



WEF/AWWA Utility Management Conference 2020

Technical Program

(Updated January 8, 2020)

February 25 – 28, 2020
Hyatt Regency Orange County
Anaheim, California

This conference is jointly sponsored by the Water Environment Federation and American Water Works Association, in cooperation with the California Water Environment Association and the Water Research Foundation.

Pre-Conference Workshops

(Additional fees apply)

Workshop A: A Utility Guide to Cyber Security: What Executives Need to Know and Practical Solutions to Achieve It

Tuesday, February 25

8:30 AM – 5:00 PM

This workshop will help today's leader formulate practical and implementable approaches to systematically address the threats inherent in operating a utility. Designed for utilities of all sizes, the workshop will combine presentations, panel discussion, and hands-on exercises to address four critical objectives:

- What can IT learn from OT and vice-versa?
- What does an actual attack on a US utility look like and how can I respond when it does happen?
- What should I really be spending?
- Where is my support in all this?

Corey Williams, Optimatics; Biju George, DC Water; David St Pierre, Westin; Lisa McFadden, Water Environment Federation; Kevin Morely, American Water Works Association

Workshop B: The Digital Worker: Workforce Implications of Digital Tools

Tuesday, February 25

8:30 AM – 5:00 PM

This workshop will provide participants with very thorough grounding on the wide array of digital tools available; factors to consider (such as staff preparedness and the organization's preparedness to invest in staff training and/or staff with new skills) in selection of digital tools; implications of digital tools for key positions in the organization (e.g., water and wastewater treatment operators); lessons learned by utilities in their implementation of a wide array of digital tools (e.g., automated meter reading infrastructure, asset management systems, automated system control systems; drones, and artificial intelligence); implications for staff development (e.g., support of new kinds of technical training in community college to adequately prepare skilled crafts workers to use digital tools); and approaches to staff training at both the agency and regional level.

Cheryl Davis, CKD Consulting; Ting Lu, Clean Water Services; Sharon Peters, EMA Canada Inc., Heather Pohl, San Francisco Public Utilities Commission; Curt Rayer, San Jose Water; Ted Lam, East Bay Municipal Utilities District; Robert Scott, Santa Clara Valley Water District; Stephen Miksis, RVSD; Jeff Oxenford, Stratus Consulting

Pre-Conference Workshops

(Additional fees apply)

Workshop C: Using Management Standards as Leadership Tools to Optimize Utility Performance

Tuesday, February 25

8:30 AM – 12:00 PM

This interactive hands on workshop focuses on the use of the AWWA Utility Management Standards to optimize utility performance. This will include:

- Water treatment Plant Operations
- Distribution Systems Operation
 - Replacement and Flushing of Lead Service Lines
- Source Water Protection

Participants will use the standards and self-assessment checklists to identify gaps in specific programs that are used at their utilities. Participants will be encouraged to bring details of their programs to evaluate at the workshop. Participants will be encouraged to select programs at their utilities that they would conduct a self-assessment and gap analysis in the next year. Speakers will be available throughout the year to answer questions offer guidance.

David Purkiss, NSF; Eva Nieminski, Utah Division of Drinking Water; Gerard Yates, Central Utah Conservancy District; Kan Oberoi, Charleston Water System; Chi Ho Sham, Eastern Research Group; Clyde Dugan, East Lansing - Meridian Water & Sewer Authority

Workshop D: Leveraging the AWWA M5 Manual with Effective Utility Management (EUM) Practices

Tuesday, February 25

8:30 AM – 12:00 PM

Today, increasing customer demands, uncertain finances and aging infrastructure complicate every Utility manager's role. Successful utility management requires optimizing operations, replacing critical infrastructure, implementing mobile workforce enhancements, leveraging the Utility's full workforce capabilities, and effectively communicating outcomes with stakeholders.

The recently updated AWWA M-5 Manual – Water Utility Management and the Effective Utility Management (EUM) publications deliver practical advice and experiences in each of these areas. This interactive workshop will focus on the water's industry's guiding transformation strategies embedded in these documents with actual utility case studies to help both seasoned and new managers embrace and leverage these modern practices.

Doug Spiers, Westin Technology Solutions; Seth Garrison, Raftelis Financial Consultants, Inc.; Kara Shuror, City of Fort Worth Water Dept; Ryan Nagel, Hazen and Sawyer; James Courchaine; James Ginley, Jim Ginley Consulting; Jay Madigan

Pre-Conference Workshops

(Additional fees apply)

Workshop E: Principles and Best Practices for Collaborative Delivery for Water Infrastructure Projects

Tuesday, February 25

1:30 PM – 5:00 PM

The use of collaborative-delivery methods for water and wastewater projects continues to steadily increase. Over the past decade, research conducted annually for the Water Design-Build Council (WDBC) on using these delivery methods reports that more and more owners are using them for their ability to achieve quality projects on schedule and within budget. More importantly, owners also agree on the continuing need to educate industry professionals about how to maximize success with these methods.

This half-day workshop, conducted by WDBC Education Committee members, addresses the essential steps that originate in the planning process and continues through the procurement, management and implementation of a water design-build project. It provides city and county officials; managers and staff of municipal, private, and governmental organizations; and private industry with essential knowledge needed to have a successful project.

Linda Hanifin Bonner, Leofwin S. Clark, Water Design Build Council; David Kinchen, Burns & McDonnell; Chitra Foster, Water Design Build Council; Justin Sobol; Tommy Brennan, Ulliman Schutte Construction; Pieter Van Ry, South Platte Water Renewal Partners

Workshop F: Business Intelligence-Driven Utility

Tuesday, February 25

1:30 PM – 5:00 PM

Business intelligence tools are disrupting industries by enabling the effective use of data – a widely underutilized asset – at a surprisingly low cost. The water industry is no different from other fields. In fact, we are a historically data rich industry that has arguably made a limited use of this asset. This workshop will introduce the industry to the effective use of business intelligence tools to address business problems. How can the industry better leverage their existing data with no need to make a major IT investment? What are the underlying concepts that can enable the use of analytics? What are the implications of this digital disruption to our workforce? Outcomes will include applicable examples crafted through an interactive learning experience.

Esteban Azagra, Arcadis; Rachel Crawley, Tarrant Regional Water District; Frank Roth, Albuquerque Bernalillo County Water Utility Authority; Brian Butscher, City of Sugar Land; Christopher Heltzel, Celine Hyer, Kevin Slaven, Arcadis

Session 01: Technology Whirlwind - Strategies for Technology Adoption and Integration
Wednesday, February 26
10:30 AM - 12:00 PM

10:30 AM **CMMS Design Guide: How San Juan Water District Built a Bulletproof CMMS**

Steven Gunsch, HDR; Tony Barela, San Juan Water District

11:00 AM **DC Water and Houston Water Perspective on CMMS, Condition Assessment, System Hydraulics, System Inventory and GIS Data Integration Challenges, Lesson Learned**

Alireza Parhami, DC Water; Fazle Rabbi, City of Houston; Salil Kharkar, DC Water; Shannon Dunne, City of Houston

11:30 AM **Leveraging Innovative Cloud Technology at a Municipal Authority**

Julie Quigley, The Pittsburgh Water and Sewer Authority; Ryan Cawley, Sprypoint

12:00 PM **Session Adjourns for Networking Lunch**

Alternate **Bridging the Gap Between BIM data and CMMS for an Advanced Water Treatment Research Center**

Dwayne Amos, Hazen and Sawyer; Katherine Linares, Hampton Roads Sanitation District; Scott Hakonson, Hazen and Sawyer

Session 02: Leadership / Workforce Support and Development I
Wednesday, February 26
10:30 AM - 12:00 PM

- 10:30 AM** **Deep Diving into the Water Sector – Using Algorithms and Web Scans to Gain Insights on Current Workforce Needs**
Zakiya Seymour, Arcadis; Melissa Meeker, Gwinnett County - Department of Water Resources; Joanna Brunner, Jason Carter, Arcadis
- 11:00 AM** **Targeted Recruitment 101: Finding the Best & Brightest Engineers**
Evelyn Cortez-Davis, Greg Reed, LADWP
- 11:30 AM** **2020's Vision: Building Tomorrow's Utility Staff -- How the Alderwood Water & Wastewater District is Attracting Quality Candidates, Selecting the Right People, Training Them for Challenging Work, and Retaining Them for the Long Term**
Jeff Clarke, Alderwood Water & Wastewater District
- 12:00 PM** **Session Adjourns for Networking Lunch**
- Alternate** **Putting Employee Diversity and Inclusion to Work**
Ed Kerwin, Orange Water & Sewer Authority

**Session 03: Risk-Based Approaches to Waterline Assessment and Replacement
Planning**

Wednesday, February 26

10:30 AM - 12:00 PM

10:30 AM Main to Meter: An Asset Management Replacement Strategy for 125K Lead Service Lines

Palencia Mobley, Detroit Water and Sewerage Department; Samuel Smalley, City of Dearborn; Garnet Conerway, Detroit Water and Sewerage Department

11:00 AM How to Catch a Break with Risk-Based Main Replacement Planning

Allan Scott, HDR; Jill Mosley, Contra Costa Water District; David Spencer, HDR

11:30 AM Next Generation Non-Revenue Water Information Management and Assessment System (NextGen NRW IMAS)

Gary Trachtman, Arcadis; James Siriano, AWWA; Ertan Akbas, Caroline Caglioni, Arcadis; Alan Wyatt, Independent Consultant

12:00 PM Session Adjourns for Networking Lunch

Session 04: Innovative Rates and Charges to Achieve Multiple Benefits

Wednesday, February 26

10:30 AM - 12:00 PM

- 10:30 AM** **Where Engineering and Finance Meet: Leveraging Your Master Plan for a Better SDC**
Mark Panny, Carollo Engineers; Jeffery Tucker, Napa Sanitation District; Jennifer Ivey, Carollo Engineers
- 10:30 AM** **Alternative Methodologies for Assessing Sewer Charges at The Metropolitan District**
Dave Fox, Raftelis; John Mirtle, The Metropolitan District
- 11:00 AM** **Optimizing Nontraditional Customer Assistance Programs at a Low Cost Utility**
Benjamin Stewart, Stantec; Michael Sweeney, Toho Water Authority; Carol Malesky, Stantec
- 12:00 PM** **Session Adjourns for Networking Lunch**

Session 05: The Paperless Path to the Future
Wednesday, February 26
1:30 PM - 3:00 PM

- 1:30 PM** **Electronic SOP, Policy, and Knowledge Capture Management for Wastewater Utility Operations**
Brian Owsenek, UOSA
- 2:00 PM** **It's All About the Digital Baby: Detroit's Paperless GIS Centric Work Order Management System**
Palencia Mobley, Anil Gosine, Detroit Water and Sewerage Department
- 2:30 PM** **Using Satellite Radar Imaging to Detect Pipeline Leaks New Braunfels, TX – A Case Study**
James Perry, Paul Gagliardo, Utilis
- 3:00 PM** **Session Adjourns for Networking Break**
- Alternate** **Getting on Board with Asset Infrastructure in Albuquerque**
Ganesh Pai, EMA, Inc.; Tim Payne; Stan Allred, Albuquerque Bernalillo County Water Utility

Session 06: Leadership / Workforce Support and Development II
Wednesday, February 26
1:30 PM - 3:00 PM

- 1:30 PM** **Leadership Training From Within**
Ian Morgan, Gina Hillary, Moulton Niguel Water District
- 2:00 PM** **What to Expect When You're Expecting... PUC Regulations**
Catherine Carter, Seth Garrison, Raftelis Financial Consultants, Inc.; Robert Weimar, PWSA
- 2:30 PM** **Changing a Culture and Improving Morale Through Employee Engagement**
Jarred Jones, Phillip Sexton, North Charleston Sewer District
- 3:00 PM** **Session Adjourns for Networking Break**

Session 07: Risk and Managing Risk

Wednesday, February 26

1:30 PM - 3:00 PM

- 1:30 PM** **Risk Management: The Value of Applying a Common Framework and Taking Account of the Risk Consequences**
Robert Raucher, Corona Environmental Consulting; Kurt Vause; Shonnie Cline, Watersuite; James Henderson, Corona Environmental Consulting; Frank Blaha
- 2:00 PM** **The AWWA Cybersecurity Tool: A User-Friendly Way to Build AWIA 2018 Compliance and Your Cyber-Resilience**
Andrew Ohrt, West Yost Associates; Kevin Morley, AWWA; Daniel Groves; Joel Cox, West Yost Associates
- 2:30 PM** **Doing it Right the First Time – Engineering Secure Water/Wastewater Systems in Our Hyper-connected World**
Andrew Ohrt, West Yost Associates; Daniel Groves; Joel Cox, West Yost Associates; Andy Bochman, Idaho National Laboratory
- 3:00 PM** **Session Adjourns for Networking Break**
- Alternate** **Assessing Cybersecurity for the AWIA: How to Develop and Implement Your Mitigation Strategy**
Bob Reilly, EMA Inc.; Jeff Coulson, EMA Canada, Inc.

Session 08: Effectively Leveraging Available Funding Sources to Finance Infrastructure Investment

Wednesday, February 26

1:30 PM - 3:00 PM

- 1:30 PM** **Let's Save Money! How Utilities Use WIFIA to Fund Projects**
Jorianne Jernberg, Arielle Gerstein, Danusha Chandy, Environmental Protection Agency
- 2:00 PM** **Working Together to Demonstrate Strength and Obtain WIFIA Funding**
Amy Broughton, Stantec; Paul Matthews, Tualatin Valley Water District; Bill VanderVeer, Willamette Water Supply System
- 2:30 PM** **When Facing a \$795 Million Master Plan, We Need More than Just Rate Increases: The Mobile Area Water and Sewer System's Quest for a Creative Solution**
Bud McCrory, Mobile Area Water and Sewer System; Carol Malesky, Stantec; Dedra Cassidey, Mobile Area Water and Sewer System
- 3:00 PM** **Session Adjourns for Networking Break**
- Alternate** **Stormwater Funding – The Golden State's Perspective**
Benjamin Stewart, Andrew Burnham, Stantec

Session 09: Innovative Approaches to Optimizing Business Practices
Wednesday, February 26
3:30 PM - 5:00 PM

- 3:30 PM** **We're Agile! - Owner Delivery Improves Agility of an Asset Management Project**
Michael McGrath, Fairfax County Wastewater Management Program; Ronald Taylor, Hazen and Sawyer; Keith Chase, County of Fairfax
- 4:00 PM** **City of Hamilton - Water Distribution & Wastewater Collection - Process Improvement Initiative**
Dave Alberton, City of Hamilton
- 4:30 PM** **Leveraging Enterprise Program Management at DC Water to Improve Strategic Alignment and Collaborative Decision-Making**
Francis Cooper, Yvette Judge, DC Water
- 5:00 PM** **Session Adjourns for Networking Reception**
- Alternate** **I AM San Diego – Large Scale SAP EAM Implementation**
Michael Rotunno, Arcadis; Susan Bowman, City of San Diego

Session 10: Strengthening and Diversifying the Water Quality Workforce: Examining Real-World Pathway Programs into Sustainable Infrastructure Careers

Wednesday, February 26

3:30 PM - 5:00 PM

Building the talent pipeline in the water, wastewater and wider infrastructure/utilities industry is an ongoing challenge facing utilities nationwide. It is a multi-faceted endeavor that includes:

- Recruiting and training entry-level employees.
- Building and supporting career advancement pathways for workers with mission-critical technical expertise and skills.
- Leadership development and succession planning.
- Increasing industry diversity and inclusiveness to enhance access to the water and utility industries for women and minorities, and for people from communities across the socio-economic spectrum.

This interactive session will address each of these topics head-on. In pursuit of a unifying model that can guide industry investment, we've enlisted a diverse panel of leaders from across the country who are actively implementing a broad range of relevant workforce development strategies and programs. Individually, the efforts they lead are impressive and notable for their innovation and effectiveness. By pulling these leaders together into a single, focused, discussion, we'll explore how their individual strategies fit together as integral pieces of the broader workforce puzzle.

Program presentations from each of our esteemed panelists will be followed by a roundtable/ panel discussion facilitated by Steven Currie, Drew Lehman, and Ifetayo Venner.

Drew Lehman, Steven Currie, Environment and Education; DJ Brooker, Young Community Developers; Trinh Nguyen, Office of Workforce Development; Ifetayo Venner, Arcadis; Beverly Scott, Introducing Youth to American Infrastructure; Srini Vallabhaneni, Stantec

Session 11: Utility-Utility Collaboration
Wednesday, February 26
3:30 PM - 5:00 PM

- 3:30 PM** **Pipes Know No Boundaries - The Need for Collaboration**
Sherri Gee, Madison Mezlyakov, Great Lakes Water Authority
- 4:00 PM** **The Leading Role: Utilities as Primary Drivers for Water Sector Innovation**
Jason Carter, Joanna Brunner, Arcadis
- 4:30 PM** **Regional Collaborative is Making a Big SPLASH in Northeastern Wisconsin**
Seth Garrison, Raftelis Financial Consultants, Inc.; Nancy Quirk, Green Bay
Water Utility; John Mastracchio; Nicolas Sparacio, Central Brown County Water
Authority
- 5:00 PM** **Session Adjourns for Networking Reception**

Session 12: Affordability, Equity, and Rising Costs

Wednesday, February 26

3:30 PM - 5:00 PM

3:30 PM Austin Water Affordability Assessment

Grant Rabon, Newgen Strategies & Solutions; Manny Teodoro, Texas A&M University; David Anders, Austin Water

4:00 PM Affordability and the True Price of Water

Valdis Krumins, Susan Woolard, Nicole Schindler, Marty Norton, USDA

4:30 PM Increasing Rates, Decreasing Affordability: Addressing Equity in a Time of Rising Costs

Margaret Schneemann, Illinois-Indiana Sea Grant; Danielle Gallet, Metropolitan Planning Council; Caroline Pakenham, Elevate Energy

5:00 PM Session Adjourns for Networking Reception

Session 13: Journey to the Center of Continuous Process Improvements
Thursday, February 27
8:30 AM - 10:00 AM

- 8:30 AM** **Taming the Three Headed Beast: People, Processes, and Information in Asset Management**
Elizabeth Lowell, Rachel King, HDR; Alden Wyma, Samayyah Williams, King County
- 9:00 AM** **Equipping Teams to Accelerate Business Process Improvements**
Tera Fong, William Elledge, Nina Love, DC Water
- 9:30 AM** **Mirror, Mirror on the Wall... HCWA's Story of Self Reflection**
Tony Carnell, Tara Brown, Henry County Water Authority; John Evans, Blue Cypress Consulting
- 10:00 AM** **Session Adjourns for Networking Break**
- Alternate** **BWWB Exploring Opportunities for Innovation through Human-Centered Design**
Zakiya Seymour, Arcadis; Michael Johnson, Birmingham Water Works Board; Jason Carter, Padraic Flannelly, Arcadis

Session 14: Optimizing Data Management to Deliver Better Asset Management Results
Thursday, February 27
8:30 AM - 10:00 AM

- 8:30 AM** **Lemons to Lemonade: How Kansas City Water Is Using Asset Management Principles to Assure the Quality of Its Data**
Scott Parker, Joel Mendoza, Kansas City Water; Amanda Griffin, Burns and McDonnell
- 9:00 AM** **Of the People, By the People, For the People – Data Democratization at Newport News Waterworks**
Yann Le Gouellec, Newport News Waterworks; Russ Dalton, Aditya Ramamurthy, Hazen and Sawyer
- 9:30 AM** **The Center Can Hold: Sustaining Diverse Data through GIS- and CAD-Based Schematics and CMMS Alignment**
Tim Walsh, Portland Water District
- 10:00 AM** **Session Adjourns for Networking Break**
- Alternate** **Truth or Consequences in New Mexico: Using Consolidated Real Asset Data for Better CIP Decision-Making**
Ganesh Pai, EMA, Inc.; Tim Payne; John Stomp, Albuquerque Bernalillo County Water Authority

Session 15: Sustainable Capital Planning
Thursday, February 27
8:30 AM - 10:00 AM

- 8:30 AM** **Sustainable and Cost Effective Biosolids Management Planning at Orange County Sanitation District**
James Clark, Black & Veatch; Sharon Yin, Orange County Sanitation District; Thomas Chapman, Brown and Caldwell
- 9:00 AM** **Strategic Energy and Biosolids Planning - Small Utilities Can Dream Big Too**
Derya Balci, Bryan Lisk, Hazen and Sawyer; Steve Wagner, Goleta Sanitary District
- 9:30 AM** **ISIP: Boca Raton's Resilient Infrastructure Program**
Lauren Burack, Chris Helfrich, City of Boca Raton; James Carolan, Jonathan Goldman, CDM Smith
- 10:00 AM** **Session Adjourns for Networking Break**
- Alternate** **How We Met Our Promise To Spend \$260 Million Dollars In 5 Years Using Lean Transformation**
Rich McGillis, Raftelis Financial; Matt Hilliard, Montgomery County (OH) Environmental Services

Session 16: We Need to Change How We Communicate
Thursday, February 27
8:30 AM - 10:00 AM

- 8:30 AM** **Enhancing Customer Service via Customer Journey Mapping and Transactional Surveys**
Jonathan Leung, Los Angeles DWP
- 9:00 AM** **Shake It Up Shake It Up – A Story of Reorganization and Process Improvements**
Melissa Josey-White, HRSD
- 9:30 AM** **The Color of Water**
Cathy Bernardino-Bailey, Greater Cincinnati Water Works
- 10:00 AM** **Session Adjourns for Networking Break**
- Alternate** **Management Commitment and Research-Based Decisions Lead to CIS Implementation Success for Central Arkansas Water**
Bill Rivers, EMA, Inc.; Jeff Mascagni, Central Arkansas Water

Session 17: Information Technology Transformation I
Thursday, February 27
10:30 AM - 12:00 PM

- 10:30 AM** **Unlocking the Potential of IT-OT Convergence: What's Your Technology Organization of the Future?**
Bob Reilly, EMA Inc.
- 11:00 AM** **Smart City-Operations and Maintenance: The Effect of "The Internet of Things" IoT on Operations and Maintenance**
Vince Turner, City Of Houston Texas; Shannon Dunne, City of Houston
- 11:30 AM** **The Art of Change: Austin Water's Asset Management Story**
Martin Tower, Austin Water
- 12:00 PM** **Session Adjourns for Lunch (on your own)**

Session 18: Asset Management Strategy Development
Thursday, February 27
10:30 AM - 12:00 PM

- 10:30 AM** **A Framework and Guidance for Incorporating Natural Assets into Asset Management Practices for Built Systems: Overview, Utility Pilot Projects, and Future Directions**
Robert Raucher, Corona Environmental Consulting; Kurt Vause; Todd Helgeson, Liberty Economics; Jan Cassin, Forest Trends; Mark Lorie, Corona Environmental Consulting
- 11:00 AM** **A Strategic Step in Fort Worth Water's Asset Management Journey**
Wendy Chi-Babulal, Fort Worth Water Department; Mazen Kawasmi, Jessica Brown, Thomas Haster, Freese and Nichols Inc
- 11:30 AM** **A SAMP Journey: How Charleston Water System Developed a Strategic Asset Management Plan**
Earl Dupriest, Charleston Water System
- 12:00 PM** **Session Adjourns for Lunch (on your own)**
- Alternate** **Strategic Asset Management Plan (SAMP) Development from the Ground Up: A People Focused Approach to Asset Management at Great Lakes Water Authority**
Steven Dutschke, Great Lakes Water Authority; James Decker; Elizabeth Kelly, Seattle Public Utilities

Session 19: Importance of Community Support for Your CIP
Thursday, February 27
10:30 AM - 12:00 PM

- 10:30 AM** **Importance of Branding Your Project: It's What People Say About You Behind Your Back**
Sarah Rossetto, Katz & Associates
- 11:00 AM** **Financing Your Integrated Resource Plan**
Fletcher Davis, Angela Bricmont, Denver Water
- 11:30 AM** **Planning and Funding 2030 Capital Needs in 2020 Through Community Engagement**
Andrew MacDonald, Harris & Associates; Melissa Pieri, Citrus Heights Water District
- 12:00 PM** **Session Adjourns for Lunch (on your own)**

Session 20: Understanding How to Communicate with Customers in Today's Media Environment

Thursday, February 27

10:30 AM - 12:00 PM

10:30 AM Get Social and Build Ambassadors – How to Get Customers to Do PR for You

Chelsea Odle, Central Arkansas Water

11:00 AM Improving the Customer Communication Experience

Guy Fittje, Parker Water & Sanitation District

11:30 AM From Mandate to Tunnel System in 7 Years: Communicating the Value of RiverRenew, Alexandria, VA's Largest Public Works Project to Date

Caitlin Feehan, Liliana Maldonado, Alexandria Renew

12:00 PM Session Adjourns for Lunch (on your own)

Alternate Innovative Public Involvement in Strategic Planning

Michael Comeskey, City of Boise Public Works Department; Matthew Gregg, Brown and Caldwell; Amanda Watson, Atlas Strategic Communications

Session 21: Information Technology Transformation II
Thursday, February 27
1:30 PM - 3:00 PM

- 1:30 PM** **How Digital Water Revolutionizes Source Water Monitoring to Ensure Safe Drinking Water for the Public – Experience and Lessons Learned from American Water**
Jianfeng Wen, American Water; Angelita Fasnacht; Aaron McGarvey, Laura Underwood, Matt Csik, Kevin Keane, American Water
- 2:00 PM** **AMI - Are You Ready?**
Billie Owens, Nikki Hoyt, Parker Water & Sanitation District
- 2:30 PM** **Planning your AMI Journey – Feasibility, Strategy, and Vendor Selection**
Tricia Anklan, West Monroe Partners; Kyle Okamura, Vicki White, City of Henderson; Mike Wayman, West Monroe Partners
- 3:00 PM** **Session Adjourns for Networking Break**
- Alternate** **Looking at 3D BIM Beyond Design**
Chris Heltzel, Suman Bopaiah, Dan Seider, Arcadis

Session 22: Effective Pipeline Assessment and Maintenance Optimization

Thursday, February 27

1:30 PM - 3:00 PM

1:30 PM A Half a Decade of Lessons Learned from the Implementation of Fairfax County's Asset Management System

Paul Longo, Dewberry; Junaid Malik, Magdalena Springer, Fairfax County

2:00 PM Putting the 'P' in Predictive: Adding Predictive Maintenance to Your Collection System Maintenance Program

Alexander Palmatier, HDR; Matthew Whitman, Winston-Salem/Forsyth County Utilities; Jacob Mueller, HDR

2:30 PM A Phased, State of The Art Technology Based Approach to Assessing KC Water's Missouri Valley Tunnel

Charles Stevens, KC Water; William Barloon, Xylem / Pure Technologies

3:00 PM Session Adjourns for Networking Break

Alternate Inland Empire Utilities Agency - Sewer System: Enhancing Condition Assessment Program & Maintenance Optimization

Joel Ignacio, Inland Empire Utilities Agency; Hector Ruiz, GHD Advisory; Kenneth Monfore, Chander Letulle, Shaun Stone, Inland Empire Utilities Agency; Jamal Awad, GHD; Gary Te, Inland Empire Utilities Agency

Session 23: Innovative Capital Planning Tools
Thursday, February 27
1:30 PM - 3:00 PM

- 1:30 PM** **Fairfax County's Trigger Based Planning Using a Capital Timing Analysis Tool**
Timothy Devine, Kelly Landry, Ronald Taylor, Janice Carroll, Hazen & Sawyer; Sarah Motsch; Michael McGrath, Fairfax County Wastewater Management Program; Mujahid Ali, Fairfax County Government; Sajana Chitrakar, Noman M Cole Jr Pollution Control Center
- 2:00 PM** **Success in Capital Tracking – Looking Back at Gwinnett County's Improvements to their CIP Process and Adoption of their Tracking System**
Daniel Scrutchfield, Arcadis; Michael Lanfreschi, Gwinnett County
- 2:30 PM** **Forget Me, Remember We: How the City of Long Beach Departments Worked Together to Implement a Robust Project Portfolio Management System**
Ertan Akbas, Arcadis; Stephanie Gunawan-Piraner, Long Beach - Airport; Angelina Castellanos, City of Long Beach - Public Works
- 3:00 PM** **Session Adjourns for Networking Break**
- Alternate** **Adopting an Asset Management Mindset for Capital Planning**
Phillip Sexton, North Charleston Sewer District

Session 24: How to Tell Your Success Story

Thursday, February 27

1:30 PM - 3:00 PM

- 1:30 PM** **Tucson Water Turnaround: Crisis to Success**
Marie Pearthree, Retired, Central Arizona Project; Michael McGuire, MJM, Inc.
- 2:00 PM** **Communicating PFAS: How to Handle the Impacts of New Discoveries and the Political Developments Caused by the EPA's Action Plan**
Michael McGill, WaterPIO
- 2:30 PM** **You'll Miss Me When I'm Gone: Consequences of Losing Customer Trust and Strategies to Earn, Maintain and Rebuild Customer Trust in Your Drinking Water System**
Shonnie Cline, Corona Environmental Consulting; Jeff Biggs
- 3:00 PM** **Session Adjourns for Networking Break**
- Alternate** **Unregulated Contaminant Roulette – Navigating the Minefield for Public Utilities**
Paul Calamita, Aqua Law PLC

Session 25: Utility Collaboration for Innovation and Development of Best Practices
Thursday, February 27
3:30 PM - 5:00 PM

- 3:30 PM** **Introduction to L4M Collaborative Development of Best Practices**
Fidan Karimova, Water Research Foundation
- 3:40 PM** **Business Case Evaluation and CIP Prioritization**
Getachew Melsew, DC Water
- 3:52 PM** **Development of Asset Management Plans**
Craig Edlund, Metropolitan Council Environment Services- Twin Cities
- 4:04 PM** **Managing Enterprise Risk**
Douglas Stewart, Portland Water Bureau
- 4:16 PM** **CIP Delivery**
Helena Manao-Fernandez, Environment Agency (UK)
- 4:28 PM** **Q & A for Panel (facilitated interaction with audience)**
Mark Poling, Clean Water Services, Co-Principal Investigator and Strategic Plan
Chair for Future Development

Session 26: Key Aspects of Successful Asset Management Programs
Thursday, February 27
3:30 PM - 5:00 PM

- 3:30 PM** **Take Your Asset Management Culture “To Infinity and Beyond!”**
Jillian Hostenske, Kyle Wong, Sammamish Plateau Water & Sewer District
- 4:00 PM** **Benefits of Every Part of Asset Management: The More You Do, The More You Benefit**
Heather Himmelberger, Southwest Environmental Finance Center
- 4:30 PM** **Risk Prioritization Beyond Utility Silos – Utility Collaboration and Planning in Rochester, MN**
Douglas Klamerus, Rochester Public Utilities; Derek Gardels, Kathryn Jones, HDR
- 5:00 PM** **Session Adjourns**
- Alternate** **Seven Guiding Practices for Getting the Most and Best from Your Asset Management Program**
Rich McGillis, Raftelis Financial; Brandon Vatter

Session 27: Latest Trends in Capital Projects
Thursday, February 27
3:30 PM - 5:00 PM

- 3:30 PM** **Project & Program Management in Capital Project Delivery – State of the Water and Wastewater Industry**
Aditya Ramamurthy, Hazen and Sawyer; Michael Martin, Milwaukee Metropolitan Sewerage District
- 4:00 PM** **Using a Business Case Evaluation to Improve you CIP**
Tracy Jarrett, John Page, Sarah Doherty, City of Olathe
- 4:30 PM** **One Water Alexandria: A Public-Private Outreach Partnership to Help Alexandrians Know their H2O**
Lisa Van Riper, Alexandria Renew Enterprise; Alison Bibb-Carson, Virginia American Water; Christina Melvin-Deweese, City of Alexandria
- 5:00 PM** **Session Adjourns**
- Alternate** **Vista Ridge Regional Water Supply Design Build for New 45-MGD San Antonio Water Source**
Carissa Shelley, Pape-Dawson Engineers, Inc.; Marisa Vergara, CP&Y; Alissa Lockett, San Antonio Water System; Bill Williams, Garney Construction

Session 28: Sustainability: Ideas, Options, and Actions
Thursday, February 27
3:30 PM - 5:00 PM

- 3:30 PM** **Developing an Enterprise-Wide Sustainability Strategy at DC Water**
Matthew Ries, DC Water; Tristen Townsend, Duke University
- 4:00 PM** **Incorporating UN Sustainable Development Goals into the Daily Routine at a One Water Utility**
Per Henrik Nielsen, VCS Denmark
- 4:30 PM** **Electric Vehicle (EV) Fleet Conversion – Is Your Utility Fleet Ready?**
Margaret Oloriz, Mark Barmasse, Michael DeVuono, Arcadis
- 5:00 PM** **Session Adjourns**
- Alternate** **City of Phoenix Biogas-to-Renewable Natural Gas Plant: Innovative Use of a Previously Wasted Resource**
Patty Kennedy, City of Phoenix

Session 29: Utility Collaboration for Resilience
Friday, February 28
8:30 AM - 10:00 AM

- 8:30 AM** **Innovative Flood Control Emerging from Collaborations - Evolution of Yokohama Green Infrastructures Accommodating Climate Change**
Horita Seiji, City of Yokohama
- 9:00 AM** **Gilbert & Queen Creek, AZ: Two Communities Sharing Resources for Resiliency Sake**
Eric Braun, Town of Gilbert
- 9:30 AM** **Tarrant Regional Water District: A Case Study on Collaboration and Resilience**
Poonam Dagli, Arcadis; Norman Ashton, Tarrant Regional Water District
- 10:00 AM** **Session Adjourns for Networking Break**
- Alternate** **One Water - Bringing Utilities Together in Denver**
Abigail Antolovich, Phillip Segura, Denver Water Dept

Session 30: Communicating in the Spotlight: A Risk Communication Training for Water Professionals

Friday, February 28

8:30 AM - 10:00 AM

8:30 AM **Overview of Risk Communication Guide (landscape of today's media and advocacy situations, social science on risk communications, strategies for risk communication in social media, customer communication advocacy groups and mainstream media)**

Samantha Villegas, Raftelis Consulting; Karen Raucher, Corona Environmental

9:00 AM **Risk Communication Applied: Case Study Examples from Utilities**

Kelley Dearing Smith, Louisville Water Company

9:30 AM **Facilitated Panel Discussion**

Kelley Dearing Smith, Louisville Water Company; Karen Snyder, Katz & Associates; Mary Gugliuzza, City of Fort Worth; Karen Raucher, Corona Environmental

Session 31: EUM: Effective or Not? Reflections and Recommendations from Utility Managers Who Used the Framework

Friday, February 28

8:30 AM - 10:00 AM

8:30 AM Introduction of Utility Managers and Co-Facilitators

Liz Kelly, Jacobs Engineering and SMPC member

8:35 AM Overview of Effective Utility Management Framework

Jim Ginley, Jim Ginley Consulting and SMPC member

8:45 AM Overview of EUM Efforts from Three Utility Managers

Tammy Whipple, Assistant to General Manager, Sammamish Plateau Water (Seattle area) and SMPC member; David Irish, General Manager, Southgate Water & Sanitation Districts (Denver area); Anna Bryan-Borja, Chief Support Services, Offices, Austin (TX) Water

9:15 AM Facilitated Panel Discussion and Interactive Discussion/Q&A

Liz Kelly, Jacobs; Jim Ginley, Jim Ginley Consulting; Tammy Whipple, Sammamish Plateau Water; David Irish, Southgate Water & Sanitation Districts; Anna Bryan-Borja, Austin Water; Jim Horne, USEPA

Session 32: Successful Facility-Focused Asset Management Approaches
Friday, February 28
8:30 AM - 10:00 AM

- 8:30 AM** **Reliability Centered Maintenance: From Development to Implementation**
Monica Gasca, Los Angeles County Sanitation Districts
- 9:00 AM** **Comprehensive Condition Assessment for 39 Wastewater Treatment Plants and 383 Lift Stations in less than a Year – Houston’s Unique Approach**
Fazle Rabbi, Shannon Dunne, Pratistha Pradhan, Amirhossein Shokouhi, City of Houston
- 9:30 AM** **Yorba Linda Water District’s Transition to a Progressive Asset Management Program**
Danielle Logsdon, Yorba Linda Water District; Rosanne Weston; Dan Baker, Carollo Engineers
- 10:00 AM** **Session Adjourns for Networking Break**
- Alternate** **Montgomery County, Ohio's Vertical Asset Management Program Implementation**
Jeff Macomber, Hazen and Sawyer; Marill Clay, Montgomery County Environmental Services

Session 33: Creating a Smart Distribution System

Friday, February 28

10:30 AM - 12:00 PM

- 10:30 AM** **WRF Project #4917 Update: Utilizing Smart Water Networks to Manage Pressure and Flow for Reduction of Water Loss and Pipe Breaks**
Michael Karl, Brown and Caldwell; Robert Janke, EPA; John Abrera, United Water Services Indiana; Erin Culbertson, Brown and Caldwell
- 11:00 AM** **Pipeline Break Forecasting for Rate Justification and Extending Pipe Useful Life Without Pipe Replacement**
Steve Strapac, Rainbow Municipal Water District; Eric Scherch, David Spencer, HDR Inc.
- 11:30 AM** **What Exactly Does 95% Accurate Mean? How to Interpret the Results of Your Machine Learning Pipe Failure Model**
Karl Ivan San Luis, Xylem Inc.; Craig Daly
- 12:00 PM** **Conference Adjourns**
- Alternate** **Next Generation Non-Revenue Water Performance Indicators**
Steve Cavanaugh, Cavanaugh & Associates PA; George Kunkel, Philadelphia Water Department

Session 34: Strategic Planning: Data, Technology, and Application
Friday, February 28
10:30 AM - 12:00 PM

- 10:30 AM** **Demystifying Intelligent Water: Actionable Insights & Strategies for Utility Leaders**
Eric Bindler, Bluefield Research; James Cooper, Arcadis
- 11:00 AM** **Technology Silos: Are They in Your Organization's Cultural DNA?**
Zdenko Vitasovic, Metropolitan Water District So. Cal.; Fidan Karimova, The Water Research Foundation
- 11:30 AM** **From a Trickle to a Big Wave of Funding: How to Develop and Ramp Up a Stormwater Program**
Matthieu Roussillon, Carollo Engineers; Hubertus Cox, LASAN
- 12:00 PM** **Conference Adjourns**
- Alternate** **The CDD Roadmap**
Elinor Buchen, San Francisco Public Utilities Commission; Katie Miller

Session 35: Water Supply Resilience
Friday, February 28
10:30 AM - 12:00 PM

- 10:30 AM** **100% Reuse Design Approach for Los Angeles**
Azya Jackson, Joline Munoz, Fernando Gonzalez, Timeyin Dafeta, City of Los Angeles Sanitation Agency; Regidia Voong; Kwasi Berko; Lenise Marrero; Ali Poosti, City of Los Angeles CA
- 11:00 AM** **Implementing Groundwater Replenishment in LA**
Yoshiko Tsunehara, Los Angeles Department of Water and Power; Joline Munoz, City of Los Angeles; Madeline Kelsch, Los Angeles Department of Water and Power
- 11:30 AM** **Strategic Planning to Improve Water Supply Resilience in the Nation's Capital**
Getachew Melsew, Biju George, DC Water; Syam Nayer, Mott MacDonald
- 12:00 PM** **Conference Adjourns**
- Alternate** **How Water Supply Risk and Drought Can Affect Utility Credit Ratings**
John Mastracchio; Luke Eastman, Raftelis Financial Consultants Inc

Session 36: Integrating Climate Change into Enterprise Risk Management
Friday, February 28
10:30 AM - 12:00 PM

- 10:30 AM** **Introductions**
Usha Sharma, Denver Water
- 10:35 AM** **How Markets May Reward Cities (Utilities) Who Plan for Climate Changes**
Paul Fuller, Allied Public Risk LLC
- 10:50 AM** **Why Is Climate Risk Relevant to a Utility's Credit Rating**
Ted Chapman, Standard & Poors
- 11:05 AM** **How Water Supply Risk and Drought Can Affect Utility Credit Ratings**
John Mastracchio, Luke Eastman, Raftelis
- 11:20 AM** **Climate Change – How Do You Integrate It in Your Organization's Comprehensive Risk Management Framework?**
Laurna Kaatz, Denver Water
- 11:45 AM** **Panel Discussion**
Paul Fuller, Allied Public Risk LLC; Ted Chapman, Standard & Poors; John Mastracchio, Luke Eastman, Raftelis; Laurna Kaatz, Usha Sharma Denver Water