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

Your last line of defense for protecting plant assets from unauthorized or unintended misuse.

SCADAfuse Features

- Automatically configured industrial firewall and intelligent Intrusion Prevention System
- Designed for easy deployment and use by Automation Engineers
- Actively eliminates threats to OT assets in real-time
- A physical device that sits in front of critical utility endpoints protecting PLCs, VFDs and other network connected devices
- Learns and enforces normal operations for your plant environment
- Customized policies to ensure integrity of access and content of your unique environment
- Protect from unauthorized config changes, device resets, device reads, logic updates, message values
- Your last line of defense for protecting plant assets from unauthorized or unintended misuse

About Bayshore Networks

Bayshore Networks was founded in 2012, and has developed security products specifically for OT environments for use by automation engineers and plant operators.

Its comprehensive technology inspects industrial network activity in real-time, and actively protects assets whenever anomalies appear. The company created SCADAfuse, SCADAwall and O’Access to address the digital security risks which can compromise the safety and availability of OT environments.

SCADAfuse vs. Firewalls

<table>
<thead>
<tr>
<th>Feature</th>
<th>SCADAfuse</th>
<th>Firewall</th>
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</thead>
<tbody>
<tr>
<td>Native OT Protocol Support</td>
<td>Yes</td>
<td>Partial</td>
</tr>
<tr>
<td>Automatic policy learning</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Deep Packet Inspection</td>
<td>Yes</td>
<td>Partial</td>
</tr>
<tr>
<td>Network bypass for max reliability</td>
<td>Yes</td>
<td>Partial</td>
</tr>
<tr>
<td>DIN rail industrial hardware</td>
<td>Yes</td>
<td>Partial</td>
</tr>
<tr>
<td>Layer 2 Transparent Bridge</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hardware key security for admin access</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Fast and easy to deploy</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Budget friendly</td>
<td>Yes</td>
<td>No</td>
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</tbody>
</table>
WEF/AWWA
The Utility Management Conference™

February 25-28, 2020
Hyatt Regency Orange County
Anaheim, California, USA

This conference is jointly hosted by the Water Environment Federation and American Water Works Association, in cooperation with the California Water Environment Association and The Water Research Foundation.
To Our Friends and Colleagues:

Welcome to Anaheim and The Utility Management Conference™!

The Water Environment Federation and the American Water Works Association are pleased to bring utility managers and other industry leaders together for another 4 days of learning, sharing and celebrating the value of our work.

We hope you are able to take a moment away from your daily routine of meetings, emails, deliverables, approvals and submittals to take a well-deserved pause. Here, you have rich opportunities to interact with the best and brightest in our industries - in an open, engaging, and unique program designed around practical and successful utility management. This is a great time for you to think beyond the day to day about how you can increase your impact back home!

The program this year is unparalleled in its breadth and depth. You will hear new ideas, lessons learned, ongoing challenges, all shared for our collective benefit. Please engage, ask questions, follow up with the speakers. (And if you are a speaker, we thank you for the effort you made to share your story with others. If you are not a speaker, please consider submitting an abstract for next year!)

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

Conference Highlights

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

- **Opening General Session** — Sector leaders will lead an engaging panel discussion regarding challenges and opportunities that are relevant to us all.

- **36 Sessions** — Over the next three days, a variety of sessions will be featured. Each spanning 1.5 hours, they cover a vast array of leadership topics and management strategies to meet the specific needs of attendees.

- **Enjoy Anaheim!** — The conference location in Anaheim provides you an opportunity to enjoy the Southern California Winter and maybe find some time to visit Disney Land. If the last time you went It’s a Small World was the new ride, much has changed and it’s worth another visit.

The Utility Management Conference gets better every year, we hope you find what you are looking for. Please do not hesitate to reach out to any of the staff, and even your colleagues, to help you find ways to plug in and connect. There are many opportunities!

*Continued on following page*
We need your feedback, too. Please tell Us What You Think. What works? What can be better? What we can do to improve your experience and the conference for future attendees? You will find forms and surveys to provide us with your valuable input, please take advantage of them or share your thoughts with staff.

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

Thank you for joining us!

Sincerely,

Jack Bebee
Conference Co-Chair (AWWA)

Sam Paske, P.E.
Conference Co-Chair (WEF)
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CONFERENCE COMMITTEE

Sam Paske
Metropolitan Council
Conference Co-Chair (WEF)

Jack Bebee
Fallbrook Public Utility District
Conference Co-Chair (AWWA)

UTILITY MANAGEMENT CONFERENCE PLANNING COMMITTEE

Ryan Nagel
Hazen

Matt Ries
DC Water

Aditya Ramamurthy
Kennedy Jenks

Bob Parks
Independence Water Department

Richard Anderson
Peace River Manasota Regional Water Supply Authority

Areeba Syed
Metropolitan Water District of Southern California
REGISTRATION

All events are held in the Hyatt Regency Orange County.

The Registration Desk is located in the Regal Room and will be open at the following times:

**Hours:**
- **Tuesday, February 25**
  7:30 AM – 5:00 PM
- **Wednesday, February 26**
  7:30 AM – 5:00 PM
- **Thursday, February 27**
  8:00 AM – 5:00 PM
- **Friday, February 28**
  8:00 AM – 12:00 PM

PRESENTER AND MODERATOR INFORMATION

All presenters, alternates, and moderators should sign in at the conference Registration Desk and attend their assigned briefing.

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

- **Wednesday, February 26 — Plaza Terrace**
  7:30 AM – 8:15 AM
  *Sessions 1 through 12

- **Thursday, February 27 — Plaza Terrace**
  7:30 AM – 8:15 AM
  *Sessions 13 through 36
RECEPTION AND MEAL FUNCTIONS

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

Wednesday, February 26
Fountain Terrace
12:00 PM – 1:30 PM

Networking Reception                                          Fountain Terrace/North Pool
Weather permitting, join fellow attendees in the Fountain Terrace outside of the main entrance to the hotel. This reception will be an opportunity to enjoy a beer and light hors d’oeuvres while enjoying the sunny California weather. Full bar service available for purchase.

Wednesday, February 26
Fountain Terrace/Main Pool
5:00 PM – 6:30 PM

Sponsored by: Arcadis

UMC Social with Speakers                                    Fountain Terrace
The UMC Social with Speakers will be held in the Fountain Terrace. This event is an opportunity to connect with those presenting throughout the meeting. All attendees are encouraged to attend. Plan to grab a beer and join us for lively conversation.

Thursday, February 27
5:00 PM – 6:00 PM
Fountain Terrace

Networking Breaks

Wednesday, February 26 and Thursday, February 27
Meeting Room Foyer
10:00 AM – 10:30 AM and 3:00 PM – 3:30 PM

Friday, February 28
Meeting Room Foyer
10:00 AM – 10:30 AM

Wednesday Breaks Sponsored by: NewGen Strategies and Solutions
Thursday Breaks Sponsored by: CDM Smith
Brave Blue World is a new feature-length documentary that examines how new technologies and innovations can create a sustainable water future. The 50-minute film will be shown on Wednesday, February 26 during the lunch break. After eating, go to the Royal Ballroom by 12:20 PM to see the documentary, which will end in time for the afternoon sessions to begin.

Learn more about the film at [www.wef.org/braveblueworld](http://www.wef.org/braveblueworld).
Continuing Education files are available online:
https://ceu.experientevent.com/WEF206

You will be able to view your participation details and access your Continuing Education Credits for Workshops and Technical Sessions online. Attendees will have immediate access to their certificates and transcripts through an online portal for 1 year after this event. After that time, CE files will have to be requested by email through WEF’s customer service group. These details will be posted on the UMC page of WEF.org and emailed to event participants after the conference.

How Do I Receive Credit For this Conference?

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

Pre-Conference Workshops:

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

Technical Sessions:

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

When Will I Receive Credits For this Conference?

Certificates and transcripts for this event will be mailed within 8 weeks of the Symposium.

Please keep in mind that although WEF does provide these files, most states will require the individual licensee to report continuing education credits.

Note: Educational Credits will not be recorded and documentation will not be distributed unless the attendee is a confirmed registrant of this event and the proper steps are is completed as indicated in the directions provided.
Are WEF Continuing Education Credits Approved in My State?

WEF applies for approval in many states and will be happy to work with individuals and Member Associations for additional state or agency approvals upon request. In addition, WEF has been approved as a Training Provider through the following: The Florida Board of Professional Engineers, the New York State Department of Education, and the Ohio EPA. Several states typically accept WEF PDH and CEU credits without issue. For example: California (CWEA), Florida and New Jersey.

What Else Do I Need to Know?

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

Service and Support…

In keeping with IACET guidelines, WEF maintains a database of all continuing education files for a minimum of 7 years. You may contact WEF’s Customer Service Team between the hours of 8:30am and 5:00pm EST, Monday through Friday to request these files. Please call 1-800-666-0206 or submit an email request to csc@wef.org.

State Credit Calculations:
*Some state licensing boards will accept CEUs for session under 3 hours in length. Some use different acronyms for training credits. In most instances the credits issued by WEF can be converted to meet state specific requirements that vary from the system used by WEF. This is usually managed at the state level using the following conversion:

1.0 CEU = 10 Hours of session time
1.0 PDH = 1 Hour of session time
1.0 Contact Hour = 1 Hour of session time
For example: 1.7 CEU Credits = 17.0 PDH depending on individual state regulations.

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

For more information regarding WEF’s Continuing Education Program, please visit www.wef.org/utilitymanagement
ONLINE PROCEEDINGS

Conference proceedings, consisting of manuscripts for each presentation, have been made available through an online portal. Advance registrants within Full Conference, Daily, and Student categories will receive access to the Utility Management Conference 2020 online proceedings on the day prior to the conference. Onsite registrants will receive an access link following the event's conclusion.

Copies of proceedings may be ordered after the conference at the member rate of $100 USD/nonmember rate of $150 USD. All orders will be processed after conclusion of the conference. You may call 1-800-666-0206 or visit www.wef.org/ShopWEF and ask for Stock Number – CPUM2001

MOBILE APP

WEF is pleased to offer the WEF Events Connect Mobile App which gives you access to all current and future WEF events, including WEF/AWWA Utility Management.

Please search for and install our “WEF Events Connect” App.

View full program details, then start building your #UMC20 agenda.

Download “WEF Events Connect” now from the Google Play OR Apple App Store. Use the App on other web-enabled devices can access the app via the web at https://ativ.me/pyn.

We are glad to continue using paperless surveys! All session feedback will be done via the App. Please complete in-app feedback tool on individual presentations, sessions, workshops, and more.
We would like to thank the following sponsoring companies for their contributions to the conference and program.

**Hazen**

[Logo]

[www.hazenandsawyer.com](http://www.hazenandsawyer.com)
Silver

---

**HDR**

[Logo]

[www.hdrinc.com](http://www.hdrinc.com)
Bronze Elite
SPONSORSHIP INFORMATION

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

American Water Resources
www.awrusa.com
Opening General Session

ARCADIS
www.arcadis.com
Networking Reception

CDM Smith
www.cdmsmith.com
Thursday Networking Break

EMA
www.ema-inc.com
Lanyard

Hansen Technologies
https://hansencx.com
Mobile App Banner Ad

HCA Asset Management
www.hcamgt.com
Water Bottle

Jacobs
www.jacobs.com
Tote Bag

NewGen Strategies & Solutions
www.newgenstrategies.net
Wednesday Networking Break

Stantec
www.stantec.com
Mobile App
**WEF POLICIES & POSITIONS**

**WEF’s Vision**
A community of empowered professionals creating a healthy global water environment.

**Core Values**
Leadership, Passion, Scholarship, and Collaboration, and Service

**WEF Policies**
WEF respects and takes the broadest view of human diversity and inclusion and is committed to providing a professional, safe, and welcoming environment at its events for all water professionals and their guests. WEF expects all sponsors, speakers, attendees, media, exhibitors and other participants to uphold our commitment to diversity and inclusion by helping us provide a positive conference environment for everyone.

For more information, please see WEF’s Diversity and Inclusivity Policy, as well as WEF’s Non-Discrimination and Harassment Policy at www.wef.org/about/about-wef.

**Reporting Concerns**
If you have any concerns during this conference, please stop by the conference registration desk in the Regal Room at the Hyatt Regency Orange County, or you may email the WEF Executive Director Walter Marlowe at wmarlowe@wef.org.

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**WEF SOCIAL MEDIA POLICY**

WEF strongly encourages the use of social media to share your experiences at our event. This includes sharing interesting quotes or information, taking pictures with colleagues, and using the event hashtag. However, to protect intellectual property, videotaping, filming, or live-streaming of any workshop or technical session presentation, or exhibit booth is prohibited. Any participant violating this policy must relinquish the media and may be removed from the conference. Also, promotional or commercial use of photographs taken at WEFTEC and other WEF conferences is strictly prohibited. If you are interested in content, materials, or products, please consider talking to the speaker or exhibitor, who may provide the information or grant permission.
Hyatt Regency Orange County  
11999 Harbor Blvd., Garden Grove, California, 92840  
Phone: 714-750-1234

In an Emergency situation, we ask that (when possible) **dial 55** or the hotel operator by dialing (0) 24/7.

In a Non-Emergency situation, we ask that (when possible) notify the hotel operator by dialing (0) 24/7.

Security’s direct phone number 24/7: **714-740-6046**
Monday, February 24

AWWA YP Chair Training
7:30 AM – 5:00 PM
Salon VII/VIII

WEF Emerging Young Professionals Leadership Workshop (EYPL)
1:00 PM – 5:00 PM
Royal AB

Tuesday, February 25

AWWA Utility Quality Management Committee
12:00 PM - 1:00 PM
Salon VII

AWWA Management and Leadership Division
1:00 PM - 5:00 PM
Salon VII

Wednesday, February 26

AWWA Customer Service
10:30 AM – 12:00 PM
Salon VII

AWWA Utility Benchmarking Advisory
1:30 PM – 3:30 PM
Salon VII

Thursday, February 27

AWWA Rates & Charges
8:30 AM - 10:30 AM
Salon VII

AWWA Workforce Strategies
9:30 AM – 11:30 AM
Salon VIII

AWWA Finance, Accounting & Management Controls
10:30 AM - 12:00 PM
Salon VII

WEF Utility Management Committee Luncheon
12:00 PM – 1:30 PM
Harbor Room

AWWA Strategic Management Practices Committee
2:00 PM - 3:30 PM
Salon VII
All WEF and AWWA members and water professionals contribute to the UN Sustainable Development Goals (SDGs) every day they go to work. To highlight the value of water, WEF is offering an SDG educational certificate to all UMC 2020 attendees who attend at least 3 SDG related sessions and complete the onsite form. When identifying sessions, virtually all conference programming is related to SDG 6: Clean Water and Sanitation. However, we have selected an extensive list of sessions that directly address a key target for multiple SDGs. Please track all sessions you attend, submit your completed SDG form to the conference registration desk, and we will e-mail you the UMC 2020 SDG Awareness Professional Development Certificate after the event.

To participate, please pick up the UMC 2020 SDG worksheet from the conference registration desk and be sure to return it before heading home.
All pre-conference workshop programs are held on Tuesday, February 25. Separate registration fees apply.

**Workshop A: A Utility Guide to Cyber Security: What Executives Need to Know and Practical Solutions to Achieve It**  
Room: Royal AB  
8:30 AM - 5:00 PM

**Workshop B: The Digital Worker: Workforce Implications of Digital Tools**  
Room: Royal CD  
8:30 AM - 5:00 PM

**Workshop C: Using Management Standards as Leadership Tools to Optimize Utility Performance**  
Room: Royal EF  
8:30 AM - 12:00 PM

**Workshop D: Leveraging the AWWA M5 Manual with Effective Utility Management (EUM) Practices**  
Room: Plaza Terrace  
8:30 AM - 12:00 PM

**Workshop E: Principles and Best Practices for Collaborative Delivery for Water Infrastructure Projects**  
Room: Royal EF  
1:30 PM – 5:00 PM

**Workshop F: Business Intelligence-Driven Utility**  
Room: Plaza Terrace  
1:30 PM – 5:00 PM
OPENING GENERAL SESSION

Wednesday, February 26
Room: Grand Ballroom ABCD
8:30 AM – 10:00 AM

8:30 AM  Conference Welcome and Introduction
Sam Paske, Conference Co-Chair (Representing WEF)
Jack Bebee, Conference Co-Chair (Representing AWWA)

8:45 AM  WEF and AWWA Welcome
Jackie Jarrell, WEF President
Jim Williams, AWWA President

9:00 AM  The Innovators – Applying External Insight in Problem-Solving
Tom Ferguson, Imagine H2O
Megan Glover, 120WaterAudit
Meena Sankaran, KETOS

Wonderful things can happen when you take an idea from outside your field and apply it to your job. The same applies to water. We can all learn from how things are done externally, and how these ideas can improve how we serve our customers. Megan Glover and Meena Sankaran each started companies as newcomers to the water sector, and less than five years later are delivering cutting-edge solutions to urgent water challenges. This conversation will explore the lessons and insight they brought in to the sector with them, and the key lessons they’ve learned now they’re here.

10:00 AM  Session Adjourns for Networking Break

Sponsored by: American Water Resources
Session 01: Technology Whirlwind - Strategies for Technology Adoption and Integration

Wednesday, February 26
10:30 AM - 12:00 PM

Room: Grand Ballroom A
SDG: 9

Moderator: David Chamberlain, Eramosa

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  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; Anas Malkawi, Jules Robichaud, HRSD; James MacDonald, Hazen and Sawyer

11:30 AM  Leveraging Innovative Cloud Technology at a Municipal Authority
Julie Quigley, The Pittsburgh Water and Sewer Authority; Ryan Cawley, Kevin Clancey, Sprypoint

12:00 PM  Session Adjourns for Networking Lunch
Session 02: Leadership / Workforce Support and Development I

Wednesday, February 26
10:30 AM - 12:00 PM

Moderator: Marianne Langridge, Sustainable Synthesis

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  Putting Employee Diversity and Inclusion to Work
Stephanie Glasgow, Ed Kerwin, Orange Water & Sewer Authority

12:00 PM  Session Adjourns for Networking Lunch
Session 03: Risk-Based Approaches to Waterline Assessment and Replacement Planning

Wednesday, February 26
10:30 AM - 12:00 PM
Room: Grand Ballroom EFG
SDG: 6

Moderator: Ryan Nagel, Hazen and Sawyer

10:30 AM  Main to Meter: An Asset Management Replacement Strategy for 125K Lead Service Lines
David Fielder, Palencia Mobley, Detroit Water and Sewerage Department; Samuel Smalley, City of Dearborn

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
Room: Royal CDEF
SDG: 9

Moderator: Jennifer Ivey, Carollo

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

11:00 AM  Alternative Methodologies for Assessing Sewer Charges at The Metropolitan District
Dave Fox, Raftelis; John Mirtle, The Metropolitan District

11:30 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 Room: Grand Ballroom A
1:30 PM - 3:00 PM SDG: 12

Moderator: Aditya Ramamurthy, Kennedy Jenks

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 Moving On Up: Albuquerque’s Climb Toward Strategic Asset Management
Ganesh Pai, Tim Payne, EMA, Inc.; Stan Allred, Albuquerque Bernalillo County Water Utility
Session 06: Leadership / Workforce Support and Development II

Wednesday, February 26
1:30 PM - 3:00 PM

Moderator: Tim Payne, EMA

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; Robert Weimar, PWSA; Rocky Craley, Raftelis

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**

**Room:** Grand Ballroom EFG

**1:30 PM - 3:00 PM**

**SDG:** 9

**Moderator:** Pieter Van Ry, SPWRP

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<td>Risk Management: The Value of Applying a Common Framework and Taking Account of the Risk Consequences</td>
<td>Robert Raucher, Raucher LLC; James Henderson, Corona Environmental Consulting; Frank Blaha</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>The AWWA Cybersecurity Tool: A User-Friendly Way to Build AWIA 2018 Compliance and Your Cyber-Resilience</td>
<td>Andrew Ohrt, West Yost Associates; Kevin Morley, AWWA; Daniel Groves; Joel Cox, West Yost Associates</td>
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<tr>
<td>2:30 PM</td>
<td>Doing it Right the First Time – Engineering Secure Water/Wastewater Systems in Our Hyper-connected World</td>
<td>Andrew Ohrt, West Yost Associates; Daniel Groves; Joel Cox, West Yost Associates; Andy Bochman, Idaho National Laboratory</td>
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<tr>
<td>3:00 PM</td>
<td>Session Adjourns for Networking Break</td>
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**Alternate**

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<th>Time</th>
<th>Session Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assessing Cybersecurity for the AWIA</td>
<td>Terry Draper, Bob Reilly, EMA Inc.; Jeff Coulson, EMA Canada, Inc.</td>
</tr>
</tbody>
</table>
Session 08: Effectively Leveraging Available Funding Sources to Finance Infrastructure Investment

Wednesday, February 26
1:30 PM - 3:00 PM

**Room:** Royal CDEF
**SDG:** 9

**Moderator:** Brian Shell, WSP USA

1:30 PM  Let's Save Money! How Utilities Use WIFIA to Fund Projects
Danusha Chandy, Environmental Protection Agency; Randy Fick, Orange County Water District; Paul Matthews, Tualatin Valley Water District

2:00 PM  Working Together to Demonstrate Strength and Obtain WIFIA Funding
Amy Broughton, Stantec; Paul Matthews, Tualatin Valley Water District; Bill VanderVeer, Stantec

2:30 PM  Funding a $795 Million Master Plan with 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

Room: Grand Ballroom A
SDG: 6

Moderator: Michael Rotunno, Arcadis

3:30 PM We’re Agile! - Owner Delivery Improves Agility of an Asset Management Project
Michael McGrath, Keith Chase, Fairfax County Wastewater Management Program; Ronald Taylor, Hazen and Sawyer

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

Wednesday, February 26
3:30 PM - 5:00 PM
Room: Grand Ballroom BCD
SDG: 5

Moderator: Steven Currie, Environment and Education

Building a strong and diverse talent pipeline is an ongoing challenge facing utilities nationwide that requires initiatives to:

• Recruit, train and retain entry-level, front-line and mid-career employees
• Build and support career advancement pathways for workers with mission-critical technical expertise and skills.
• Invest in leadership development and succession planning
• Increase industry diversity and inclusiveness to enhance access to water and utility industry careers for women and minorities, and for people from communities across the socio-economic spectrum.

Building off discussions (two years) involving nationwide workforce and infrastructure leaders in New Orleans, Ft. Lauderdale, and Chicago, we invite you to join us in this critical conversation about the present and future of our industry.

3:30 PM Introduction
Steven Currie, Environment and Education

3:35 PM Trust the Process: Lowering Barriers through Apprenticeships and Pipeline Academy
Carolyn Ross, Charlotte Water

3:45 PM How the CityWorks Youth Program Works: San Francisco’s Sewer System Improvement Program
Dion Jay (DJ) Brooker, Young Community Developers

3:55 PM Stand for Something: Using Your Agency for the Greater Good
Wainella Isaacs, College of Engineering Diversity and Inclusion Programs, University of South Florida

4:05 PM National Infrastructure Workforce Models
Drew Lehman, Environment and Education

4:15 PM WEF’s Workforce Program Overview
Ifetayo Venner, Arcadis

4:30 PM Roundtable Discussion

5:00 PM Session Adjourns for Networking Reception
Session 11: Utility-Utility Collaboration

Wednesday, February 26
3:30 PM - 5:00 PM
Room: Grand Ballroom EFG
SDG: 17

Moderator: Ed McCormick, McCormick Strategic Water

3:30 PM  Pipes Know No Boundaries - The Need for Collaboration
          Sherri Gee, Madison Merzlyakov, Great Lakes Water Authority

4:00 PM  The Leading Role: Utilities as Primary Drivers for Water
          Sector Innovation
          Jason Carter, Joanna Brunner, Sarina Sriboonlue, Arcadis; Ed
          Means, Means Consulting LLC

4:30 PM  Regional Collaborative is Making a Big SPLASH in
          Northeastern Wisconsin
          Seth Garrison, John Mastracchio, Raftelis Financial
          Consultants, Inc.; Nicolas Sparacio, Central Brown County
          Water Authority; Nancy Quirk, Green Bay Water Utility

5:00 PM  Session Adjourns for Networking Reception
Session 12: Affordability, Equity, and Rising Costs

Wednesday, February 26
3:30 PM - 5:00 PM

Moderator: Todd Cristiano, Raftelis

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: How do you know what to charge?
Marty Norton, Susan Woolard, Valdis Krumins, Nicole Schindler, 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; Dan Cooper, Metropolitan Planning Council; Margaret Garascia, 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
Room: Grand Ballroom A
SDG: 9

**Moderator:** Salil Kharkar, DC Water

8:30 AM  **Taming the Three Headed Beast: People, Processes, and Information in Asset Management**
Donna Lund, King County Wastewater Treatment Division; Elizabeth Lowell, Rachel King, HDR; Alden Wyma, King County Department of Nat'l Resources & Parks

9:00 AM  **Equipping Teams to Accelerate Business Process Improvements: Case Studies in Change Management at DC Water**
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**
Session 14: Optimizing Data Management to Deliver Better Asset Management Results

Thursday, February 27
8:30 AM - 10:00 AM
Room: Grand Ballroom BCD
SDG: 9

Moderator: Phil Segura, Denver Water

8:30 AM  Lemons to Lemonade: How Kansas City Water Is Using Asset Management Principles to Assure the Quality of Its Data
Brian Hiller, Scott Parker, Burns and McDonnell

9:00 AM  Asset Management Data Accessibility to All Utility Staff
Yann Le Gouellec, Newport News Waterworks; Russ Dalton, Hazen and Sawyer

9:30 AM  Truth or Consequences in New Mexico: Using Consolidated Real Asset Data for Better CIP Decision-Making
Ganesh Pai, Tim Payne, EMA, Inc.; Stan Allred, Albuquerque Bernalillo County Water Utility Authority

10:00 AM  Session Adjourns for Networking Break
Session 15: Sustainable Capital Planning

Thursday, February 27
8:30 AM - 10:00 AM
Room: Grand Ballroom EFG
SDG: 7, 9

Moderator: Phillip Sexton, NCSD

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
Room: Royal CDEF
SDG: 11

Moderator: Donna Mancuso, Suffolk County Water Authority

8:30 AM Begin the Journey to Excellent Customer Service
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 Courage over Comfort in Conversations
Cathy Bernardino-Bailey, Greater Cincinnati Water Works

10:00 AM Session Adjourns for Networking Break

Alternate Management Commitment and Research-Based Decisions Benefit CIS Implementation 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
Room: Grand Ballroom A
SDG: 11

Moderator: Terry Brueck, EMA

10:30 AM  Unlocking the Potential of IT-OT Convergence: What’s Your Technology Organization of the Future?
Bob Reilly, Terry Draper, EMA Inc.

11:00 AM  Smart City-Operations and Maintenance: The Effect of "The Internet of Things" IoT on Operations and Maintenance
Robert Riedel, Vince Turner, 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
Session 18: Asset Management Strategy Development

Thursday, February 27
10:30 AM - 12:00 PM
Room: Grand Ballroom BCD
SDG: 11

Moderator: Rebecca West, RFW Consulting Services

10:30 AM  A Framework and Guidance for Incorporating Natural Assets into Asset Management Practices for Built Systems
Robert Raucher, Raucher LLC; Kurt Vause; 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

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, Jacobs; Elizabeth Kelly, Seattle Public Utilities
Session 19: Importance of Community Support for Your CIP

Thursday, February 27
10:30 AM - 12:00 PM
Room: Grand Ballroom EFG
SDG: 11

Moderator: Richard Anderson, Peace River Manasota Regional Water Supply Authority

10:30 AM  Importance of Branding Your Project: It's What People Say About You Behind Your Back
Sarah Rossetto, Matthew Bennett, Katz & Associates

11:00 AM  Financing Your Integrated Resource Plan
Fletcher Davis, Greg Fisher, Denver Water

11:30 AM  Planning and Funding 2030 Capital Needs in 2020 Through Community Engagement
Melissa Pieri, Citrus Heights Water District; Andrew MacDonald, Harris & Associates; Habib Isaac, IB Consulting LLC

12:00 PM  Session Adjourns
Session 20: Understanding How to Communicate with Customers in Today's Media Environment

Thursday, February 27
10:30 AM - 12:00 PM
Room: Royal CDEF
SDG: 12

Moderator: Matthew Manchisi, Hazen and Sawyer

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  Enhancing the Customer Communication Experience by Revamping Your Phone System
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

Alternate Innovation in Integrated Stakeholder Engagement for Strategic Utility 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      Room: Grand Ballroom A
1:30 PM - 3:00 PM      SDG: 9

Moderator: Russ Dalton, Hazen and Sawyer

1:30 PM How Digital Water Revolutionizes Source Water Monitoring
Laura Underwood, Aaron McGarvey, Lauren Weinrich
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
Room: Grand Ballroom BCD
SDG: 6

Moderator: Mike Martin, Milwaukee Metropolitan Sewer District

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, Jacob Mueller, Xiating Chen, 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
Session 23: Innovative Capital Planning Tools

Thursday, February 27
Room: Grand Ballroom EFG
1:30 PM - 3:00 PM
SDG: 9

Moderator: Doug Baldessari, Baker Tilly

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

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 Water Resources

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; Morgan Mills, Arcadis

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

Room: Royal CDEF
SDG: 3

Moderator: Matt Ries, DC Water

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
Jeff Biggs, Tucson Water; Shonnie Cline, Corona
Environmental Consulting

3:00 PM  Session Adjourns for Networking Break
Session 25: Utility Collaboration for Innovation and Development of Best Practices

Thursday, February 27
3:30 PM - 5:00 PM
Room: Grand Ballroom A
SDG: 9

Moderator: Scott Haskins, Jacobs

3:30 PM  Introduction to L4M Collaborative Development of Best Practices
Mark Poling, Clean Water Services

3:35 PM  Track 1: Value of Business Process Modeling from a Utility Perspective
Kevin Simmonds, Orange County, FL

3:45 PM  Track 2: Introduction
Scott Haskins, Jacobs

3:50 PM  Modeling “As Is” Business Processes and Collecting Data
Getachew Melsew, DC Water

4:00 PM  2019 Fall Workshop: Overview of Agendas, Goals, Deliverables
Scott Parker, Kansas City Water

4:10 PM  Preparation for the 2020 UMC Workshop
Liv Hov, UK Environment Agency

4:20 PM  Next Steps: Implementing Processes for 4 Topics, New Topics
Scott Haskins, Jacobs

4:30 PM  Interactive Q & A with Panel Members
Mark Poling, Clean Water Services

5:00 PM  Session Adjourns for Social Event with Speakers
Session 26: Key Aspects of Successful Asset Management Programs

Thursday, February 27
3:30 PM - 5:00 PM

Moderator: Areeba Syed, Metropolitan Water District of Southern California

3:30 PM  Take Your Asset Management Culture “To Infinity and Beyond!”
Tammy Whipple, Jillian Hostenske, Kyle Wong, Kevin Walton, 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 Klamers, Rochester Public Utilities; Derek Gardels, Kathryn Jones, HDR

5:00 PM  Session Adjourns for Social Event with Speakers

Alternate  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
Room: Grand Ballroom EFG
SDG: 9

Moderator: Robert Parks, Independence Water Department

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
A Strategic Approach to CIP Prioritization
Tracy Jarrett, John Page, Sarah Doherty, City of Olathe, KS

4:30 PM
One Water Alexandria: A Public-Private Outreach Partnership to Help Alexandrians Know their H2O
Alison Bibb-Carson, Virginia American Water; Lisa Van Riper, Monica Billger, Alexandria Renew Enterprise

5:00 PM
Session Adjourns for Social Event with Speakers

Alternate
Everything’s Bigger In Texas - The Nearly $1Billion P3 That Will Secure San Antonio’s Waterful Future
Carissa Shelley, Murraysmith; Marisa Vergara, CP&Y; Alissa Lockett, San Antonio Water System
Session 28: Sustainability: Ideas, Options, and Actions

Thursday, February 27                Room: Royal CDEF
3:30 PM - 5:00 PM                  SDG: 7, 17

 Moderator: Ann Casey, Carollo

3:30 PM  Sustainability at DC Water: Concept Development, Input, and Reporting
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, Mads Leth, 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 for Social Event with Speakers

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
Room: Grand Ballroom A
SDG: 12

Moderator: Matt Ries, DC Water

8:30 AM  Innovative Flood Control Emerging from Collaborations - Evolution of Yokohama Green Infrastructures
Accommodating Climate Change
Seiji Horita, 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; Barbara Chongtoua, Mile High Flood District; David Jula, City and County of Denver; Devon Buckels, The Water Connection; Kevin Reidy, Colorado Water Conservation Board
Session 30: Communicating in the Spotlight: A Risk Communication Training for Water Professionals

Friday, February 28
8:30 AM - 10:00 AM

**Room:** Grand Ballroom BCD
**SDG:** 3

**Moderator:** Kelley Dearing Smith, Louisville Water Company

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**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

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**9:00 AM**

Risk Communication Applied: Case Study Examples from Utilities

Kelley Dearing Smith, Louisville Water Company

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**9:30 AM**

Facilitated Panel Discussion

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

Room: Grand Ballroom EFG
SDG: 6

Moderator: Jim Ginley, Jim Ginley Consulting

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 Officer, 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, US EPA

10:00 AM  Session Adjourns for Networking Break
Session 32: Successful Facility-Focused Asset Management Approaches

Friday, February 28
8:30 AM - 10:00 AM
Room: Royal CDEF
SDG: 6

Moderator: Patrick Beane, City of Des Moines Department of Public Works

8:30 AM  Montgomery County, Ohio’s Vertical Asset Management Program
Jeff Macomber, Hazen and Sawyer; Marill Clay, Montgomery County Environmental Services

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

10:00 AM  Session Adjourns for Networking Break
Session 33: Creating a Smart Distribution System

Friday, February 28                                      Room: Grand Ballroom A
10:30 AM - 12:00 PM                                      SDG: 9

Moderator: Megan Yoo Schneider, Seven Management & Consulting

10:30 AM       WRF Project #4917 Update: Utilizing Smart Water Networks to Manage Pressure and Flow for Reduction of Water Loss and Pipe Breaks
John Abrera, Michael Karl, Erin Culbertson, Brown and Caldwell; Robert Janke, EPA

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
Greta Vladeanu, Xylem Inc.; Chenyang Wang, MullenLowe Media Hub Global; Sepideh Yazdekhashi, Karl Ivan San Luis, Craig Daly, Xylem Inc.

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     Room: Grand Ballroom BCD
10:30 AM - 12:00 PM     SDG: 9

Moderator: Jon Grant, JNG

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 in Your Organization’s Cultural DNA
Zdenko Vitasovic, 9D Analytics; 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
Katie Miller, Lisa Chau, San Francisco Public Utilities Commission
Session 35: Water Supply Resilience

Friday, February 28
10:30 AM - 12:00 PM
Room: Grand Ballroom EFG
SDG: 12

Moderator: Gerard Yates, Central Utah Water

10:30 AM  A 100% Water Reuse Design Approach for Los Angeles
Hubertus Cox, Azya Jackson, Timeyin Dafeta, Fernando Gonzalez, Tracy Minamide, Joline Munoz, Ali Poosti, City of Los Angeles Sanitation Agency

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; Azya Jackson, City of Los Angeles; Michael Ruiz

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
## Session 36: Integrating Climate Change into Enterprise Risk Management

**Friday, February 28**

**10:30 AM - 12:00 PM**

**Room:** Royal CDEF

**SDG:** 12

**Moderator:** Usha Sharma, Denver Water

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<th>Time</th>
<th>Session</th>
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<tr>
<td>10:30 AM</td>
<td><strong>Introductions</strong>&lt;br&gt;Usha Sharma, Denver Water</td>
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<tr>
<td>10:35 AM</td>
<td><strong>How Markets May Reward Cities (Utilities) Who Plan for Climate Changes</strong>&lt;br&gt;Paul Fuller, Allied Public Risk LLC</td>
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<td>10:50 AM</td>
<td><strong>Why Is Climate Risk Relevant to a Utility’s Credit Rating</strong>&lt;br&gt;Ted Chapman, Standard &amp; Poors</td>
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<tr>
<td>11:05 AM</td>
<td><strong>How Water Supply Risk and Drought Can Affect Utility Credit Ratings</strong>&lt;br&gt;John Mastracchio, Luke Eastman, Raftelis</td>
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<tr>
<td>11:20 AM</td>
<td><strong>Climate Change – How Do You Integrate It in Your Organization’s Comprehensive Risk Management Framework?</strong>&lt;br&gt;Taylor Winchell, Denver Water</td>
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<td>11:45 AM</td>
<td><strong>Panel Discussion</strong>&lt;br&gt;Paul Fuller, Allied Public Risk LLC; Ted Chapman, Standard &amp; Poors; John Mastracchio, Luke Eastman, Raftelis; Laura Kaatz, Usha Sharma Denver Water</td>
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<td>12:00 PM</td>
<td><strong>Conference Adjourns</strong></td>
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# SESSIONS AT A GLANCE

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<td><strong>Tuesday, February 25</strong></td>
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<tr>
<td>Workshop A</td>
<td>A Utility Guide to Cyber Security: What Executives Need to Know and Practical Solutions to Achieve It</td>
<td>8:30am–5:00pm</td>
<td>6.0 CEUs</td>
<td>Royal AB</td>
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<td>Workshop B</td>
<td>The Digital Worker: Workforce Implications of Digital Tools</td>
<td>8:30am–5:00pm</td>
<td>6.0 CEUs</td>
<td>Royal CD</td>
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<tr>
<td>Workshop C</td>
<td>Using Management Standards as Leadership Tools to Optimize Utility Performance</td>
<td>8:30am–12:00pm</td>
<td>3.0 CEUs</td>
<td>Royal EF</td>
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<td>Workshop D</td>
<td>Leveraging the AWWA M5 Manual with Effective Utility Management (EUM) Practices</td>
<td>8:30am–12:00pm</td>
<td>3.0 CEUs</td>
<td>Plaza Terrace</td>
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<tr>
<td>Workshop E</td>
<td>Principles and Best Practices for Collaborative Delivery for Water Infrastructure Projects</td>
<td>1:30pm–5:00pm</td>
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<td>Workshop F</td>
<td>Business Intelligence-Driven Utility</td>
<td>1:30pm–5:00pm</td>
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<td><strong>Wednesday, February 26</strong></td>
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<tr>
<td>OGS</td>
<td>Opening General Session</td>
<td>8:30am–10:00am</td>
<td>1.5 GCHs</td>
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<tr>
<td>Session 1</td>
<td>Technology Whirlwind - Strategies for Technology Adoption and Integration</td>
<td>10:30am–12:00pm</td>
<td>1.5 PDHs</td>
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<td>Session 2</td>
<td>Leadership / Workforce Support and Development I</td>
<td>10:30am–12:00pm</td>
<td>1.5 PDHs</td>
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<td>Session 3</td>
<td>Risk-Based Approaches to Waterline Assessment and Replacement Planning</td>
<td>10:30am–12:00pm</td>
<td>1.5 PDHs</td>
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<td>Session 4</td>
<td>Innovative Rates and Charges to Achieve Multiple Benefits</td>
<td>10:30am–12:00pm</td>
<td>1.5 PDHs</td>
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<td>Session 5</td>
<td>The Paperless Path to the Future</td>
<td>1:30pm–3:00pm</td>
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<td>Session 6</td>
<td>Leadership / Workforce Support and Development II</td>
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<td>Risk and Managing Risk</td>
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<td>Effectively Leveraging Available Funding Sources to Finance Infrastructure Investment</td>
<td>1:30pm–3:00pm</td>
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<td>Session 9</td>
<td>Innovative Approaches to Optimizing Business Practices</td>
<td>3:30pm–5:00pm</td>
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<td>Session 10</td>
<td>Strengthening and Diversifying the Water Quality Workforce: Examining Real-World Pathway Programs into Sustainable Infrastructure Careers</td>
<td>3:30pm–5:00pm</td>
<td>1.5 PDHs</td>
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<td>Session 11</td>
<td>Utility-Utility Collaboration</td>
<td>3:30pm–5:00pm</td>
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<td>Session 12</td>
<td>Affordability, Equity, and Rising Costs</td>
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<td>Session 13</td>
<td>Journey to the Center of Continuous Process Improvements</td>
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<td>Session 14</td>
<td>Optimizing Data Management to Deliver Better Asset Management Results</td>
<td>8:30am–10:00am</td>
<td>1.5 PDHs</td>
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<td>Session 15</td>
<td>Sustainable Capital Planning</td>
<td>8:30am–10:00am</td>
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<td>We Need to Change How We Communicate</td>
<td>8:30am–10:00am</td>
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<td>Information Technology Transformation I</td>
<td>10:30am–12:00pm</td>
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<td>Asset Management Strategy Development</td>
<td>10:30am–12:00pm</td>
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<td>Importance of Community Support for Your CIP</td>
<td>10:30am–12:00pm</td>
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<td>Session 20</td>
<td>Understanding How to Communicate with Customers in Today's Media Environment</td>
<td>10:30am–12:00pm</td>
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<td>Information Technology Transformation II</td>
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<td>Effective Pipeline Assessment and Maintenance Optimization</td>
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<td>Innovative Capital Planning Tools</td>
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<td>How to Tell Your Success Story</td>
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<td>Utility Collaboration for Innovation and Development of Best Practices</td>
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<td>Key Aspects of Successful Asset Management Programs</td>
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<td>Latest Trends in Capital Projects</td>
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<td>Session 28</td>
<td>Sustainability: Ideas, Options, and Actions</td>
<td>3:30pm–5:00pm</td>
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<td>Utility Collaboration for Resilience</td>
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<td>Session 30</td>
<td>Communicating in the Spotlight: A Risk Communication Training for Water Professionals</td>
<td>8:30am–10:00am</td>
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<td>Session 31</td>
<td>EUM: Effective or Not? Reflections and Recommendations from Utility Managers Who Used the Framework</td>
<td>8:30am–10:00am</td>
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<td>Successful Facility-Focused Asset Management Approaches</td>
<td>8:30am–10:00am</td>
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<td>Creating a Smart Distribution System</td>
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<td>Strategic Planning: Data, Technology, and Application</td>
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<td>Water Supply Resilience</td>
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<td>Integrating Climate Change into Enterprise Risk Management</td>
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<td>Ertan Akbas</td>
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<td>Richard Anderson</td>
<td>Peace River Manasota Regional Water Supply Authority</td>
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<td>Tricia Anklan</td>
<td>West Monroe Partners</td>
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<tr>
<td>Cathy Bernardino-Bailey</td>
<td>Greater Cincinnati Water Works</td>
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<td>Alexandria Renew Enterprise</td>
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<td>Andy Bochman</td>
<td>Idaho National Laboratory</td>
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<td>Eric Braun</td>
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<td>Ulliman Schutte Construction</td>
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<td>Amy Broughton</td>
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<td>Tara Brown</td>
<td>Henry County Water Authority</td>
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<td>Jessica Brown</td>
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<td>Terry Brueck</td>
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<td>Anna Bryan-Borja</td>
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<tr>
<td>Catherine Carter</td>
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<td>Jason Carter</td>
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<td>Danusha Chandy</td>
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<td>Ted Chapman</td>
<td>S&amp;P Global Ratings</td>
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<tr>
<td>Lisa Chau</td>
<td>SF Public Utilities Commission</td>
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<td>Wendy Chi-Babulal</td>
<td>Fort Worth Water Department</td>
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<td>Leofwin S. Clark</td>
<td>Water Design-Build Council</td>
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<td>Shonnie Cline</td>
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<tr>
<td>Michael Comeskey</td>
<td>City of Boise Public Works Department</td>
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<td>Francis Cooper</td>
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<td>Evelyn Cortez-Davis</td>
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<td>James Courchaine</td>
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<td>Steven Currie</td>
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<td>Catherine Curtis</td>
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<td>Russ Dalton</td>
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<td>Craig Daly</td>
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<td>Fletcher Davis</td>
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<tr>
<td>Kelley Dearing</td>
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<td>Clyde Dugan</td>
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<td>Shannon Dunne</td>
<td>City of Houston, Speaker Session 17</td>
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<td>Earl Dupriest</td>
<td>Charleston Water System, Speaker Session 18</td>
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<td>Steven Dutschke</td>
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<td>William Elledge</td>
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<td>John Evans</td>
<td>Blue Cypress Consulting, Speaker Session 13</td>
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<td>Randy Fick</td>
<td>Orange County Water District, Speaker Session 08</td>
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<td>Guy Fittje</td>
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<td>Tera Fong</td>
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<td>Chitra Foster</td>
<td>Water Design-Build Council, Speaker Workshop E</td>
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<td>Paul Fuller</td>
<td>Allied Public Risk LLC, Speaker Session 36</td>
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<td>Seth Garrison</td>
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<tr>
<td>Sherri Gee</td>
<td>Great Lakes Water Authority, Speaker Session 11</td>
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<td>Biju George</td>
<td>DC Water, Speaker Workshop A</td>
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<td>James Ginley</td>
<td>Jim Ginley Consulting, Speaker Workshop D, Coordinator</td>
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<td>Robert Golden</td>
<td>Water Design Build Council, Coordinator, Workshop E</td>
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<td>Jon Grant</td>
<td>JNG, Moderator Session 34</td>
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<td>Mary Gugliuzza</td>
<td>City Of Fort Worth Water Dept, Speaker Session 30</td>
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<td>Steven Gunsch</td>
<td>HDR, Speaker Session 01</td>
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<td>Scott Haskins</td>
<td>Jacobs, Coordinator Session 25</td>
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<td>Christopher Heltzel</td>
<td>Arcadis, Speaker Workshop F, Session 21</td>
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<td>Brian Hiller</td>
<td>Burns &amp; McDonnell, Speaker Session 14</td>
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<td>Heather Himmelberger</td>
<td>Southwest Environmental Finance Center, Speaker Session 26</td>
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<td>Seiji Horita</td>
<td>City of Yokohama, Speaker Session 29</td>
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<td>Jim Horne</td>
<td>US EPA, Speaker Session 31</td>
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<td>Jillian Hostenske</td>
<td>Sammamish Plateau Water &amp; Sewer District, Speaker Session 26</td>
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<td>Nikki Hoyt</td>
<td>Parker Water &amp; Sanitation District, Speaker Session 21</td>
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</table>
Dave Irish, Southgate Sanitation District, Speaker Session 31

Mazen Kawasmi, Freese and Nichols Inc, Speaker Session 18

Wainella Isaacs, University of South Florida, Speaker Session 10

Liz Kelly, Jacobs Engineering, Speaker Session 31

Jennifer Ivey, Carollo, Moderator Session 04

Madeline Kelsch, Los Angeles Department of Water and Power, Speaker Session 35

Dane Jablonsky, Arcadis, Speaker Workshop F

Patty Kennedy, City of Phoenix, Speaker Session 28

Azya Jackson, City of Los Angeles - PW/LASAN, Speaker Session 35

Ed Kerwin, Orange Water & Sewer Auth, Speaker Session 02

Tracy Jarrett, City of Olathe, Speaker Session 27

Salil Kharkar, DC Water, Moderator Session 13

Jarred Jones, North Charleston Sewer District, Speaker Session 06

David Kinchen, Burns & McDonnell, Speaker Workshop E

Marianne Langridge, Sustainable Synthesis, Moderator Session 02

Marianne Langridge, Sustainable Synthesis, Moderator Session 02

Yann Le Gouellec, Newport News Waterworks, Speaker Session 14

Drew Lehman, Environment and Education, Speaker Session 10

Jonathan Leung, Los Angeles DWP, Speaker Session 16

Danielle Logsdon, Yorba Linda Water District, Speaker Session 32

Paul Longo, Dewberry, Speaker Session 22

Nina Love, DC Water, Speaker Session 13

Elizabeth Lowell, HDR, Speaker Session 13

Andrew MacDonald, Harris & Associates, Speaker Session 19

Marianne Langridge, Sustainable Synthesis, Moderator Session 02

Ted Lam, East Bay Municipal Utilities District, Speaker Workshop B

Ting Lu, Clean Water Services, Speaker Workshop B

Andrew MacDonald, Harris & Associates, Speaker Session 19
Jeff Macomber, Hazen and Sawyer, Speaker Session 32

Jay Madigan, Brown and Caldwell, Speaker Workshop D

Liliana Maldonado, Alexandria Renew Enterprises, Speaker Session 20

Carol Malesky, Stantec, Speaker Session 08

Matthew Manchisi, Hazen and Sawyer, Moderator Session 20

Donna Mancuso, Suffolk County Water Authority, Moderator Session 16

Michael Martin, Milwaukee Metropolitan Sewerage District, Moderator Session 22, Speaker Session 27

John Mastracchio, Raftelis Financial Consultants, Speaker Session 36

Paul Matthews, Tualatin Valley Water District, Speaker Session 08

Ed McCormick, McCormick Strategic Water, Moderator Session 11

Billy McCrory, Mobile Area Water & Sewer System, Speaker Session 08

Lisa McFadden, Water Environment Federation, Speaker Workshop A

Michael McGill, WaterPIO, Speaker Session 24

Rich McGillis, Raftelis Financial, Speaker Session 15, 26

Michael McGrath, Fairfax County Wastewater Management Program, Speaker Session 09

Michael McGuire, MJM, Inc., Speaker Session 24

Melissa Meeker, Gwinnett County - Department of Water Resources, Speaker Session 02

Getachew Melsew, DC Water, Speaker Session 25, 35

Madison Merzlyakov, Great Lakes Water Authority, Speaker Session 11

Stephen Miksis, RVSD, Speaker Workshop B

Palencia Mobley, Detroit Water and Sewerage Department, Speaker Session 03, 05

Ian Morgan, Moulton Niguel Water District, Speaker Session 06

Kevin Morley, American Water Works Association, Speaker Workshop A, Session 07

Ryan Nagel, Hazen and Sawyer, Speaker Workshop D, Moderator Session 03

Per Henrik Nielsen, VCS Denmark, Speaker Session 28

Eva Nieminski, Utah Division of Drinking Water, Speaker Workshop C

Marty Norton, USDA Rural Development, Speaker Session 12

Kanwal Oberoi, Charleston Water System, Speaker Workshop C
Chelsea Odle, Central Arkansas Water, Speaker Session 20

Andrew Ohrt, West Yost Associates, Speaker Session 07

Kyle Okamura, City of Henderson, Speaker Session 21

Margaret Oloriz, Arcadis, Speaker Session 28

Billie Owens, Parker Water & Sanitation District, Speaker Session 21

Brian Owsenek, UOSA, Speaker Session 05

Jeff Oxenford, Stratus Consulting, Speaker Workshop B

John Page, City of Olathe, KS, Speaker Session 27

Ganesh Pai, EMA, Inc., Speaker Session 14

Alexander Palmatier, HDR, Speaker Session 22

Mark Panny, Carollo, Speaker Session 04

Scott Parker, Kansas City Water, Speaker Session 14, 25

Robert Parks, Independence Water, Moderator Session 27

Tim Payne, EMA, Inc., Speaker Session 05, Moderator Session 06

James Perry, Utilis Inc., Speaker Session 05

Sharon Peters, EMA Canada Inc., Speaker Workshop B

Heather Pohl, San Francisco Public Utilities Commission, Speaker Workshop B

Mark Poling, Clean Water Services, OR, Speaker Session 25

David Purkiss, NSF, Coordinator Workshop C

Julie Quigley, The Pittsburgh Water and Sewer Authority, Speaker Session 01

Fazle Rabbi, Houston Water, Speaker Session 32

Grant Rabon, Newgen Strategies & Solutions, Speaker Session 12

Aditya Ramamurthy, Kennedy Jenks, Moderator Session 05

Robert Raucher, Raucher LLC, Speaker Session 07, 18

Karen Raucher, Raucher LLC, Speaker Session 30

Curt Rayer, San Jose Water, Speaker Workshop B

Bob Reilly, EMA Inc., Speaker Session 07, 17

Matthew Ries, DC Water, Moderator Session 24, 29, Speaker Session 28

William Rivers, EMA, Speaker Session 16

Carolyn Ross, City of Charlotte, Utilities Department, Speaker Session 10

Sarah Rossetto, Katz & Associates, Speaker Session 19
Frank Roth, Albuquerque
Bernalillo County
Water Authority,
Speaker Workshop F

Michael Rotunno, Arcadis, Moderation Session 09

Matthieu Roussillon, Carollo, Speaker Session 34

Dave Sadamoto, Metropolitan Water District of Southern California, Speaker Workshop F

Eric Scherch, HDR, Speaker Session 33

Margaret Schneemann, Illinois-Indiana Sea Grant, Speaker Session 12

Robert Scott, Valley Water (formerly Santa Clara Valley Water District), Speaker Workshop B

Allan Scott, HDR Inc, Speaker Session 03

Daniel Scrutchfield, Arcadis, U.S., Speaker Session 23

Phillip Segura, Denver Water, Moderator Session 14, Speaker Session 29

Phillip Sexton, North Charleston Sewer District, Moderator Session 15, Speaker Session 23

Chi Ho Sham, Eastern Research Group, Speaker Workshop C

Usha Sharma, Denver Water, Coordinator Session 36

Brian Shell, WSP USA, Moderator Session 08

Carissa Shelley, Murraysmith, Speaker Session 27

Kara Shuror, City of Fort Worth Water Dept, Speaker Workshop D

Kevin Simmonds, Orange County Utilities, Speaker Session 25

Kevin Slaven, Arcadis, Speaker Workshop F

Doug Spiers, Westin Technology Solutions, Coordinator Workshop D

David St Pierre, Westin, Speaker Workshop A

Charles Stevens, KC Water, Speaker Session 22

Benjamin Stewart, Stantec, Speaker Session 04, 08

Areeba Syed, Metropolitan Water District of Southern California, Moderator Session 26

Karen Synder, Katz & Associates, Speaker Session 30

Manny Teodoro, Texas A&M University, Speaker Session 12

Martin Tower, Austin Water, Speaker Session 17

Gary Trachtman, Arcadis Speaker Session 03

Laura Underwood, American Water, Speaker Session 21
Bill Van Derveer, Stantec Consulting Services Inc., Speaker Session 08

Pieter Van Ry, South Platte Water Renewal Partners, Speaker Workshop E, Moderator Session 07

Ifetayo Venner, Arcadis, Speaker Session 10

Samantha Villegas, APR, Raftelis, Speaker Session 30

Zdenko Vitasovic, 9D Analytics, Speaker Session 34

Rebecca West, RFW Consulting Services, Moderator Session 18

Tammy Whipple, Sammamish Plateau Water, Speaker Session 31

Vicki White, City of Henderson, Speaker Session 21

Corey Williams, Optimatics, Coordinator Workshop A

Taylor Winchell, Denver Water, Speaker Session 36

Gerard Yates, Central Utah Conservancy District, Speaker Workshop C, Moderator Session 35

Sharon Yin, Orange County Sanitation District, Speaker Session 15

Megan Yoo Schneider, Seven Management & Consulting, Moderator Session 33
CONFERENCE SCHEDULE AT-A-GLANCE

**Tuesday, February 25**

- 7:30 AM – 5:00 PM  Registration
- 8:30 AM – 5:00 PM  Workshops A & B
- 8:30 AM – 12:00 PM Workshops C & D
- 1:30 PM – 5:00 PM  Workshops E & F

**Wednesday, February 26**

- 7:30 AM – 5:00 PM  Registration
- 8:30 AM – 10:00 AM Opening General Session
- 10:30 AM – 12:00 PM Technical Sessions 1, 2, 3, 4
- 12:00 PM – 1:30 PM  Networking Luncheon
- 1:30 PM – 3:00 PM  Technical Sessions 5, 6, 7, 8
- 3:30 PM – 5:00 PM  Technical Sessions 9, 10, 11, 12
- 5:00 PM – 6:30 PM  Networking Reception

**Thursday, February 27**

- 8:00 AM – 5:00 PM  Registration
- 8:30 AM – 10:00 AM Technical Sessions 13, 14, 15, 16
- 10:30 AM – 12:00 PM Technical Sessions 17, 18, 19, 20
- 12:00 PM – 1:30 PM  Lunch on Own
- 1:30 PM – 3:00 PM  Technical Sessions 21, 22, 23, 24
- 3:30 PM – 5:00 PM  Technical Session 25, 26, 27, 28
- 5:00 PM – 6:00 PM  Social Event with Speakers

**Friday, February 28**

- 8:00 AM – 12:00 PM Registration
- 8:30 AM – 10:00 AM Technical Sessions 29, 30, 31, 32
- 10:30 AM – 12:00 PM Technical Sessions 33, 34, 35, 36
Sustainability Efforts throughout the Hyatt Regency Orange County:

- Window tinting film installed on glass in the atrium lobby to reduce solar heat load by 63%
- Participation in Southern California Edison’s Demand Bidding Program
- Recycling bins provided in all guestrooms and throughout the hotel
- Turn off lights and HVAC when meeting room, guestroom or office is not occupied
- Utilize thermal storage tanks to reduce chiller run time by 15% in cooler months
- Chilled water setting based on desired return temperature of 52 - 53° to reduce energy consumption
- Water dispensing items rated as conservation devices: Low-flow toilets, showerheads and faucets
- Compact fluorescent lights in guestrooms and T8 fluorescent bulbs in service halls and offices
- Recycle paper, cardboard, plastic and glass
- Proper disposal of hazardous waste such as bulbs, batteries and computer hardware
- Multiple employee incentive programs for ride-sharing and conserving energy within the hotel

Food & Beverage Efforts

- Organic rooftop herb garden
- Strive to reduce food waste by accurately forecasting food quantity needs
- Provide condiments in bulk, and beverages in pitchers rather than individual containers if possible
- Purchase local and organic foods when possible

Housekeeping Efforts

- Each room is equipped with a digital thermostat set at 72°
- The drapes are closed to 12 inches to save on air conditioning
- Use of Green Safe Cleaning Products deemed environmentally safe
- Linen and terry cloth are washed every three days in stay-over rooms, unless otherwise requested

Introducing the Green Team

A hotel committee created with a commitment to conserve and protect the environment by ensuring that our hotel is reducing waste and conserving energy to its fullest potential.
UPCOMING EVENTS

WEF Odors and Air Pollutants Conference 2020
March 15-18, 2020
Cincinnati, Ohio
www.wef.org/OdorsAir

WEF National Stormwater Symposium 2020
March 15-17, 2020
Cincinnati, Ohio
www.wef.org/NationalStormwater

AWWA Membrane Technology Conference & Exposition
March 16-20, 2020
Phoenix, Arizona
www.awwa.org/Events-Education/Membrane-Technology

AWWA Sustainable Water Management Conference
March 29-April 1, 2020
Minneapolis, Minnesota
www.awwa.org/Events-Education/Sustainable-Water-Management

WEF Residuals and Biosolids Conference 2020
March 31-April 3, 2020
Minneapolis, Minnesota
www.wef.org/ResidualsBiosolids

AWWA International Symposium on Inorganics
April 14-15, 2020
Denver, Colorado
www.awwa.org/Events-Education/Inorganics

ACE 2020
June 14-17, 2020
Orlando, Florida
www.awwa.org/ace

WEF Collection Systems Conference 2020
June 2-5, 2020
El Paso, Texas
www.wef.org/CollectionSystems

Continued on following page
WEF/AWWA Transformative Issues Symposium on Communications 2020
August 17-19, 2020
Cincinnati, Ohio
www.awwa.org/Events-Education/Communications

WEFTEC 2020
October 3-7, 2020
New Orleans, Louisiana
www.weftec.org

AWWA Water Infrastructure Conference & Exposition
November 2-5, 2020
Philadelphia, Pennsylvania
www.awwa.org/Events-Education/Water-Infrastructure

AWWA/SWAN International Smart Water Symposium
November 10-11, 2020
Austin, Texas
www.awwa.org/Events-Education/Smart-Water

AWWA Water Quality Technology Conference & Exposition
November 16-19, 2020
Schaumberg, Illinois
www.awwa.org/Events-Education/Water-Quality-Technology

For more information, visit www.awwa.org/events-education or www.wef.org/events/all-events/.
Local Connections, Global Ideas

Our clients face tough decisions with limited resources. That’s why we support leading water associations—like AWWA and WEF—to help make great things possible for our industry.

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