



The
**Utility
Management
Conference**™

WEF | AWWA

**2024
CONFERENCE
PROGRAM**

**FEBRUARY 13-16, 2024
PORTLAND, OREGON**

#UMC24
wef.org/UMC24

The
Utility
Management
Conference™

AWWA | WEF



American Water Works
Association



The Utility Management Conference

Early 2025 - Details Coming Soon!

Water/wastewater utility managers face constant challenges requiring innovative solutions.

Join UMC for forward-thinking leadership, covering strategic planning, efficient processes, and a holistic approach to ongoing improvement efforts.

awwa.org/Utility-Management



The
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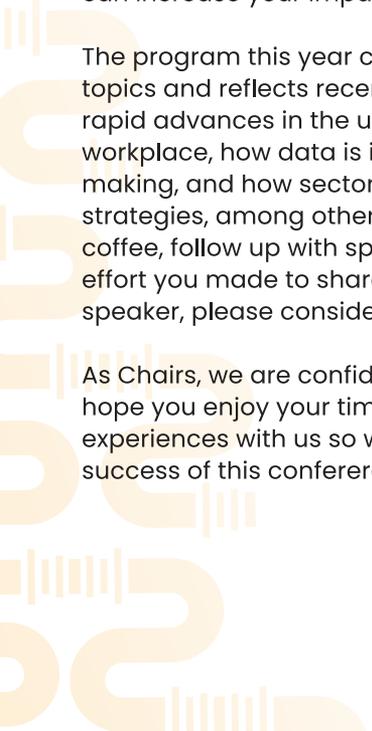
AWWA | WEF

February 13-16, 2024
Oregon Convention Center
Portland, Oregon

#UMC24



This conference is jointly hosted by the Water Environment Federation (WEF) and American Water Works Association (AWWA) and is held in cooperation with the Pacific Northwest Clean Water Association (PNCWA).



The
Utility
Management
Conference™
AWWA | WEF

To Our Friends and Colleagues:

Welcome to Portland and The Utility Management Conference™!

The Water Environment Federation and the American Water Works Association are excited to bring utility managers and sector leaders together for another four days of learning, sharing and celebrating the value of our work. The many management our water utilities continues to be dynamic, reacting to substantial shifts both inside and outside the water sector that affect us all.

We encourage you to make the most of our valuable time together. Take advantage of a unique week to step outside of your daily routine of meetings, emails, and deliverables to take a well-deserved pause to learn and reflect. Here, you have opportunities to interact in person with some of the best leaders in our sector in an open, engaging, and unique program designed around practical and successful utility management. This is a great time for you to think beyond the day to day about how you can increase your impact back home!

The program this year covers a wide variety of utility management topics and reflects recent changes in the sector. You will hear about rapid advances in the use of generative artificial intelligence (AI) in the workplace, how data is increasingly being used to improve decision making, and how sector leaders are implementing new human resource strategies, among other timely topics. Bring your questions, engage over coffee, follow up with speakers. If you are a speaker, we thank you for the effort you made to share your experience with others. If you are not a speaker, please consider submitting an abstract for next year!

As Chairs, we are confident of the value of this Conference, and we also hope you enjoy your time here. Please seek us out and share your experiences with us so we can reinvest that knowledge into continued success of this conference.

Conference Highlights

Pre-Conference Workshops — Interactive workshops cover topics of current interest and present opportunities to learn and share with experts and peers on challenges facing the utility sector. These are always very popular; we hope you can attend one!

Opening General Session — How do you get the public to understand the value of water? By making beer from reuse water of course! The Pure Water Brew competition, started right here in Portland over a decade ago, spurred a global trend that continues today. Hear from the founders about the risks they took and the benefits they reaped.

36 Sessions — Over the next three days, a variety of sessions will be featured covering a vast array of leadership topics and management strategies to meet the specific needs of attendees.

The Utility Management Conference gets better every year, and we hope you will agree. Please reach out to any of the WEF or AWWA staff to tell us how we are doing or to just say hi, we can help you find ways to plug in and connect. There are many opportunities!

We love your feedback!. Please tell us what you think. What works? What can be better? What can we do to improve your experience and the conference for future attendees? Take a minute to complete a survey to provide us with your valuable input or share your thoughts with staff.

On behalf of WEF, AWWA, the conference planning committee, the dedicated staff, all moderators, speakers, and sponsors, we invite you to make this conference experience your best UMC ever!

Thank you for joining us!

Sincerely,
Matthew Ries, Ph.D., P.E., Conference Co-Chair (WEF)
Donna Mancuso, SHRM-SCP, Conference Co-Chair (AWWA)

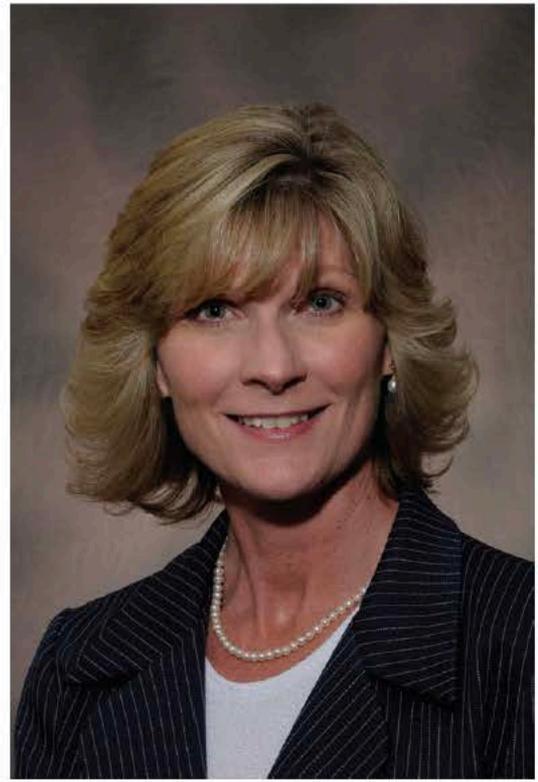
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CONFERENCE PLANNING COMMITTEE



Matt Ries
DC Water
Conference Co-chair, WEF



Donna Mancuso
Suffolk County Water Authority
Conference Co-chair, AWWA

WEF/AWWA THE UTILITY MANAGEMENT CONFERENCE PLANNING COMMITTEE

Maria DeChellis
ORACLE
AWWA

Prabha Kumar
Black & Veatch
WEF

Ryan Locicero
Clean Water Services
WEF

Robert Ryall
Arcadis
AWWA

REGISTRATION

All events are held in the Oregon Convention Center.

The Registration Desk is located in Pre-Function A on Level 1 and will be open at the following times:

Tuesday, February 13	7:30 a.m. - 5:00 p.m.
Wednesday, February 14	7:30 a.m. - 5:00 p.m.
Thursday, February 15	8:00 a.m. - 5:00 p.m.
Friday, February 16	8:00 a.m. - 12:00 p.m.

Sponsored by Brown & Caldwell

PRESENTER AND MODERATOR INFO

All presenters, alternates, and moderators should pick up their badge at the conference Registration Desk and attend their assigned briefing.

Moderators, presenters and alternates participating Wednesday, Thursday, and Friday should attend their assigned briefing. Please attend only once unless speaking on multiple days. The Speaker Briefing and room schedule is as follows:

Wednesday, February 14 – Oregon Ballroom 203	7:45 a.m. - 8:15 a.m.
*Sessions 1 through 12	
Thursday, February 15 – Oregon Ballroom 203	7:45 a.m. - 8:15 a.m.
*Sessions 13 through 36	

CODE OF CONDUCT

WEF is committed to providing a professional, safe, and welcoming environment during its in-person and virtual events for all participants. WEF expects all attendees, moderators, panelists, and speakers to uphold our commitment to diversity and inclusion by helping us provide a positive environment for everyone.



WEF Events Code of Conduct

As a participant you agree to the following:

- To treat all individuals with respect and create a collegial, inclusive, and professional environment.
- To value a diversity of views and opinions by communicating openly with respect for others.
- Not to verbally abuse any individual or to discriminate, harass, or intimidate on the basis of gender, race, gender identity and expression, sexual orientation, physical or mental disability, physical appearance, age, religion, national origin, veteran status, citizenship, or professional rank.

Anyone requested to stop unacceptable behavior is expected to comply immediately. WEF management may take any action deemed necessary and appropriate, including removal from the event (and any remaining portions thereof) without warning and without refund of registration fee.



WEF Member Code of Conduct

Additionally, if you are a WEF member, you agree to uphold the WEF Member Code of Conduct while attending WEF events.

Reporting Concerns

To report a Code of Conduct violation, you may email the WEF Executive Director, at: [**executivedirector@wef.org**](mailto:executivedirector@wef.org).

WIFI

Free WiFi is available in meeting rooms, lobbies, and common areas via the "OCC Free WiFi" network. Service is intended for casual internet access such as light browsing, email, text-based social media, etc. Up to 1Mbps shared bandwidth per connected device.

WEF SOCIAL MEDIA POLICY

WEF strongly encourages the use of social media to share your experiences at our event. This includes sharing interesting quotes or information, taking pictures with colleagues, and using the event hashtag. However, to protect intellectual property, videotaping, filming, or live-streaming of any workshop or technical session presentation, or exhibit booth is prohibited. Any participant violating this policy must relinquish the media and may be removed from the conference. Also, promotional or commercial use of photographs taken at WEFTEC and other WEF conferences is strictly prohibited. If you are interested in content, materials, or products, please consider talking to the speaker or exhibitor, who may provide the information or grant permission.

CONFERENCE SAFETY AND SECURITY

In Case of Emergency

Oregon Convention Center (OCC)

- **For life-threatening situations, immediately call 9-1-1.**
- For non-life-threatening first-aid occurrences or a security threat, contact the Public Safety Console at +1 503-731-7849 OR dial 7849 from any OCC house phone and provide the specifics of the occurrence.
- If a fire (smoke, flames, etc.) is suspected, immediately call 9-1-1 and then contact the 24-hour Public Safety Console by dialing 7849 from any OCC house phone or +1 503-731-7849.
- The official evacuation assembly area is the OCC North Plaza at the corner of NE MLK Boulevard and NE Holladay Street. The overflow area is the Convention Center Plaza.

First Aid

Med-Tech Office A - Level 1, Oregon Convention Center

Tuesday, February 13	7:30 a.m. – 5:00 p.m.
Wednesday, February 14	7:30 a.m. – 5:00 p.m.
Thursday, February 15	7:30 a.m. – 5:00 p.m.

Hyatt Regency Portland (conference headquarters hotel)

- **Dial 55 from any Hotel phone and immediately report it.**
- If the matter is NOT an emergency, dial 4240 from any Hotel phone, ask to speak to the Manager on Duty, and report the matter accordingly.

Paramedics, the Fire Department, Law Enforcement and Hospitals are all located approximately 4- to 7-minutes from the OCC and the Hyatt Regency Portland.

RECEPTIONS AND MEAL FUNCTIONS

Conference Luncheon

Sponsored by Walsh Group

Lunch will be provided for all registered attendees at the Conference Luncheon. Use this opportunity to meet your fellow participants from across the country and abroad while enjoying a nice meal. The menu has been created with a variety of dietary preferences in mind, but please let staff know if you have specific restrictions.

Exhibit Hall A - Level 1, Oregon Convention Center

Wednesday, February 14 12:00 p.m. - 1:30 p.m.

Conference Reception

Sponsored by Arcadis

Join fellow attendees at the Conference Reception! This is a great opportunity to enjoy a beverage and light hors d'oeuvres while networking with other water and utility leaders.

Oregon Ballrooms 201-202 - Level 2, Oregon Convention Center

Wednesday, February 14 5:00 p.m. - 6:30 p.m.

Meet the Speakers Social Hour

Sponsored by Hobas Pipe

The UMC Meet the Speakers Social Hour is an opportunity to connect with those presenting throughout the meeting. All attendees are encouraged to attend. Plan to grab a drink and join us for lively conversation.

Oregon Ballroom 204 - Level 2 , Oregon Convention Center

Thursday, February 15 5:00 p.m. - 6:00 p.m.

Networking Breaks

Wednesday and Thursday Networking Breaks Sponsored by MentorAPM

Holladay Lobby and Oregon Ballroom Lobby, Oregon Convention Center

Wednesday, February 14 10:00 - 10:30 a.m. and 3:00 - 3:30 p.m.

Thursday, February 15 10:00 - 10:30 a.m. and 3:00 - 3:30 p.m.

Friday, February 16 10:00 - 10:30 a.m.

COMMITTEE MEETINGS

AWWA Asset Management (ECD) Committee

Room A107-108 - Level 1, Oregon Convention Center

Wednesday, February 14 12:15 p.m. - 1:15 p.m.

AWWA Customer Service Committee

Room A107-108 - Level 1, Oregon Convention Center

Wednesday, February 14 1:30 p.m. - 2:30 p.m.

AWWA Water Equation Committee

Room A107-108 - Level 1, Oregon Convention Center

Wednesday, February 14 2:30 p.m. - 5:00 p.m.

AWWA Rates & Charges Committee

Room A107-108 - Level 1, Oregon Convention Center

Thursday, February 15 8:30 a.m. - 10:00 a.m.

WEF Utility Management Community Meeting

Room A106 - Level 1, Oregon Convention Center

Thursday, February 15 12:00 p.m. - 1:30 p.m.

AWWA Management & Leadership Division

Room A107-108 - Level 1, Oregon Convention Center

Thursday, February 15 1:00 p.m. - 2:30 p.m.

AWWA Strategic Management Practices Committee

Room A107-108 - Level 1, Oregon Convention Center

Thursday, February 15 3:00 p.m. - 4:00 p.m.

AWWA Utility Benchmarking Advisory Committee

Room A107-108 - Level 1, Oregon Convention Center

Thursday, February 15 4:00 p.m. - 5:00 p.m.

ONLINE PROCEEDINGS

Conference proceedings, consisting of manuscripts for each presentation, have been made available through an online portal. Advance registrants will receive an email with instructions on how to access to the WEF/AWWA Utility Management Conference 2024 online proceedings before the end of the conference. Onsite registrants will receive an email with instructions to access proceedings following the event's conclusion.

Not attending this year's Utility Management Conference? Copies of proceedings may be ordered on Access Water after the conference ends. You may call 1-800-666-0206 or visit www.AccessWater.org to place your order.

MOBILE APP

WEF is pleased to offer the 2024 WEF/AWWA Utility Management Mobile App which gives you convenient access to all event details.



Use the QR Code, or search "EventPilot" in the Google Play or Apple Store.
Enter Access Code: **UMC24**

View full program details, speakers, and sponsors. Set up your account to begin saving your favorite sessions, speakers and sponsors to your plan, receiving recommendations, and connecting with other conference attendees by Joining the Conversation within each session.

Please note that this print program is up to date as of January 24, 2024. Download the mobile app for the most current information about each technical session!

CONTINUING EDUCATION

Continuing Education credit files will be made available online after the event.

Participating attendees will receive an email within 4 weeks after each event informing them when CE Credit documentation becomes available. Attendees will be able to view and download a certificate and transcript detailing their event participation using the link provided in the event follow up messaging. These details are also posted under the Events & Education tab of www.WEF.org.

How Do I Receive Credit For this Conference?

In order to receive credit for participation in any of the education sessions attendees will be required to scan their badge when entering and exiting each session room. Credits obtained during this event will be available at the end of the conference using the link provided in the post event email and WEF site listed above.

Pre-Conference Workshops:

WEF offers Continuing Education Units (CEUs) for participation in workshops. One CEU is the equivalent to 10 hours of training or formal instruction. These are distributed for structured, relevant professional training above and beyond that of initial certification or employment in a particular field.

Technical Sessions:

WEF offers Professional Development Hours (PDHs) for participation in technical sessions. A PDH is defined as one hour spent engaged in an activity that contributes to the advancement or enhancement of professional skills or scientific knowledge of a professional engineer or operator.

When Will I Receive Credits For this Conference?

Certificates and transcripts are available for download during and post conference. WEF will send an email after the conference to inform attendees where they can obtain their credits. Please keep in mind that most state licensing boards require the individual licensees to report continuing education credits.

Note: Educational Credits will not be recorded, and documentation will not be distributed unless the attendee is a confirmed registrant of this event and the proper steps are completed as indicated in the directions provided.

Are WEF Continuing Education Credits Approved in My State?

Most state engineering boards will accept WEF event credits as issued by WEF. WEF applies for approval in many states for operators and will be happy to work with individuals and Member Associations for additional state or agency approvals upon request. In addition, WEF has been approved as a Training Provider through the following: The Florida Board of Professional Engineers, the New York State Department of Education, and the Ohio EPA.

Please visit www.wef.org for specific state approval information for each event.

CONTINUING EDUCATION

What Else Do I Need to Know?

WEF follows the International Association of Continuing Education and Training (IACET) guidelines along with strict state-specific CE Credit regulations. We strive to maintain these policies and procedures regarding our Continuing Education Program to meet with and receive state recognition of our events. WEF calculates education credits following a standardized method that is widely accepted by certification and licensing agencies. However, many states differ in the type and/or number of credits they will approve for educational events. Because of this, participants are responsible for exploring their state requirements and for ensuring that WEF conference credits are accepted.

Service and Support...

WEF maintains a database of all continuing education files for a minimum of 7 years. You may contact WEF's Customer Service Team between the hours of 8:30 a.m. and 5:00 p.m. EST, Monday through Friday for questions related to WEF Programs - 1-800-666-0206 or csc@wef.org.

State Credit Calculations:

Each state has its own set of CE credit requirements. Some licensing boards use different acronyms for approved training credits. In most instances the credits issued by WEF can be converted to meet state specific requirements that vary from the system used by WEF. This is usually managed at the state level using the following conversion:

1.0 CEU = 10 Hours of session time

1.0 PDH = 1 Hour of session time

1.0 General Contact Hour = 1 Hour of session time

For example: **1.7 CEU Credits = 17.0 PDH** depending on individual state regulations.

**CEU & PDH credits are available for Workshops to Professional Engineers licensed in the state of New York (NYSED).*

Please note: courses that are not related to professional practice, such as accounting/financial planning, basic Auto CAD, general office management, insurance, marketing, real estate, risk management, DE&I, etc. are not approved for continuing education credits by some state licensing boards, including the NYSED.

For more information regarding WEF's Continuing Education Program, please visit the Events & Education tab at www.WEF.org.

SPONSORS

We would like to thank the following sponsoring companies for their contributions to the conference and program.



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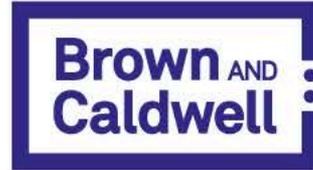
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walshgroup.com
LUNCHEON

SESSIONS AT-A-GLANCE

Session Number	Session Title	Start Time	End Time	CE Credits (PDHs)
Wednesday, February 14				
OGS	Opening General Session	8:30 a.m.	10:00 a.m.	1.5 GCHs
Session 01	Building Resilient and Sustainable Water Infrastructure in Jackson, MS - Insights from the Project Team	10:30 a.m.	12:00 p.m.	1.5
Session 02	Utility Collaboration & Regionalization A	10:30 a.m.	12:00 p.m.	1.5
Session 03	Strategic Planning A	10:30 a.m.	12:00 p.m.	1.5
Session 04	Understanding the 'Why' Behind Utility Technology Transformations	10:30 a.m.	12:00 p.m.	1.5
Session 05	Workforce Development - A Focus on Operators	1:30 p.m.	3:00 p.m.	1.5
Session 06	Asset Management and Capital Program Frameworks	1:30 p.m.	3:00 p.m.	1.5
Session 07	Times They Are a Changing - How to Bob and Weave for Dylan' with Change Management	1:30 p.m.	3:00 p.m.	1.5
Session 08	Digital Transformation in the Water Sector	1:30 p.m.	3:00 p.m.	1.5
Session 09	Workforce Development - Managing this Crucial Asset	3:30 p.m.	5:00 p.m.	1.5
Session 10	Best Practices for Capital Program and Asset Management	3:30 p.m.	5:00 p.m.	1.5
Session 11	Financial Resilience for Utilities and Customers Alike	3:30 p.m.	5:00 p.m.	1.5
Session 12	Water Research Foundation Project 5189- AI/ML Framework for Water and Wastewater Utilities	3:30 p.m.	5:00 p.m.	1.5
Thursday, February 15				
Session 13	Incorporating Equity into Utility Decision Making	8:30 a.m.	10:00 a.m.	1.5
Session 14	Innovating the Consumer Experience	8:30 a.m.	10:00 a.m.	1.5
Session 15	Optimizing Business Practices	8:30 a.m.	10:00 a.m.	1.5
Session 16	Management and Oversight of New Frontiers in Artificial Intelligence	8:30 a.m.	10:00 a.m.	1.5
Session 17	Utility Resilience and Reliability	10:30 a.m.	12:00 p.m.	1.5

SESSIONS AT-A-GLANCE

Session Number	Session Title	Start Time	End Time	CE Credits (PDHs)
Thursday, February 15, continued				
Session 18	Innovation Amplified - Harnessing Collaboration and Communications for Breakthrough Solutions	10:30 a.m.	12:00 p.m.	1.5
Session 19	Utility Planning - Essential to Success	10:30 a.m.	12:00 p.m.	1.5
Session 20	Combining Data and Asset Management for Improved Monitoring and Operations	10:30 a.m.	12:00 p.m.	1.5
Session 21	Alternative Project Delivery and Procurement	1:30 p.m.	3:00 p.m.	1.5
Session 22	Communications and Public Engagement	1:30 p.m.	3:00 p.m.	1.5
Session 23	How Rockwood Water People's Utility District and the City of Portland Benefitted from WIFIA Financing for their Water Infrastructure Projects	1:30 p.m.	3:00 p.m.	1.5
Session 24	Real World Applications of Artificial Intelligence	1:30 p.m.	3:00 p.m.	1.5
Session 25	Diversity, Equity, and Inclusion from a Water Utility's Perspective	3:30 p.m.	5:00 p.m.	1.5
Session 26	The Business Case for Water Affordability - A Quantitative Approach	3:30 p.m.	5:00 p.m.	1.5
Session 27	Utility Financing - A Multi-Faceted and Long-Term Effort	3:30 p.m.	5:00 p.m.	1.5
Session 28	Applications of Data Management and Analysis	3:30 p.m.	5:00 p.m.	1.5
Friday, February 16				
Session 29	Change Management - Considering Culture, Workforce, Business Processes, and Technology	8:30 a.m.	10:00 a.m.	1.5
Session 30	Utility Collaboration & Regionalization B	8:30 a.m.	10:00 a.m.	1.5
Session 31	Integrated Water Management	8:30 a.m.	10:00 a.m.	1.5
Session 32	Optimization of Operation & Maintenance	8:30 a.m.	10:00 a.m.	1.5
Session 33	Decision Making with the Customer in Mind	10:30 a.m.	12:00 p.m.	1.5
Session 34	Engaging the Community in One Water Programming	10:30 a.m.	12:00 p.m.	1.5
Session 35	Strategic Planning B	10:30 a.m.	12:00 p.m.	1.5
Session 36	Utility Sustainability and Environmental Challenges	10:30 a.m.	12:00 p.m.	1.5

PRE-CONFERENCE WORKSHOPS

WORKSHOP

A

TUESDAY
FEBRUARY 13



Room: B110-111



0.6 CEUs

From Disrepair to Prepared (from Reactive to Proactive): Leveraging the Fundamentals of Maintenance Reliability for Effective Operations and Sustainable Utility Management



8:30 a.m. – 5:00 p.m.

additional fees apply

- 8:30 a.m. Welcome Message**
Pam Elardo, Brown and Caldwell
- 8:40 a.m. Building the Foundation for Maintenance Reliability**
Steve Hutchings, Brown and Caldwell
- 9:00 a.m. Starting the Journey**
Peter Boone, Tualatin Valley Water District
- 9:30 a.m. Interactive Session #1 - Self / Utility Assessment Exercise**
- 10:00 a.m. Networking and Coffee Break**
- 10:30 a.m. The Maintenance Optimization Journey, From the Bottom Up, The Story of KC WTD**
Adam Comfort, King County Wastewater Treatment Division
- 11:00 a.m. Feeding the Data System: Bellevue's Coordinated Approach to Condition Assessment and FMECA**
Jaclyn Knoth, City of Bellevue Utilities
- 11:30 a.m. Interactive Session #2 - Data and Problem-solving Exercise**
- 12:00 p.m. Lunch**
- 1:30 p.m. Interactive Session #2 - Data and Problem-solving Exercise - Cont.**

Workshop A agenda continued on following page

PRE-CONFERENCE WORKSHOPS

WORKSHOP

A

TUESDAY
FEBRUARY 13

additional fees apply



Room: B110-111



0.6 CEUs

From Disrepair to Prepared (from Reactive to Proactive): Leveraging the Fundamentals of Maintenance Reliability for Effective Operations and Sustainable Utility Management



8:30 a.m. – 5:00 p.m.

Workshop A agenda continued from previous page

- 2:00 p.m.** **Lifecycle of a Predictive Maintenance Program**
John Nice, Clean Water Services
- 2:30 p.m.** **Portland BES, Condition Assessment and Cultural Change at the Shop Floor**
Christa Overby, Mia Sabanovic, Portland Bureau of Environmental Services
- 3:00 p.m.** **Networking and Coffee Break**
- 3:30 p.m.** **Cultural Transformation and the WEF WISE Program**
Mark Poling, Clean Water Management
- 3:50 p.m.** **Interactive Session #3 - Readiness Assessment and Cultural Change**
- 4:20 p.m.** **Vision the Possible, Benefits Realized, Continue the Journey**
Pam Elardo, Brown and Caldwell
- 4:45 p.m.** **Wrap-Up and Evaluation**
- 5:00 p.m.** **Workshop adjourns**

PRE-CONFERENCE WORKSHOPS

WORKSHOP B

TUESDAY
FEBRUARY 13



Room: B118-119



0.6 CEUs

Commissioning Capital Projects as a Life Cycle Process



8:30 a.m. - 5:00 p.m.

additional fees apply

- 8:30 a.m.** **Introductions**
Salil Kharkar, DC Water
- 9:00 a.m.** **Inconvenient Truths**
Diala Dandach, Brown and Caldwell; Christine deBarbadillo,
Black & Veatch
- 9:30 a.m.** **Understanding the P-F Curve**
Theresa Bruton, Salil Kharkar, DC Water
- 10:00 a.m.** **Networking and Coffee Break**
- 10:30 a.m.** **Failure Mode Approach to Defect Identification**
Jaime Alba, Theresa Bruton, DC Water
- 11:00 a.m.** **Condition Monitoring to Find Hidden Defects**
Theresa Bruton, DC Water
- 12:00 p.m.** **Lunch**
- 1:30 p.m.** **Designing out Defects**
Christine deBarbadillo, Black & Veatch; David Parker, DC Water
- 2:00 p.m.** **Improving Training Effectiveness**
Stacy Passaro, Passaro Engineering

Workshop B agenda continued on following page

PRE-CONFERENCE WORKSHOPS

WORKSHOP B

TUESDAY
FEBRUARY 13



Room: B118-119



0.6 CEUs

Commissioning Capital Projects as a Life Cycle Process



8:30 a.m. – 5:00 p.m.

additional fees apply

Workshop B agenda continued from previous page

- 3:00 p.m.** **Networking and Coffee Break**
- 3:30 p.m.** **Warranties**
Jeff Lukas, Xylem; Chuck Sinclair, Garney Construction
- 4:00 p.m.** **Measuring Commissioning Success**
David Parker, DC Water; Diala Dandach, Brown and Caldwell
- 4:30 p.m.** **Wrap Up and Parking Lot Items**
Stacy Passaro, Passaro Engineering
- 5:00 p.m.** **Workshop adjourns**

PRE-CONFERENCE WORKSHOPS

WORKSHOP

C

TUESDAY
FEBRUARY 13

 Room: A105

 0.3 CEUs

Resilience Continuum for Assessing and Improving a Utility's Resilience Positioning

 8:30 a.m. - 12:00 p.m.

additional fees apply

- 8:30 a.m.** **Welcome and Resilience Continuum**
Prabha Kumar, Black & Veatch
- 9:00 a.m.** **Utility Panelist: MNWD and Workforce Adaptation**
Drew Atwater, Moulton Niguel Water District
- 9:15 a.m.** **Utility Panelist: City of Wilmington and Customer Engagement**
Brett Taylor, City of Wilmington
- 9:30 a.m.** **Utility Panelist: LWC and Digital Enablement**
Matthew Griffith, Louisville Water Company
- 9:45 a.m.** **Panel Discussion & Resilience Continuum Live Poll**
Marissa Huntley, Sammamish Plateau Water
- 10:00 a.m.** **Networking and Coffee Break**
- 10:30 a.m.** **Reflection on Live Poll Results**
Marissa Huntley, Sammamish Plateau Water
- 10:45 a.m.** **Exercise: Resilience Factor Breakouts**
Marissa Huntley, Sammamish Plateau Water; Prabha Kumar, Black & Veatch; Jason Carter, Arcadis
- 11:30 a.m.** **Breakout Group Reports and Discussion**
Jason Carter, Arcadis
- 12:00 p.m.** **Workshop Adjourns**

PRE-CONFERENCE WORKSHOPS

WORKSHOP

D

TUESDAY
FEBRUARY 13

 Room: A106

 0.3 CEUs

Operationalizing Equity, Environmental Justice, and Resilience in your Utility with Advanced Asset Management

 8:30 a.m. - 12:00 p.m.

additional fees apply

- 8:30 a.m.** **Introductions and Workshop Overview**
Hugh Sinclair, Arcadis
- 8:45 a.m.** **What is Advanced Asset Management?**
- **Role of Resilience In Advanced Asset Management**
Kevin Slaven, Arcadis
 - **Role of Equality and Environmental Justice in Asset Management**
Karyn Riley, Arcadis
- 9:00 a.m.** **Calibrating Levels of Service for Greater Equity**
Alan Sauvageau, WSSC Water
- 9:30 a.m.** **Data-driven Decision Making - Incorporating Resilience into Asset Management**
Satish Tripathi, Houston Water
- 10:00 a.m.** **Networking and Coffee Break**
- 10:30 a.m.** **Group Exercise 1: Capital Project Prioritization with Equity and Environmental Justice**
- 11:10 a.m.** **Group Exercise 2: Risk Assessment with Resilience Factors**
- 11:50 a.m.** **Workshop Exercise Debrief, Discussions, and Wrap Up**
- 12:00 p.m.** **Workshop Adjourns**

PRE-CONFERENCE WORKSHOPS

WORKSHOP E

TUESDAY
FEBRUARY 13

 **Room: A105**

 **0.3 CEUs**

Wateropolis – A Facilitated Workshop for Values-Based Resource Prioritization

 **1:30 p.m. – 5:00 p.m.**

additional fees apply

- 1:30 p.m.** **Introductions and the Context for Wateropolis**
Catherine Carter, Raftelis
- 2:00 p.m.** **The Effective Utility Management Framework**
Jim Ginley, Jim Ginley Consulting LLC
- 2:20 p.m.** **Selecting Organizational Values**
Jim Ginley, Jim Ginley Consulting LLC
- 2:50 p.m.** **Scenario Instructions**
Catherine Carter, Raftelis
- 3:00 p.m.** **Networking and Coffee Break**
- 3:30 p.m.** **Scenarios 1 and 2**
Catherine Carter, Jen Teal, Raftelis
- 4:00 p.m.** **Scenarios 3 and 4**
Catherine Carter, Jen Teal, Raftelis
- 4:30 p.m.** **Scenario 5, Exercise Debrief**
Catherine Carter, Jen Teal, Raftelis; Jim Ginley, Jim Ginley Consulting LLC
- 5:00 p.m.** **Workshop adjourns**

PRE-CONFERENCE WORKSHOPS

WORKSHOP

F

TUESDAY
FEBRUARY 13

 **Room: A106**

 **0.3 CEUs**

**Using Gap Assessments to Advance
Your Asset Management Program
Maturity**

 **1:30 p.m. – 5:00 p.m.**

additional fees apply

- 1:30 p.m.** **Welcome and Introductions, Overview of Assessment Reasons and Tools**
Tammy Whipple, AMCL
- 1:45 p.m.** **Case Study: Using Assessments to Identify Gaps and Develop Road Maps for Advancement**
Mert Muftugil, Portland Water Bureau
- 2:05 p.m.** **Complete Assessment on Current and Desired Maturity Benchmark Current and Desired State of Maturity and Select Focus of Breakout Sessions**
- 2:30 p.m.** **Breakout Session: Develop Advancement Options for Select AM Aspects Group Discussion/Report out**
Facilitators; Tammy Whipple, AMCL; Rebecca Borker, WSP; Kevin Campanella, Burgess & Niple; Mert Muftugil, Portland Water Bureau
- 3:00 p.m.** **Networking and Coffee Break**
- 3:30 p.m.** **Developing an AM Program Roadmap**
Rebecca Borker, WSP; Kevin Campanella, B&N
- 4:00 p.m.** **Breakout Session: Develop AM Roadmap Example for Select Aspect**
Facilitators; Tammy Whipple, AMCL; Rebecca Borker, WSP; Kevin Campanella, Burgess & Niple; Mert Muftugil, Portland Water Bureau
- 4:45 p.m.** **Summary and Concluding Statements**
Tammy Whipple, AMCL
- 5:00 p.m.** **Workshop adjourns**

OPENING GENERAL SESSION

 **WEDNESDAY, FEBRUARY 14 | 8:30 a.m. – 10:00 a.m.**

- 8:30 a.m. Welcome to Portland and UMC 2024**
Matt Ries, 2024 Co-Chair (representing WEF)
Donna Mancuso, 2024 Co-Chair (representing AWWA)
- 8:45 a.m. WEF Welcome**
Aimeé Kileen, WEF President
- 8:50 a.m. AWWA Welcome**
Pat Kerr, AWWA President
- 8:55 a.m. May I offer You Some Highly Purified Wastewater? It's a Nice Pale Ale: Unique Approaches to Public Engagement with Pure Water Brew**
Brian Haslip, Fermentation Specialist
M. Lee Hedgmon, Owner, The Barreled Bee
Jenn McPoland, SheBrew Founder/Organizer
Mark Poling, formerly with Clean Water Services, now Principal Engineer, Clean Water Management LLC
- It's been almost 10 years since some crazy people at Clean Water Services said to themselves, "You know, if we want to get people talking about reusing water, we ought to make beer from it!" Join us for an informative and fun discussion about the origins and evolution of Pure Water Brew with some of the founders of the sustainable water challenge. We'll discuss the challenges and successes of the venture that spurred a global trend and its implications for future innovation and communication. More than just craft brewers talking about beer, the session's Pure Water Brew veterans brings together elements of risk-taking, humor and messaging, creating one of the most effective public engagement campaigns in our sector.
- 10:00 am Session Adjourns for Networking Break**

TECHNICAL PROGRAM

SESSION 01

WEDNESDAY
FEBRUARY 14



Room: B115-116



1.5 PDHs

Building Resilient and Sustainable Water Infrastructure in Jackson, MS – Insights from the Project Team



10:30 a.m. – 12:00 p.m.

Speakers: **Ted Henifin, JXN Water; Ameerah Palacios, Brent Tippey, HDR; Mia Welch, Jacobs; Patrick Brown, Stantec**

You've seen the headlines, now hear from the project team of JXN Water, Ted Henifin, interim third-party manager will speak on lessons learned and introduce key parts of his project team from Jacobs, Stantec, and HDR to speak on the progress of the system in its recovery. This panel will explore the critical intersection of resiliency and sustainability in water infrastructure development and management. Through a multi-disciplinary lens, the panelists will provide valuable insights and practical approaches for the AEC industry to understand the challenges in Jackson, MS. The 'Building Resilient and Sustainable Water Infrastructure' panel is designed to provide a comprehensive and actionable overview of the crucial issues surrounding water infrastructure today. It brings together experts from the JXN Water project team to share their knowledge, experiences, and best practices. Attendees will leave with a deeper understanding of the complexities of water infrastructure, as well as practical tools and strategies to address the challenges of an ever-changing world.

- 10:30 a.m.** **Introduction**
- 10:35 a.m.** **Updates on the System**
Ted Henifin, JXN Water
- 10:55 a.m.** **The First 100 Days**
- 11:15 a.m.** **Stabilization**
- 11:30 a.m.** **The Future of JXN**
- 11:45 a.m.** **Audience Q&A**
- 12:00 p.m.** **Session adjourns for networking luncheon**

TECHNICAL PROGRAM

**SESSION
02**

**WEDNESDAY
FEBRUARY 14**

 **Room: B117-119**  **1.5 PDHs**

Utility Collaboration & Regionalization A

 **10:30 a.m. – 12:00 p.m.**

Moderator: **Heidi Hackett, Cape Fear Public Utility Authority**

10:30 a.m. **From Burden to Benefit, ALCOSAN's Regionalization Program Then and Now**
Kaye Bealer, AECOM; Julia Spicher, ALCOSAN

11:00 a.m. **Doubled Overnight: Consolidating Seven Utilities into One**
Jack Beers, CDM Smith; Jacob Tittle, MetroConnects

11:30 a.m. **When Less is More: A Wastewater Treatment Consolidation Case Study**
Bailey Keller, Kendall Ryan, Jared Barber, Lindsey Reid, David Munn, Richard Weatherly, Freese and Nichols; Jameson Appel, City of Pearland

12:00 p.m. **Session adjourns for networking luncheon**

Alternate: **Creation and Implementation of the Best Practices Guide for Quality Plan Submittals in Nevada**
Leslie Long, Ernie Buo, Clark County Water Reclamation District

Alternate: **Regionalization - The Problem with Finances**
Ryan Graf, Miranda Kleven, Advanced Engineering and Environmental Services Inc

TECHNICAL PROGRAM

SESSION
03

WEDNESDAY
FEBRUARY 14

 Room: B110-112  1.5 PDHs

Strategic Planning A

 10:30 a.m. – 12:00 p.m.

Moderator: Sharon Peters, EMA, Inc.

- 10:30 a.m.** **Preparing for All Potential Outcomes: How HRSD Used Innovative Scenario Planning to Future-Proof its Organizational Strategic Plan**
Jay Bernas, HRSD; Shelbie Dashiell, Sarah Dominick, Ryan Nagel, Hazen and Sawyer
- 11:00 a.m.** **Future of Water and Wastewater Infrastructure and Policy in Sugar Land - A Story of Collaboration between Planning and Engineering**
Ishita Rahman, Alexis Garcia, Kendall Ryan, Freese & Nichols Inc.; Katie Clayton, City of Sugar Land
- 11:30 a.m.** **Strategic Planning and Execution of a Unified SCADA System for Water Utility Management**
Devin Sanders, Portland Water Bureau; Leo Rodgers, Brown and Caldwell
- 12:00 p.m.** **Session adjourns for networking luncheon**
- Alternate:** **Setting Expectations: Providing Flexible Project Guidance to Align the Management of Projects Across an Organization**
Sree Kolapalli, Loudoun Water; Michael Dalton, Hazen and Sawyer; Thomas Lipinski, Loudoun Water; Conor Brennan, Ryan Nagel, Hazen and Sawyer

TECHNICAL PROGRAM

SESSION 04

WEDNESDAY
FEBRUARY 14

 Room: B113-114  1.5 PDHs

Understanding the "Why" Behind Utility Technology Transformations: The Behind the Scenes View of What Drives the Need for Change



10:30 a.m. – 12:00 p.m.

Moderator: Seth Johnstone, 1898 & Co.

This session will include presentations from three leading utilities on 'why' they undertook a strategic technology initiative at their organization. The focus of these presentations will be on the organizational drivers that made the project necessary, what approaches were used to build buy-in to taking on the project, and lessons learned leading up to the actual procurement and deployment of the technology initiative. Following the presentations, there will be a moderated panel discussion providing the audience a chance to ask the utility leaders additional questions about each of these initiatives and the utilities overarching strategies around technology use.

- 10:30 a.m.** **Introduction to Session and Presenters**
- 10:35 a.m.** **Going Back to the Beginning: Building Trust in Data and Systems through Continual Business Engagement**
Michael Beardslee, Craig Lees, Loudoun Water
- 10:55 a.m.** **Right-Sizing Technology: Improving Business Processes through a SharePoint Implementation**
Jeanetta Williams, Prince William County Service Authority
- 11:15 a.m.** **Learning from the Past to Build for the Future: Creating the Case for Modernizing Asset Management through an Asset Management System Deployment**
Lee Haller, Matthew Jacob, Pittsburgh Water & Sewer Authority
- 11:35 a.m.** **Moderated Panel Discussion**
- 12:00 p.m.** **Session adjourns for networking luncheon**

TECHNICAL PROGRAM

**SESSION
05**

**WEDNESDAY
FEBRUARY 14**

 **Room: B117-119**  **1.5 PDHs**

Workforce Development: A Focus on Operators

 **1:30 p.m. – 3:00 p.m.**

Moderator: **Rhonda Harris, Workforce Resource Solutions**

1:30 p.m. **Wastewater Operator Apprenticeship Program**
Tim Runde, City of Des Moines Metro WRA-WRF

2:00 p.m. **Attracting Operators to the Field**
Olga Mikhalchishina, Bradley Hayes, Woodard and Curran

2:30 p.m. **Analyzing Operators' Jobs: A data driven approach to certifying operators and how it impacts the future of the water industry**
Paul Bishop, Water Professionals International (WPI); Alan Cranford, City of Murfreesboro, TN; Mike Gosselin, City of Kelowna

3:00 p.m. **Session adjourns for networking break**

Alternate: **Stay Interviews: A Mechanism for Improving Employee Retention**
Kacie Allard, South Platte Water Renewal Partners

Alternate: **Purpose Driven Work: Utilizing the motivation behind the new workforce to build a successful internship program**
Anna Schroeder, Zeena Williss Kohr, South Platte Renew

TECHNICAL PROGRAM

SESSION 06

WEDNESDAY
FEBRUARY 14



Room: B110-112



1.5 PDHs

Asset Management and Capital Program Frameworks



1:30 p.m. – 3:00 p.m.

Moderator: Prabha Kumar, Black & Veatch

- 1:30 p.m.** **Charlotte Water's Systematic and Comprehensive Sewer Maintenance and Rehabilitation Program Leads to a 75% Reduction in SSOs over the last 15 Years**
Aaron Frazier, CHA Consulting, Inc.; Keith Shirley, Jason Bromirski, Charlotte Water
- 2:00 p.m.** **So, You Think You Can Inspect? The Saga of City-Wide Inspections in the Nation's Capital**
Tatiana Baranova, Jessica Shiao, DC Water; Pono Hanson, Kaylie Kramer, Sohan Patel, Brown and Caldwell
- 2:30 p.m.** **EWSU's Roadmap to Asset Management Excellence**
Logan Guffey, Evansville Water and Sewer Authority; Sara Ferrara, Arcadis
- 3:00 p.m.** **Session adjourns for networking break**

TECHNICAL PROGRAM

SESSION 07

WEDNESDAY
FEBRUARY 14



Room: B113-114



1.5 PDHs

Understanding the "Why" Behind Utility Technology Transformations: The Behind the Scenes View of What Drives the Need for Change



1:30 p.m. – 3:00 p.m.

Moderators: Heather Wootton, Tanya Miro, Kimley-Horn and Associates

Utilities are a constant in our industry. Our organizations are essential to providing safe drinking water to our communities and are critical to public health. It is fitting that we are in the water industry because whether we like it or not things are constantly changing. As water erodes and shapes, our policies and ever-changing environment continues to shape how our utilities operate and change how things flow. Whether it's upcoming or new regulations, staffing shortages, or operating procedures, these all affect how our utilities operate and adapt to the times. This panel will address three main topics from planning for, managing, and tracking progress related to change. We will hear stories from three large utilities across the nation on how they have planned for, received, and adapted to change across their organizations. To close out this session we will provide a tabletop exercise to break out groups and have group discussion on how they would approach the specific challenge presented. Attendees will walk away with an understanding of change management principles and a real-life view on how that has been experienced, tracked, and implemented at utilities across the nation.

1:30 p.m. Introduction

1:35 p.m. Change Management Planning Principles
Tanya Miro, Kimley-Horn and Associates; Ruthie Redmond, US Water Alliance

1:55 p.m. Managing Change During Workforce Transitions
Tanya Miro, Kimley-Horn and Associates; Silvia Amparano, Tucson Water; John Bennett, Trinity River Authority

2:25 p.m. Tracking Progress and Pivoting
Tanya Miro, Kimley-Horn and Associates; Anas Malkawi, HRSD; Theresa Bruton, DC Water

2:55 p.m. Closing

3:00 p.m. Session adjourns for networking break

TECHNICAL PROGRAM

**SESSION
08**

**WEDNESDAY
FEBRUARY 14**

 **Room: B115-116**  **1.5 PDHs**

Digital Transformation in the Water Sector

 **1:30 p.m. – 3:00 p.m.**

Moderator: **Getachew Melsew, DC Water**

1:30 p.m. **From a Ripple to a Wave: Global Best Practices for Digital Water Transformation**

Eric Bindler, Bluefield Research; Shawn Ingram, Xylem

2:00 p.m. **Preparing for and Implementing Process Optimization Using Data Visualization**

Erin Mackey, Brown and Caldwell; Kimberly Gupta, Portland Water Bureau; Kelly Kimball, Brown and Caldwell

2:30 p.m. **A Decade of Domain Expert-Led Digital Transformation in Houston Water: The Integration of ChatGPT and AI Technologies**

Fazle Rabbi, Pratistha Pradhan, City of Houston

3:00 p.m. **Session adjourns for networking break**

Alternate: **Getting Comfortable Being Uncomfortable: The Digital Transformation Journey at Milwaukee Metropolitan Sewerage District**

Michael Martin, Milwaukee Metropolitan Sewerage District; Alan Tucker, Brown and Caldwell

TECHNICAL PROGRAM

**SESSION
09**

**WEDNESDAY
FEBRUARY 14**



Room: B117-119



1.5 PDHs

Workforce Development: Managing this Crucial Asset



3:30 p.m. – 5:00 p.m.

Moderator: Matt Gregg, Brown and Caldwell

3:30 p.m.

One Plus One Equals A Common Goal: Discussions and Perspectives on Workforce Development From Two Sides of the Workforce

Kathleen Mannion, Carollo Engineers; Molly Nause-McCord, City of Portland, Bureau of Environmental Services

4:00 p.m.

Tapping the Talent Pipeline: Developing the Next Generation of Leaders in Your Organization

Jennifer Teal, Raffelis; Zach McNutt, Kacey Waggaman, City of Monroe, OH; Chrissy Roe, Louisville Water

4:30 p.m.

Utility Leadership - Career Progressions for Recruitment & Retention

Jose Leon Jr, Raul Romero, Johnson County Wastewater

5:00 p.m.

Session adjourns for networking reception

Alternate:

Preparing the Future Water Workforce

Stephen Brown, Town of Cary; Tasneem Hussam

Alternate:

Deep Diving into the Water Sector Workforce - Round Two!

Joanna Brunner, Arcadis; Zakiya Seymour; Kristan Vanden Heuvel, The Water Tower; Joanna Brunner, Trisha Brown, Jayden Wright, Arcadis; Melissa Meeker, Gwinnett County - Department of Water Resources

TECHNICAL PROGRAM

SESSION 10

WEDNESDAY
FEBRUARY 14

 Room: B110-112  1.5 PDHs

Best Practices for Capital Program and Asset Management

 3:30 p.m. – 5:00 p.m.

Moderator: Scott Lehman, Kennedy/Jenks

- 3:30 p.m.** **Developing a Strategic Asset Management Plan (SAMP) for South Platte Renew**
Shannon Harney, Angela Hager, South Platte Renew; Steve Simon, Hazen and Sawyer
- 4:00 p.m.** **Using Digital Technologies in Capital Planning: Parker Water & Sanitation District's Water Supply Capital Planning Process**
Andrew Goldberg, Brown and Caldwell; Emilie Abbott, Parker Water and Sanitation District
- 4:30 p.m.** **Making the Right Choices for Your Utility: Using Augmented Alternatives Analysis (AAA) to Plan for Large Capital Investments**
J Leslie Corcelli, US Environmental Protection Agency
- 5:00 p.m.** **Session adjourns for networking reception**

Alternate: **Checking Boxes and Moving the Needle: Incrementally Advancing Asset Management Program Value for Utilities**
Alden Wyma, Donna Lund, Todd Smith, Adam Comfort, King County Wastewater Treatment Division; Laura Nolan, Michael Flores, Rachel King, Steven Rogowski, HDR

Alternate: **Equitable Investments at DC Water: "Equity in CIP Tool" for Equitable Outcomes and Customer Experiences**
Getachew Melsew, DC Water

TECHNICAL PROGRAM

SESSION 11

WEDNESDAY
FEBRUARY 14

 Room: B115-116  1.5 PDHs

Financial Resilience for Utilities and Customers Alike

 3:30 p.m. – 5:00 p.m.

Moderator: Robert Ryall, Arcadis

3:30 p.m. Pure Water Antelope Valley - A Critical Water Supply Project for a Large Disadvantaged Community

Kim Pugel, Stantec; Dennis Hoffmeyer, Scott Rogers, Palmdale Water District; Kyleen Marcella, Amy Broughton, Tama Snow, Stantec

4:00 p.m. Climate Change in the Drinking Water and Wastewater Sectors and the Impact on Financial Resilience, Insurability, and Credit and Investment Quality

Curt Baranowski, Aliza Furneaux, Environmental Protection Agency; Karri Ving, Brown & Caldwell; Matt Ries, DC Water

4:30 p.m. Inflation Reduction Act: Direct Pay Tax Incentives and Grants for Qualifying Utility Projects

Doug Baldessari, Baker Tilly Municipal Advisors

5:00 p.m. Session adjourns for networking reception

Alternate: Managing Support Services Cost is Not an After Thought but an Integral Best Practice in Clayton's Utility Financial Resilience

Rich Cappola, Robert McKie, Town of Clayton; Rupa Jha, Black & Veatch

TECHNICAL PROGRAM

SESSION 12

WEDNESDAY
FEBRUARY 14

 Room: B113-114  1.5 PDHs

**Water Research Foundation Project 5189 –
Automation, Analytics, and AI in Water**

 3:30 p.m. – 5:00 p.m.

Speakers: **Prabhushankar Chandrasekeran, Arcadis**

Many water utilities struggle with the assessment, planning, and implementation of data analytics projects especially those involving Artificial Intelligence (AI) and Machine Learning (ML) products and solutions. While there is a clear understanding of the challenges with adopting AI/ML products and solutions, there is currently no resource for water utilities to effectively assess the relevance of AI/ML initiatives, their readiness and gaps with implementing AI/ML technologies and developing a pathway for phased implementation of these technologies. The Water Research Foundation (WRF) created this project (WRF 5189) to help address these concerns and to provide quantifiable results and real case studies that will help utilities evaluate AI/ML techniques and determine what tools are the best fit for their organization. This interactive session is designed to explore the transformative potential of advanced analytics, data-driven modeling, and application of machine learning technologies in the water industry, with a focus on education using practical case studies.

**3:30 p.m. Fundamentals and Applications of Advanced Data Solutions
and AI/ML in Water**
Prabhu Chandrasekeran, Arcadis

**4:00 p.m. Utility Perspectives and Initiatives with Advanced Digital
Solutions**
Salil Kharkar, DC Water; Whitney Rux, Denver Water

4:30 p.m. Current State of AI, Interactive Session, and Panel Discussion
Prabhu Chandrasekeran, Arcadis; Malia Dunn-Reier, Hazen

5:00 p.m. Session adjourns for networking reception

TECHNICAL PROGRAM

SESSION 13

THURSDAY
FEBRUARY 15



Room: B117-119



1.5 PDHs

Incorporating Equity into Utility Decision Making



8:30 a.m. - 10:00 a.m.

Moderator: Ann Casey, Carollo Engineers

- 8:30 a.m.** **How Do You Say 'Aquifer' in Spanish? How Incremental Changes Result in Meaningful Advancement of Diversity, Equity, Inclusion, and Belonging (DEIB)**
Haley Falconer, City of Boise Public Works Department;
Andrea Hall, Tiffany Torres, Brown and Caldwell
- 9:00 a.m.** **A Journey that Navigated Houseless Encampments Empathetically, Provided Core Services, and Prioritized Staff Safety & Wellness**
William Owen, Randy Lyons, Aster Moulton, Multnomah County Drainage District
- 9:30 a.m.** **A Repeatable and Clear Methodology for Utilities to Evaluate and Resolve Potential Inequities in Your Capital Improvement Program**
Jennifer Belknap, Carollo Engineers; William Elledge, DC Water
- 10:00 a.m.** **Session adjourns for networking break**

Alternate: **Economics of Equity in Infrastructure Decisions**
Chris Behr, HDR

TECHNICAL PROGRAM

SESSION 14

THURSDAY
FEBRUARY 15

 Room: B113-114  1.5 PDHs

Innovating the Consumer Experience

 8:30 a.m. - 10:00 a.m.

Speakers: **Catherine Carter, Melissa Elliott, Raftelis; Jacqueline Jarrell, Raftelis; Julie Mechling, Pittsburgh Water; Krystina Bryant, City of Baltimore Department of Public Works; Christal Hardy, Fairfax Water**

As customer expectations evolve, utilities must innovate to enhance the consumer experience. This session will delve into the multifaceted aspects of innovating the consumer experience at water and wastewater utilities, focusing on changing expectations, utility oversight and policies, optimizing the customer journey, and the role for technology and automation in the future of customer service.

8:30 a.m. **Setting the Stage for Meeting Customer Expectations**
Catherine Carter, Melissa Elliott, Raftelis

8:40 a.m. **Innovative Communication Practices**
Krystina Bryant, City of Baltimore Department of Public Works

8:50 a.m. **Executing Operational Improvements**
Jackie Jarrell, Raftelis

9:00 a.m. **Panel discussion with all participants**

9:20 a.m. **Integrating Enhanced Technology**
Christal Hardy, Fairfax Water

9:30 a.m. **Moving into the Future with Artificial Intelligence**
Julie Mechling, Pittsburgh Water and Sewer Authority

9:40 a.m. **Panel discussion with all participants**

10:00 a.m. **Session adjourns for networking break**

TECHNICAL PROGRAM

**SESSION
15**

**THURSDAY
FEBRUARY 15**

 **Room: B110-112**  **1.5 PDHs**

Optimizing Business Practices

 **8:30 a.m. - 10:00 a.m.**

Moderator: **Jhoanna Murphy, City of Tulsa**

8:30 a.m. **Finance, Procurement, Contracts and the PMO, Can It Be Love? How We Have Worked across Barriers to Thrive Together**
Shannon Spence, Lyle Beefelt, Prince William County Service Authority

9:00 a.m. **How to Maximize the Generational Infrastructure Funding by Innovating Procurement Practices to Align with Asset Management and Sustainability Goals**
Randy Moore, Tnemec Company, Inc.; TJ Stroebel, Kurita America Inc.

9:30 a.m. **Warehouse Best Practices - Dealing with Limited Storage and Supply Chain Issues in a Post-COVID Environment**
James Decker, Hazen and Sawyer; Zonetta English, Rene' Lindsey, Louisville & Jefferson County MSD

10:00 a.m. **Session adjourns for networking break**

Alternate: **Capital Delivery Optimization and Best Practices**
Brandon Vatter, Raftelis Financial Consultants; Rich McGillis, Blue Cypress Consulting LLC; Donnie Couch, Sanitation District No 1

Alternate: **Evolution of a Water Utility: Holding On to G.S.D. to Steward and Trusted Provider**
Frank Sidari, Pittsburgh Water and Sewer Authority

TECHNICAL PROGRAM

SESSION 16

THURSDAY
FEBRUARY 15

 Room: B115-116  1.5 PDHs

Management and Oversight of New Frontiers in Artificial Intelligence



8:30 a.m. - 10:00 a.m.

Moderator: [Christine Boyle](#), [Burnt Island Adventures](#)

8:30 a.m. **Laws and Ethics of Using AI in Utility Operations and Management**
[James Cooper](#), [Arcadis](#)

9:00 a.m. **A Board Level Guide to Risks and Opportunities of AI in the Water Sector**
[Nandita Ahuja](#), [Ben Stanford](#), [Katya Bilyk](#), [Javad Roostaei](#), [Hazen and Sawyer](#)

9:30 a.m. **Sustainability Bias in Utility and Infrastructure Related Large Language Model Queries**
[Lauren Basler](#), [William Kuehne](#), [Ardurra](#)

10:00 a.m. **Session adjourns for networking break**

Alternate: **Ready or Not, Artificial Intelligence Is Here!**
[Sasa Tomic](#), [Burns & McDonnell](#); [Gigi Karmous-Edwards](#), [Karmous-Edwards Consulting LLC](#); [Paul Fleming](#), [WaterValue](#)

Alternate: **Water Main Likelihood of Failure Machine Learning Model**
[Javad Roostaei](#), [Paul Wilson](#), [Malia Turner](#), [Hazen and Sawyer](#); [Steven Cook](#), [Donald Piron](#), [Virginia Beach Public Utilities](#); [Katya Bilyk](#), [Reid Cagir](#), [Zachary Perkins](#), [Hazen and Sawyer](#)

TECHNICAL PROGRAM

SESSION
17

THURSDAY
FEBRUARY 15

 Room: B115-116  1.5 PDHs

Utility Resilience and Reliability

 10:30 a.m. – 12:00 p.m.

Moderator: Paul Suto, City of Portland BES

- 10:30 a.m.** **Empowering People for Sustainable Utility Resilience**
Joone Kim-Lopez, Matt Collings, Drew Atwater, Rod Woods,
Moulton Niguel Water District; Jason Carter, Arcadis
- 11:00 a.m.** **The Importance of Cyber Resiliency in the Modern Utility:**
the Metropolitan St. Louis Sewer District Journey
Jonathon Sprague, HDR; Ginny Kienstra, Metropolitan St
Louis Sewer District
- 11:30 a.m.** **Drinking Water Utility-Level Understanding of Climate
Change Effects to System Reliability**
Zia Lyle, Jeanne VanBriesen, Constantine Samaras,
Carnegie Mellon University
- 12:00 p.m.** **Session adjourns for lunch on your own**

TECHNICAL PROGRAM

SESSION 18

THURSDAY
FEBRUARY 15

 Room: B113-114  1.5 PDHs

Innovation Amplified: Harnessing Collaboration and Communications for Breakthrough Solutions

 10:30 a.m. – 12:00 p.m.

Moderator: **Katelyn Skornia, Arcardis**

In this session, a panel of executive champions, innovation leaders, and communication professionals from different utilities will discuss innovation at their organizations and how they communicate the impact of innovation. This session will equip other leaders to effectively align communications and performance measures with their strategic priorities for greater impact and influence in their organizations.

10:30 a.m. Session Introduction

10:35 a.m. Introductions from Clean Water Services, Orange County Water District, and Sacramento Area Sewer District
Ryan Locicero, Clean Water Services; Mike Huot, Sacramento Area Sewer District and Regional San; Medha Paliwal, Orange County Water District

10:50 a.m. Breakout Stations

- **Effectively Telling the Innovation Story at Orange County Water District**
- **Aligning Innovation Performance Measures to Organizational Goals with Clean Water Services**
- **Maintaining Engagement and Demonstrating the Impact of Innovation at Sacramento Area Sewer District**

11:40 a.m. Conclusion and Facilitated Panel Discussion

11:50 a.m. Audience Q&A

12:00 p.m. Session adjourns for lunch on your own

TECHNICAL PROGRAM

SESSION
19

THURSDAY
FEBRUARY 15



Room: B117-119



1.5 PDHs

Utility Planning: Essential to Success



10:30 a.m. – 12:00 p.m.

Moderator: Jennifer Ivey, Corollo Engineers

- 10:30 a.m.** **If You Plan it, They Can Come. The City of Frisco’s Journey through Proactive Planning and Progressive Growth**
Jason Grimm, City of Frisco; Stephen Johnson, Mazen Kawasmi, Freese & Nichols, Inc.
- 11:00 a.m.** **Water Demand Forecasting Implementation: Best Practices for Improved Decision Making**
Jessica LeNoble, Colwyn Sunderland, Kerr Wood Leidal Associates Ltd.
- 11:30 a.m.** **The More You Know the Less You Realize You Do - Boise’s Journey in Understanding Reliability and Redundancy**
Haley Falconer, City of Boise Public Works Department; Matthew Gregg, Brown and Caldwell
- 12:00 p.m.** **Session adjourns for lunch on your own**

Alternate: **Roadmap for Achieving Energy Neutrality: Planning and Funding Energy Resiliency Projects Without Compromising Water Quality**
Elizabeth Keddy, Hazen and Sawyer; Bryan Schmerber, Shannon Harney, South Platte Renew

TECHNICAL PROGRAM

**SESSION
20**

**THURSDAY
FEBRUARY 15**

 **Room: B110-112**  **1.5 PDHs**

**Combining Data and Asset Management
for Improved Monitoring and Operations**

 **10:30 a.m. – 12:00 p.m.**

Moderator: **Maria DeChellis, Oracle**

10:30 a.m. **10-years of Planning and Progress toward Newport's (RI) Mission to Implement Proactive Asset Management Practices**
Peter von Zweck, Jacobs; Robert Schultz, City of Newport; Edwin Rroworth, Jacobs

11:00 a.m. **From Data Deluge to Dashboard Success: Pima County RWRD's Enterprise Dashboard Story**
Grantley Pyke, Hazen and Sawyer; Rudy Daniels, Pima County Regional Wastewater Reclamation Department; Belinda Gamboa-Felix, Jeff Prevatt, Daniela Panfil, Hazen and Sawyer

11:30 a.m. **Selection and Implementation of a Computerized Maintenance Management System (CMMS) for Polk County Utilities, Florida.**
Sanjay Puranik, Black & Veatch; Charles Nichols, Polk County

12:00 p.m. **Session adjourns for lunch on your own**

Alternate: **Maximizing Value through the use of Actionable Leak Data Knowledge**
Paul Gagliardo, Gagliacqua Consulting; Bruno Tume, Asterra

Alternate: **How to Employ a Visualization Tool to Sustainably Implement a Robust Asset Management Program**
Marta Ortiz, Albuquerque Bernalillo County Water Utility Authority; Dilip Kumar, Marcela Sion, Hazen and Sawyer

TECHNICAL PROGRAM

**SESSION
21**

**THURSDAY
FEBRUARY 15**

 **Room: B110-112**  **1.5 PDHs**

**Alternative Project Delivery and
Procurement**

 **1:30 p.m. - 3:00 p.m.**

Moderator: Brian Shell, WSP USA

- 1:30 p.m.** **Return on Investment - Does the Owner Advisor Add Value to your Project?**
Will Shull, HDR; Nicole Bartlett, Charlotte Water; John Shutak, Union County
- 2:00 p.m.** **Supply Chain Issues Impacting the Construction of Infrastructure Projects: A Decision-Making Tool for Alternative Product Selection**
Velmurugan Subramanian, Atkins
- 2:30 p.m.** **Perspectives on Public Private Partnerships : A Rialto Case Study on Sustaining Water Operations**
Ryan Nordvik, Arup; Chandrasekar Venkatraman, Veolia; Peter Lucchetti, Megan Matson, Table Rock Infrastructure Partners
- 3:00 p.m.** **Session adjourns for networking break**

TECHNICAL PROGRAM

SESSION
22

THURSDAY
FEBRUARY 15

 Room: B117-119  1.5 PDHs

Communications and Public Engagement

 1:30 p.m. - 3:00 p.m.

Moderator: Fletcher Davis, Denver Water

- 1:30 p.m.** **Launching a Service Line Replacement Program - Denver Water Lessons on Building in Equity and Reaching Audiences through Communications, Outreach & Education**
Stacy Chesney, Denver Water; Meg Trubee
- 2:00 p.m.** **Keep Your Water Quality Data Close, and the Tap Water Critics Closer**
Jonathan Leung, Kaushal Parbhoo, Los Angeles DWP
- 2:30 p.m.** **Best Practices in Utility Communications: Tips and Tricks from the Pros**
Mandy Cawby, WaterOne; Monica Hoyt, Central Utah Water Conservancy District; Douglas Shackelford, Central Arkansas Water; Kelley Dearing Smith, Louisville Water Company
- 3:00 p.m.** **Session adjourns for networking break**

Alternate: **Strategic Messaging for More Effective Communications on Sanitary Sewer Overflows in the Chesapeake Bay Watershed**
Edward Shea, HDR; George Heiner, Anne Arundel County DPW; Meghan Robinson, HDR

TECHNICAL PROGRAM

SESSION 23

THURSDAY
FEBRUARY 15

 Room: B113-114  1.5 PDHs

How Rockwood Water People's Utility District and the City of Portland Benefitted from WIFIA Financing for their Water Infrastructure Projects

 1:30 p.m. - 3:00 p.m.

Moderator: Dallas Shattuck, US EPA

The Water Infrastructure Finance and Innovation Act (WIFIA) program is a government bank operated by US EPA headquarters that provides supplemental, flexible, low-cost credit assistance to public and private borrowers for all types of wastewater, drinking water, and stormwater projects. The WIFIA program offers long-term loans that can be combined with State Revolving Fund assistance, municipal bonds, and federal and state grants to help communities deliver more critical water infrastructure projects for a lower cost with less impact on rate payers. In this session, we will begin by providing a brief overview of the WIFIA program, including eligibilities, benefits, and flexibilities of WIFIA financing. We will then conduct a panel discussion between US EPA and current WIFIA borrowers about their projects and the benefits of utilizing WIFIA financing for their water infrastructure investments.

1:30 p.m. Introduction and Brief Overview of the WIFIA Program

1:40 p.m. **Moderated Discussion**
Dallas Shattuck, Karen Fligger, Jordan Dorfman, US EPA; Kari Duncan, Rockwood Water People's Utility District; Michelle Cheek, City of Portland

2:30 p.m. Audience Q&A

3:00 p.m. Session adjourns for networking break

TECHNICAL PROGRAM

**SESSION
24**

**THURSDAY
FEBRUARY 15**

 **Room: B115-116**  **1.5 PDHs**

Real World Applications of Artificial Intelligence

 **1:30 p.m. - 3:00 p.m.**

Moderator: **Travis Wagner, Trinnex**

1:30 p.m. **DC Water's Journey to Gen AI**
Robert Bornhofen, DC Water

2:00 p.m. **Flowing Forward: Revolutionizing Water Utilities with AI**
Tim D'Agostino, P.W. Grosser Consulting

2:30 p.m. **Tucson Water LCRR Inventory Development, Powered by Artificial Intelligence**
Eric Packer, Erin Lansey, HDR

3:00 p.m. **Session adjourns for networking break**

Alternate: **Transforming Water Modeling Practices: AI-Enhanced Water Distribution and Quality Modeling with Real-Time IoT Data - A Case Study of the Houston Water**
Satish Tripathi, City of Houston; Akshaya Niraula, Bentley

Alternate: **Using Artificial Intelligence to Optimize Sewer Preventative Maintenance**
Sara Titus, WSSC Water

Alternate: **The Amazing AI Race: Pit Stops, Detours, and Red Flags**
Alexander Palmatier, Kelly Alexander, Holly Curry, HDR; Tim McGarry, Eric Sullivan, SewerAI

TECHNICAL PROGRAM

**SESSION
25**

**THURSDAY
FEBRUARY 15**

 **Room: B117-119**  **1.5 PDHs**

**Diversity, Equity, and Inclusion from a
Water Utility's Perspective**

 **3:30 p.m. – 5:00 p.m.**

Moderator: **Shawn Heselton, HRSD**

3:30 p.m. **Being Intentional with Diversity, Equity, Inclusion, and
Environmental Justice**

Rosanna La Plante, Eric McFarland, WSSC Water

4:00 p.m. **Beyond the Commitment: Embedding Diversity, Equity, and
Inclusion within Public Utilities**

Lydia Hartman, Constance Haqq, Northeast Ohio Regional
Sewer District

4:30 p.m. **DEI - It Can Be A 'Dirty Word'**

C. Tad Bohannon, Central Arkansas Water

5:00 p.m. **Session adjourns**

Alternate: **Empowered Women Empower Others. A Generational
Discussion of Women Leading in Today's Digital Solutions.**

Katie Deheer, Carolyn Christy, Trinnex

TECHNICAL PROGRAM

SESSION 26

THURSDAY
FEBRUARY 15

 Room: B113-114  1.5 PDHs

The Business Case for Water Affordability: A Quantitative Approach

 3:30 p.m. – 5:00 p.m.

Speakers: **Lawrence Levine, Natural Resources Defense Council; Roger Colton, Fischer, Sheehan & Colton, Public Finance and General Economics; Tony Searls, Greater Cincinnati Water Works**

Utilities can make a 'business case' for offering a low-income discount program by considering the program as a collection device designed to improve overall revenue and strengthen the utility's financial position.

This session will present a new downloadable Excel-based tool, which water and wastewater utilities can use to assess their own business case for adopting a low-income discount program. The session will demonstrate how utilities can use the Tool to assess the extent to which a rate-funded affordability initiative can be justified as a collection device designed to improve overall revenue and strengthen the utility's financial position; or, in the alternative, the extent to which external financial support might be needed to generate the desired outcomes within internal resource constraints.

This session will feature the following speakers on these topics:

- **The Business Case for Water Affordability: An Introduction**
Lawrence Levine, Natural Resources Defense Council
- **Making the Case: How the Water Affordability Business Case Tool Can Work for Your Utility**
Roger Colton, Fischer, Sheehan & Colton, Public Finance and General Economics
- **The Business Case Tool in Action: Greater Cincinnati Water Works**
Tony Searls, Greater Cincinnati Water Works

5:00 p.m. **Session adjourns**

TECHNICAL PROGRAM

SESSION
27

THURSDAY
FEBRUARY 15

 Room: B115-116  1.5 PDHs

Utility Financing – A Multi-Faceted and Long Term Effort

 3:30 p.m. – 5:00 p.m.

Moderator: Ann Hajnosz, Harris & Associates

3:30 p.m. **An Uphill Battle: A NC Case Study of Utility Cost Recovery and Customer Affordability**

Olivia August, Hazen and Sawyer; Martin Doyle, Lauren Patterson, Duke University

4:00 p.m. **Puget Sound Wastewater Service Affordability Analysis: Potential Impacts of Implementing the Nutrient General Permit**

Susan Burke, Stantec; Aimee Kinney, UW Puget Sound Institute

4:30 p.m. **What Got Us Here Won't Get Us There: Building Alignment around a (One) Water Resiliency Strategy to Prioritize, Fund, and Communicate Capital Project Needs**

Holly Tichenor, Brown and Caldwell; Frank Dick, City of Vancouver, WA Public Works; Rachel Garrett, Brown and Caldwell

5:00 p.m. **Session adjourns**

Alternate **Strength Based Billing: An Updated Cost Allocation and Billing Framework for San Diego's Metro Wastewater System**

Benjamin Stewart, Stantec; Adam Jones, City of San Diego; William Zieburzt, Stantec

TECHNICAL PROGRAM

**SESSION
28**

**THURSDAY
FEBRUARY 15**

 **Room: B110-112**  **1.5 PDHs**

**Applications of Data Management
and Analysis**

 **3:30 p.m. – 5:00 p.m.**

Moderator: **Brett Anderson, City of Minneapolis**

3:30 p.m. Using Data Analysis to Improve Household Water Conservation

Glenn Barnes, Water Finance Assistance

4:00 p.m. Getting Ahead of Innovation by Taking a Step Back: Data Management Planning at Cape Fear Public Utilities Authority
Elizabeth Severt, Chris Bolton, Cape Fear Public Utility Authority;
Timothy Devine, Malia Turner, Ben Stanford, Hazen and Sawyer

4:30 p.m. Leveraging the Dataverse to Enable Living Data Management from Design to Operations

Devin Sanders, Portland Water Bureau; Dale Johnson, Lantern;
Chris Somerlot, Kirk Olds, Riley Middlebrook, Brown and Caldwell

5:00 p.m. Session adjourns

Alternate A Practical Sewer Network Digital Twin - It is not a PIPE dream

Varun Srinivasan, Jonathan Nelson, Steven Drangsholt, Carolyn Christy, Trinnex

TECHNICAL PROGRAM

**SESSION
29**

**FRIDAY
FEBRUARY 16**

 **Room: B113-114**  **1.5 PDHs**

Change Management: Considering Culture, Workforce, Business Processes, and Technology

 **8:30 a.m. - 10:00 a.m.**

Moderator: **Charlie Stevens, City of Des Moines**

8:30 a.m. The Importance of Change Management: Intersection in Program Development and Optimization

Mia Sabanovic, City of Portland BES

8:45 a.m. Diversity, Equity & Environmental Justice at the City of Baltimore Department of Public Works

Marco Merrick, City of Baltimore DPW

8:57 a.m. Project Management & Delivery: Continuous Improvements at Johnson County

Dan Ott, HDR

9:09 a.m. Importance of Understanding Processes

Nohemy Revilla, San Francisco PUC

9:21 a.m. The Environment Agency's Strategic Look at Digital Transformation

Vanessa Dyson, UK Environment Agency

9:33 a.m. Panel Discussion

Andrew Pearce, UK Environment Agency; Ramona Harry, City of Baltimore DPW; Debra Anderson, Great Lakes Water Authority

10:00 a.m. Session adjourns for networking break

TECHNICAL PROGRAM

SESSION
30

FRIDAY
FEBRUARY 16

 Room: B117-119  1.5 PDHs

Utility Collaboration & Regionalization B

 8:30 a.m. - 10:00 a.m.

Moderator: [Raj Chavan, AtkinsRealis](#)

8:30 a.m. **A Watershed Moment for Regionalization**
[Kevin Gibson](#), [Wesley Sydnor](#), Louisville MSD

9:00 a.m. **Breaking Boundaries, Transforming Communities: The Stowe Regional Water Resource Recovery Facility - Pioneering a Collaborative Approach to Regional Wastewater Management**
[Angela Charles](#), Charlotte Water; [David Saunders](#), Sabrina Colon, HDR

9:30 a.m. **Being Intentional About Collaboration and Regionalization to Overcome Paralysis and Put the People First**
[C. Tad Bohannon](#), Central Arkansas Water; [Aaron Benzing](#), Hawkins Weir Engineers Inc; [Chelsea Boozer](#), Rogue Water Lab

10:00 a.m. **Session adjourns for networking break**

TECHNICAL PROGRAM

**SESSION
31**

**FRIDAY
FEBRUARY 16**

 **Room: B110-112**  **1.5 PDHs**

Integrated Water Management

 **8:30 a.m. – 10:00 a.m.**

Moderator: **Sarah Lothman, Burns & McDonnell**

- 8:30 a.m.** **Raleigh Water's Unified Vision: Mastering Integrated Planning Unified Vision**
Nicola Hill, Adam Sharpe, HDR
- 9:00 a.m.** **Integrated Urban Wet Weather Solutions Save Money and Provide More Benefits**
Andrew Sauer, Burns & McDonnell; Andy Shively, Kansas City Water
- 9:30 a.m.** **Using Meter Readings to Identify Conservation Opportunities: A Low-Cost, No-Code Digital Solution**
Jonathan Hoechst, Tetra Tech
- 10:00 a.m.** **Session adjourns for networking break**
- Alternate:** **Surface Water and Ground Water Pricing Strategies**
Isalah Barnes, Carollo; Summer Hvasta, San Jacinto River Authority

TECHNICAL PROGRAM

**SESSION
32**

**FRIDAY
FEBRUARY 16**

 **Room: B115-116**  **1.5 PDHs**

Optimization of Operation & Maintenance

 **8:30 a.m. - 10:00 a.m.**

Moderator: **Brittany Downing, City of Portland Bureau of Environmental Services**

8:30 a.m. **More RATs, Less Problems: Acoustic Inspection as a Smart Water Solution in Bend, Oregon**
Alex Churchill, InfoSense Inc; Chase Mendell, InfoSense

9:00 a.m. **Asset Management, Artificial Intelligence, & Connected Devices: Optimizing Collection System O&M**
Jacob Mueller, HDR

9:30 a.m. **Charlotte Water's Use of a Risk Management Tool to Effectively Mitigate Sanitary Sewer Overflows**
Jason Bromirski, Charlotte Water; Glen Hill, Tim Schempp, SmartCover Systems

10:00 a.m. **Session adjourns for networking break**

TECHNICAL PROGRAM

SESSION 33

FRIDAY
FEBRUARY 16

 Room: B117-119  1.5 PDHs

Decision Making with the Customer in Mind

 10:30 a.m. - 12:00 p.m.

Moderator: [Terry Fairchild, Cole Fairchild Consulting](#)

10:30 a.m. **Solutions to Construction Challenges for an Equitable and Incentivized Lead Service Line Replacement Program**
Jennifer Lachmayr, Arcadis; Joseph Lanzafame, City of New London

11:00 a.m. **AMI: Leveraging the Power of Data**
Nicole Bates, Mount Pleasant Waterworks

11:30 a.m. **More than Metrics: Northeast Ohio Regional Sewer District's Path for Customer Affordability Programs**
Constance Haqq, Northeast Ohio Regional Sewer District;
Carol Malesky, Stantec

12:00 p.m. **Conference adjourns**

Alternate: **Effective Strategies for Building Consensus with a Rate Advisory Committee**
Paul Matthews, Tualatin Valley Water District; Elizabeth Bakke, Barney & Worth Inc

TECHNICAL PROGRAM

**SESSION
34**

**FRIDAY
FEBRUARY 16**

 **Room: B113-114**  **1.5 PDHs**

Engaging the Community in One Water Programming

 **10:30 a.m. – 12:00 p.m.**

Moderator: **Amy Weinfurter, Becky Anderson, WaterNow Alliance**

Trusted relationships between water utilities and their communities are more important than ever to ensure delivery of equitable, affordable access to clean, reliable drinking water, wastewater, and stormwater services. Increasingly, water leaders are working to develop and strengthen relationships with community members.

This panel presentation will feature case studies from communities across the county demonstrating how various types of community partnerships and outreach can support innovative One Water programming and ensure that implementation of these programs includes and benefits all of their community members.

10:30 a.m. **Introductory Remarks**
Amy Weinfurter, Becky Anderson, WaterNow Alliance

10:40 a.m. **Presentations from panelists**
Sara Behunek, Denver Water; Ting Lu, City of Portland Bureau of Environmental Services; Jacqueline Muhammad, Northeast Ohio Regional Sewer District

11:40 a.m. **Panel discussion and audience questions**

12:00 p.m. **Conference adjourns**

TECHNICAL PROGRAM

SESSION
35

FRIDAY
FEBRUARY 16

 Room: B110-112  1.5 PDHs

Strategic Planning B

 10:30 a.m. – 12:00 p.m.

Moderator: Ryan Locicero, Clean Water Services

- 10:30 a.m.** **Moving Up a Level: Charleston Water System's Journey to Update its Strategic Asset Management Plan**
David Gordon, Charleston Water System; Martin Jones, Black & Veatch
- 11:00 a.m.** **Making a Strategic Plan is the Easy Part Actually Implementing It Well, That's a Whole Different Ball Game! – SWBNO's Strategy for Strategic Plan Implementation**
Rocky Craley, Raftelis; Kaitlin Tymrak, Sewerage and Water Board of New Orleans
- 11:30 a.m.** **Using a Compass to Find Your Direction: Miami-Dade Water and Sewer Department's Employee-Led Five-Year Strategic Plan**
Roy Coley, Miami Dade County Water & Sewer Dept; George Hawkins, Moonshot Missions Inc.; Debbie Griner, Miami Dade County Water & Sewer Dept; Susie O'Hara, Moonshot Missions
- 12:00 p.m.** **Conference adjourns**
- Alternate:** **More Than Pretty Pictures - Developing a Utility Strategic Plan That Enhances Public Trust**
Jeff Thorn, City of Lee's Summit Water Utilities; Michael Brink, HDR, Inc.
- Alternate:** **It's Not all Numbers: How Boise Translates Levels of Service into Decision Making Criteria for Capital Planning**
Manon Fisher, Brown and Caldwell; Evan Carpenter, City of Boise; Karaline Bridgeford, Brown and Caldwell

TECHNICAL PROGRAM

**SESSION
36**

**FRIDAY
FEBRUARY 16**

 **Room: B115-116**  **1.5 PDHs**

Utility Sustainability and Environmental Challenges

 **10:30 a.m. - 12:00 p.m.**

Moderator: **Stephanie Abram, Denver Water**

- 10:30 a.m.** **Ready or Not: Implementing DOE's 50001 Ready Program for Establishing an Energy Management System**
Michael McGrath, Fairfax County; Khisi Suravallop, SE Three, PLLC; Shannon Zaret
- 11:00 a.m.** **Creating a Culture of Environmental Compliance and Ethics at Your Utility**
Frank Sidari, Pittsburgh Water and Sewer Authority
- 11:30 a.m.** **Developing a New Long-Term Demand Forecasting Model for Seattle Public Utilities**
Elizabeth Garcia, Seattle Public Utilities; Joseph Crea, Raftelis
- 12:00 p.m.** **Conference adjourns**

Alternate: **More Than Just SSO Prevention, Environmental Stewardship at the Prince William County Service Authority**
Don Pannell, Douglas Shoop, Prince William County Service Authority; Corey Williams, SmartCover Systems

PRESENTER MODERATOR DIRECTORY

Stephanie Abram

Denver Water
Moderator Session
36

Nandita Ahuja

Hazen and Sawyer
Speaker Session 16

Jaime Alba

DC Water
Presenter Workshop
B

Kelly Alexander

HDR
Speaker Session 24

Kacie Allard

*South Platte Water
Renewal Partners*
Speaker Session 05

Silvia Amparano

Tucson Water
Speaker Session 07

Becky Anderson

WaterNow Alliance
Moderator Session
34

Brett Anderson

City of Minneapolis
Moderator Session
28

Drew Atwater

*Moulton Nigel
Water District*
Presenter Workshop
C

Olivia August

Hazen and Sawyer
Speaker Session 27

Doug Baldessari

*Baker Tilly Municipal
Advisors*
Speaker Session 11

Glenn Barnes

*Water Finance
Assistance*
Speaker Session 28

Isalah Barnes

Carollo
Speaker Session 31

Nicole Bates

*Mount Pleasant
Waterworks*
Speaker Session 33

Kaye Bealer

AECOM
Speaker Session 02

Michael Beardslee

Loudoun Water
Speaker Session 04

Jack Beers

CDM Smith
Speaker Session 02

Chris Behr

HDR
Speaker Session 13

Sara Behunek

Denver Water
Speaker Session 34

John Bennett

*Trinity River
Authority of Texas*
Speaker Session 07

Alexandra Bernatz

Utilis Inc.
Speaker Session 20

Eric Bindler

Bluefield Research
Speaker Session 08

Paul Bishop

*Water Professionals
International (WPI)*
Speaker Session 05

C. Tad Bohannon

*Central Arkansas
Water*
Speaker Session 25,
Session 30

Peter Boone

*Tualatin Valley
Water District*
Presenter Workshop
A

Rebecca Borker

*WSP Parsons
Brinckerhoff*
Presenter Workshop
F

Robert Bornhofen

*DC Water & Sewer
Authority*
Speaker Session 24

Christine Boyle

*Burnt Island
Ventures*
Moderator Session
16

Michael Brink

HDR, Inc.
Speaker Session 35

Jason Bromirski

*NC City Of Charlotte
Water*
Speaker Session 32

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Patrick (Pat) Brown

Stantec Consulting Services Inc.
Speaker Session 01

Stephen Brown

Town of Cary
Speaker Session 09

Theresa Bruton

DC Water & Sewer Authority
Presenter Workshop B, Speaker Session 07

Krystina Bryant

City of Baltimore Department of Public Works
Speaker Session 14

Ernie Buo

Clark County Water Reclamation District
Speaker Session 02

Susan Burke

Stantec
Speaker Session 27

Reid Cagir

Hazen and Sawyer
Speaker Session 16

Kevin Campanella

Burgess & Niple Inc
Presenter Workshop F

Catherine Carter

Raftelis
Coordinator
Workshop C,
Speaker Session 14

Jason Carter

Arcadis
Coordinator
Workshop C

Ann Casey

Carollo Engineers
Moderator Session 13

Rosa Castro

Metropolitan Water District of So. California
Speaker Session 29

Prabhushankar Chandrasekeran

Arcadis U.S. Inc.
Speaker Session 12

Raj Chavan

AtkinsRealis
Moderator Session 30

Michelle Cheek

Portland Water Bureau
Speaker Session 23

Stacy Chesney

Denver Water
Speaker Session 22

Carolyn Christy

Trinnex
Speaker Session 25,
Session 28

Alex Churchill

InfoSense Inc
Speaker Session 32

Roy Coley

Miami Dade County Water & Sewer Dept
Speaker Session 35

Roger Colton

Fischer, Sheehan & Colton, Public Finance and General Economics
Speaker Session 26

Adam Comfort

King County Dept of Natural Resources and Parks
Presenter Workshop A

James Cooper

Arcadis
Speaker Session 16

J Leslie Corcelli

U.S. Environmental Protection Agency
Speaker Session 10

Rocky Craley

Raftelis
Speaker Session 35

Alan Cranford

City of Murfreesboro, TN
Speaker Session 05

Tim D'Agostino

P.W. Grosser Consulting
Speaker Session 24

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Diala Dandach

Brown and Caldwell
Presenter Workshop
B

Rudy Daniels

Pima County
Regional
Wastewater
Reclamation
Department
Speaker Session 20

Fletcher Davis

Denver Water
Moderator Session
22

Kelly Davis

Trinity River
Authority
Speaker Session 06

**Kelley Dearing
Smith**

Louisville Water
Company
Speaker Session 22

**Christine
deBarbadillo**

Black & Veatch
Presenter Workshop
B

Maria DeChellis

ORACLE
Moderator Session
20

James Decker

Hazen and Sawyer
Speaker Session 15

Frank Dick

City of Vancouver
Public Works
Speaker Session 27

Jordan Dorfman

U.S. EPA
Speaker Session 23

Brittany Downing

City of Portland
Bureau of
Environmental
Services
Moderator Session
32

Kari Duncan

Rockwood Water
PUD
Speaker Session 23

Vanessa Dyson

UK Environment
Agency
Speaker Session 29

Ethan Edwards

Bluefield Research
Speaker Session 36

Pamela Elardo

Brown and Caldwell
Coordinator
Workshop A

William Elledge

DC Water & Sewer
Authority
Speaker Session 13

Melissa Elliott

Raftelis
Speaker Session 14

Hatem El-Sayegh

Barge Design
Solutions
Speaker Session 19

Terry Fairchild

Cole Fairchild
Consulting
Moderator Session
33

Haley Falconer

City of Boise Public
Works Department
Speaker Session 13

Sara Ferrara

ARCADIS
Speaker Session 06

Manon Fisher

Brown and Caldwell
Speaker Session 35

Karen Fligger

U.S. Environmental
Protection Agency
Speaker Session 23

Aaron Frazier

CHA Consulting,
Inc.
Speaker Session 06

Aliza Furneaux

Environmental
Protection Agency
Speaker Session 11

Elizabeth Garcia

Seattle Public
Utilities
Speaker Session 36

PRESENTER MODERATOR DIRECTORY

Kevin Gibson

Louisville &
Jefferson County
MSD
Speaker Session 30

James Ginley

Jim Ginley
Consulting LLC
Presenter Workshop
E

Andrew Goldberg

Brown and Caldwell
Speaker Session 10

David Gordon

Charleston Water
System
Speaker Session 35

Ryan Graf

Advanced
Engineering &
Environmental
Services Inc (ae2s)
HQ
Speaker Session 02

Matthew Gregg

Brown and Caldwell
Speaker Session 19,
Moderator Session
09

Matthew Griffith

Louisville Water
Company
Presenter Workshop
C

Kimberly Gupta

Portland Water
Bureau
Speaker Session 08

Heidi Hackett

Cape Fear Public
Utilities Authority
Moderator Session
02

Ann Hajnosz

Harris & Associates
Moderator Session
27

Lee Haller

Pittsburgh Water &
Sewer Authority
Speaker Session 04

Pono Hanson

Brown and Caldwell
Speaker Session 06

Constance Haqq

Northeast Ohio
Regional Sewer
District
Speaker Session 33

Christal Hardy

Fairfax Water
Speaker Session 14

Shannon Harney

South Platte Renew
Speaker Session 10

Lydia Hartman

Northeast Ohio
Regional Sewer
District
Speaker Session 25

George Hawkins

Moonshot Missions
Inc.
Speaker Session 35

John Helwig

CDM Smith
Speaker Session 06

Ted Henifin

JXN Water
Speaker Session 01

Shawn Heselton

HRSD
Moderator Session
25

Nicola Hill

HDR
Speaker Session 31

Jonathan Hoechst

Tetra Tech
Speaker Session 31

Dennis Hoffmeyer

Palmdale Water
District
Speaker Session 11

Jim Horne

US Environmental
Protection Agency
HQ
Presenter Workshop
E

Marissa Huntley

Sammamish Plateau
Water
Presenter Workshop
C

Mike Huot

Sacramento Area
Sewer District and
Regional San
Speaker Session 18

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Brown and Caldwell
Presenter Workshop
A

Jennifer Ivey

Carollo Engineers
Moderator Session
19

Matthew Jacob

*Pittsburgh Water &
Sewer Authority*
Speaker Session 04

Jacqueline Jarrell

Raftelis
Speaker Session 14

Rupa Jha

Black and Veatch
Speaker Session 11

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Inc.*
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1898 & Co.
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Edwards**

*Karmous-Edwards
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Speaker Session 12

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Utilities*
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A

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Loudoun Water
Speaker Session 03

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William Kuehne

Ardurra
Speaker Session 16

Prabha Kumar

*Black & Veatch
Corporation*
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C, Moderator
Session 06

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*Washington
Suburban Sanitation
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Arcadis
Speaker Session 33

Craig Lees

Loudoun Water
Speaker Session 04

Jessica LeNoble

*Kerr Wood Leidal
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Jose Leon Jr

*Johnson County
Wastewater*
Speaker Session 09

Jonathan Leung

Los Angeles DWP
Speaker Session 22

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*Natural Resources
Defense Council*
Speaker Session 26

Ryan Locicero

*Clean Water
Services*
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Moderator Session
35

Leslie Long

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Reclamation District*
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31

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Xylem
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B

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Table Rock Capital
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Stantec
Speaker Session 33

Anas Malkawi

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*Fairfax County
Government*
Speaker Session 36

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*Gwinnett County -
Department of
Water Resources*
Speaker Session 09

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Speaker Session 10,
Moderator Session
08

Marco Merrick

*Baltimore City
Department of
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Speaker Session 29

Olga

Mikhalchishina
*Woodard & Curran
Inc*
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Kimley-Horn
Moderator Session
07

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HDR
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Mert Muftugil

*Portland Water
Bureau*
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F

**Jacqueline
Muhammad**

*Northeast Ohio
Regional Sewer
District*
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Jhoanna Murray

City of Tulsa
Moderator Session
15

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Hazen and Sawyer
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McCord**

BES, City of Portland
Speaker Session 09

Jonathon Nelson

Trinnex
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John Nice

*Clean Water
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A

Ryan Nordvik

Arup
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Moonshot Missions
Speaker Session 35

Kirk Olds
Brown and Caldwell
Speaker Session 28

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Speaker Session 29

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City of Portland Bureau of Environmental Service
Presenter Workshop A

William Owen
Multnomah County Drainage District
Speaker Session 13

Eric Packer
HDR
Speaker Session 24

Ameerah Palacios
HDR
Speaker Session 01

Medha Paliwal
Orange County Water District
Speaker Session 18

Don Pannell
Prince William County Service Authority
Speaker Session 36

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DC Water
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Passaro Engineering
Presenter Workshop B

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UK Environment Agency
Speaker Session 29

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Clean Water Management
Presenter Workshop A

Sanjay Puranik
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Grantley Pyke
Hazen and Sawyer
Speaker Session 20

Fazle Rabbi
City of Houston
Speaker Session 08

Ishita Rahman
Freese and Nichols
Speaker Session 03

Ruthie Redmond
US Water Alliance
Speaker Session 07

Nohemy Revilla
San Francisco Public Utilities Commission
Speaker Session 29

Matt Ries
DC Water & Sewer Authority
Speaker Session 11

Karyn Riley *Arcadis*
US Presenter Workshop D

Leo Rodgers *Brown and Caldwell*
Speaker Session 03

Raul Romero
Johnson County Wastewater Speaker Session 09

Javad Roostaei
Hazen and Sawyer
Speaker Session 12

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*Arcadis
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11*

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A, Speaker Session
29*

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*WSSC Water
Presenter Workshop
D*

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Anna Schroeder

*South Platte Renew
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*Greater Cincinnati
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*Wiley and Wilson
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*WSP USA
Moderator Session
21*

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Will Shull

*HDR
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Frank Sidari

*Pittsburgh Water
and Sewer Authority
Speaker Session 15*

Frank Sidari

*Pittsburgh Water
and Sewer Authority
Speaker Session 36*

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*Hazen and Sawyer
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*Garney Construction
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B*

Hugh Sinclair

*Arcadis
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Workshop D*

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18*

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D*

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*Alcosan
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Speaker Session 27

**Velmurugan
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Atkins
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Bureau of
Environmental
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17

Wesley Sydnor

*Louisville &
Jefferson County
MSD*
Speaker Session 30

Brett Taylor

Wilmington, DE
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C

Jennifer Teal

Raftelis
Presenter Workshop
E, Speaker Session
09

Mark Thomas

Denver Water
Speaker Session 12

Brent Tippey

HDR
Speaker Session 01

Sara Titus

WSSC Water
Speaker Session 24

Satish Tripathi

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Presenter Workshop
D, Speaker Session
24

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Karri Ving

Brown and Caldwell
Speaker Session 11

Peter von Zweck

Jacobs
Speaker Session 20

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Trinnex
Moderator Session
24

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WaterNow Alliance
Moderator Session
34

Mia Welch

*Jacobs Engineering
Group Inc*
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Tammy Whipple

AMCL
Coordinator
Workshop F

Jeanetta Williams

*Prince William
County Service
Authority*
Speaker Session 04

Zeena Williss Kohr

South Platte Renew
Speaker Session 05

Heather Wootton

*Kimley-Horn and
Associates, Inc.*
Moderator Session
07

Alden Wyma

*King County Dept
Of Nat'l Res & Parks*
Speaker Session 10

CONFERENCE SCHEDULE AT-A-GLANCE

Tuesday, February 13

7:30 a.m. - 5:00 p.m.	Registration
8:30 a.m. - 5:00 p.m.	Workshops A & B
8:30 a.m. - 12:00 p.m.	Workshops C & D
1:30 p.m. - 5:00 p.m.	Workshops E & F

Wednesday, February 14

7:30 a.m. - 5:00 p.m.	Registration
8:30 a.m. - 10:00 a.m.	Opening General Session
10:30 a.m. - 12:00 p.m.	Technical Sessions 1, 2, 3, 4
12:00 p.m. - 1:30 p.m.	Networking Luncheon
1:30 p.m. - 3:00 p.m.	Technical Sessions 5, 6, 7, 8
3:30 p.m. - 5:00 p.m.	Technical Sessions 9, 10, 11, 12
5:00 p.m. - 6:30 p.m.	Networking Reception

Thursday, February 15

8:00 a.m. - 5:00 p.m.	Registration
8:30 a.m. - 10:00 a.m.	Technical Sessions 13, 14, 15, 16
10:30 a.m. - 12:00 p.m.	Technical Sessions 17, 18, 19, 20
12:00 p.m. - 1:30 p.m.	Lunch on Own
1:30 p.m. - 3:00 p.m.	Technical Sessions 21, 22, 23, 24
3:30 p.m. - 5:00 p.m.	Technical Sessions 25, 26, 27, 28
5:00 p.m. - 6:00 p.m.	Meet the Speakers Social Hour

Friday, February 16

8:00 a.m. - 12:00 p.m.	Registration
8:30 a.m. - 10:00 a.m.	Technical Sessions 29, 30, 31, 32
10:30 a.m. - 12:00 p.m.	Technical Sessions 33, 34, 35, 36

CONVENTION CENTER AMENITIES

Concessions

View hours of operation and menus online: oregoncc.org/en/eat-now

Outlet	Tuesday, February 13	Wednesday, February 14*	Thursday, February 15	Friday, February 16
Portland Roasting Company - Level 1 Grab-and-go coffee, espresso, fresh baked goods, yogurt, and sandwiches.	7:00 AM - 3:30 PM	7:30 AM - 3:30 PM	7:30 AM - 3:30 PM	8:30 AM - 12:30 PM
Stir Bistro and Lounge - Level 2 Full-service restaurant focused on local fare.	10:00 AM - 2:00 PM	10:00 AM - 3:30PM	10:00 AM - 2:00 PM	CLOSED
Bento Food Cart - Level 1 - Grab-and-go rice bowls.	CLOSED	CLOSED	10:00 AM - 2:00 PM	CLOSED

*Complimentary Lunch is served to all conference registrants in Exhibit Hall A, 12:00 p.m. – 1:30 p.m. on Wednesday, February 14.

Coat and Bag Check

Pre-Function A – Level 1, Oregon Convention Center

Tuesday, February 13	7:30 a.m. – 7:00 p.m.
Wednesday, February 14	7:30 a.m. – 7:00 p.m.
Thursday, February 15	7:30 a.m. – 6:30 p.m.
Friday, February 16	8:00 a.m. – 12:30 p.m.

UPCOMING WEF AND AWWA EVENTS

AWWA Membrane Technology Conference

March 4-7, 2024, in West Palm Beach, FL

www.awwa.org/Events-Education/Membrane-Technology

WEF Collection Systems and Stormwater Conference

April 9-12, 2024, in Hartford, CT

www.wef.org/collectionsstormwater

DBIA/AWWA/WEF Design-Build for Water/Wastewater Conference

April 15-17, 2024, in Cincinnati, OH

www.dbwater.com

WEF Innovations in Treatment Technology Conference

May 21-24, 2024, in Virginia Beach, VA

www.wef.org/treatmenttech

AWWA Annual Conference & Expo (ACE)

June 10-13, 2024, in Anaheim, CA

www.awwa.org/ace

WEF Residuals and Biosolids Conference

June 18-21, 2024, in Oklahoma City, OK

www.wef.org/residualsbiosolids

WEF Circular Water Economy Summit

July 15-17, 2024, in Dallas, TX

www.wef.org/cwesummit

AWWA Water Infrastructure Conference

September 8-11, 2024, in Phoenix, AZ

www.awwa.org/Events-Education/Water-Infrastructure

UPCOMING WEF AND AWWA EVENTS

AWWA WaterSmart Innovations

September 24-26, 2024, in Las Vegas, NV

www.awwa.org/Events-Education/WaterSmart-Innovations

WEFTEC

October 5-9, 2024, in New Orleans, LA

www.weftec.org

AWWA Water Quality Technology Conference

November 17-21, 2024, in Schaumburg, IL

www.awwa.org/Events-Education/Water-Quality-Technology



ACE24

Co-hosted by  American Water Works Association
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June 10–13, 2024, Monday–Thursday
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- 440 Premier Presenters
- 90 Countries
- 6 Competitions
- 450 Exhibitors

TOP TECHNICAL TOPICS

- **Water Utility Management and Leadership Financing, Rates, and Affordability**
- **Utility Risk and Resilience**
- **Water Quality Challenges**
- **Advances in Water Treatment**
- **The Latest in Lead and Copper**
- **Potable Reuse**
- **Work Laws**
- **PFAS Litigation and the MDL**



Exhibitor and Sponsorship opportunities are available; please contact sales@awwa.org to learn how being an exhibitor or sponsor can help promote your company.

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