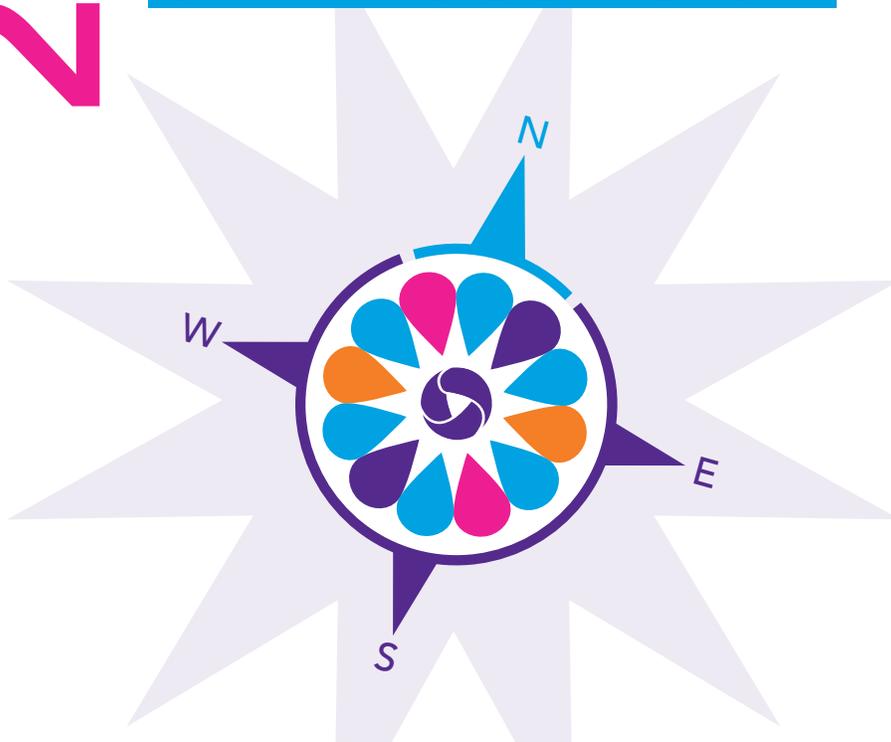


VIRTUAL ON-DEMAND  
PROGRAM



**2022** WaterReuse  
**SYMPOSIUM**  
SHAPING OUR PAST &  
**CHARTING OUR FUTURE**



IN COLLABORATION WITH THE WATER RESEARCH FOUNDATION

# Welcome to the 37th Annual WaterReuse Symposium

Dear Symposium Attendee:

The WaterReuse Association and The Water Research Foundation are pleased to welcome you to the 2022 WaterReuse Symposium! This year's theme, *Water Reuse: Shaping Our Past & Charting Our Future*, is a call to action for the water reuse community to apply available research and innovation to address the urgency of our changing Earth, including floods, fires, droughts, and pandemics.

Our Symposium kicks off with a keynote presentation from The Honorable Tanya Trujillo, Assistant Secretary for Water and Science in the United States Department of the Interior. Assistant Secretary Trujillo oversees the U.S. Geological Survey and Bureau of Reclamation and leads the Interior Department's efforts to address the country's worsening drought conditions.

San Antonio is a long-time leader in water reuse, and we invite you to learn from this city's accomplishments during locally focused tours, events, and plenary sessions. Beyond our strong foundation in Texas, this Symposium also takes an expanded look at water reuse in unexpected geographical locations. Join us for plenary sessions about different regional drivers and strategies, building-scale water reuse innovations nationwide, and more.

This year, our program features nearly 70 hours of technical content and provides the opportunity for

over 55 professional development hours. WaterReuse and The Water Research Foundation continue to combine our strengths and bring you a comprehensive program that offers both practical approaches and theoretical considerations for the future of water recycling. You'll see an icon throughout the program that signifies which technical sessions align with Water Research Foundation projects, as well as which sessions align with National Water Reuse Action Plan efforts. You'll also see technical sessions demarcated by which project lifecycle phase they're most relevant to: Conceptual, Planning, Design & Construction, or Implementation & Operation.

We are overjoyed to see many of you joining us at this year's Symposium. For those participating in-person, please review our COVID-19 protocols at [watereuse.org/COVID](http://watereuse.org/COVID). We request that all attendees wear a mask while indoors at the Symposium. We are also excited to offer a robust on-demand virtual Symposium, available from March 21 through April 30, 2022.

Thank you again for your participation. Please do not hesitate to contact Symposium staff if you need any assistance throughout your Symposium experience. We look forward to seeing you again next March—in Atlanta, Georgia!



**PATRICIA SINICROPI**  
Executive Director  
WaterReuse Association



**PETER GREVATT**  
Chief Executive Officer  
The Water Research  
Foundation

# RESOURCES TO SUPPORT YOUR EXPERIENCE

## PROFESSIONAL DEVELOPMENT

The 37th Annual WaterReuse Symposium is pleased to offer Professional Development Hours (PDHs) for all states. It is the attendee's responsibility to follow up with state accreditation agencies to see whether you qualify.

### How Do I Earn Educational Credits at the Symposium?

The 37th Annual WaterReuse Symposium PDH/CEU request form is available at the registration desk. Please complete the form and return the form to the registration desk before the end of the Symposium.

### When Will I Receive Credits for the Symposium?

Certificates will be emailed to participants within 3-4 weeks after the Symposium. It is the attendee's responsibility to submit the certificates to state accreditation agencies to request credit.

### General Information

Terminology and education credit requirements and restrictions vary widely. All participants are responsible for checking with their license/certification authority to ensure that the WaterReuse technical sessions meet specific requirements.

## POWERPOINT PRESENTATIONS

A link will be emailed to all Symposium attendees at the conclusion of the conference for access to the Power-Point presentations.

GUIDE TO WATEREUSE SYMPOSIUM TECHNICAL SESSIONS					
					
PROJECT PHASE: CONCEPTUAL	PROJECT PHASE: PLANNING	PROJECT PHASE: DESIGN & CONSTRUCTION	PROJECT PHASE: IMPLEMENTATION & OPERATION	ALIGNS WITH: NATIONAL WATER REUSE ACTION PLAN EFFORTS	ALIGNS WITH: THE WATER RESEARCH FOUNDATION EFFORTS

# SUNDAY, MARCH 6

9:00 pm - 1:00 pm	<b>TOUR OF STEVE CLOUSE WATER RECYCLING CENTER</b> SPONSOR: ARCADIS			
	<b>INNOVATION IN REUSE</b> SALON JK	<b>ACHIEVING TREATMENT REMOVAL</b> SALON LM Moderator: Martin Rumbaugh, AECOM		
1:00 pm - 3:00 pm	<b>Multi-point Ozone Dissolution for Bromate Control &amp; Trace Contaminant Oxidation</b> Robert Pearce, Virginia Tech 	<b>A Scientific Evaluation of Pathogen Removal Credits in MAR Systems</b> Tanja Rauch-Williams, Carollo Engineers 	<div style="border: 1px solid black; padding: 5px; text-align: center; background-color: #4a4a8a; color: white; margin-bottom: 10px;"> <b>WORKSHOP</b> </div> <b>DEVELOPING A NATIONWIDE WATER REUSE RESEARCH ROADMAP</b> SALON CD <b>Presented by The Water Research Foundation</b> <div style="text-align: center; margin: 10px 0;">  </div> Speakers: Shane Trussell, Trussell Tech; Vijay Sundaram, AECOM; Erin Mackey, Brown & Caldwell; Troy Walker, Hazen and Sawyer; Andy Salveson, Carollo; Eva Steinle-Darling, Carollo; Trent Stober, HDR  Facilitators: Greta Zornes, CDM; Samir Mathur, CDM; Jean Debroux, Kennedy Jenks; Jeff Mosher, SAWPA; Steve Katz, Suez; Chris Hill, AECOM; Brian Pecson, Trussell Tech; Denise Funk, Brown & Caldwell; Zeynep Erdal, Black & Veatch; Greg Wetterau, CDM; Dave Smith, Water Innovation Services/US EPA (retired); Rob McCandless, Brown & Caldwell; Erin Messner, AWWA; Pinar Balci, NYDEP; Aliza Furneaux, WateReuse; Haley Falconer, City of Boise; Julie Minton, WRF; Katie Spahr, WRF; Erin Partlan, WRF; Lyndsey Bloxom, WRF	<div style="border: 1px solid black; padding: 5px; text-align: center; background-color: #4a4a8a; color: white; margin-bottom: 10px;"> <b>WORKSHOP</b> </div> <b>WATER REUSE 101 – BOOTCAMP</b> SALON AB <b>Sponsored by Carollo</b> Moderator: Ellen McDonald, Plummer <b>What is Reuse?</b> Eva Steinle-Darling, Carollo <b>Determining Need</b> Juan Gomez, San Antonio Water Systems <b>Paying for Reuse</b> Collins Balcombe, BOR <b>Reuse Regulations</b> Ellen McDonald, Plummer <b>Case Studies</b> Tracy Clinton, Carollo <b>Building Public Support</b> Christina Montoya, El Paso Water
	<b>On-Site Residential Graywater Reuse in San Francisco Apartment Building</b> Jeff Danner, Innovatreat 	<b>Enhancing 1,4-Dioxane Removal with Co-Metabolic Biofiltration for Potable Reuse</b> Hannah Stohr, Hampton Roads Sanitation District 		
	<b>Data Analytics Practices for Efficient Water and Wastewater Management</b> Guy Meiri, IOSight			
3:00 pm - 3:30 pm	<b>NETWORKING BREAK</b> SPONSOR: DIGITAL REALTY			

SUNDAY, MARCH 6

	<p><b>ACHIEVING TREATMENT REMOVAL</b> SALON LM</p> <p>Moderator: Bohdan Bodniewicz, AECOM</p>		
<p>3:30 pm - 5:00 pm</p>	<p><b>WWTP Effluent Reuse: Multibarrier Ozonation &amp; Ceramic Membrane Filtration</b></p> <p>Martin Spruijt, PWN Technologies</p>  <p><b>More is Better: Potable Reuse Pilot Study to Maximize Water Production with FRRO</b></p> <p>Ronit Erlitzki, Chart Industries; Megan Plumlee, Orange County Water District</p>  <p><b>Microbial Community Structure and Dynamics in Ozone-BAC System for Potable Reuse</b></p> <p>Sunayna Dasgupta, American Water Works Service Company Inc; Dr. Zia Bukhari, American Water Works Service Company Inc.</p> 	<p><b>WORKSHOP</b></p> <p><b>DEVELOPING A NATIONWIDE WATER REUSE RESEARCH ROADMAP</b></p> <p>SALON CD</p> <p><b>Presented by</b> <b>The Water Research Foundation</b></p>  <p>Speakers: Shane Trussell, Trussell Tech; Vijay Sundaram, AECOM; Erin Mackey, Brown &amp; Caldwell; Troy Walker, Hazen and Sawyer; Andy Salveson, Carollo; Eva Steinle-Darling, Carollo; Trent Stober, HDR</p> <p>Facilitators: Greta Zornes, CDM; Samir Mathur, CDM; Jean Debroux, Kennedy Jenks; Jeff Mosher, SAWPA; Steve Katz, Suez; Chris Hill, AECOM; Brian Pecson, Trussell Tech; Denise Funk, Brown &amp; Caldwell; Zeynep Erdal, Black &amp; Veatch; Greg Wetterau, CDM; Dave Smith, Water Innovation Services/US EPA (retired); Rob McCandless, Brown &amp; Caldwell; Erin Messner, AWWA; Pinar Balci, NYDEP; Aliza Furneaux, WaterReuse; Haley Falconer, City of Boise; Julie Minton, WRF; Katie Spahr, WRF; Erin Partlan, WRF; Lyndsey Bloxom, WRF</p>	<p><b>WORKSHOP</b></p> <p><b>WATER REUSE 101 – BOOTCAMP</b></p> <p>SALON AB</p> <p><b>Sponsored by</b> <b>Carollo</b></p> <p>Moderator: Ellen McDonald, Plummer</p> <p><b>What is Reuse?</b> Eva Steinle-Darling, Carollo</p> <p><b>Determining Need</b> Juan Gomez, San Antonio Water Systems</p> <p><b>Paying for Reuse</b> Collins Balcombe, BOR</p> <p><b>Reuse Regulations</b> Ellen McDonald, Plummer</p> <p><b>Case Studies</b> Tracy Clinton, Carollo</p> <p><b>Building Public Support</b> Christina Montoya, El Paso Water</p>
<p>5:30 pm - 7:00 pm</p>	<p><b>WELCOME RECEPTION: WELCOME TO TEXAS</b></p> <p>SPONSORS: EL PASO WATER, FREESE AND NICHOLS, GULF COAST AUTHORITY, PLUMMER, TRINITY RIVER AUTHORITY OF TEXAS, &amp; WATEREUSE TEXAS</p>		

# MONDAY, MARCH 7

8:00 am -  
10:00 am

## OPENING GENERAL SESSION - SALON IG SPONSORED BY AECOM

### Light Breakfast and Welcome

Craig W. Lichty P.E., Vice President, Client Director, Black & Veatch, WateReuse President

### Keynote Presentation

The Honorable Tanya Trujillo, Assistant Secretary for Water and Science, United States Department of the Interior

### Panel Discussion

Water Reuse & Integrated Planning – The San Antonio Story: Exploring the Drivers, Benefits, and Challenges of a One Water Strategy

Moderator: Craig W. Lichty P.E., Vice President, Client Director, Black & Veatch, WateReuse President

Melissa Bryant, P.E., Director of Technical Services, San Antonio River Authority

Erika Crespo, Assistant Deputy Director of the Water Quality Division, Texas Commission on Environmental Quality

Gregg Eckhardt, Senior Analyst, San Antonio Water System

Nefi Garza, P.E., Assistant Director of Public Works, City of San Antonio

10:00 am -  
10:30 am

## NETWORKING BREAK SPONSOR: JACOBS

### RETHINKING WATER'S FOOTPRINT

SALON AB

Moderator:

Emily O'Morrow,  
Brown & Caldwell

### FROM POLICY TO PRACTICE: WATER REUSE GUIDANCE & MORE

SALON CD

Moderator:  
Alex Franchi,  
AECOM

### INNOVATION IN POTABLE REUSE

SALON JK

Moderator:

Dave Ebersold,  
CDM

### ADVANCING COMMUNITY REUSE

SALON LM

Moderator:

Jim Pembroke,  
HDR

10:30 am -  
12:00 pm

### Tackling Water Conservation, Quality & Policy Evolution with District Reuse

Pinar Balci,  
NYCDEP;  
Bonnie Campbell,  
Two Trees;  
Alan Cohn,  
NYCDEP;  
Zach Gallagher,  
Natural Systems Utilities;  
Rick Petrosino,  
Natural Systems Utilities



### T-minus 10 & Counting: Navigating Florida's Elimination of Surface Discharges

Moderator:  
Robert Beltran,  
Dewberry  
David Ammerman,  
Altamonte Springs;  
Laura Donaldson,  
Manson Bolves;  
Donaldson Varn;  
Nory Hancock,  
Pinellas County;  
Lynn Spivey,  
Plant City;  
Bart Weiss,  
Hillsborough County;  
Wayne Young,  
JEA (invited);  
Tamara Richardson,  
Polk County (invited);



### The Future of Potable Reuse Using KPIs

Mahmudul Hasan,  
George Washington  
University;  
Stephen Katz,  
Suez;  
Justin Mattingly,  
EPA;  
Jeff Mosher,  
Santa Ana Watershed  
Project Authority;  
Kristin O'Neill,  
Stantec;  
Michael Watts,  
Garver



### Innovation in Florida WateReuse: Palm Beach County's Green Cay Project

Dave MacNevin,  
CDM Smith



### Benefits of a Large-Scale Recycled Water Project

Bruce Chalmers,  
Metropolitan Water District  
of Southern California



### Anne Arundel County, MD – Our wAAter Program: Advanced Water Treatment for MAR

Christina Alito,  
HDR;  
George Heiner,  
Anne Arundel County,  
Maryland Department of  
Public Works



# MONDAY, MARCH 7

12:00 pm -  
1:30 pm

## WATERUSE ANNUAL BUSINESS MEETING & LUNCHEON PLENARY - SALON IG SPONSORED BY STANTEC

### WaterReuse Association Business Meeting

Craig W. Lichty P.E., Vice President, Client Director, Black & Veatch, WaterReuse President State of the Association  
Patricia Sinicropi, Executive Director, WaterReuse Association

### Different Drivers, Different Strategies: Water Reuse in New Places

Karen Pallansch, Chief Executive Officer, Alexandria Renew Enterprises (Moderator)  
Jeff Glass, Director of Public Works, City of Westminster, Maryland (invited)  
Greg Goodwin, Applied Research Consultant, Bluefield Research  
David Niesse, Technical Services Officer, ReWa – Renewable Water Resources, South Carolina  
Brian Perkovitch, Executive Director, Metropolitan Water Reclamation District of Greater Chicago  
Rusty Smith, Director of the Texas Produced Water Consortium

### RETHINKING WATER'S FOOTPRINT

SALON AB

Moderator:  
Aaron Tartakovsky,  
Epic CleanTech

### FROM POLICY TO PRACTICE: WATER REUSE GUIDANCE & MORE

SALON CD

Moderator:  
Trent Stober,  
HDR

### INNOVATION IN POTABLE REUSE

SALON JK

Moderator:  
Stephen Katz,  
Suez

### BUILDING PARTNERSHIPS THROUGH COMMUNITY ENGAGEMENT, EDUCATION, & FINANCING

SALON LM

Moderator:  
Jaime Kypuros,  
Tetra Tech

1:45 pm -  
3:15 pm

### Water Reuse for Corporate Campus in Austin, TX

Katherine Jashinski,  
Austin Water;  
Eric Lohan,  
Sustainable Water/  
NextEra Energy;  
Bob Salvatelli,  
NextEra Distributed Water



### Advancing Water Reuse through Policy: Implementation of the Bipartisan Infrastructure Law

Deidre Finn,  
CIFIA;  
Greg Fogel,  
WaterReuse Association;  
Justin Mattingly,  
U.S. EPA;  
Yuliana Porras-Mendoza,  
Bureau of Reclamation



### When IPR Is Not Enough

Roshan Aflaki and  
Greta Zornes,  
CDM Smith;  
Bruce Chalmers,  
Metropolitan Water District  
of Southern California;  
Anselmo Collins,  
Los Angeles Department  
of Water and Power;  
Lynn Spivey,  
Plant City



### Bumpy Road or Smooth Ride? Strategies for Mobile DPR Demonstrations

Jason Assouline,  
Carollo Engineers;  
John Rehring,  
Carollo Engineers



### Building (& Rebuilding) Trust with Boise's Recycled Water Program

Royce Davis,  
City of Boise;  
Melanie Holmer,  
Brown and Caldwell;  
Natalie Monro,  
City of Boise



### Raise a Glass to Potable Reuse

Patrick Dube,  
Water Environment  
Federation



MONDAY, MARCH 7

	<b>RETHINKING WATER'S FOOTPRINT</b> SALON AB Moderator: Jeff Hansen, HDR	<b>FROM POLICY TO PRACTICE: WATER REUSE GUIDANCE &amp; MORE</b> SALON CD Moderator: Patrick Regan, DuPont	<b>INNOVATION IN POTABLE REUSE</b> SALON JK Moderator: Kathleen Peach, Suez	<b>DIGITAL INNOVATIONS</b> SALON LM
3:45 pm - 5:15 pm	<b>Case-Studies: Improving Industrial Water Footprints with Reuse</b> Christopher Kramer, JEA; Amelia Luna, Sherwood Engineers; Ken Martins, Stantec; Patrick Regan, DuPont Water Solutions; Bob Salvatelli, NextEra Distributed Water 	<b>Partnering: Accelerating Regional Integrated Water Management Solutions</b> Blaga Delic, AECOM; Ralph Exton, Suez Water Technologies and Solutions; Haley Falconer, City of Boise; Jon Freedman, SUEZ Water Technologies and Solutions; Jeff Mosher, Santa Ana Watershed Project Authority; Lydia Teel, Truckee Meadows Water Authority; Rick Warner, Warner and Associates 	<b>Approach to Implement the World's Largest Potable Reuse System – Hyperion 2035</b> Amos Branch, Carollo Engineers; Hubertus Cox, LASAN; Nasir Emami, LASAN; Zakir Hirani, Stantec; Roland Pilemalm, Carollo Engineers; Andrew Salveson, Carollo Engineers; Rueren Yu, Stantec 	<b>Cybersecurity Barriers to Innovation: Addressing Risk &amp; Innovation for Reuse</b> <b>Sponsored by Hazen and Sawyer and Zivaro</b> Ben Stanford, Hazen and Sawyer; Dan Weiske, Zivaro; Kevin Morley, AWWA; Mehul Patel, Orange County Water District 



## TUESDAY, MARCH 8

7:30 am -  
9:00 am

### AWARDS BREAKFAST AND PLENARY SESSION - SALON IG

SPONSORED BY BLACK & VEATCH

#### Annual WaterReuse Awards for Excellence

Craig W. Lichty P.E., Vice President, Client Director, Black & Veatch, WaterReuse President

#### Water Reuse Leaders Panel

Steve Johnson, Senior Vice President, Director of Strategy and Growth, AECOM Global Water

Heather Polinsky, Resilience Global President, Arcadis

Dave Ross, Partner, Troutman Pepper

Karine Rouge, CEO Municipal Water, Veolia North America

Joseph P. Vesey, Senior Vice President & Chief Marketing Officer, Xylem

Cindy Wallis-Lage, Executive Director, Black & Veatch

#### INNOVATION IN POTABLE REUSE

SALON AB

Moderator:  
Robert Fowlie,  
CDM

#### INNOVATIVE APPROACHES TO WATER RECYCLING

SALON CD

Moderator:  
Ufuk Erdal,  
Arcadis

#### OPTIMIZING TREATMENT, OPERATIONS, & MORE

SALON JK

Moderator:  
Michael Priest,  
Stantec

#### MONITORING, MODELING, & ASSESSING RISK

SALON LM

Moderator:  
Jocelyn Lu,  
Brown & Caldwell

9:00 am -  
10:00 am

#### Bureau of Reclamation Advanced Water Treatment Research Roadmap

Yuliana Porras Mendoza,  
Bureau of Reclamation



#### One Water: What Does It Mean to You?

Moderator:  
Sara Katz,  
Katz & Associates

Daniel Nix,  
City of Wichita Falls;  
Paula Paciorek,  
City of Houston;  
Kevin Critendon;  
Austin Water;  
Sam Marie Hermitte;  
Texas Water  
Development Board;  
Peter Grevatt,  
The Water Research Foundation



#### Innovation in Oxidation for Reuse: A Seamless Pipeline

Erin Mackey,  
Brown and Caldwell;  
Christina Morrison,  
Southern Nevada  
Water Authority;  
Erin Partlan,  
Water Research Foundation;  
Eric Wert,  
Southern Nevada  
Water Authority;  
Andrea White,  
Moleaer



#### Off the Roof: Measuring Microbial Characteristics of Roof Runoff

Jumana Aljafari,  
Colorado State University



#### Evaluation of the Key Factors Impacting DPR Treatment & Risk

Anya Kaufman  
and Brian Pecson,  
Trussell Technologies;  
Adam Olivieri,  
EOA, Inc.



#### Quantitative Relative Chemical Assessment: Filling the Gap

Melanie Holmer,  
Brown and Caldwell;  
Christopher Jones,  
Brown and Caldwell;



10:00 am -  
10:30 am

### NETWORKING BREAK

SPONSOR: NEXTERA DISTRIBUTED WATER

## TUESDAY, MARCH 8

	<b>INNOVATION IN POTABLE REUSE</b> SALON AB Moderator: Heather Tugaoen, Stantec	<b>INNOVATIVE APPROACHES TO WATER RECYCLING</b> SALON CD Moderator: Naomi Jones, McCarthy	<b>OPTIMIZING TREATMENT, OPERATIONS, &amp; MORE</b> SALON JK	<b>MONITORING, MODELING, &amp; ASSESSING RISK</b> SALON LM Moderator: Jonathan Vorheis, Jacobs
10:30 am - 12:00 pm	<p><b>Preliminary Design &amp; Cost Estimate of a Direct Potable Reuse Plant in AZ</b></p> <p>Alyssa Aligata, Bureau of Reclamation</p> 	<p><b>Risk-Based Guidance for Onsite Non-Potable Reuse: Progress &amp; Opportunities</b></p> <p>Jay Garland, EPA; Kerry Hamilton, Arizona State University; Michael Jahne, EPA; Anya Kaufman, Trussell Technologies; Sybil Sharvelle, Colorado State University</p>  	<p><b>Demonstrating Greater LRVs Across NF &amp; RO Membranes—Results from WRF 4958</b></p> <p>Hannah Ray, Southern Nevada Water Authority; Han Gu, Orange County Water District; James Vickers, Separation Processes, Inc.; Jason Assouline, Carollo Engineers; Megan Plumlee, Orange County Water District; Eric Dickenson, Southern Nevada Water Authority; Chris Bellona, Colorado School of Mines; Tom Seacord, Carollo Engineers</p>  	<p><b>Quantitative Microbial Risk Assessment of Water Reuse</b></p> <p>Karla Mendez, UTHealth Houston School of Public Health</p> 
	<p><b>Los Angeles' Headworks DPR Project: Implementing Direct Potable Reuse</b></p> <p>Erik Avila and Brianna Plancarte, Los Angeles Department of Water and Power</p> 			<p><b>Effective Online Microbial Monitoring for Onsite Water Reuse</b></p> <p>Sheng Chu and Zach Gallagher, Natural Systems Utilities; Cody Ray, LuminUltra Technologies, Ltd</p> 
	<p><b>Identifying WRRF Impacts on AWT Performance (WRF 4833 Module A)</b></p> <p>Kelly Landry, Hazen and Sawyer</p>  			<p><b>EEM-PARAFAC – Monitoring Organic Matter Through the Potable Water Cycle</b></p> <p>Katherine Bell, Brown and Caldwell</p>  

## TUESDAY, MARCH 8

12:15 pm -  
1:30 pm

### PLENARY LUNCHEON - SALON IG SPONSOR: SUEZ

#### Onsite Water Reuse Systems Showcase: Building-Scale Innovation that Benefits the Entire Community

Facilitator: Greta Zornes, Water Reuse Practice Leader, CDM Smith

Wendy Broley, Vice President, Brown and Caldwell

Kevin Critendon, Assistant Director, Environmental, Planning and Development, Austin Water

Zach F. Gallagher, PE, LEED AP, President & COO, Natural Systems Utilities

Bob Salvatelli, Director, Water Origination, NextEra Distributed Water (formerly Sustainable Water)

Drew Wenzel, District Systems Water Lead, Google Real Estate

#### INNOVATIVE APPROACHES TO WATER RECYCLING SALON AB

#### OPTIMIZING TREATMENT, OPERATIONS, & MORE SALON CD

#### COLLABORATING IS KEY SALON JK

#### NAVIGATING EVOLVING REGULATIONS SALON LM

1:45 pm -  
3:15 pm

#### Advancing Stormwater Capture & Use Policy, Research, & Action Priorities

Justin Mattingly,  
EPA;  
Dave Smith,  
Water Innovation Services/  
US EPA (retired)



#### Reuse as a Water Quality Compliance Strategy: Challenges & Opportunities

Scott Mansell,  
Clean Water  
Services



#### Demonstration of an MBR-RO Based Treatment Train for Regional Reuse

Amos Branch,  
Carollo Engineers;  
George Di Giovanni,  
Metropolitan Water District of  
Southern California;  
Lysa Gaboudian,  
Los Angeles County  
Sanitation District;  
Zakir Hirani,  
Stantec;  
Joyce Lehman,  
Metropolitan Water District  
of Southern California



#### Increasing Water Resiliency through Collaboration in North Central Texas

Glenn Clingenpeel,  
Trinity River Authority;  
Ellen McDonald,  
Plummer;  
R.J. Muraski,  
North Texas Municipal  
Water District;  
Denis Qualls,  
City of Dallas Water Utilities;  
Nicole Rutigliano,  
Tarrant Regional Water District;  
Shannon Spurlock,  
Ochotona



#### Comparison of Potable Reuse Regulations and Impacts to Project Implementation

Larry Schimmoller,  
Jacobs



#### Permitting a Potable Reuse System in the Midst of Regulatory Change in Florida

Jo Ann Jackson,  
Black & Veatch;  
Ryan Popko,  
JEA



#### Collaboration in Action: Colorado DPR Rulemaking Process

Austa Parker,  
Brown and Caldwell



3:15 pm -  
3:45 pm

### NETWORKING BREAK SPONSOR: ATKINS

TUESDAY, MARCH 8

	INNOVATIVE APPROACHES TO WATER RECYCLING SALON AB	OPTIMIZING TREATMENT, OPERATIONS, & MORE SALON CD	COLLABORATING IS KEY SALON JK	NAVIGATING EVOLVING REGULATIONS SALON LM Moderator: Roshan Aflaki, CDM
3:45 pm - 5:15 pm	<p><b>Evidence from Consumer Willingness-to-Pay Studies: New Approaches to Water Reuse</b></p> <p>Sara Katz, Katz and Associates; Maik Kecinski, University of Delaware; Kent Messer, University of Delaware; Mark Millan, Data Instincts</p> 	<p><b>Operational Considerations &amp; Insights for Reliable CBAT</b></p> <p>Robert Angelotti, Upper Occoquan Service Authority; Gayathri Ram Mohan, Gwinnett County DWR; Germano Salazar-Benites, Hampton Roads Sanitation District; Vijay Sundaram, AECOM; Lydia Teel, Truckee Meadows Water Authority</p>	<p><b>Multi-Agency Reuse Programs: Lessons for Successful Collaboration</b></p> <p>Felicia Marcus, Stanford University; Eric Rosenblum, EnviroSpectives; David Smith, Water Innovation Services/USEPA (retired); Shannon Spurlock, Ochotona</p>	<p><b>Making Reuse Work – NPDES Permit Case Studies for EPA WRAP Action Item 2.2.6</b></p> <p>Melanie Holmer, Brown and Caldwell; Emily Rimmel, NACWA; Patricia Whitby, Brown and Caldwell</p> <p><b>Produced Water Reuse Efforts in Support of the National Water Reuse Action Plan</b></p> <p>Mike Hightower, New Mexico Produced Water Research Consortium</p>   <p><b>Regulatory Challenges for Reuse of Produced Water via Land Application</b></p> <p>Amy Hardberger, Texas Tech University; Nichole Saunders, Environmental Defense Fund</p>  
6:30 pm - 9:00 pm	<p><b>AN EVENING AT KNIBBE RANCH</b>            VENUE SPONSOR: XYLEM            FIREWORKS SPONSOR: MCCARTHY            BUS SPONSOR: SUNDT            MUSIC SPONSOR: NACWA</p>			

## WEDNESDAY, MARCH 9

8:00 am -  
8:45 am

### **BREAKFAST PLENARY SESSION - SALON IG**

#### **Welcome**

Bart Weiss, Chief Officer, Innovation and Resiliency, Hillsborough County Public Utilities (Florida), and Vice President, WateReuse Board of Directors

#### **The Federal Government's Role in Promoting Reuse**

Sharon Nappier, PhD, MSPH, National Program Leader for Water Reuse, US EPA – Office of Water  
Yuliana Porras-Mendoza, Advanced Water Treatment Research Coordinator, Bureau of Reclamation  
Martin Page, Operational Water Research Team Leader, Department of Defense

8:50 am -  
9:00 am

### **REPORT OUT: WRAP ACTION 2.2, REGULATOR STATE SUMMIT PLANNING - SALON IG**

9:05 am -  
11:45 am

### **CLOSING SESSION - SALON IG**

SPONSORED BY CDM SMITH

#### **Reuse in the One Water Research Portfolio**

Peter Grevatt, Chief Executive Officer, The Water Research Foundation

#### **Running Towards the Hard Topics: Capturing and Communicating the Resiliency and Equity Value of Water Reuse**

Facilitator: H.G. Chissell, Founder and Chief Executive Officer, Advanced Energy Group  
Steven Clouse, Senior Vice President & Chief Operating Officer, San Antonio Water System  
Sharon Nappier, National Program Leader for Water Reuse, U.S. Environmental Protection Agency  
Deven Upadhyay, Chief Operating Officer and Assistant General Manager, Metropolitan Water District of Southern California

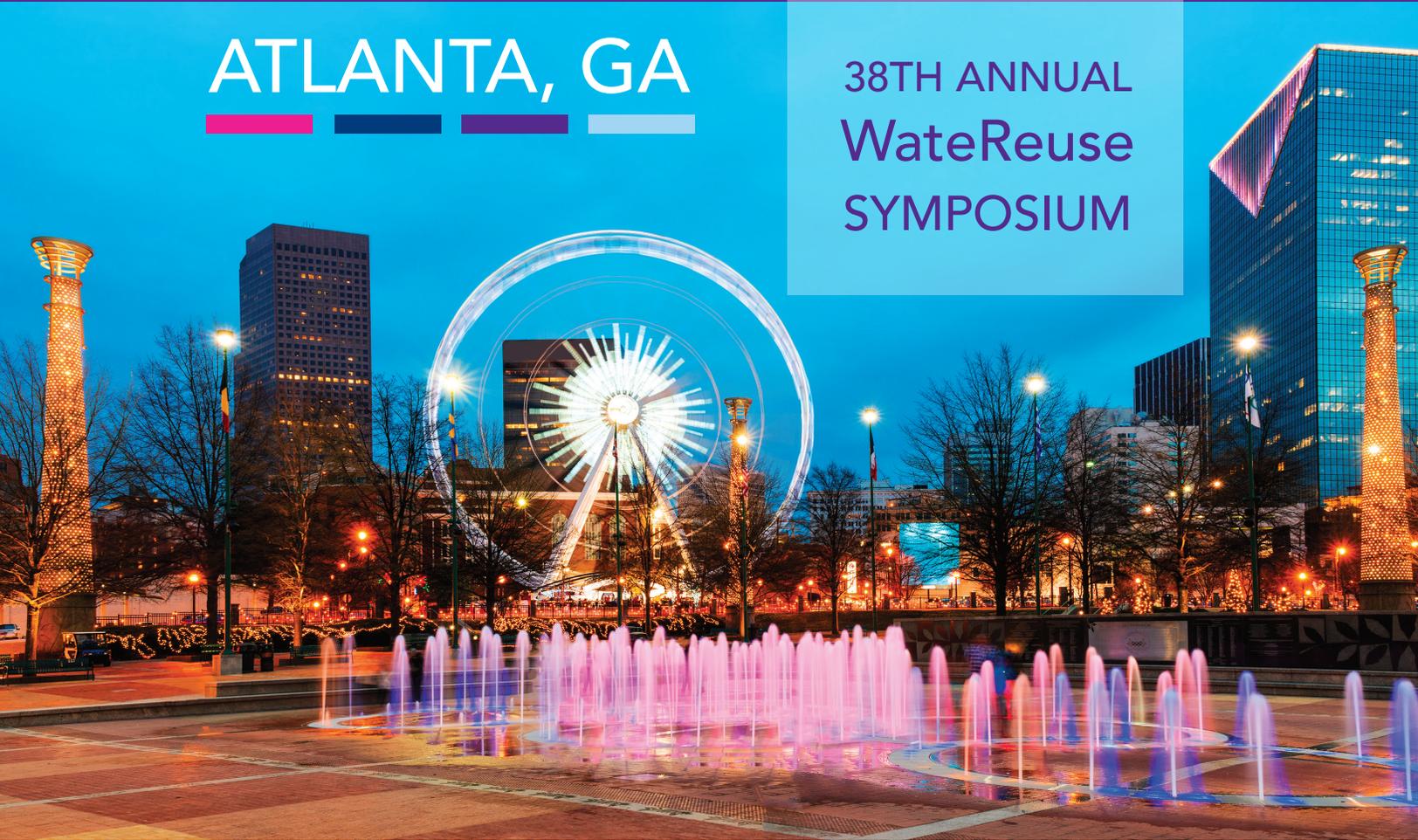
#### **Closing Remarks**

Bart Weiss, Chief Officer, Innovation and Resiliency, Hillsborough County Public Utilities (Florida), and Vice President, WateReuse Board of Directors

SAVE <sup>THE</sup> DATE  
MARCH 4-8, 2023

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