WEF/AWWA
The Utility Management Conference 2024
February 13-16, 2024
Portland, Oregon, USA
www.wef.org/utilitymanagement
#UMC24

Pre-Conference Workshops: February 13
Conference: February 14-16

Technical Program
(last updated November 13, 2023)

This conference is jointly hosted by the Water Environment Federation and American Water Works Association with cooperation from the Pacific Northwest Clean Water Association.
Pre-conference Workshops
Additional fees apply

Workshop A: From Disrepair to Prepared (from reactive to proactive): Leveraging the Fundamentals of Maintenance Reliability for Effective Operations and Sustainable Utility Management
Tuesday, February 13, 2024
8:30 a.m. - 5:00 p.m.

Speakers: Pam ELardo, Steven Hutchings, Brown and Caldwell; Adam Comfort, King County Dept of Natural Resources and Parks; Peter Boone, Tualatin Valley Water District; Christa Overby, City of Portland Bureau of Environmental Service; Reginal Joseph, Anthony Campanella, NYC DEP; Mark Poling, Clean Water Services

Maintenance Reliability programs and Reliability Centered Maintenance (RCM) practices provide approaches to serve the public as utilities address aging infrastructure, knowledge retention, financial constraints, regulatory requirements, performance needs, security, and more. This workshop will provide interactive learning and insights to Maintenance Reliability through theory, practice, examples, and use of data and technology. It will provide in-depth understanding of requirements necessary to increase reliability by utilizing failure modes, consequences, and improved maintenance strategies. While Maintenance Reliability can significantly decrease maintenance and operating costs and lower risks of equipment failures, the human elements need to be understood for sustained success. The workshop will explore change management, consistent communication, and cultural components as essential for implementation.
**Pre-conference Workshops**  
*Additional fees apply*

**Workshop B: Commissioning Capital Projects as a Life Cycle Process**  
**Tuesday, February 13, 2024**  
**8:30 a.m. - 5:00 p.m.**

**Speakers:** Salil Kharkar, DC Water; Stacy Passaro, Passaro Engineering; Theresa Bruton, DC Water; Diala Dandach, Brown and Caldwell; David Parker, DC Water; Robert Fairweather, Sherwood, Logan and Associates; Jaime Alba, DC Water; Charles Sinclair, Garney Construction, Christine deBarbadillo, Black and Veatch

Most utilities consider commissioning to be the tail end of a construction project to confirm that the built project meets specifications. There is also a perception that project delivery methods impact commissioning. This workshop will show that the commissioning challenges are agnostic of selected project delivery method and so are the approaches to overcome these challenges. This workshop will also highlight that the activities leading to successful commissioning start early in the decision phase, goes beyond construction, and is focused on the goal of ensuring that the constructed assets last and meet the design intent through its intended life span.
Pre-conference Workshops
Additional fees apply

Workshop C: Resilience Continuum for Assessing and Improving a Utility’s Resilience Positioning
Tuesday, February 13, 2024
8:30 a.m. - 12:00 p.m.

Speakers: Jason Carter, Arcadis; Prabha Kumar, Black and Veatch; Joone Lopez; Matthew Griffith, Louisville Water Company; Marissa Huntley Sammamish Plateau Water

Enterprise resilience has long been recognized as a core attribute of effectively managed utilities. Recent unprecedented challenges have forced utilities to adapt fundamental business practices and policies rapidly in order to deliver services. In 2021, a team from AWWA’s Strategic Management Practices Committee (SMPC) published an article on utility resilience based on their evaluation of AWWA’s pandemic survey data and a focus group discussion held with three utility leaders. This led SMPC authors to define the concept of a "Resilience Continuum". This workshop will build on this concept and resilience self-assessment to examine three focus areas with participants - Workforce Adaptation, Customer Engagement, and Digital Enablement.

Workshop D: Operationalizing Equity, Environmental Justice, and Resilience in your Utility with Advanced Asset Management
Tuesday, February 13, 2024
8:30 a.m. - 12:00 p.m.

Speakers: Hugh Sinclair, Arcadis; Satish Tripathi, City of Houston; Alan Sauvageau, WSSC Water

Water equity and environmental justice are now shifting from aspirational goals to required strategic objectives for many utilities. At the same time, the traditional problem of aging infrastructure is compounded by need for higher system resilience to combat the climate effects. To navigate these new challenges utilities are employing emerging best practices and technology to inform optimized asset management strategies. In this workshop participants will learn best practices of how to incorporate equity and environmental justice into its infrastructure prioritization and level of service performance while also exploring strategies to increase asset resilience to climate effects.
Pre-conference Workshops
Additional fees apply

Workshop E: Wateropolis - A Facilitated Workshop for Values-Based Resource Prioritization
Tuesday, February 13, 2024
1:30 p.m. - 5:00 p.m.

Speakers: Catherine Carter, Jennifer Teal, Raftelis; Jim Horne, US EPA; James Ginley, Jim Ginley Consulting, LLC

Wateropolis is an interactive board game designed to provide utility organizations with a new tool to engage internal and external stakeholders, help enhance community understanding and support, and demonstrate the value of water. This facilitated workshop leverages the industry's updated Effective Utility Management initiative and leads participants through the myriad of emerging issues and choices that confront local utility service providers, using Wateropolis, a highly-interactive experience that is modeled closely on the very successful North Carolina School of Government's "Budgetopolis" game.

Workshop F: Using Gap Assessments to Advance Your Asset Management Program Maturity
Tuesday, February 13, 2024
1:30 p.m. - 5:00 p.m.

Speakers: Tammy Whipple, AMCL, Mert Muftugil; Rebecca Borker. WSP Parsons Brinkerhoff; Todd Shepherd

This workshop is designed for utilities seeking to advance in their asset management maturity. It will provide an overview of asset management maturity assessment tools and uses, feature speakers from two utilities who will share real-world examples of evaluating their asset management program maturity and utilizing the assessment to develop actionable strategies to advance. An asset management self-assessment and tabletop exercises will be utilized throughout the workshop to provide attendees with practical, ready-to-use ideas and practices they can take back to their organization to advance their asset management practices and outcomes from any state of maturity.
Session 01: Building Resilient and Sustainable Water Infrastructure in Jackson, MS - Insights from the Project Team

Wednesday, February 14, 2024
10:30 a.m. - 12:00 p.m.

Speakers: Ameerah Palacios, Brent Tippey, HDR; Edward Henifin, JXN Water

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.
Session 02: Utility Collaboration & Regionalization A  
Wednesday, February 14, 2024  
10:30 a.m. - 12:00 p.m.

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, Metropolitan Sewer Sub District

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

Ernie Buo, Leslie Long, Clark County Water Reclamation District

Alternate  Regionalization – The Role of Finances in Successful Solutions  
Ryan Graf, Miranda Kleven, Advanced Engineering and Environmental Services Inc
Session 03: Strategic Planning A  
Wednesday, February 14, 2024  
10:30 a.m. - 12:00 p.m.

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; Ryan Nagel, Sarah Dominick, Shelbie Dashiell, 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, Freese & Nichols Inc.; Katie Clayton, City of Sugar Land; Kendall Ryan, Alexis Garcia, Freese & Nichols Inc.

11:30 a.m. Strategic Planning and Execution of a Unified SCADA System for Water Utility Management  
Leo Rodgers, Brown and Caldwell; Devin Sanders, Portland Water Bureau

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; Ryan Nagel, Conor Brennan, Hazen and Sawyer

Alternate Strategic Plan, SMART Goals and Employee Investment: A Recipe for Success  
Nicole Bates, Allan Clum, Christi Fowler, Mount Pleasant Waterworks
Session 04: Understanding the "Why" Behind Utility Technology Transformations: The Behind the Scenes View of What Drives the Need for Change

Wednesday, February 14, 2024
10:30 a.m. - 12:00 p.m.

Speakers: Seth Johnstone, 1898 & Co.; Lee Haller, Matthew Jacob, Pittsburgh Water & Sewer Authority; Cassidy Harding, California Water Service; Michael Beardslee, Craig Lees, Loudon Water

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.
Session 05: Workforce Development: A Focus on Operators
Wednesday, February 14, 2024
1:30 p.m. - 3:00 p.m.

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; Mike
           Gosselin, City of Kelowna

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
           Zeena Williss Kohr, Anna Schroeder, South Platte Renew
Session 06: Asset Management and Capital Program Frameworks  
Wednesday, February 14, 2024  
1:30 p.m. - 3:00 p.m.

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.; 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  
Kaylin Kramer, Brown and Caldwell; Tatiana Baranova; Jessica Shiao, DC Water

2:30 p.m.  Evansville Water and Sewer Utility's Roadmap to Asset Management Excellence  
Sara Ferrara, Arcadis; Logan Guffey, Evansville Water and Sewer Authority

Alternate  Raise Your Standards: The Value of ISO 55000 in the Water & Wastewater Industry  
John Helwig, CDM Smith; Tacoma Zach, MentorAPM; Jim Dieter, aim4ams

Alternate  Rapid Population Growth Drives Evolutionary Changes to Large Scale Multi-Billion Dollar Water/Wastewater Capital Improvement Program  
Tom Davies, Kelly Davis, Trinity River Authority
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.
Session 08: Digital Transformation in the Water Sector
Wednesday, February 14, 2024
1:30 p.m. - 3:00 p.m.

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

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

Alternate Getting Comfortable Being Uncomfortable: The MMSD Digital Transformation Journey
Alan Tucker, Brown and Caldwell; Matt Magruder, Michael Martin, Milwaukee Metropolitan Sewerage District
Session 09: Workforce Development: Managing this Crucial Asset  
Wednesday, February 14, 2024  
3:30 p.m. - 5:00 p.m.

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, Raftelis; Zach McNutt, Kacey Waggaman, City of Monroe; Chrissy Roe, Louisville Water

4:30 p.m.  **Utility Leadership - Career Progressions for Recruitment & Retention**  
Jose Leon Jr, Raul Romero, Johnson County Wastewater

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 VandenHeuvel, The Water Tower; Joanna Brunner, Trisha Brown, Jayden Wright, Arcadis; Melissa Meeker, Gwinnett County - Department of Water Resources
Session 10: Best Practices for Capital Program and Asset Management  
Wednesday, February 14, 2024  
3:30 p.m. - 5:00 p.m.

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; Andrew Kricun

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 Dept of Natural Resources and Parks; Steven Rogowski, Metro Wastewater Reclamation District; Rachel King, Michael Flores, HDR

Alternate  Equitable Investments: DC Water’s Experience Diving Deeper from an Analysis of Spending per Neighborhood to a Rigorous Approach to Enhancing Intergenerational Equitable Outcomes and Customer Experiences  
Jennifer Belknap, Carollo Engineers; Getachew Melsew, DC Water
Session 11: Financial Resilience for Utilities and Customers Alike
Wednesday, February 14, 2024
3:30 p.m. - 5:00 p.m.

3:30 p.m.  Pure Water Antelope Valley – A Critical Water Supply Project for a Large Disadvantaged Community
           Kim Pugel, Stantec; Dennis Hoffmeyer, Palmdale Water District

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
           Aliza Furneaux, Environmental Protection Agency; Curt Baranowski

4:30 p.m.  Inflation Reduction Act: Direct Pay Tax Incentives and Grants for Qualifying Utility Projects
           Doug Baldessari, Baker Tilly Municipal Advisors

Alternate  Financial Risk Mitigation: Utilizing long-range rate and financial planning helps minimize the impacts of large capital projects
           Josiah Close, HDR; Daniel Zimmerman, Rockwood Water Peoples Utility District

Alternate  Managing Support Services Cost is Not an After Thought but and Integral Best Practice in Clayton’s Utility Financial Resilience
           Rich Cappola, Robert McKie, Town of Clayton; Rupa Jha, Black and Veatch
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. Since AI/ML technologies offer solutions to all business functions of the water utility - operations, maintenance, financial management, customer experience, engineering, and planning - it becomes imperative for water utilities to chart a pathway for adopting AI/ML products and solutions to create better outcomes. 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.
Session 13: Incorporating Equity into Utility Decision Making
Thursday, February 15, 2024
8:30 a.m. - 10:00 a.m.

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) through the City of Boise's Recycled Water Program
Haley Falconer, City of Boise Public Works Department; Tiffany Torres, Andrea Hall, Brown and Caldwell

9:00 a.m.  A Journey that Navigated Houseless Encampments Empathetically, Provided Core Services, and Prioritized Staff Safety & Wellness
William Owen, Aster Moulton, Randy Lyons, 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

Alternate Economics of Equity in Infrastructure Decisions
Chris Behr, HDR
Session 14: Innovating the Consumer Experience
Thursday, February 15, 2024
8:30 a.m. - 10:00 a.m.

Speakers: Catherine Carter, Melissa Elliott, Raftelis; Jacqueline Jarrell, Charlotte Water

In an era marked by rapid technological advancements, the water and wastewater industry is poised for significant changes that reach far beyond the pipes and treatment plants. 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. The session will incorporate short special topics presentations, panel discussions with opportunities for audience participation, and visual facilitation, with the overarching theme of defining and delivering a great customer experience.
Session 15: Optimizing Business Practices  
Thursday, February 15, 2024  
8:30 a.m. - 10:00 a.m.

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 Stroebl, 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

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
Session 16: Management and Oversight of New Frontiers in Artificial Intelligence
Thursday, February 15, 2024
8:30 a.m. - 10:00 a.m.

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 ChatGPT Queries
William Kuehne, Lauren Basler, Ardurra

Alternate  Ready or Not, Artificial Intelligence Is Here!
Sasa Tomic, HDR; Gigi Karmous-Edwards; Paul Fleming, WaterValue

Alternate  Predictive Modeling for Water Main Likelihood of Failure: Integrating Machine Learning Techniques and Experts Insights with Utility Data - A Case Study of Virginia Beach
Javad Roostaei, Paul Wilson, Malia Turner, Hazen and Sawyer; Steven Cook, Virginia Beach Public Utilities; Donald Piron, Virginia Beach Public Utilities; Katya Bilyk, Reid Cagir, Zachary Perkins, Hazen and Sawyer
Session 17: Utility Resilience and Reliability
Thursday, February 15, 2024
10:30 a.m. - 12:00 p.m.

10:30 a.m.  Empowering People for Sustainable Utility Resilience
Jason Carter, Arcadis; Joone Lopez; Matt Collings, Drew Atwater, Rod Woods, Moulton Niguel Water District

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, Carnegie Mellon University

Alternate  Successful Water Crisis Communications: Lessons Learned from The Texas & Southern Freezes
Michael McGill, WaterPIO
Session 18: Innovation Amplified: Harnessing Collaboration and Communications for Breakthrough Solutions
Thursday, February 15, 2024
10:30 a.m. - 12:00 p.m.

Speakers: Katelyn Skornia, Arcadis; Ryan Locicero, Clean Water Services; Mike Huot, Sacramento Area Sewer District and Regional San; Medha Paliwal, Orange County Water District; Jason Carter, Joanna Brunner, Arcadis

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. Through a facilitated discussion, these leaders will share their stories on how they have built a culture of innovation, challenges they have experienced in maintaining engagement at different levels throughout the organization, and specific actions that have helped overcome these obstacles. The experiences shared in this session will demonstrate how using a combination of metrics and effective storytelling is needed to engage and encourage different audiences throughout their organization. By capturing a diverse set of perspectives and expertise from leadership, innovation, and communications, 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.
Session 19: Utility Planning: Essential to Success  
Thursday, February 15, 2024  
10:30 a.m. - 12:00 p.m.

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, Kerr Wood Leidal; Colwyn Sunderland

11:30 a.m. The More You Know the Less You Realize You Do – Boise’s Journey in Understanding Reliability and Redundancy  
Matthew Gregg, Brown and Caldwell; Haley Falconer, City of Boise Public Works Department

Alternate Not a Master Plan: Creating an Ultimate Infrastructure Plan to Aid in Preparing for Tomorrow’s Growth  
Jennifer Suttles, Tai Yi Su, Gwinnett County - Department of Water Resources; Hatem El-Sayegh, Barge Design Solutions

Alternate Roadmap for Achieving Energy Neutrality: Planning and Funding Energy Resiliency Projects Without Compromising Water Quality  
Elizabeth Keddy, Hazen and Sawyer; Bryan Schmerber
Session 20: Combining Data and Asset Management for Improved Monitoring and Operations
Thursday, February 15, 2024
10:30 a.m. - 12:00 p.m.

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 Rrowth, Jacobs

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

Alternate Maximizing Value through the use of Actionable Leak Data Knowledge
Paul Gagliardo, Gagliacqua Consulting

Alternate Employing a Visualization Tool to Implement a Robust and Sustainable Asset Management Program
Marta Ortiz, Albuquerque Bernalillo County Water Utility Authority; Marcela Sion, Dilip Kumar, Hazen and Sawyer
Session 21: Alternative Project Delivery and Procurement
Thursday, February 15, 2024
1:30 p.m. - 3:00 p.m.

1:30 p.m.   Get What you Need and Show What You've Got: A Panel Discussion on Qualifications-Based Selection
            Sarah Lothman, Kat Becchina, Burns & McDonnell; Allison Swisher; Rick Harris; Jesus Rudy Gonzalez, DC Water

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 (P3): Expert Panel on Sustaining Water Operations using P3
            Ryan Nordvik, Arup; Thomas Crowley; Rolf Ohlemutz, Table Rock Capital; Chandrasekar Venkatraman, Veolia

Alternate  Managing the Largest Program in PWBs History: Cost, Schedule, and Quality Strategies to Achieve Success
            Kyle Sandera, Brown and Caldwell; Michelle Cheek, David Peters, Portland Water Bureau

Alternate  Return on Investment - Does the Owner’s Advisor Add Value to your Project?
            Will Shull, HDR; Nicole Bartlett, Charlotte Water; John Shutak
Session 22: Communications and Public Engagement
Thursday, February 15, 2024
1:30 p.m. - 3:00 p.m.

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
Monica Hoyt, Central Utah Water Conservancy District; Kelley Dearing Smith, Louisville Water Company; Mandy Cawby, WaterOne; Douglas Shackelford, Central Arkansas Water

Alternate  
How to Successfully Communicate about PFAS in the Post-MCL World: Case Studies from Across the Country
Michael McGill, WaterPIO

Alternate  
Strategic Messaging for More Effective Communications on Sanitary Sewer Overflows in the Chesapeake Bay Watershed
Meghan Robinson, HDR; Edward Shea, Wiley and Wilson; George Heiner, Anne Arundel County DPW
Session 23: How Rockwood Water People's Utility District and the City of Portland Benefitted from WIFIA Financing for their Water Infrastructure Projects

Thursday, February 15, 2024
1:30 p.m. - 3:00 p.m.

Speakers: Dallas Shattuck, Karen Fligger, US EPA; Kari Duncan, Rockwood Water People's Utility District; Cecelia Huynh, Portland Water Bureau

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.
Session 24: Real World Applications of Artificial Intelligence
Thursday, February 15, 2024
1:30 p.m. - 3:00 p.m.

1:30 p.m. DC Water’s Journey to ChatGPT
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

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 Green Flags
Kelly Alexander, Alexander Palmatier, HDR; Eric Sullivan, Tim McGarry, SewerAI
Session 25: Diversity, Equity, and Inclusion from a Water Utility’s Perspective
Thursday, February 15, 2024
3:30 p.m. - 5:00 p.m.

3:30 p.m. Being Intentional with Diversity, Equity, Inclusion, and Environmental Justice
Rosanna La Plante, Eric Mcfarland, Kishia Powell, 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

Katie Deheer, Trinnex
To help provide safe and affordable water and sanitation to everyone in their communities, some utilities are turning to various forms of low-income customer discounts. But utility managers and others often have questions about the financial impacts that such programs will have on a utility. Experience in the energy utility sector and emerging data in the water and wastewater utility sector show that, by improving customers’ complete, timely, regular, unprompted payment of bills, a low-income discount program can benefit a utility financially, significantly offsetting (or even exceeding) the costs of such a program. Even though a portion of low-income customers' bills are discounted, payments can increase such that total cash collections may go up, while the costs of collecting that revenue go down. Put another way, 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. This 'Water Affordability Business Case Tool' was developed by a nationally-recognized expert on water affordability and affordable utility rates, who will be one of the presenters in this session. 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.
3:30 p.m.  **A Strategic Approach to Enhancing Collections Management**
Hernando Parrott, Open International; Andrew Carlstrom, Tualatin Valley Water District

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

Alternate  **An Uphill Battle: A NC Case Study of Utility Cost Recovery and Customer Affordability**
Olivia August, Hazen and Sawyer; Martin Doyle, Duke University

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, Public Utilities Department; William Zieburtz, Burton & Associates
Session 28: Applications of Data Management and Analysis
Thursday, February 15, 2024
3:30 p.m. - 5:00 p.m.

3:30 p.m. Using Data Analysis to Improve Household Water Conservation: One Utility’s Journey
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
Kirk Olds, Brown and Caldwell; Devin Sanders, Portland Water Bureau; Riley Middlebrook, Brown and Caldwell; Dale Johnson, Marquam

Alternate A Practical Sewer Network Digital Twin - It is not a PIPE dream
Varun Srinivasan, Steven Drangsholt, Trinnex

Robert Maloney, WSSC Water
Session 29: Change Management: Considering Culture, Workforce, Business Processes, and Technology

Friday, February 16, 2024
8:30 a.m. - 10:00 a.m.

Speakers: Mia Sabanovic, City of Portland Bureau of Environmental Service; Marco Merrick, Baltimore City Department of Public Works; Nohemy Revilla, San Francisco Public Utilities Commission; Jessica Maloney, MWR Denver; Rosa Castro, MWD So. Cal.

This session will include two parts:

1. Testimonials/case studies from staff and management in public water sector utilities who applied a framework based on value gained and an easy approach built on systems thinking to address different organizational challenges and design and implement improvements. Presentations will demonstrate how products from completed WRF projects (Vitasovic et. al., 2022, Lehman et al. 2022) have been used by utilities to add value and improve specific aspects of performance including: a) a value-based framework that considers People, Processes, and Technology; b) maturity models and assessment tools for each of these elements; and c) a continuous improvement methodology including Change Management.

2. Facilitated interactive panel discussion including interaction with the audience to address their questions and comments.
Session 30: Utility Collaboration & Regionalization B  
Friday, February 16, 2024  
8:30 a.m. - 10:00 a.m.

8:30 a.m.  
**A Watershed Moment for Regionalization**  
Kevin Gibson, Wesley Sydnor, Louisville & Jefferson County MSD

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

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

Alternate  
**Collaborative Solutions for Reuse to Eliminate Surface Water Discharge in Southwest Florida**  
Justin Saarinen, CDM Smith; Jason Sciandra, City of Ft Myers
Session 31: Integrated Water Management  
Friday, February 16, 2024  
8:30 a.m. - 10:00 a.m.

8:30 a.m.  Raleigh Water's Unified Vision: Mastering Integrated Planning  
Nicola Hill, Adam Sharpe, HDR; Janeen Goodwin, Raleigh Water

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

Alternate  Lessons Learned: Utility Strategies for Developing & Commercializing Water Reuse  
Isabel Kezman, Bluefield Research

Alternate  Ground Water and Surface Water Pricing Strategies  
Isalah Barnes, Carollo; Summer Hvasta, San Jacinto River Authority
Session 32: Optimization of Operation & Maintenance
Friday, February 16, 2024
8:30 a.m. - 10:00 a.m.

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

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

9:30 a.m. Improving Operations by Taking a Step Back and Finding Opportunities for Continuous Improvement
Veronica Jensen, Toho Water Authority; Erik Dabrowski

Alternate 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

Alternate Lessons Learned from Installation of Los Angeles County Public Works' First Arsenic Treatment Plant
Joon Jang, TJ Kim, Ramy Mattar, Los Angeles County Public Works
Session 33: Decision Making with the Customer in Mind
Friday, February 16, 2024
10:30 a.m. - 12:00 p.m.

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
Carol Malesky, Stantec; Constance Haqq, Northeast Ohio Regional Sewer District

Alternate Effective Strategies for Building Consensus with a Rate Advisory Committee
Paul Matthews, Tualatin Valley Water District; Elizabeth Bakke, Barney & Worth Inc
Session 34: Engaging the Community in One Water Programming  
Friday, February 16, 2024  
10:30 a.m. - 12:00 p.m.

Speakers: Amy Weinfurter, Victoria Arling, 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. These efforts are especially important for utilities and water resource agencies looking to advance One Water programs, i.e., integrated and sustainable water resource management initiatives that involve decentralized infrastructure distributed across communities, such as green stormwater infrastructure, water use efficiency initiatives, drought-tolerant landscaping, water use monitoring and leak detection technologies, graywater reuse, and more. However, implementing One Water strategies requires an intentional engagement with community members of all kinds, and in particular those who are or have been disproportionately impacted by water challenges, such as neighborhood flooding, unaffordable rates, and/or face unique barriers to access to clean, safe water services. 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.
Session 35: Strategic Planning B
Friday, February 16, 2024
10:30 a.m. - 12:00 p.m.

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; Connie Banegas, Charleston Water System; Ahmet Ozman

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; Susie O'hara, Moonshot Missions

Alternate More Than Pretty Pictures – Developing a Utility Strategic Plan That Enhances Public Trust
Michael Brink, HDR, Inc.; Jeff Thorn, City of Lee's Summit Water Utilities

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
Session 36: Utility Sustainability and Environmental Challenges
Friday, February 16, 2024
10:30 a.m. - 12:00 p.m.

10:30 a.m.  Ready or Not: Implementing DOE's 50001 Ready Program for Establishing an Energy Management System
Michael McGrath, Fairfax County; Khis 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
Joseph Crea, Raftelis; Elizabeth Garcia, Seattle Public Utilities

Alternate  From Biogas to Green Hydrogen – What's the Impact of the Energy Transition on Water Utilities?
Ethan Edwards, Bluefield Research

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