

TRIN	Date	Start Time	End Time	Credit AWWA	Code
	6/13/2022	11:30 AM	12:15 PM	0.20	AEESP
	6/12/2022	1:00 PM	5:00 PM	0.50	CRT1
	6/12/2022	1:00 PM	4:00 PM	0.30	CRT4
	6/12/2022	9:00 AM	4:00 PM	0.60	PCW01
	6/12/2022	9:00 AM	4:00 PM	0.60	PCW02
	6/12/2022	9:00 AM	4:00 PM	0.60	PCW03
	6/12/2022	9:00 AM	4:00 PM	0.60	PCW04

6/12/2022	9:00 AM	4:00 PM	0.60	PCW05
6/12/2022	9:00 AM	12:00 PM	0.30	PCW06
6/12/2022	12:15 PM	5:00 PM	0.50	PCW07
6/13/2022	1:00 PM	5:00 PM	0.30	CRT2
6/13/2022	1:00 PM	2:00 PM	0.10	FIRESIDE
6/13/2022	2:00 PM	5:00 PM	0.30	MON01
6/13/2022	2:00 PM	5:00 PM	0.30	MON02
6/13/2022	2:00 PM	5:00 PM	0.30	MON03
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6/13/2022	2:00 PM	4:30 PM	0.30	MON07

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6/13/2022	2:00 PM	5:00 PM	0.30	MON17
6/13/2022	1:00 PM	2:30 PM	0.20	MONDAYKEY
6/13/2022	8:30 AM	10:00 AM	0.20	OGS
6/14/2022	1:00 PM	5:00 PM	0.40	CRT3
6/14/2022	2:00 PM	3:30 PM	0.20	PST01
6/14/2022	8:30 AM	11:30 AM	0.30	TUE01
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6/15/2022	1:30 PM	4:30 PM	0.30	WED33

Session Title

AEESP - Association of Environmental Engineering & Science
Professors Lecture

CRT1 - Introduction to Water and Sewer Operating Environments

All Three CRT Courses (CRT1, CRT2 and CRT3) attendees will earn
an AWWA Public Officials Certificate

PCW01 - Proactive Management of Aesthetic Quality to Maintain
Consumer Confidence

PCW02 - The Gamification of Asset Management

PCW03 - Critical Information for Advancing Your Water Main
Condition Assessment Program

PCW04 - Calibrating Water Distribution System Models

PCW05 - Water Utility Management: What you don't know that you probably should!

PCW06 - Implementing Biological Treatment Processes in One Water Applications

PCW07 - Implementation of AWWA Management Standards for Source Water Protection and Emergency Preparedness and Security Practices

CRT2 - Water and Sewer Infrastructure Operations, and Maintenance

Fireside Chat with EPA

MON01 - Membrane Innovations

MON02 - Leading Asset Management Practice Implementation

MON03 - Integrated Planning and Management for Resilient Water Supplies

MON04 - Effectively Applying Advanced Desktop Condition Assessments to Your Small Diameter Water Mains

MON05 - AMI and Water Conservation

MON06 - Distribution System Capital Improvement Projects

MON07 - Insights into Corrosion

MON08 - PFAS: Beyond Treatment

MON09 - Water Quality Assessments Using Water Distribution
System Hydraulic Models

MON10 - Artificial Intelligence and Machine Learning:
Applications of Advanced Analytics

MON11 - USEPA Water Policy Priorities

MON12 - The Infrastructure Investment and Jobs Act of 2021: A
Sea of Change in Federal Investment in Water

MON13 - One Water and Land Subsidence: Challenges and
Opportunities

MON14 - Disinfection Byproducts

MON15 - A Comprehensive Defense Strategy for Water &
Wastewater Utilities

MON16 - Making Diversity and Inclusion Real

MON17 - Platinum Sponsor Session

Monday Keynote

OGS - Opening General Session

CRT3 - Water Resources Planning – Consider Water Quality and
Quantity

PST01 - Industry Insights - Smart Metering / Lead and Copper /
Stormwater / Modeling

TUE01 - 101 Session: Conventional Treatment

TUE02 - ♻️ BLACK Session #1

TUE03 - AP BLACK Session #2

TUE04 - Emerging Asset Management Tools and Methodologies
TUE05 - Assessments and Innovations Enhance Water Treatment
Plant Performance

TUE06 - Harnessing the Co-benefits of Water Conservation

TUE07 - Innovations Leading to Successful WTP Implementation

TUE08 - Managing Lead and Copper Under the LCRR - Practical
Solutions

TUE09 - More about PFAS

TUE10 - Simple Ways for Smaller Systems to Get Things Done

TUE11 - Demystifying Digital Twins

TUE12 - Emerging Issues of Concern: Communicating with
Confidence in a Changing Environment

TUE 13 - Communication Challenges and Solutions in CCRs

TUE14 - Methods and Strategies for Protecting Source
Watersheds

TUE15 - Cyanotoxin Vulnerability: Past, Present, and Future
Challenges

TUE16 - Central South Texas Regional Planning

TUE17 - Innovation as a Key to Organizational Agility

TUE18 - Transformative Leadership Academy

TUE19 - Building Careers and Businesses: Leadership and
Entrepreneurship

TUE20 - International Council - Resilience

TUE21 - Advances in Potable Reuse Treatment and Monitoring Techniques

TUE22 - University Forum: Our Future Researchers and Their Mentors

TUE23 - Asset Management Jam Session

TUE24 - Watermain Rehabilitation Good Practices and Advancements

TUE25 - Climate Impacts and Adaptation: Preparing for Extremes, from Drought to Floods via Cyanotoxins

TUE26 - Approaches to Condition Assessment of Water Transmission Mains

TUE27 - New Perspectives on Water Efficiency

TUE28 - Fast-Tracked and Design-Build Solutions for Water Treatment Plants

TUE29 - The Water Research Foundation's Latest PFAS Research Update

TUE30 - Challenges for Small Systems

TUE31 - Learning From Digital Twins

TUE32 - Planning for Digital Transformation

TUE33 - Strengthening Public Trust at the Tap, Online, and in the Community

TUE34 - Source Water Protection in Texas Using the Farm Bill

TUE35 - Exploring Legionella and Manganese in Treatment and Distribution Systems

TUE36 - Pathways to Innovation as Exemplified by the 2021 Innovation Award Nominees

TUE37 - Stimulating Transformative Change Through Diversity and Inclusion

TUE38 - Emerging Issues of Concern: Communicating With Confidence in a Changing Environment

TUE39 - UCMR5 and PFAS: Requirements and Tools for Drinking Water Systems

WED01 - Surface Water Treatment Challenges and Solutions

WED02 - AP BLACK Session #3

WED03 - Pipeline Management – From Asset Management Planning to Repair

WED04 - Impacts and Highlights of New and Revised AWWA Standards

WED05 - Innovations in Leakage Management

WED06 - Climate Resilience, Drought Planning, and Reuse

WED07 - Proven Results in Condition Assessment and Monitoring of Water Distribution Systems

WED08 - Managing Outdoor Water Use

WED09 - CMAR Project Delivery for Risk Allocation and a Sustainable Environment

WED10 - Lead Challenges Coast to Coast

WED12 - Modeling Provides Solutions to Water Challenges

WED13 - The New Frontier of Engineering in Utilities
Management

WED14 - Opportunistic Pathogens

WED15 - Innovative Utility Management

WED16 - Future of Utility Workforce

WED17 - UCMR5 and One Water: What You Need for PFAS Risk
Communication

WED18 - Advances in Advanced Treatment

WED19 - Customer Metering Best Practices

WED20 - Emerging Pipeline Issues: AWWA Standards, Manuals,
and Pipe Design Tools

WED21 - Non-Revenue Water Industry Trends and Updates

WED22 - Emerging Issues for Water Resource Planning and
Management

WED23 - Taking on Water Use in Texas

WED24 - PFAS Treatment Solutions

WED25 - Advances in Reuse – From Nonpotable to Direct Potable
Reuse

WED26 - Expanding Your Toolbox - YPs Tackle Water Issues

WED27 - Impact of Climate Change on Source Water Quality:
Management of Harmful Algae Blooms, Taste & Odor
Compounds and Aquatic Toxins
WED28 - Cybersecurity – How Prepared is Your Utility?
WED29 - Preparing Your Utility for the Next Emergency Event

WED30 - Sustainability in Action
WED31 - Lesson in Digital Transformation
WED32 - Building Financial Sustainable Utility
WED33 - When It Comes to Planning, Small Systems are NOT
Large Systems

Details

This course is optional and offered at an additional cost for public officials only. You must be registered for the conference to purchase courses. Officials completing this course will acquire a basic understanding of the regulatory environment and water supply concerns surrounding public water systems. The course will discuss the regulatory environment that utilities operate in and why, the rule making process and permitting agencies. Admission to all three (3) half-day courses and the awarding of an AWWA Public Officials Certificate upon completion. This course is optional and offered at an additional cost for public officials only. You must be registered for the conference to purchase courses.

Even when water systems meet regulatory requirements and have safe water available for customers, aesthetic problems of taste, odor, color, and suspended matter can occur deteriorating the public confidence and trust that took years to build. This workshop will give water utility personnel such as water quality, public relations, customer service, and regulatory managers an overview of need-to-know criteria for better managing and mitigating aesthetic problems in drinking water.

The team is huddled in the locker room and about to take the field. Do the players know their role and understand the game plan? • Do they have a sense of the opponents they will be facing and how to minimize their vulnerabilities? • Will the consistent patterns the team practiced in the playbook be effective in the game? • Will they be able to learn from their efforts to improve how they play in the next game? • Will they be able to put points on the board and win the game?

This workshop centers on the premise that most successful Asset Management (AM) programs center upon building a strong team atmosphere where action on the field serves as the basis for learning and improving. Using an interactive facilitation approach that includes brief presentations and group exercises, attendees will be led through five stages of AM maturity: innocence, awareness, understanding, competence, and excellence. The backdrop for moving through each of the stages will orient around a “team sports” analogy using terms and examples that can be easily applied and transferred back to utility scenarios. Attendees will walk away with not only a clearer sense of their own program and practical steps they can take to improve it, but also gain perspective from other utility case examples and expert guidance and insight.

This workshop is a forum for information exchange among utilities on case studies and lessons learned from undertaking water main condition assessment programs. First, we will present and discuss the importance of creating an organized data management system, as well as how to best use inspection data for decision-making. We will then cover deployment risks, validation techniques, and the investment value of pressure monitoring to reduce water main breaks, average wall assessment inspections using low-resolution tools, and accurate defect locating and quantification using high-resolution inspection tools. Lastly, utilities will share tips and advice for how to minimize the cost of field inspections.

Water distribution system model calibration can be a daunting task. There are many parameters to adjust to achieve good calibration. This workshop lays out a logical procedure on identifying problems with uncalibrated models and helps the modeler decide what data to collect, what parameters to adjust and how to evaluate the results. The workshop will cover water quality and real-time modeling as well as standard hydraulic modeling for design.

Increasing demands, changing technologies, uncertain costs and aging infrastructure complicate every Utility manager's role. Whether the utility is large or small, successful management requires more than single-subject expertise. Today's leaders must optimize the operations and maintenance activities of the utility, effectively serve and communicate with its customers and other stakeholders, continuously improve its workforce capabilities, replace aging infrastructure with scarce financial resources, appropriately manage its risks, and keep up with the rapidly changing information systems and technology. AWWA's M5 Manual – Water Utility Management delivers deep experience, strength and context for each of these concerns. Newly minted utility managers will find within M5 a means to untangling today's multiple utility issues for a successful and fulfilling career. The M5 Manual will also help seasoned utility managers build upon their prior knowledge and broaden their perspectives. The presentations are from public and private utility executives, senior water and wastewater engineers and principal management and financial consultants who have captured the water industry's best practices, methods, approaches and overall strategies to help participating utility managers remain heroes in today's complex and ever-changing world.

Pre-Conference Workshops are an additional cost and require pre-registration. This workshop focuses on leveraging regional and national expertise to provide operational strategies, lessons learned, and data interpretation of potable reuse/advanced water treatment facilities utilizing biological treatment processes such as biofiltration. Specifically, the workshop discusses the benefits of biological treatment such as improved total organic compounds, contaminants of emerging concern, and nutrient removal, while providing guidance for managing common biofiltration challenges in potable reuse applications (e.g. bromate formation, biomass production). The workshop will showcase potable reuse leaders from utilities nationwide to share experiences with pilot, demonstration, and full-scale implementation of biofiltration in advanced water treatment. This interactive hands-on workshop focuses on the implementation of the AWWA Utility Management Standards to optimize utility operations, for Source Water Protection, Emergency Preparedness, and Security Practices. Participants will use the standards and checklists to identify gaps in specific programs used at their utilities.

This course explores the mission and inner workings of water treatment and piping assets, with a focus on the management of these assets to protect public health and reduce outage risk, including maintenance requirements and utility expenditures.

Membranes hold the promise of higher quality drinking water as high-quality sources become more scarce. This session covers leading asset management practices, beginning with the implementation of an overall strategic asset management program and the development of service levels and a performance management system. It will also cover the use of more tactical asset management principles in maintenance management, energy management, and transmission main management.

In this session, presenters will identify case studies which demonstrate how using a one water approach alternative supplies can provide a sustainable and drought resilient water supply. This session will showcase creative planning approaches for groundwater and surface water management, integrated water planning, and water supply resiliency.

This session will cover new techniques for desktop condition assessment of small diameter water mains, including advanced statistical analysis, machine learning, and artificial intelligence. Applying advanced desktop analysis improves decision making for condition assessment or replacement of smaller mains.

This session highlights several examples of how water utilities are leveraging their Automated Metering Infrastructure (AMI) systems to hunt down water waste and encourage water conservation.

Lessons learned and new technology to improve the design and construction of water distribution systems. Changing water sources and water quality have impacts on corrosion which are explored in this session. The Lead and Copper Rule revisions will have significant impacts for utilities in the future as they incorporate new water sources and treatment processes.

While treatment remains at the core of the PFAS issue, there are many other aspects to this complex problem that inform treatment decisions. This session addresses PFAS occurrence, regulation, planning, fate & transport, and management considerations, all of which are central to understanding the challenges posed by PFAS and potential solutions.

Delivering safe, potable water is a top priority for operating a water distribution system. Many factors with complex interactions can play a role in the degradation of water quality. This session addresses how hydraulic modeling is used to identify challenges in maintaining water quality and how the results are utilized to develop and implement successful measures to sustain water quality.

This session explores a variety of applications for advanced analytics across the water sector – from process optimization to decision support and predicting future events.

Directors of USEPA's drinking water and wastewater management programs will outline current USEPA policy priorities under the Safe Drinking Water Act and Clean Water Act programs, and the Agency's efforts to protect the nation's water supply and support investment in water infrastructure.

Critical leaders in federal water infrastructure policy from Washington, D.C., will discuss and answer questions on the Infrastructure Investment and Jobs Act that was signed into law last fall. This act will send significant levels of new federal funding to water infrastructure across the country.

In many locations throughout the world, land subsidence is inextricably linked to sustainable water management. Join leaders from Texas, Virginia, and California in an informative discussion of the challenges and opportunities in their regions and the importance of considering subsidence in a One Water approach to water management. Reduction in DBPs remains a strong driver for utility process improvements. Further, the USEPA continues to debate changes in the regulation of disinfection byproducts including expansion of the type and number of regulated compounds. This session incorporates a range of DBP topics, from the results of UCMR4 for HAA9 to advanced treatment for DBP precursor reduction.

The Water Sector has experienced an inadvertent gap in security by using risk models such as Design Basis Threat (DBT) and Risk Analysis and Management for Critical Asset Protection (RAMCAP). Although the intent was to provide a security baseline, the probability of threats based on historical frequency or available intelligence have skewed recommendations provided in vulnerability assessments.

Issues of diversity and inclusion have been talked about for years. They have been incorporated into workforce development strategies, discussed at the executive level of many of our organizations and have made their way into the forefront of our collective psyche. In making diversity and inclusion real, speakers will share best practices and practical examples of how they moved from conversation to action. What's unique about this session is that it is interactive. Each presentation will include 30 minutes of lecture and 15 minutes of facilitated

Public Officials Course are an additional cost.

This course will help public officials understand the importance of water resources planning from both a water quality and quantity perspective when tackling such topics as PFAS, lead and fire impacts.

Join us for an engaging one-on-one with poster presenters. These researchers, program managers, consultants, and utilities will be in the Exhibit Hall to answer all your questions. Find topics of interest to you: Join us for an engaging one-on-one with poster presenters. These researchers, program managers, consultants, and utilities will be in the Exhibit Hall to answer all your questions. Topics presented during this poster session are IISM- Industry Insights-Smart Metering; LC-Lead and Copper; Stormwater-SW and Modeling-M.

Coagulation and filtration are the backbone to many water treatment systems. A focus on the basics of these technologies and their optimization provides a foundation for improving plant performance and efficiency.

This session covers the use of new applications of a variety of technologies and methodologies to advance the management of both facility and pipeline asset classes.

This session presents the value of effectively evaluating treatment plant components and using innovative approaches to enhance water quality.

This session highlights how activities to advance water conservation and efficiency can also provide co-benefits to utilities and communities.

Innovation is increasingly needed in the design of water treatment facilities. This session provides great case-study examples of creative thinking in the several stages of a water treatment plant project. The proposed sessions include lesson-learned that would be applicable to the design of other water treatment facility projects. This STS presents an overview of the Lead and Copper Rule Revisions (LCRR) followed by focused presentations and case studies on key aspects of the new regulation, including lead service line (LSL) inventories, corrosion control treatment (CCT), and compliance sampling. The session will end with a Q&A session with industry PFAS continue to capture the attention of regulators, utilities, and the public. Understanding how to break the PFAS cycle is the ultimate goal of treatment.

This session is focusing on the simple successful approaches to solve small system issues.

This STS is intended to offer a blend of industry experience and perspectives on digital twins with panel discussions to define digital twins and hear from multiple utility perspectives, including experts in intelligent water, technology products, and instrumentation and control automation.

The upcoming revisions to the Consumer Confidence Report Rule give an opportunity to think about how not only the CCR can be improved to better reach customers, but how it can fit into a larger set of communication goals. This session will tie together what is going on with CCRs, results from a recent public confidence survey as well as provide other key insights on how to improve communications plans using these tools and others.

This session will cover various methods for assessing watershed vulnerability and implementing protection strategies for surface water and/or groundwater systems.

This session covers cyanotoxin occurrence and treatment plant vulnerability. It will highlight key components of a HAB response plan, regional vulnerabilities, and optimization of source water management and treatment processes. A demonstration of CyanoTOX, a spreadsheet-based tool for estimating cyanotoxin treatment efficacy that is available for free to AWWA members, will also be included.

Compilation of the hot topics and key projects that address the water needs and challenges in Central and South Texas.

Embedding innovation is the key for building organizational agility. In this session, utility leaders will share their experience in applying the recommendations and tactics from WRF 4907 Leading Water and Wastewater Innovation to build effective strategies, engage their workforce, and leverage partnerships. Participants will gain insight as well as a roadmap for their use.

The Transformative Water Leadership Academy (TWLA) is a leadership program that focuses on the fundamental concepts of sustainable community leadership to prepare participants for higher-level position within the water utility sector so that they can address new 21st Century challenges and substantial change within utilities.

This session will convey important lessons on leadership and entrepreneurship through a technical presentation followed by a panel discussion of the water industry's own entrepreneurs. The data driven and qualitative conclusions as well as actionable items from kick-off presentation will inspire attendees to think critically about how leadership can be incorporated into their career, followed by a panel discussion with three business owners who will share their own experiences of leadership by starting and growing their own companies as young professionals.

Given the stressors on water service provision today, resilience is more than ever at the forefront of every water practitioner's mind. In the face of these new challenges, water utilities are increasingly exploring innovative solutions all over the world. Through short dynamic presentation, speakers will share their experience on customer centric solutions and new technologies. This session will also include group discussions pertaining to key topics.

This session covers advances in potable reuse treatment and monitoring techniques
University research reflects our current concerns as well as future issues. These students and professors are leading the way.

Discussion Series: Hosted and facilitated by members of the AWWA Asset Management Committee (AMC), this session will focus on audience participation and interaction. Only one formal presentation will be made, sharing results from the "2020 Level of Progress in Utility Asset Management" survey. For the remainder of the session, AMC subcommittee chairs will give brief (2-5 minutes) presentations on their subcommittee's work and open the topic to audience questions, comments, feedback, and discussion.

This session will provide attendees with recent advancements in watermain rehabilitation practices for proven technologies that can renew aging and deteriorated watermains at a lower capital, social and environmental cost than open-cut replacement.

This session focuses on lessons learned by utilities as incorporate resilience into their planning for climate extremes, with case studies from Texas, Oregon, California and nationwide research by WRF. The session touches on building resilience to urban flooding, droughts, water quality shocks, through innovation, proactive design criteria, and regional collaboration.

Condition assessment of water transmission mains can be expensive. This session will present case studies where utilities targeted their investments on inspection methods, technologies, and approaches that would yield the most useful data for decision making to cost-effectively extend the lives of these high-value assets.

This session shows how utilities are using different approaches to tackle water efficiency.

This session will present case-studies where fast-tracked and design-build strategies were used to successfully implement new water treatment facilities, including valuable lessons-learned.

This session will highlight key research results from WRF funded PFAS projects.

The Colonias offer special small system concerns; and there are ways small systems can effectively treat their water.

Application of digital twins is growing throughout the water sector. This session will provide lessons learned and multiple case studies across water treatment and distribution.

Moving the water sector through digital transformation requires proper planning and understanding of current and emerging technologies. Learning from others on the journey is also beneficial. This session advances concepts in new and emerging technologies and identifies some of the key steps in planning for them. Learn from those already on the journey.

Connecting with your customers and the community is a 24/7 effort that goes beyond newsletters, special events and construction outreach. It may mean putting water in a different light or combatting inaccuracies from celebrities who have entered the water conversation. Every touchpoint in the water production and delivery process presents an opportunity to educate and engage. Making those connections easier to understand and relatable to people already navigating information overload is critical for utilities and the water profession as a whole. Presenters will highlight the challenges, best practices and successes for meeting people where they are to build and maintain trust and confidence in the value of water and all that it takes to produce and safely deliver. Several agencies have worked together to protect source water in Texas. Various planning strategies and success stories are presented on how agencies have worked to implement practices to protect drinking water.

Understanding Legionella and manganese continues to drive interest in the industry. This session covers both Legionella research and manganese control techniques through both treatment and within distribution systems. The AWWA Innovation Award highlights innovative thinking and best practices in the water sector to inspire others and promote a culture of innovation. The nominees for 2021 represented a cross-section of different pathways for innovation, culminating in creative solutions with immediate and measurable benefits to the industry. In this session you will hear from four (4) Innovation Award 2021 nominees who will discuss their innovation experience from the conceptual phase through implementation, highlighting their challenges and successes along the way. This session is sponsored by the Manufacturers/Associates Council (MAC), where the Innovation Award and the greater Innovation Initiative both originated.

Since 2020, the water industry and society have undergone unprecedented change both unintentional and intentional. Change itself, while uncomfortable is sometimes necessary. This session highlights practical tools for stimulating transformative change through Diversity and Inclusion in your organization. It will feature presentations from the winners of AWWA's Diversity & Inclusion Awards alongside other speakers who will detail how their experiences in promoting the principles of Diversity and Inclusion at their organizations propelled positive change.

Whether it's intense weather events disrupting service, newly regulated contaminants or reporting requirements, utilities must be even more focused on how changes in the natural environment and the regulatory environment are creating new communication challenges at the same time that consumers expect instant and real-time information. With more attention on PFAS and other contaminants, expanded public information requirements under the new Lead & Copper Rule, weather-related impacts to service, and the day-in day-out crises utilities face, this session will show why having clear plans and messaging in place to successfully manage emerging concerns is a must for any utility.

The Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was finalized in 2021 and will require drinking water systems to monitor drinking water and other information for per- and polyfluoroalkyl substances (PFAS). As water demand and scarcity both increase, so does our reliance on surface water treatment. Water purveyors must be better prepared to treat surface water year-round, even when the source is threatened due to HAB. This session will blend conventional and biological treatment tools and discuss HAB Treatment.

Pipeline management is a hot topic at water utilities across the country with competing priorities. This session covers how to address two of those priorities: pipe deterioration and lead service line removal. The session concludes illustrating the importance of proactively managing pipe – a large diameter pipeline repair.

AWWA Standards Committees have completed several exciting updates to address industry needs and recognize new technologies. This session will highlight important new first edition standards and significant revisions to existing standards, explaining how to use them and the value of each standard, and the need they have. Learn about innovative solutions to manage leaks, including pressure transient monitoring, predictive modeling, and leak detection technologies.

This session covers various strategies of planning for climate resilience using real results from flooding, drought, and groundwater issue responses. These discussions will explore alternative water supply sources, implementation of emergency supply plans, and innovative methods of managing ground water supply.

State-of-the-industry, new approaches, and lessons learned in desktop assessment, monitoring, and renewal of water distribution systems.

This session highlights activities that water utilities are taking to control outdoor water use through better irrigation and landscape choices.

Construction Management at Risk (CMAR) and other alternative delivery methods have been successfully used on environmentally sensitive projects to allocate risk and ensure sustainability.

Lead in drinking water continues to be a challenge, and utilities throughout the U.S. are preparing for the upcoming Lead and Copper Rule revisions. This session will present how several large cities in the U.S. and Canada are addressing the risk and approaching compliance.

Modeling allows the evaluation of a broad range of options to enhance water system planning and operations. This session will explore how different types of models are used to plan water systems more efficiently and effectively.

The discussion to see what works and what needs to work in today's infrastructure delivery is here by talking with different generations and groups into our complete delivery. The challenge is similar, and we will discuss these similarities while identifying restrictions in each of the project steps created by one or more historical methods and processes.

Identifying and understanding the role of opportunistic pathogens in water systems and premise plumbing is challenging. This session highlights tools and techniques used in OPP work.

Water sector professionals need to be able to communicate with their customers clearly, concisely, consistently, and coherently about all aspects of PFAS – what they are, why the water system is monitoring, what levels were detected, what the results mean as well as what is not known. A fast-tracked project was commissioned to provide support for the industry with UCMR5 this year and in the broader One Water context.

Advanced treatment processes such as membrane processes, advanced oxidation, and biological treatment are very useful tools to solve many water quality challenges. This session will present recent advancements in those processes for drinking water and potable water reuse.

This session will focus on customer metering and AMI best-practices.

Pipelines are a crucial asset for utilities and account for a significant portion of utility activities. AWWA Standards Committees generate an ever-increasing set of tools to deal with emerging pipeline issues to help utilities manage these assets

Get the latest updates in the non-revenue water industry, including advances in water auditing, validation, regulations and policies, and data trends.

This session focuses on a range of emerging issues in water resource planning and management including emerging contaminants, the effects of wildfire on water quality, and leveraging networks of engaged community groups to establish robust water quality monitoring.

This session will highlight how Texas is addressing the need to maintain a focus on water efficiency, even during periods when drought is not prevalent across the state - because the sector knows that drought conditions will return. [Note: talks/speakers are tentative and will be pinned down in early 2022).

Treatment for PFAS is one of the industry's most critical water quality issues. This session covers the entire arc of implementing this treatment, progressing from modeling to testing to full scale operation to residuals management.

Discussion of regulatory guidance and requirements for potable reuse and advances in direct potable reuse rules and implementation.

This session will showcase how young professionals (YPs) are leveraging the tools both in the office and in the field to evaluate and develop solutions to a variety of water supply and quality challenges. Presenters will share their knowledge and experiences gained from utilizing hydraulic modeling to tackle infrastructural, operational, and financial problems and running pilot studies for advanced treatment to help the attendees enhance their skillsets.

The occurrence and impacts of Harmful Algae Blooms, Taste and Odor events and Cyanotoxins are intensifying and expanding to new geographical areas in parallel to the growing impacts of climate change on sources waters. Attending this session will equip the audience with the latest knowledge of how to handle the monitoring, treatment, and communications when it comes to taste and odor and cyanotoxin. This session is designed to educate and update the audience about the current state of knowledge regarding managing and controlling source water quality with respect to cyanotoxins and taste and odor compounds, since the occurrence of these contaminants is increasing in terms of frequency and geographical footprint together with the negative impacts from climate change.

Sustainability is commonly the goal and is the actual outcome of well-planned waterworks studies, projects, and operational efforts. Decreased energy consumption, industry certifications, and environmental achievements are prime examples of desired outcomes and sustainable results. Three practitioners bring forth their achievements in this arena, with the session goal of inspiring attendees to better plan, execute, and celebrate their sustainable waterworks achievements.

In this session, presentations are giving an overview on the utility management, strategic planning, partnership, and considerations of manuals for the small systems utilities.

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