WEF/AWWA
The Utility Management Conference 2022

Technical Program
(As of February 2, 2022)

February 21-24, 2022
Hyatt Regency Grand Cypress
Orlando, Florida

This conference is jointly hosted by the Water Environment Federation and American Water Works Association in cooperation with the Florida Water Environment Association.
Pre- Conference Workshops
Monday, February 21, 2022
7 workshop programs, individual descriptions provided on the following pages.
(Additional fees apply)

8:30 a.m. - 5:00 p.m.
- Workshop A: Solving the Affordability Riddle: Creating a Framework for Customer Assistance Programs that Bridge Legal Barriers and are Financially Sound

8:30 a.m. - 12:00 p.m.
- Workshop B: Communicating to Decision Makers: Getting Your Staff To Understand
- Workshop C: Smart Water Utility Framework and Maturity Assessment

1:30 p.m. - 5:00 p.m.
- Workshop E: Workforce Development - Developing the Whole Person: A Tactical View for Workforce Competency
- Workshop F: Combining Traditional SCADA with Contemporary Analytics: Big Data Finally Yields Big Benefits
- Workshop G: A Practical and Concise Approach to Developing an Effective Strategic Asset Management Plan

Technical Program
Tuesday, February 22 – Thursday, February 24, 2022
35 Sessions, individual agendas provided on the following pages.
Pre-Conference Workshops
Monday, February 21, 2022
(Additional fees apply)

Workshop A: Solving the Affordability Riddle: Creating a Framework for Customer Assistance Programs that Bridge Legal Barriers and are Financially Sound
Monday, February 21, 2022
8:30 a.m. - 5:00 p.m.

Customer Assistance Programs (CAPs) are fraught with real and perceived barriers, but there is a better way. CAPs can be used to harness and align your customer services with the need in your community in a way that surmounts legal barriers and appreciates the full costs and financial benefits each CAP provides. Learn the tools and the techniques that leading utilities of all sizes are using to start or enhance your customer assistance and affordability efforts. As part of this session participants will work on developing a CAP decision tree framework and be introduced to a tool that helps utilities rank assistance programming based on new financial impacts or consequence of a range of options.

Consistent with that over-arching intent, we have identified an opportunity to develop a business case framework for rate funded customer assistance programs (CAPs) that would address perceived or real legal barriers. The objective is to identify a fundamentally sound way to comprehensively evaluate various CAPs with an appreciation of the full costs and financial benefits each would provide. In so doing, utilities would have the ability to select and design CAPs that address legal concerns (including those stemming state statutes, case law, and/or bond covenants) and provide a neutral or positive financial benefit that would support funding from rates. The framework would serve to provide guidance to utilities in terms of levels of assistance as utilities would now have a clear understanding of how to quantify the net financial impacts or consequences of a range of options.

This workshop will provide a high level of engagement with other utilities with facilitated exercises and sharing of best practices.

Prior to the workshop participants will be surveyed to get the status of customer assistance programs at their utility and what they most want to learn from the workshop.

Learning Objectives:
- Learn the basis for CAP needs to justify the program for their utility;
- Evaluate the broad range of CAP options available and select those that might work best for a utility’s affordability needs;
- Interact with a CAP framework to learn to identify potential barriers and how to overcome them; and
- Create the beginnings of a CAP framework that is specific to their utility
Workshop B: Communicating to Decision Makers: Getting Your Staff To Understand

Monday, February 21, 2022
8:30 a.m. - 12:00 p.m.

Coordinator: John Solomon, JD Solomon, Inc.
Presenters: Ed Kerwin, Orange Water & Sewer Authority; Rick Crosby, Mount Pleasant Waterworks; Tim Adams, NASA

The burden of effective communication is on the sender, not the receiver. Unfortunately, most of our junior- and mid-level staff are poorly equipped to be good communicators. There are many textbooks and guidance documents that highlight the importance of better communication but there is limited practical guidance provided. Technical professionals frequently cite communicating with decision makers as the most difficult part of their job. This workshop will explore what decision makers can do to mold their staff into better communicators. Developing a staff of effective trusted advisors to executive teams and decision makers requires more than standard marketing training or communications webinars. Workshop participants will leave with a checklist of practical action items that they can take home to implement with their staff. More importantly, workshop attendees with be provided with a solid understanding of 'where to start' and milestone tips and pointers for measuring improvement. The workshop will be facilitated by three, 30-year-plus veterans of the water and wastewater industry and by a 30-year-plus technical leader from outside the profession to get an outside view.

This interactive workshop will include case examples from presenters, breakout discussion groups, and the use of an audience response system to get immediate feedback from attendees to drive larger discussions.

Learning Objectives:
- Apply staff communication checklist at home to better develop staff skills;
- Identify key training approaches in the area of listening, empathy, and decision making;
- Understand differences between technical advisory and advocacy communication;
- Distinguish between approaches for individual and group decision-making contexts.
Workshop C: Smart Water Utility Framework and Maturity Assessment
Monday, February 21, 2022
8:30 a.m. - 12:00 p.m.

Coordinator: Prabhushankar Chandrasekeran, Stantec
Presenters: Z Vitasovic, MWD; Kevin Johnson, Stantec; Yvonne Carney, WSSC; Sandra Davis, Pinellas County Utilities; Ting Lu, Clean Water Services; Andrew Lee, Seattle Public Utilities

This Water Research Foundation funded project (5039) focuses on filling the gaps in our industry with developing an easy to use and explain framework for Smart Water Utility, definitions that distinguishes an Intelligent Water System from a Smart Water Utility, and an assessment tool to measure the digital maturity of any business process of a water utility. This project sets the foundation for further development of tool/methods to improve utility business processes.

Learning Objectives:
- Define “Smart Water Utility” so that people within the utility can easily understand;
- Demonstrate the definition of a Smart Water Utility using a simple yet reasonable framework;
- Explain simple steps within framework that utilities can take to become a Smart Water Utility;
- Learn the characteristics of a business process with respect to data collection, management, analytics, and decision making;
- Measure the current maturity of a business process in its ability to sense/collect, manage, analyze data to make necessary business decisions.
Imagine either hiring on to a new water/wastewater utility or being promoted to a new management position with additional responsibilities. Imagine yourself trying to understand and prioritize the most important steps to take. Are you wondering what you would do? The updated AWWA M5 Manual ‘Water Utility Management’ was specifically designed for water and wastewater managers as a go-to reference to help them achieve their utility’s most critical objectives. Water and wastewater managers are public health providers with unparalleled track records of success. In the 20th century alone, the application of our industry’s science, tools and trades saved more lives than any other single health development. The people who design and manage our water processes are nothing less than heroes — M5 is here to help.

Today’s dynamic workforce, climate change, increasing customer demands, new technologies, and continually aging infrastructure complicate every manager’s role. Whether the utility is large or small, successful management requires more than single-subject expertise. This workshop has been developed to focus on the pulse of what is current and essential for today’s utility managers to know. The presentations are from public and private utility executives, senior engineers, and seasoned management and financial consultants who have captured the water industry’s best practices, methods, and overall strategies to help participating utility managers remain heroes in today’s complex and ever-changing world.

Learning Objectives:

- Focus on the pulse of what is current and essential for today’s utility managers to know using new case studies;
- Present the industry’s best practices, methods, approaches and overall strategies for sustainable success;
- Get acquainted with the new AWWA M5 Manual - Water Utility Management, which was specifically designed for water and wastewater managers as a “Go-To” reference to help achieve their utility’s most critical objectives.
Workshop E: Workforce Development - Developing the Whole Person: A Tactical View for Workforce Competency

Monday, February 21, 2022
1:30 p.m. - 5:00 p.m.

Coordinator: Rhonda Harris, Brown and Caldwell
Presenters: Jim Courchaine, Regional Water Authority; Richard Gerstberger, Tap Resource Development Group, Inc.; Cindy Goodburn, Goodburn Consulting, Inc.

Nearly 1/3 of the U.S. Workforce is age 55 or older (30%), which means 47.7 million people will likely retire within the next 10-15 years. The loss of such a large section of the working population creates a significant gap in U.S. Industry, and requires immediate steps to ensure a well-trained and capable workforce is ready to fill the gap. This interactive workshop looks at the current training and development approaches within the water and water reclamation utilities which seek to fill the gap of the departing workforce. Many utilities have begun developing training programs that address the 'Whole Person', and provide a holistic approach to competencies and skills development. The workshop activities takes an in-depth look at the organizational strategies, business requirements, and personnel needs that are required for effective employee progression, retention, and succession planning. These training programs support project management objectives, program administration, policy enforcement, effective coaching, mentoring, disciplining techniques, as well as effective writing, developing and presenting in front of small and large groups, and understanding and executing budgetary oversight. The workshop looks at the needs of the 'Whole Person' and explores training programs within the water sector that seek to meet these development needs. This workshop is the continuation of a workshop presented at WEFTEC 2021, called 'Workforce Development-Addressing the Whole Person - A Holistic Approach to Skills and Competency Development,' and this workshop focuses on the Tactical View for Competency Development.

Learning Objectives:
- Gain a better understanding of the meaning of “Technical and Leadership skills”;
- Discuss the concepts and attributes of a learning organization, one that supports a well-rounded workforce in all water and wastewater areas including field services, engineering, plant operations and maintenance, and construction management;
- Identify resources available to assist in developing a “holistic” training program that addresses staff needs and meets the needs of future progression within the organization;
- Identify programs that enable employees to gain increased knowledge and high-value skills without waiting for vacancies to create promotional opportunities.
**Workshop F: Combining Traditional SCADA with Contemporary Analytics: Big Data Finally Yields Big Benefits**

**Monday, February 21, 2022**  
1:30 p.m. - 5:00 p.m.

**Coordinator:** Dane Jablonsky, Arcadis  
**Presenter:** Stephen Rot, City of Scottsdale, Arizona

SCADA datasets represent one of, if not the largest, inventory of existing data available to utilities. Millions of datapoints are available that tell the story of operations at utility facilities going back years. Furthermore, these datasets are usually of very high quality as the data has not been touched by human hands. These factors combine to create what is probably the best opportunity for the application of advanced analytics, artificial intelligence (AI) and machine learning (ML).

Traditional reporting and analysis tools provided by SCADA vendors have not kept pace for a number of reasons. Vendor, and more importantly the inability of such products to be leveraged outside of the SCADA environment (i.e., economies of scale) mean that such vendor tools will have difficulty keeping up with the capabilities of general-purpose systems. Advances in these general-purpose analytic tools, represented by products such as PowerBi and Tableau, have been game-changers. These tools can now be used to combine SCADA with other external data sources – i.e., weather – to create even more value. Their affordability, feature set and ability to handle very large datasets presents utilities with a new opportunity – to finally get the most out of their biggest data set.

**Learning Objectives:**
- Achieve a better understanding of the tools and techniques needed using and manipulating large SCADA data sources for the purpose of analytics;
- Share lessons learned through the discussion of three recent utility analytics projects that used big SCADA data;
- Identify a number of your own key questions that might be answered by combining your SCADA data with contemporary business intelligence tools like PowerBI.
Workshop G: A Practical and Concise Approach to Developing an Effective Strategic Asset Management Plan

Monday, February 21, 2022
1:30 p.m. - 5:00 p.m.

Coordinator: Celine Hyer, Arcadis
Presenters: Esteban Azagra, Arcadis; Ryan Nagel, Hazen and Sawyer; Tim Noyes, Toho Water Authority; Jamie Decker, Hazen and Sawyer; Jennifer Suttles, Gwinnett County Department of Water Resources

1:30 p.m.  Introductions, SAMP Overview and Case Studies
- Overview of AM Strategy Elements
- Case Study: AM Alignment with Overarching Strategy / Performance Measures at Gwinnett County
- Case Study: AM Governance Establishment at TRWD
- Case Study: AM Maturity Assessment & Roadmap Development at Somerville, MA
- Case Study: AM Implementation Journey at Toho Water Authority

2:30 p.m.  Breakout Sessions – round 1: AM Policy and SAMP Table of Contents

3:10 p.m.  Networking break


4:05 p.m.  Breakout Sessions – round 3: AM Gap Analysis and Roadmap for Improvements

4:45 p.m.  Group Summary, Lessons Learned, and Closing Remarks

5:00 p.m.  Workshop adjourns

Learning Objectives:
- Understand the importance of strategy as a foundational element of asset management, and the importance of aligning asset management with your overall business strategy;
- Learn how leading utilities have developed and effectively applied their SAMP;
- Connect with peers and industry leaders through a hands-on strategy development experience, and learn how diverse teams tackle a complex problem;
- Learn how to apply practical maturity assessment tools, including ISO 55001, the Institute of Asset Management SAM+, Water Research Foundation SAM Gap, etc.;
- Walk through the design of an optimal asset program management function, which will fit your unique organizational goals.
Opening General Session
Tuesday, February 22, 2022
8:30 a.m. – 9:45 a.m.
Room: Grand Cypress Ballroom

More information about the opening general session is coming soon.
Session 01: A Thin Line Between Diversity, Equity and Inclusion
Tuesday, February 22, 2022
10:30 a.m. – 12:00 p.m.
Room: Windsong 3

Moderator: Donnell Duncan, Arcadis

10:30 a.m. Equity in Water Infrastructure: People at the Center of Our Design and Effort
Steve Hamai, Seattle Public Utilities

11:00 a.m. Developing an Inclusive Workforce Strategy
Lisa Stone, DC Water

11:30 a.m. Panel Discussion
Steve Hamai, Seattle Public Utilities; Lisa Stone, DC Water; Donnell Duncan, Arcadis

Some water and wastewater utilities have developed clear objectives for equity in their services. Others have committed to diversity and inclusion in their workforce. In this panel, we discuss the overlap between equity in the provision of services to diverse communities while promoting diversity and inclusion in our water workforce.
Session 02: Data Management
Tuesday, February 22, 2022
10:30 a.m. - 12:00 p.m.
Room: Windsong 5

Moderator: Tim Dean, Kleinfelder

10:30 a.m. Are We There Yet? — Performance Measurement through Process Optimization, Collaboration, & Technology Integration
Jeanetta Williams, Aniruddha Guha, Irma Houck, Jillian Rosche, PWCSA; Aditya Ramamurthy, Janice Sloan, Kennedy/Jenks

11:00 a.m. A Collaborative Approach to Business Intelligence Software Selection
Lauren Chamblin, Clayton County Water Authority; Ann Houseman, Hazen and Sawyer

11:30 a.m. The Long Road: CMMS Lessons Learned from a Former Town Manager
John Solomon, JD Solomon, Inc.

Alternate Lessons Learned: Integrating 'Dirty Data' into Cartegraph
Abby Owens, City of Plano; Stephen Johnson, Freese & Nichols Inc

Session 03: Strategic Planning
Tuesday, February 22, 2022
10:30 a.m. - 12:00 p.m.
Room: Windsong 6

Moderator: Terri Holcomb, Peace River Manasota Regional Water Supply Authority

10:30 a.m. Peer Scanning, Informative Interviews, and Design Thinking — Tactical Approaches for Leveraging Innovation
Michael Johnson, Birmingham Water Works; Zakiya Seymour, Jason Carter, Patrick Flannelly, Arcadis

11:00 a.m. Developing a Utility Strategic Plan Integrating Sustainability, Innovation and Equity: A Case Study of the 2021-2025 MWRD Strategic Plan
Vincent Lee, Arup; Marcelino Garcia, Catherine O’Connor, MWRD; Janine Witko, Audrey Freimer, Arup

11:30 a.m. Using Uncertainty to Drive Investments for Organizational Resiliency
Jason Carter, Arcadis; Keith Tyson, Todd Allen, Yvonne Caney, WSSC Water; Joanna Brunner, Arcadis

Alternate Adapting to Unexpected Changes: A Case Study in Successful Program Management in a Changing Environment
David Saunders, Jacob Mueller, HDR
Session 04: Environmental and Regulatory Issues
Tuesday, February 22, 2022
10:30 a.m. - 12:00 p.m.
Room: Windsong 9

Moderator: Trent Stober, HDR

10:30 a.m. Pacing Reinvestment: Developing a Long-Term Collection System Rehabilitation Plan
Alexander Palmatier, Jacob Mueller, HDR Inc.

11:00 a.m. Preparing for New Requirements of Lead Copper Rule Revisions
Rob Little, Woodard & Curran

11:30 a.m. Modular, Decentralized Wastewater Treatment: A Promising Solution for the American Southeast and Beyond
Ashutosh Sharma, Kenneth DaRos, Aquatech

Alternate PFAS, The Challenge for Water/Wastewater Utilities
Viraj deSilva Weerapperuma, Freese & Nichols

Session 05: Organizational Culture Change
Tuesday, February 22, 2022
1:30 p.m. - 3:00 p.m.
Room: Windsong 3

Moderator: Sarah Reeves, Brown and Caldwell

1:30 p.m. From Words to Empowerment: Embrace the Power of a Promise
Jamie Floer, Todd Swingle, Toho Water Authority

2:00 p.m. KC Water's Capital Improvement Program Planning & Delivery Improvements - The Power of Business Process Modeling
Daniel Ott, Scott Parker, Kansas City Water

2:30 p.m. Grow Up! — Maturity Assessment to Direct Organizational Development
Jacob Mueller, Kaylyn Sinisgalli, HDR
Session 06: Utility Leadership & Strategy Implementation I  
Tuesday, February 22, 2022  
1:30 p.m. - 3:00 p.m.  
Room: Windsong 5  
Moderator: Jim Ginley, Jim Ginley Consulting, LLC  

1:30 p.m.  Accelerate Critical Decisions through Real-Time Data Storytelling Fed by Data from more than 13 Disparate Data Sources via a Modern Utility-wide Data Warehouse  
Charles Burtron, Benjamin Cella, Teksouth Corporation; Dan Hilyer, Opelika Utilities  

2:00 p.m.  Transformative Water Leadership — Who, What, Where, When, Why and How  
Tim Worley, Ortega Strategies Group; Suresh Radhakrishnan, Metropolitan Water District of Southern California; Alane Boyd, Desert Rose Environmental  

2:30 p.m.  Not Your Typical Rate Study: How a Mid-Sized Aging Utility Instilled Transformational Change to Overhaul Its Planning and Financing Strategies  
Pieter Van Ry, South Platte Water Renewal Partners; Sarah Stone, City of Englewood Utilities; Roger Austin, Hazen and Sawyer; Carol Malesky, Stantec  

Session 07: Operations & Maintenance  
Tuesday, February 22, 2022  
1:30 p.m. - 3:00 p.m.  
Room: Windsong 6  
Moderator: Laurie Chase, Blue Heron Engineering  

1:30 p.m.  The Dollars and Sense for Adopting Optimized O&M Processes: The Demonstrated Successes of Three Utilities  
Jay Boyd, ADS Environmental  

2:00 p.m.  Operational Strategies to Prepare the Wastewater Treatment Facilities for Extreme Weather Events  
Velmurugan Subramanian, Atkins  

2:30 p.m.  Benchmarking Your Break Rates: How Do Water Main Break Rate Studies Compare to AI/Machine Learning Findings?  
Gregory Baird, Water Finance Research
Session 08: Developing a Financing Strategy in Uncertain Times

Tuesday, February 22, 2022
1:30 p.m. – 5:00 p.m.
Room: Windsong 9

Moderator: Amy Jablonsky
Panelists: John Mastracchio; Dustin Lowndes, DC Water; Rosalind Bertolo, City of Dayton; Rachel Bradley, Arcadis

Whether we need to address underlying industry needs such as funding aging infrastructure, or other critical issues like water affordability, the need to develop an effective financial strategy is as relevant as ever before. This panel discussion will explore the building block of a sound financial strategy, bringing perspectives from both, a large and a mid-size water utility, as well as from industry practitioners that will be able to share traditional and emerging tools available to the industry.

A full detailed agenda for this session is coming soon.
Session 09: Planning for Utility Excellence through Workforce Management and Development
Tuesday, February 22, 2022
3:30 p.m. - 5:00 p.m.
Room: Windsong 3

Moderator: Christine Boyle, Xylem, Inc.

3:30 p.m. Developing a New Generation of Leaders with Discover the Leader in Utilities (DLIU)
Jenelle Ostrowski, Megan Ross, Pinellas County Utilities

4:00 p.m. Strategic Talent Management for Utilities in a Post-Pandemic World
Caitlin Humrickhouse, Jeffrey Rowe, Baker Tilly

4:30 p.m. Want to Strengthen Innovation? First, Break Down the Organizational Siloes
Robert Bornhofen, DC Water

Session 10: Communications and Public Interest
Tuesday, February 22, 2022
3:30 p.m. - 5:00 p.m.
Room: Windsong 5

Moderator: Amanda Schwerman, Black & Veatch

3:30 p.m. In March, OWASA’s Water Tastes Like Chlorine (And Other Community Survey Learnings)
Mary Tiger, Orange Water and Sewer Authority; Catherine Carter, Raftelis

4:00 p.m. The CCR — Transforming a Mandate Into a Masterpiece
Jennifer Frost, Charlotte Water; Samantha Villegas, Raftelis

4:30 p.m. Ethnographic Approach for a Watershed-Based Disadvantaged Community Initiative
Jeffrey Mosher, Rick Whetsel, Santa Ana Watershed Project Authority
Session 11: Utility Innovation: Leadership and Evolution  
Tuesday, February 22, 2022  
3:30 p.m. - 5:00 p.m.  
Room: Windsong 6  
Moderator: Melissa Pomales, Arcadis

3:30 p.m.  Key Tactics for Executive Innovation Champions  
Jason Carter, Joanna Brunner, Arcadis; Ed Means, Means Consulting; Keith Tyson, WSSC Water; Colin Chapman, Queensland Urban Utilities; Jeff Cochran, Birmingham Water Works

4:00 p.m.  An Innovation “Refresh” at DC Water: History, Drivers, and the Path Forward  
Matt Ries, Robert Bornhofen, DC Water

4:30 p.m.  Rustbelt Innovation — A Tale (Comparison) of Two Programs  
Jeffrey Duke, Northeast Ohio Regional Sewer District; John Norton, Great Lakes Water Authority

Session 12: Diversity, Equity, and Inclusion in Workforce Pipelines  
Wednesday, February 23, 2022  
8:30 a.m. - 10:00 a.m.  
Room: Windsong 3  
Moderator: Donna Mancuso, Suffolk County Water Authority

8:30 a.m.  Meeting DEI Where It’s At: Innovative Outreach Approaches  
Judith Ibarra-Bianchetta, Tetra Tech

9:00 a.m.  Jail-to-Job Pipeline Program  
Noralvys Hancock, Megan Ross, Hillary Weber, Pinellas County Utilities

9:30 a.m.  Reboot Re-entry: Returning to a Technical Profession After a Career Detour  
Karen Counes, Julie Lucas, Jennifer Harrison, Kurt Wildforster, Sara Varvargios, Rose Hanson, CDM Smith
Session 13: Rate & Affordability Benchmarking from NYC to Capacity Fee Evolutions on the West Coast  
Wednesday, February 23, 2022  
8:30 a.m. - 10:00 a.m.  
Room: Windsong 5  
Moderator: Robert Ryall, Arcadis  

8:30 a.m. Understanding the ‘Why’ Behind Utility Rate Structures and Customer Affordability Programs  
David Hyder, Deborah Kloeckner, Stantec; Janet Clements, One Water Econ; Alan Cohn, NYC DEP  

9:00 a.m. Coming Soon! A New System Development Charge Manual  
Jennifer Ivey, Carollo Engineers; Andy McCartney, City of Fort Worth  

9:30 a.m. Improving Capacity Charges through Sound Philosophy and Modern Statistics  
Matthew Freiberg, Benjamin Stewart, William Zieburtz, Stantec; Sophia Skoda, East Bay Municipal Utility District  

Session 14: Digital Transformation I  
Wednesday, February 23, 2022  
8:30 a.m. - 10:00 a.m.  
Room: Windsong 6  
Moderator: David Garcia, WCS Engineering  

8:30 a.m. Where Do We Go from Here? A Technology Master Plan for St. Paul Regional Water Services  
Carol Kaszynski, Saint Paul Regional Water Services; Bill Lloyd, Kathryn Jones, HDR  

9:00 a.m. The Foundational Role of GIS in Digital Water Transformation  
Eric Bindler, Bluefield Research; Seth Johnstone, Esri  

9:30 a.m. Beyond the “Cool” Factor: Why Managing Facilities and Vertical Assets using GIS and BIM Makes Business Sense  
Seth Johnstone, Esri; Emily Champagne, Milwaukee Metropolitan Sewer District  

Alternate Smart One Water — A New Paradigm for Integrated Water Management in the 21st Century  
Sunil Sinha, Virginia Tech; Celine Hyer, Arcadis
Session 15: Asset Management: The Crucial Fundamentals
Wednesday, February 23, 2022
8:30 a.m. - 10:00 a.m.
Room: Windsong 9

Moderator: Cory Dow, V&A Consulting Engineers, Inc.

8:30 a.m.  Getting The Money That Your Utility Requires: Key Approaches for Forecasting Capital and O&M Needs
John Solomon, JD Solomon, Inc.

9:00 a.m.  Aligning Service Levels and KPI’s as part of Creating an Effective Asset Management Plan for Your Sewer Mains
Celine Hyer, Arcadis

9:30 a.m.  How an Asset Management Maturity Assessment Led to a New Strategic Plan
Joseph Sloan, Evansville Water and Sewer Authority; Kevin Slaven, Arcadis
**Session 16: Leaning into Adaptive Challenges: Insights from Public Sector Leaders**

**Wednesday, February 23, 2022**  
10:30 a.m. – 12:00 p.m.  
Room: Windsong 3

**Moderators:**  Rick Warner, Warner & Associates; Ralph Exton, Suez Water Technologies & Solutions

**Panelists:**  Eileen O’Neill, Water Principles LLC; Yvonne Forrest, Director Houston Water; Raye Marshall, JEA; Oluwele McFoy, Buffalo Sewer Authority; Kevin Shafer, Milwaukee MMSD

While concepts of adaptive challenges and adaptive leadership are not new, these management ideas come to mind when the events of the last 18 months and their impacts on the water sector are considered. During 2020 and 2021 the key role of water service providers in helping cities and society at large address both longstanding and more recently recognized challenges has certainly been evident. Addressing these needs will require new thinking, new approaches, and new partnerships.

Partnering for Impact (PFI) believes that compelling examples and ideas already exist and that these can, inform, encourage, and inspire our sector as this new normal of unprecedented change continues. Because of this, PFI's Dr. Eileen O'Neill spent some of late spring and early Summer of 2021 in deep, frank, and structured individual conversations with a diverse group of public sector water CEOs listening to their personal, organizational and leadership stories. Each leader was interviewed using a semi-structured process with questions covering both organizational change and current priorities as well as their career journeys, key successes, individual motivations, and survival tips.

For the panel session, Dr. O'Neill will present an overview of the findings of this unique study and a panel of four utility CEOs will expand on lessons learned from their careers and roles in the context of leading through adaptive challenges.

*A full detailed agenda for this session is coming soon.*
Session 17: Shaping Rates Through Policies & Second Opinions
Wednesday, February 23, 2022
10:30 a.m. - 12:00 p.m.
Room: Windsong 5

Moderators: Jennifer Ivey, Carollo Engineers

10:30 a.m. Integrating Financial Policies into Long-Term Financial Planning
Usha Sharma, Denver Water

11:00 a.m. Real Time Water Rate Policy
Dan Hilyer, Opelika Utilities; Andrew Leeds, Waggoner Engineering; Charles Burtron, Teksouth Corporation

11:30 a.m. Pain, With Gain: Independent Reviews to Challenge and Improve Utility Financial Outcomes
Benjamin Stewart, Andrew Burnham, Stantec; Lisa Celaya, City of San Diego

Alternate Due Diligence - Establishing a Framework for Utility Acquisitions
Jeffrey Dykstra, Stantec

Session 18: CIP Planning
Wednesday, February 23, 2022
10:30 a.m. - 12:00 p.m.
Room: Windsong 6

Moderators: Michael Jankowski, Drummond Carpenter

10:30 a.m. Integrating Project Recommendations from Competing Master Plans Under Limited Budgets
Mikita Browning, City of Atlanta; Sharon Matthews, Atlanta Program Management Services Team; Jane McLamarrah, Stantec Consulting Services

11:00 a.m. Four Case Studies for WRF 4917 — Using Smart Water Networks for Manage Pressure and Flow for Reduction of Water Loss and Pipe Breaks
John Abrera, Erin Culbertson, Brown and Caldwell

11:30 a.m. Strategic CIP Prioritization Utilizing Optimization Algorithms to Maximize Return on Investment
Joel Wilson, Andrew Faulkner, David Garcia, WCS Engineering James Brescol, Tetra Tech
Session 19: Utility Collaboration & Regionalization  
Wednesday, February 23, 2022  
10:30 a.m. - 12:00 p.m.  
Room: Windsong 9  
Moderator: Kris Samples, Mead & Hunt

10:30 a.m. Denver One Water Plan — Setting the Stage for Broad Utility Collaboration  
John Rehring, Inge Wiersema, Carollo Engineers; David Jula, City and County of Denver; Ty Bereskie, Denver Water

11:00 a.m. Development of a Wastewater Surveillance Program to Protect Public Health in Southeastern Michigan  
John Norton, Great Lakes Water Authority; Anil Gosine, Detroit Water and Sewerage Dept; Andrea Busch, Xavier Fonoll Almansa, Great Lakes Water Authority; Anna Mehrotra, Water Environment Federation; John Sheets, CDM Smith; Brijen Miyani, Liang Zhao, Irene Xagoraraki, Michigan State University

11:30 a.m. COVID in Wastewater: How Data from Sewer Assets Enhanced the UK’s Response to the Pandemic Threat and Enables Completely New Public Health Services  
Simon Spooner, Atkins

Alternate Equitably Allocating the Cost of Providing Sanitary Services to an Adjoining Municipality  
Nicholas Dragisich, Baker Tilly; Brian Bachmeier, P.E., City of Oakdale, Minnesota

Session 20: Alternative Storytelling 101: Partnering with Arts  
Wednesday, February 23, 2022  
1:30 p.m. - 3:00 p.m.  
Room: Windsong 3  
Moderator: Matt Manchisi, Kimley-Horn

1:30 p.m. The Art of Water - Partnering with the Arts Community to Tell your Story  
Douglas Shackelford, Jane Hurley, Central Arkansas Water

2:00 p.m. Framing Effects on Public Support for Rate Increases: Experimental Evidence  
Manny Teodoro, University of Wisconsin

2:30 p.m. It’s Not Water’s Worth It — It’s People are Worth It: An Exploration of the Crisis in Miscommunication from the Water Industry and How We Fix It  
Steve Drangsholt, Brown and Caldwell; Stephanie Corso, Rogue Water; Stephen Sanders, SUNY Morrisville; Chelsea Boozer, Central Arkansas Water
Session 21: Resilience: The Leadership Superpower We All Need
Wednesday, February 23, 2022
1:30 p.m. – 3:00 p.m.
Room: Windsong 5

Presenter: Alan Heymann, Peaceful Direction

Resilience is the ability to cope with the challenges, problems, and setbacks you face in life, and to become stronger because of them. Resilience is our ability to return to our natural state after absorbing a bunch of… stuff.

It's also a highly learnable skill. As utility leaders, our internal resilience is as important as the physical resilience we rely on to protect infrastructure from environmental challenges. We must model it for our teams to succeed.

Resilience relies on different skills and draws on various sources of help, including rational thinking skills, physical and emotional health and your relationships with those around you. We’ve all learned a lot about resilience during the pandemic, and this session builds on that learning to make it sustainable.

Former two-time DC Water executive Alan Heymann founded the utility's nonprofit Blue Drop arm in 2016. In his role as an executive and leadership coach, Alan works with leaders in utilities and other sectors to put their best selves forward. He brings techniques from his practice into this session.

A full detailed agenda for this session is coming soon.
Session 22: Business Transformation for Nimble CIP Planning
Wednesday, February 23, 2022
1:30 p.m. - 3:00 p.m.
Room: Windsong 6

Moderator: Cliff Cate, Burns & McDonnell

1:30 p.m. Lessons Learned from a Performance Management Implementation
Brett Anderson, City of Minneapolis; Kevin Slaven, Arcadis

2:00 p.m. Back to the Basics: Establishing the Foundation for a Modern Capital PMO
Daniel Scrutchfield, Arcadis; Casey Hellriegel, Pinellas County Utilities Department

2:30 p.m. Utility Performance Improvement through Business Process Transformation
Prabhushankar Chandrasekeran, Stantec; Torri Martin, Wole Ralph, City of Atlanta; Christopher Puccio, Sharon Matthews, Stantec

Session 23: Alternate Project Delivery/PPP I
Wednesday, February 23, 2022
1:30 p.m. - 3:00 p.m.
Room: Windsong 9

Moderator: James Steffen, Archer Western Construction

1:30 p.m. Management Decisions for Making Multiple Collaborative Delivery Methods Part of Hillsborough County’s Strategy to Deliver the One Water Program
Cheryl Robitzsch, Thomas Mamott, Jason Parrillo, Hillsborough County

2:00 p.m. Utilizing the Progressive Design Build Delivery Model to Meet City of St. Petersburg’s Consent Order Commitment for Wet Weather Flow
Scott Keddy, City of St. Petersburg; JD Gillespie, Archer Western Construction; Christopher High, Wade Trim

2:30 p.m. Blue River Biosolids: Can Lump Sum Design-Build Be Progressive?
Blake Anderson, KC Water; Hannah Fodor, Carollo Engineers; Matt Bond, KC Water, Lynn Norton, Carollo Engineers

Alternate Effectively Engaging Stakeholders of a University Community’s New Water Treatment Plant Under Design-Build-Operate Contract
Rob Little, Woodard & Curran
Session 24: Improving Customer Experience
Wednesday, February 23, 2022
3:30 p.m. - 5:00 p.m.
Room: Windsong 3

Moderator: Maria DeChellis, Oracle

3:30 p.m. Ready to be Rescued: How Utilities and Their Customers are Accessing Low Income Households Water Assistance Program Funds
Henrietta Locklear, Joseph Crea, Raftelis Financial Consultants Inc; Danielle Giannantonio, Northeast Ohio Regional Sewer District

4:00 p.m. The Economic Importance of Your Utility – What Customers Need to Know
William Zieburtz, Stantec, Patrick Luce, ITR Economics

4:30 p.m. Seeing the Unseen: Using Interactive Mapping to Engage with the Public
Clayton Freed, City of Phoenix; Bill Lloyd, Marsha Miller, HDR

Session 25: YP Perspectives: Meeting the Needs of a Multi-Generational Workforce
Wednesday, February 23, 2022
3:30 p.m.– 5:00 p.m.
Room: Windsong 5

Moderator: Ji Im, P.E., CDM Smith
Panelists: Chelsea Boozer, Central Arkansas Water; Jaquice Boyd, Birmingham Water Works Board; T.C. Schofield, Brunswick & Topsham Water District; Mark Theiler, Middlesex Water Company.

Get ready to engage with a room full of water industry OGs (older generations) and YPs (young professionals) on all the buzz topics around today’s multi-generational workforce and the misconceptions and opportunities that come along with that. Communication is key in bridging gaps and misunderstandings between generational groups (that might not be as different as we think.) Back by popular demand after a successful and interactive session at UMC21, this session is set up to fully engage the audience in a facilitated conversation with a panel of utility YP leaders and managers who will share their experience and research on what YPs are looking for from utilities today and tips on how utilities can meet those needs. The audience is invited to engage throughout what we hope is a productive conversation that moves the industry forward on this timely topic. Audience members wishing to ask their question or make comments anonymously can take advantage of the live texting option we will have available. Let us know your questions ahead of time here: https://www.surveymonkey.com/r/UMC22YP

3:30 p.m. Who Are We and Why Are We Here?

4:00 p.m. Panel Discussion
- Retention and engagement
- Barriers to success
- Succession planning and professional development
Session 26: Utility Leadership and Strategy Implementation II  
Wednesday, February 23, 2022  
3:30 p.m. - 5:00 p.m.  
Room: Windsong 6  
Moderator: John Phillips, Parametrix

3:30 p.m.  Becoming Utility of the Future - Journeys and Case Studies  
Prabhushankar Chandrasekeran, Stantec

4:00 p.m.  The North Miami Beach Utility Transition: Taking Back a Utility During a Pandemic  
Juan Oquendo, Beate Wright, Nicole Cohen, Brenda Rivera, Jafeth Baez, Carollo Engineers; Andrea Suarez, City of North Miami Beach

4:30 p.m.  Increasing Digital Resiliency Through Extended Reality  
Scott Aldridge, Richard Newberg, CDM Smith

Alternate  Comprehensive Decision-making Framework for a Wastewater Utility Using MCDA (Multi-Criteria Decision Analysis)  
Daehyun Ko, University of Michigan; John Norton, Great Lakes Water Authority; Glen Daigger, University of Michigan

Session 27: Asset Management: Tools and Technologies  
Wednesday, February 23, 2022  
3:30 p.m. - 5:00 p.m.  
Room: Windsong 9  
Moderator: Raj Chavan, Atkins, North America

3:30 p.m.  Leveraging Business Intelligence from Legacy Data to Optimize Utility Operations and Decision Making  
Rishi Immanni, Peter Garvey, Michael Hanley, Dewberry; Louis Mammolette, City of Chelsea, Dept. of Public Works

4:00 p.m.  Denver Water’s Integrated Approach to Linear Asset Replacement Leveraging the Optimizer™ WMR Software Solution  
Jaclyn Gorman, Denver Water; Joshua Cantone, Marie Hilliard, Optimatics

4:30 p.m.  Innovative Approach to Master Planning – A Phased-based Asset Management Technique  
Hansa Keswani, Souroush Zamanian, Sean Pour, Hazen and Sawyer

Alternate  A Goldilocks Problem: Identifying Suitable Asset Management Tools for Mid-Size Utilities  
Bradley Hayes, Rachel Osborn, Woodard and Curran
Session 28: Resilience
Thursday, February 24, 2022
8:30 a.m. - 10:00 a.m.
Room: Windsong 5

Moderator: Arturo Burbano, Black & Veatch

8:30 a.m. Regional Resiliency Among Neighboring Water Districts
Renée Lanza, Meghan Trahan, Woodard & Curran; Paul Ferland, City of Fall River

9:00 a.m. Real-Time Storm Water Management Keeps Pace with Mother Nature
Tommy Strowd, Lake Worth Drainage District; Glen Hill, Greg Quist, SmartCover

9:30 a.m. How the City of Miami is Using Technology to Help Plan for Management of Urban Flooding in the Face of Sea Level Rise
Michael Schmidt, Jayson Brennen, CDM Smith; Christopher Bennett, City of Miami; Jonathan Goldman, Thomas Nye CDM Smith

Alternate When it Rains, it Pours: Organizational Learning in the Face of More Extreme Precipitation
John Phillips, Parametrix

Session 29: Innovations in Resiliency Funding
Thursday, February 24, 2022
8:30 a.m. - 10:00 a.m.
Room: Windsong 6

Moderator: Andrew Burnham, Stantec Consulting Services, Inc.

8:30 a.m. It’s About Time: Recent Developments to Close the Stormwater Funding Gap, Including Innovative Stormwater Financing Approaches
Fernando Pasquel, Arcadis; Ellen Tarquinio, EPA; Robert Ryall, Arcadis

9:00 a.m. Increasing the Effectiveness of BRIC Grant Applications: Lessons Learned
Sheryl Chino, Roger Null, HDR Engineering Inc

9:30 a.m. Cincinnati MSD’s Strategic Pathway to Build Wet Weather Resiliency While Enhancing Affordable Cost Recovery
Marilynn Lodor, Metropolitan Sewer District of Greater Cincinnati; Pamela Lemoine, Prabha Kumar, Black & Veatch

Alternate Potential Cost of Service Implications Resulting From the Pandemic
Michael Borchers, Arcadis
Session 30: Digital Transformation II
Thursday, February 24, 2022
8:30 a.m. - 10:00 a.m.
Room: Windsong 9

Moderator: Thierry Boveri, Raftelis

8:30 a.m. Technology Strategy, Smart SCADA, and AI-Based Analytics Implementation at City of Chino, CA
Benjamin Stanford, Tori Yokoyama, Hazen and Sawyer; Amanda Coker, City of Chino

9:00 a.m. Making Digital Twins a Reality - Waste Water Case Study
David Ogden, Atkins

9:30 a.m. Integrating “Large Data” into a Distribution System Digital Twin Model
Charlie Stevens, Melanie Jollett, KC Water; James Maher, Black & Veatch; Ashton Rohrich, KC Water

Alternate The First Fruits of the Metropolitan Utilities District’s Digital Transformation
Derek Gardels, Scott Humphrey, HDR; Masa Niiya, Jared Svagera, Metropolitan Utilities District

Session 31: Lessons from Working with Digital Twins
Thursday, February 24, 2022
10:30 a.m. – 12:00 p.m.
Room: Windsong 3

Moderator: James Cooper, Arcadis
Presenters: Christopher Miller, Fontus Blue; Chris Basford, Newport News Waterworks

The water sector is in the midst of a digital transformation. A growing number of utility leaders across all sizes of systems are finding that you can achieve more, positively impact natural resources, and improve financial stability through incorporation of intelligent water. With increasing case studies illustrating the significant return on investment the technology can provide, utilities are increasingly considering and adopting, at least in some part, digital solutions to their address their challenges and achieve their priorities. The pandemic catalyzed this change as utilities were forced to find innovative and transformative approaches, resulting in rapid deployment of new technologies and meaningful business process improvements.

One of the topics with rapidly growing interest is digital twins. While the concept of digital twins is not new, the application and adoption of digital twins in the water sector is only beginning and will continue to evolve and play an integral long-term role in water utilities' planning, engineering, modeling, design, and operations.

A full detailed agenda for this session is coming soon.
Session 32: Alternate Project Delivery/PPP II
Thursday, February 24, 2022
10:30 a.m. - 12:00 p.m.
Room: Windsong 5

Moderator: Justin Sobel, Burns & McDonnell

10:30 a.m. Can You Hear Me Now? — Effective Technology Adoption & Stakeholder Engagement in the Delivery of a Complex Alternative Delivery Program
Teresa Herrera, Silicon Valley Clean Water; Mark Minkowski, Kennedy Jenks; Ken Pilkins, Nexinite

11:00 a.m. Leveraging Alternative Delivery and Innovative Funding to Achieve the City of Memphis’s Vision — Process Upgrades at the T.E. Maxson WWTF
Zack Daniel, CDM Smith; Scott Morgan, City of Memphis; Yaribell Hernandez, CDM Smith

11:30 a.m. Yadkin Regional Water Supply Project — Water Treatment Plant Design Development for Union County’s Future Needs
John Shutak, Union County; Jonathan Lapsley, CDM Smith

Alternate Implementing Creative Cooperation – City of Camden, New Jersey and American Water Operations & Maintenance LLC Public Private Partnership
Jim Hopkins, Buchart Horn, Inc.

Session 33: Closing the Gap — Valuable Approaches to Risk Management and Continuity Planning
Thursday, February 24, 2022
10:30 a.m. - 12:00 p.m.
Room: Windsong 6

Moderator: Ashwin Dhanasekar, The Water Research Foundation

10:30 a.m. Winter Storm Uri Shows Us Why Investing in Risk and Emergency Planning Goes Beyond Checking the Box for Compliance Requirements
Trey Shanks; Nadia Mata

11:00 a.m. Do Not Let a Crisis Go to Waste: Leveraging Industry Momentum to Address Integrated Risk Management
Esteban Azagra; Norman Ashton

11:30 a.m. Utility Resiliency Starts with an Engaging Business Continuity Planning Approach
Michael Sweeney, Maria Aviles, Chris Wilson, Michael Gibbs, Toho Water Authority; Duane Lohn, Risk Solutions International
Session 34: Successfully Funding Resilience
Thursday, February 24, 2022
10:30 a.m. – 12:00 p.m.
Room: Windsong 9

Moderator: Linda Warren, Launch! Consulting
Panelists: Kevin Morley; David Goldbloom-Helzner

There are billions of dollars in existing FEMA funding that utilities are not applying for or have not yet leveraged successfully. This panel discussion provides the details on how to change that. Water and wastewater utilities of any size can leverage the results of their risk and resilience assessment (RRA) to provide winning applications through their state funding agency (typically the Office of Emergency Management). This panel will detail FEMA's Building Resilient Infrastructure Communities (BRIC) funding program with a presenter from the program, discuss related programs and funding supported by EPA with a speaker from EPA, hear from Kevin Morley at AWWA about the array of funding available and the opportunity for utilities to utilize the RRA requirements and results to build a business case for funding mitigation measures identified in the RRA, learn first-hand from a state funding representative about what they are looking for in applications, and hear from a few utilities who were already awarded funding (and consultants who wrote successful grants). Linda Warren, Chair of the AWWA Emergency Preparedness and Security Committee, will facilitate the panel discussion and ensure an interactive session that will also answer questions from the audience.

A full detailed agenda for this session is coming soon.