undergraduate degree in Mechanical Engineering and an MBA in Marketing.

Joseph Lorimer, Associate Director, Ricardo

Joe is an Associate Director at Ricardo with over a decade of experience leading work on water policy and regulation in Australia, Asia, Middle East, the UK, and the US.

Martha Wright, Manager, Conservation Department, San Antonio Water System

Martha is a manager in the Conservation Department at San Antonio Water System where she uses her passion for data and sustainability to enhance water conservation programs and help residential and commercial customers better understand their water footprint.

Rodney Tilley, Water Conservation Supervisor, Toho Water

Rodney is the Water Conservation Supervisor with the Toho Water Authority located in Kissimmee Florida. In his current role with Toho, he develops and delivers water conservation programs focused on: Education and Outreach, Enforcement of Standards and Water Audit Processes. Tilley has more than 40 years of experience in landscaping and irrigation and has led the Award-Winning Toho Water Authority Conservation Department for 15 years.

Johnathan Cruz, Director of Finance & Innovation, Moulton-Niguel Water District

Jonathan is the Director of Finance Planning & Innovation at Moulton Niguel Water District. Jonathan started his career at Moulton Niguel almost 10 years ago as a Water Resource Analyst. He has both a B.A. and M.A. in Economics.

Tami Moon, Environmental Manager, City of Northglenn

Tamara has dedicated the past 23 years to serving the residents of Northglenn, CO, bringing extensive experience in municipal water management. Throughout her tenure with the city, she has developed a deep understanding of the complexities involved in delivering high-quality drinking water from source to tap. In her current role, Tamara specializes in regulatory compliance, utility operations, water rights, and water conservation, leveraging her expertise to develop innovative and sustainable solutions for community water supply challenges.

Ken Knox, Knox Water Engineers

Ken Knox is the Chief Deputy State Engineer for the State of Colorado. He holds a BS in Chemical Engineering and a MS and PhD in Civil Engineering from Colorado State University. Ken is the Compact Coordinator and Engineer for the nine Interstate River Compacts and one International Treaty that Colorado is a party to and is responsible for litigation and water supply/engineering activities for the Colorado Division of Water Resources. Dr. Knox is also an Adjunct Professor at the University of Denver and teaches graduate-level classes in environmental protection law and other natural resources planning and management classes.

AWWA Webinar – AWWA's New Guidebook: Climate Change Impacts in Water Demand Forecasting

April 23,2025

Overview:

Governments are subject to financial shocks, including natural catastrophes, financial dislocations, and more. Financial reserves (a "rainy day" fund) are essentially a form of self-insurance that governments use to buffer themselves against these risks. But what are the risks governments should be concerned about and what size of reserves are appropriate to those cover risks? In this webinar, we will answer these questions and more. Participants will leave with resources and strategies to apply risk-aware and risk-savvy thinking to reserves in their own organizations, with a special emphasis on water utilities.

Learning Objectives:

- Learn how to recognize and analyze risks that reserves guard against and translate that knowledge into a reserve strategy.
- Access tools for risk-savvy thinking in public finance
- See how other local governments and public utilities have optimized their reserve strategies"

Presenters:

Michelle Maddaus, President and Principal Engineer, Maddaus Water Management

Michelle is a registered civil engineer with 22 years of experience, a wide variety of which is in the water resources field including water demand forecasting including climate change and water conservation savings. Michelle has been Project Manager for dozens of water conservation plans across the United States. She led the MWM team in updating AWWA's Manual of Water Supply Practices, M52, Water Conservation Programs – A Planning Manual which was published in December 2017. Michelle was also a co-author for the newly released AWWA Manual of Practice M71, Climate Action Plans.

Tess Sprague, PhD, Principal, National Climate & Resilience Lead, Brown and Caldwell

Dr. Teresa specializes in developing Solutions and building strategies for climate resilience, water resources planning, corporate stewardship and governance, and managing extreme events at local and regional levels for public and private sectors. Her work within the US and internationally includes climate change adaptation planning, private and public sector water risk, science-based metrics and KPIs, water resource management, disaster risk reduction, and public outreach & stakeholder engagement. She is passionate about connecting people, teaching, and conducting research on the above topics and is internationally published. She has authored a book on Building Resilience and Planning for Extreme Water-Related Events with Palgrave & Macmillan Publishers and is a contributor to the Springer Nature Handbook on Climate Resilient Societies.

Jessica Fritsche, Senior Water Resource Planner, Carollo Engineers

Jessica has been supporting water resources planning across North American for nearly two decades. She specializes in urban, regional, statewide, and national projects that model future water resource demand, supply, and economic outputs, and integrate risk and uncertainty. She holds a master's from Southern Illinois University, Carbondale, in Geography and Environmental Resource Management.

Matthew Pacicco, Engineer, Carollo Engineers

Matt is a professional engineer with experience in climate change adaptation and resilience. He has deep expertise in the array of climate-related challenges communities confront now and, in the future, including evaluating and applying downscaled global climate models to inform resilience strategies at the regional and local level. Matt also serves as an adjunct professor of Climate Science at Monmouth University covering topics ranging from theory and evidence to adaptation and mitigation.

Negin Ashoori, PhD, Senior Water Resources Engineer, Bay Area Water Supply and Conservation Agency (BAWSCA)

Negin is the Senior Water Resources Engineer at the Bay Area Water Supply and Conservation Agency (BAWSCA), where she leads both technical and policy-level initiatives in water resources. Her work includes long-term water supply planning, demand projections, and conservation efforts. Negin holds a Ph.D. in Civil and Environmental Engineering from Carnegie Mellon University and is passionate about developing innovative, cost-effective solutions to complex water management challenges.

Darrin Geldert, PE, Planning Manager, Loudoun Water

Darrin has spent the past 10 years at Loudoun Water working in and managing the Planning Department. Prior to Loudoun Water, Darrin was a consultant in Virginia and Oregon with a primary focus on hydraulic modeling and master planning, but with a wide variety of engineering experience. Darrin has a master's in civil Engineering focused on Water Resources from the University of Minnesota.

Bradley Schmitz, Environmental Scientist, Loudon Water

Bradley is an Environmental Scientist at Loudoun Water in Northern Virginia. He received his Ph.D. in Environmental Microbiology from the University of Arizona and previously held two postdoc positions at the National University of Singapore and Johns Hopkins University. During his time in academia, Bradley's research focused on the intersection between water and public health. His research background focuses on viruses in non-potable and potable reuse schemes. In his current role at Loudoun Water, Bradley is working to increase the organizations involvement in research and exploring potential water reuse opportunities.

Vini de Oliveira, PhD, Water Resources Engineer, Tarrant Regional Water District

Vini de Oliveira, Ph.D. is a water resources engineer at the Tarrant Regional Water District. He has experience in water supply management and planning, flood protection and various branches of water resources research.

AWWA Webinar – Microplastics 2025: The Health Effects Synopsis

April 30, 2025

Overview:

Despite the demonstrated ubiquity of microplastics in both the environment and the human body, the clear determination of health effects remains elusive. This webinar discusses the reasons for these challenges and provides a briefing on our current understanding of microplastics toxicology.

The goal of this webinar is to provide a substantive update on the contemporary understanding of microplastics' health effects, focusing on three parts: 1) the complexities of microplastics as a drinking water contaminant; 2) the potential impact of microplastics themselves; and 3) the toxicity of polymer additives.

Learning Objectives:

- Discuss the challenges associated with establishing human health effects of microplastics.
- Apply an understanding of the current state-of-the-science of microplastics health effects for internal/external organization communications.

Presenters:

Brent Alspach, Vice President and Director of Applied Research, Arcadis

Brent holds both BS and MS degrees in Civil and Environmental Engineering from Cornell University. Brent joined Arcadis in 1997 and serves as a Vice President and the company's Director of Applied Research. He currently serves on the AWWA Technical and Education Council (TEC), as well as on the editorial boards for Opflow and AWWA Water Science. He is the Principal Investigator on two Water Research Foundation projects on microplastics in drinking water, a subject on which he recently had the privilege of testifying to the US Congress.

Dr. Scott Coffin, Research Scientist, California Office of Environmental Health Hazard Assessment

Dr. Coffin has a PhD in environmental toxicology and serves as a Pharmacokinetics Research Scientist at the Office of Environmental Health Hazard Assessment in the California Environmental Protection Agency. Since 2014, Dr. Coffin has led research projects to characterize hazards and risks of microplastics and their associated contaminants to humans and ecosystems. From 2019 to 2024, Dr. Coffin worked at the California State Water Resources Control Board, where he developed a regulatory definition of microplastics, as well as the state's monitoring plan for drinking water.

Dr. Husein Almuhtaram, Senior Research Associate, University of Toronto

Dr. Almuhtaram works extensively in several issues related to drinking water treatment including cyanobacteria, microplastics, and water quality in distribution systems. His research on microplastics involves the development of protocols for sampling and analysis,

as well as assessment of chemical additive toxicity. Husein is a senior research associate at the University of Toronto.

AWWA Webinar – Water Treatment: Sustainable Solutions for Small and Rural Sites

May 7, 2025

Overview:

This webinar is focused on sustainable water treatment solutions tailored for small and rural communities across India. This session will explore practical and environmentally conscious approaches to ensure access to clean water, emphasizing innovative, cost-effective methods and environmentally friendly initiatives. Industry experts will share valuable insights and present case studies addressing the unique water quality challenges faced by these regions. Learn about impactful solutions for long-term water sustainability.

Presenter Biographies:

Abhishek Praveen Jadhav, Director CEO, Water and Sewage Environment Engineering Pvt. Ltd

CEO of Water and Sewage Environment Engineering Private Limited since 2020. Formerly Jr Site Engineer at Laxmi Civil Engineering Services. Abhishek has their Master of Engineering, environmental health engineering, from D.Y. Patil College of Engineering, Akurdi, Pune.

Dr Imre Pascik, Director, Biofilm tech GmbH/Levapor GmbH

Dr. Imre Pascik is the founder and main think tank behind inception of Levapor as global process solution provider. A PhD in Polymer Science from prestigious Aachen University, Germany, Imre has more than 40 years of experience in the field of Environmental Biotechnology. He is highly acclaimed professional and scientist for his contribution to the degradation of difficult to biodegrade complex effluents and nitrification of industrial effluents. He is chairperson of German DWA committee for Industrial Nutrient Removal. With numerous patents and hundreds of publications attributed to him, Imre brings on board his extensive process knowledge which helps the Levapor team delivers optimum solutions for the clients' requirement.

Amit Kumar Christian, Director, Levapor India Pvt Ltd

Amit is Head of Global Marketing at Biofilm Tech GmbH and has been Director of Levapor since 2018. They have a Master of Science in environmental pollution control from Middlesex University, London.

AWWA Webinar - PFAS Removal: Novel Adsorbents and Process

May 8, 2025

Overview:

This webinar will explore the novel sorbent(s) used in the AquaPRS PFAS Removal system process to achieve the new regulatory requirements. While meeting these requirements, the AquaPRS process provides customers with a low cost of ownership due to the reduced operating costs associated with sorbent usage and disposal/destruction costs.

Attendees will be introduced to a novel solution to PFAS treatment that could be used in a range of applications within the water industry. You'll learn how these new technologies can handle low to high concentration PFAS waters while producing high-quality micro-filtration effluent water.

Learning Objectives:

- Compare operating costs associated with PFAS removal which are very high with classical solutions.
- Learn about sorbent disposal and/or destruction costs with PFAS removal.
- Consider a new PFAS removal solution that can handle a wide range of water with low to very high PFAS concentrations.

Presenter Biographies:

Moderator: Mark Hughes, P.E., Vice President - Technology, Aqua-Aerobic Systems, Inc.

John Dyson, Product Manager - PFAS Solutions, Aqua-Aerobic Systems, Inc.

John has been Product Manager for Aqua-Aerobic Systems, Inc since 2016 and has a Bachelor of Science in Chemistry from Longwood University.

Terence K. Reid, P.E., Director of Research Development, Aqua-Aerobic Systems, Inc.

Terence has been Director of Research Development at Aqua-Aerobic Systems, Inc since 1989. He has a Bachelor of Science in Civil and Environmental Engineering from University of Wisconsin-Madison and a Master of Science in Product Design and Development from Northwestern University.

AWWA Webinar – Unlock the Power of Your Distribution Network Data

May 29, 2025

Overview:

In the modern world, which is developing at a fast rate, it is becoming essential for organizations across various industries to find new and unique ways of gaining data-driven insights to enhance their decision-making processes. This webinar will discuss how digital solutions, with the help of

advanced sensor networks, can change the way utilities work, for the better, through greater efficiency, sustainability, and resilience.

Xylem Vue experts will delve into how utilities can leverage these technologies to optimize their operations and improve decision-making. Additionally, Metro Water Services (MWS), based in Nashville, will join the discussion to share their experience in adopting digital solutions and sensor networks, enabling them to reduce water losses, optimize supply quality, and make real-time decisions to improve operational efficiency.

This session will provide valuable insights into the latest technological advancements, whether you are focused on optimizing operations, ensuring regulatory compliance, or leading digital transformation. You will discover how digital solutions and IoT sensor networks collect and process real-time data to generate actionable insights. You'll also learn how organizations use Xylem Vue to enhance efficiency and sustainability while managing risks.

Learning Objectives:

- Shift from reactive to proactive control: Understand the challenges utilities face daily in the operation of water distribution networks and learn how to anticipate these by leveraging data and technology.
- Unlock the power of your data: Discover how digital platforms can lead to enhanced decision-making processes by ensuring data availability and quality.
- See the whole forest: Discover how digital platforms can lead to holistic recommendations by considering any piece of suitable information available in the utility.

Presenter Biographies:

Jose Maria Santos, Director of Product Management - Drinking Water, Xylem

Jose has a master's degree in civil engineering, hydraulic and hydrology, from Universidad de Granada. Since 2013 they have focused on the development of hydraulic modelling tools and IoT platforms and Smart Water applications at Xylem. Their main areas of expertise include product management, business analysis, hydraulic, hydrological and sanitation models as well as geographic information systems. They have served as Director of product management – drinking water at Xylem since 2023.

Justin Bowling P.E., Engineer III, Metro Water Services (Nashville)

Justin Bowling is an Engineer III who has worked at Nashville Metro Water Services (MWS) for 12 years. Justin currently works in the Water Operations Division of MWS with a focus on water treatment plant advances and water distribution system improvement initiatives. Prior to joining the Water Operations Division, Justin managed the design section in the Engineering Division of MWS. Prior to moving to Nashville to join MWS, Justin served as the City Engineer for Galveston, Texas.

AWWA Webinar – Essential Policy Updates from AWWA's DC Office: Second Quarter – PFAS and LCRI

June 4, 2025

There are two significant rulemakings on everyone's radar: PFAS and LCRI (Pre- and Polyfluoroalkyl Substances and Lead and Copper Rule Improvements). Deadlines are rapidly approaching, and this webinar will focus on opportunities for and challenges to prepare to comply. AWWA's DC Office hosts a total of four policy update webinars each year, scheduled quarterly. Experts in Washington will provide a status report of the current federal water policy landscape. Due to their timely nature, topics and details are announced closer to the live air date.

Presenter Biographies:

Steve Via, Director of Federal Relations, AWWA

Steve's primary responsibilities are two-fold. First, working with the Environmental Protection Agency (EPA) and other federal agencies on the development of policy and regulations that affect the water sector, and communicating the basis and substance of federal policy and regulations to the water sector. Mr. Via has 31 years' professional experience in environmental regulatory compliance assistance related to federal and state drinking water, wastewater, and solid/hazardous waste regulations. His work experience includes supporting communities engaged in planning, financing, and managing infrastructure improvements.

Nate Norris, Director of Legislative Affairs, AWWA

Nate leads the development and implementation of AWWA's legislative priorities by representing the association in congressional meetings, monitoring legislation, and engaging volunteers and grassroots members. In his seven years with AWWA, Nate has worked on issues ranging from water infrastructure, water affordability, emerging contaminants and PFAS, and cybersecurity. Prior to AWWA, Nate worked at the White House Office of Legislative Affairs and the White House Council on Environmental Quality. He holds a bachelor's degree in political science from the University of Texas at Austin.

Eugene Leung, M.S., P.E., Drinking Water Treatment – Technical Specialist, California State Water Resource Control Board, DDW

Eugene is the drinking water treatment technical specialist for the California Water Board's State Water Resources Control Board, Division of Drinking Water (DDW), which is responsible for developing and enforcing drinking water regulations and standards in California. His office is in the San Francisco Bay Area, and he is responsible for the review and acceptance of treatment technologies and techniques for drinking water treatment. Eugene's current efforts include working with and reviewing technologies as alternative filtration technologies, biological treatment of inorganic and organic contaminants, and treatment of PFAS and hexavalent chromium. He has also guided various state funded studies in UV-AOP; point-of-use and point-of-entry treatment; and true cost, feasibility, and challenges of nitrate treatment at disadvantaged communities. Eugene has worked for

California's Drinking Water Program since 1997, where he started as a field engineer regulating public water systems and was promoted to his current position in 2010. Prior to this, he worked for a year at Alameda County Water District. Eugene holds an M.S. and a B.S. in civil engineering from UCLA and is a registered civil engineer and a T4 Water Treatment Operator in California.

Amanda Canida, Senior Drinking Water Process Engineer, Black & Veatch

Amanda is a senior Drinking Water Process Engineer and PFAS Technology Leader for Black & Veatch with a Master of Science in Civil Engineering from Purdue University and 13 years of experience. She manages multiple PFAS projects nationwide and brings deep expertise in regulation, cost, and pilot testing. She is leading development of the Framework for Approaching PFAS Permit Approval for PFAS Treatment Evaluations under this WITAF project for the AWWA.

Adam Feffer, Senior Drinking Water Process Engineer, Black & Veatch

Adam is a senior Water Process Engineer and PFAS Practice Leader for Black & Veatch with 20 years' experience focusing on emerging contaminant treatment, drinking water compliance, treatment optimization, DBP management. He is a licensed professional engineer with drinking water treatment and distribution certifications in North Carolina and California. He is passionate about bringing efficiency and innovation to the drinking water industry for the purpose of benefiting public health domestically and abroad.

AWWA Webinar – Improving Cyber Resilience Against the Rising

June 5, 2025

Overview:

Recent headlines are a clear indicator that the bad actor sees utilities as a target for sophisticated cyberattacks. This has elevated the importance of cyber readiness for water and wastewater utilities. During this panel discussion, experts will discuss strategies for preparing for, responding to, and recovering from cyberattacks as a part of any business continuity plan.

Learning Objectives:

- Understanding the importance of visibility to the connected assets and devices and assess vulnerabilities open to attack.
- Evaluate the cybersecurity needs to support modern and legacy SCADA platforms across water plants, wastewater facilities, and distribution facilities.
- Learn best practices for utility leaders when taking the first steps to restart a cybersecurity program.

Presenter Biographies:

Matt McDermott, Chief Technology Officer, 43Tc

Matt has been Chief Technology Officer at 43Tc since the year 2000. His specialties include Technology Industry Insider with over 24 years' experience providing IT Consulting and Services to a vast array of businesses from Fortune 50 to local dental and medical practices. App-V MVP and specializing in all Virtualization. Products ranging from Microsoft Hyper-V and SCVMM, MED-V, App-V, Remote Desktop Services, and third-party virtualization technologies. Networking Infrastructure company, specializing in Active Directory, Network Security, and Application Deployment, utilizing technologies from Microsoft, e.g. Windows Server 2008, Windows 7, SCOM, SCCM, MDOP.

Michael Medina, Information Systems, Victor Valley Wastewater Reclamation Authority

Michael is an Information Systems Technician for Victor Valley Wastewater Reclamation Authority.

Kevin Dunn, Executive Director, Public Water Supply District #2 of St Charles County

Kevin has been the ED of Public Water Supply District #2 of St. Charles County, Missouri since 2017. He previously worked at Missouri American Water as Director of Engineering for 31 years. He has a BSCE, Civil Engineering degree from University of Missouri-Columbia.

Mike Lauer, Senior Director and Chief of Staff - US Public Sector, Fortinet

Mike has been with Fortinet since 2022 serving as Director of SLED Programs and Chief of Staff & GTM. They have a bachelor's degree from Jubilee School of Ministry. Mike has experience working as a video engineer and communications networks since 2003.