



## Technical Program Schedule

**Sunday, March 15, 2020**

Sunday, March 15	Seacliff A	Seacliff B	Seacliff C
<b>Technical Sessions</b>	A1: Reuse Case Studies	B1: Non Potable Reuse	C1: Panel Session
<b>Sponsor</b>			Tetra Tech
<b>Moderator</b>	Melody LaBella, Central Contra Costa Sanitary District	Kevin Jim, East Bay Municipal Utility District	Robin Nezhad, Tetra Tech
1:00m - 1:30pm	Challenges and Solutions for an Aging AWTF  Jessica Koop, Water Replenishment District of Southern California	Non Potable Reuse - Log Removal or Water Quality Targets?  Troy Walker, Hazen and Sawyer  Ben Stanford, Hazen and Sawyer	From the Strategy Room: Leadership's Perspective on Advancing Potable Reuse  Cari Dale, City of Oceanside  Shivaji Deshmukh, Inland Empire Utilities Agency
1:30pm - 2:00pm	Integrated Resource Recovery Supports Agriculture and Economy in Paso Robles  Kaitlin Zusy Black & Veatch  Matt Thompson, City of Paso Robles	Save the Outfall, Save the Avocados: Design Build for Advanced Treatment  Scott Lacy Brown and Caldwell  Angela Morrow City of Escondido	Mike Markus, Orange County Water District  Robb Whitaker, Water Replenishment District of Southern California



Sunday, March 15	Seacliff A	Seacliff B	Seacliff C
2:00pm - 2:30pm	<p>For Whom the Bell Tolls: Determining When to Replace Aging Reuse Infrastructure</p> <p>Nathan Boyle, Hazen and Sawyer</p> <p>Susanna Li, West Basin Municipal Water District</p>	<p>The Challenges of Building a Recycled Water Treatment Facility in San Francisco</p> <p>Barbara Palacios, San Francisco Public Utilities Commission</p> <p>Cheryl Munoz San Francisco Public Utilities Commission</p>	
2:30pm - 3:00pm	<p>Leveraging nutrient control strategies to promote recycled water production</p> <p>Azalea Mitch City of San Mateo</p> <p>John Kenny and Brian Pecson Trussell Technologies, Inc.</p>	<p>Fish, farmers and drought</p> <p>Sean White, City of Ukiah</p>	
3:00pm - 3:30pm			



Sunday, March 15	Seacliff A	Seacliff B	Seacliff C
Technical Sessions	A2: PFAS	B2: Intra-agency Projects	C2: Panel Session
Sponsor		Los Angeles Department of Water and Power	
Moderator	Kim Ervin, Jacobs	Sylvie Lee, Inland Empire Utilities Agency	Julie Minton, Water Research Foundation
3:30pm - 4:00pm	<p>PFAS Occurrence and Recent Advances in Treatment</p> <p>Jennifer Hooper CDM Smith</p> <p>Charles Schaefer and Dora Chiang CDM Smith</p>	<p>One Water, Two Approaches, Three Sources: Integrating Stormwater into Portfolios</p> <p>Rachel Morgan, Kennedy/Jenks Consultants</p> <p>Sachi Itagaki, Kennedy/Jenks Consultants</p>	<p>State Water Board/WRF Research to Ensure Sound DPR Regulations in CA</p> <p>Adam Olivieri, EOA</p> <p>Jim Crook, Water Reuse Consultant</p> <p>Shane Trussell and Brian Pecson, Trussell Technologies</p> <p>Jean Debroux, Kennedy/Jenks Consultants</p> <p>Krista Wiggington, University of Michigan</p>
4:00pm - 4:30pm	<p>PFAS Removal by Thin Film Nanocomposite Reverse Osmosis Membranes</p> <p>Kenneth Chao, LG Chem</p> <p>Hoon Hyung, Roy Daly and Nate Weeks LG Chem</p>	<p>Laying the Framework for 100% Reuse in Los Angeles</p> <p>Rafael Villegas Los Angeles Department of Water and Power</p>	



Sunday, March 15	Seacliff A	Seacliff B	Seacliff C
4:30pm - 5:00pm	<p>PFAS in Water Reclamation Plants: Treatment and Environmental Fate</p> <p>Alex Franchi, AECOM</p> <p>YuJung Chang and Chris Curran AECOM</p>	<p>WIN 4 ALL: Securing Regional Resiliency Through Sustainable Groundwater</p> <p>Diane Gatza The Water Replenishment District</p> <p>Lyndsey Bloxom The Water Replenishment District</p>	



## Monday, March 16, 2020

Monday, March 16	Seacliff AB	Seacliff CD	Bayview A	Bayview B
Technical Sessions	A3: How To Do "On-Site" Reuse	B3: Membrane Integrity Testing	C3: Disinfection Byproducts	D3: Panel Session
Sponsor				Central Contra Costa Sanitary District
Moderator	Sarah Rhodes, Woodard & Curran	Paul Swaim, Jacobs	Alex Page, Kennedy Jenks	Melody LaBella, Central Contra Costa Sanitary District
10:00am - 10:30am	<p>A Design Professional's Guide to Onsite Water Use and Reuse</p> <p>Kyle Pickett, The William J. Worthen Foundation &amp; Urban Fabrick</p>	<p>Validating Virus and Protozoa Removal and Surrogates for Flat-Sheet MBR</p> <p>Siamak Modarresi, Kubota Membrane USA</p> <p>Nicola Fontaine, Carollo Engineers</p> <p>Larry Morris, Kubota Membrane USA</p>	<p>Disinfection Byproduct Formation at Potable Reuse and Water Reclamation Plants</p> <p>Larry Schimmoller, Jacobs</p>	<p>Stemming the Flow of Harmful Chemicals Upstream to Support Potable Reuse in CA</p> <p>Kelly Moran, TDC Environmental</p> <p>Anne Cooper Doherty, California Department of Toxic Substances Control</p>
10:30am - 11:00am	<p>A Sewer Agency's Experience Permitting Facebook's On-Site Treatment Plant</p> <p>Roanne Ross, West Yost Associates</p> <p>Phil Scott, West Bay Sanitary District</p>	<p>Rapid detection of waterborne viruses through flow cytometry</p> <p>Hannah Safford, University of California</p> <p>Davis Heather-Bischel, University of California, Davis</p>	<p>UV/Cl<sub>2</sub> AOP Performance, Modeling and Process Control at Water Reuse Facilities</p> <p>Mihaela Stefan, Trojan Technologies</p> <p>A. Royce, Trojan Technologies; S. McDermid, Trojan Technologies; M. Kwon, Trojan Technologies; K. Ishida OCWD, CA; T. Knoell, WRD, CA.</p>	<p>Simona Balan, California Department of Toxic Substances Control</p>



Monday, March 16	Seacliff AB	Seacliff CD	Bayview A	Bayview B
11:00am - 11:30am	<p>Integration of a decentralized solution in an urban renewal project</p> <p>Chris Hertle, GHD, Inc.</p> <p>Mark Trickey, Andrew Chapman GHD Pty Ltd.</p>	<p>A Simple Measure of MBR Integrity – Further Validation of the Solids-LRV Method</p> <p>Stephen Katz, SUEZ Water Technologies &amp; Solutions</p> <p>Pierre Cote, Cote Membrane Separation Ltd.,</p> <p>Daniella Mosqueda-Jimenez and Kathleen Peach SUEZ Water Technologies and Solutions</p>	<p>Toxicity Bioassays for Assessing Disinfection Byproducts in Potable Water Reuse</p> <p>Erica Marti, University of Nevada, Las Vegas</p> <p>Matias Attene-Ramos, George Washington University</p>	
11:30am - 12:00pm	<p>The Rainbow and Vision of a Decentralized DPR Community</p> <p>Hesse McGraw, el dorado, inc.</p> <p>Brynne Weeks, Sanjay Reddy and Andrew Salveson, Carollo Engineers</p>	<p>A Roadmap Toward LRV Credits for Membrane Bioreactor in Reuse Applications</p> <p>Chris Morrow, Evoqua Water Technologies</p> <p>Anthony Zamarro, Evoqua Water Technologies</p>	<p>Lessons Learned from the First Full Scale UV-Cl Advanced Oxidation Process</p> <p>Bryan Trussell, Trussell Technologies</p> <p>Fernando Gonzalez, Lance Thibodeaux, Roshanak Aflaki, Slavica Hammond, Keel Robinson, Jen Scheideler LA Sanitation, CDM, Parsons, Xylem</p>	





Monday, March 16	Seacliff AB	Seacliff CD	Bayview A	Bayview B
12:00pm - 1:30pm				
Technical Sessions	A4: From Surveys to Demonstration Facilities	B4: Potable Reuse Planning - Part 1	C4: Public Outreach Simplified	D4: Panel Session
Sponsor	North San Diego Water Reuse Coalition			
Moderator	Mike Jaeger, Tanner Pacific	Paul Cook, Irvine Ranch Water District	Nitesh Dullabh, 2pod Ventures	Roshanak Aflaki, CDM Smith
1:30pm - 2:00pm	Unlocking the Power of Public Survey Research to Propel Your Project  Rebecca Cole, NV5  Sarah Davis, City of Oceanside	Recycled Water Research for a Changing California  Laura McLellan, California State Water Resources Control Board	Potty Talk - How Effective Language Can Advance Your Reuse Project  Steve Thomas, TBC Communications & Media	PFAS Regulatory Horizon, Research Needs and Utility Perspective  Shahlah Farahnak, California State Water Resources Control Board  Robert Brownwood, California State Water Resources Control Board
2:00pm - 2:30pm	Moving with the Little Engine that Could  Melanie Schumacher, Soquel Creek Water District  Mark Millan, Data Instincts	PureWaterSF: The Season Finale  Manisha Kothari, San Francisco Public Utilities Commission  Brynne Weeks and Andrew Salvesson, Carollo Engineers	Dejargon Your Outreach, Build a Storyline that Earns Support  Tiffany Meyer, Water Systems Consulting, Inc.  Holly Tichenor, Water Systems Consulting	Lanaya Volez Alexander, Eastern Municipal Water District  Hubertus Cox, Los Angeles Sanitation  Charles Neslund, Eurofins  Dora Chiang, CDM Smith



Monday, March 16	Seacliff AB	Seacliff CD	Bayview A	Bayview B
2:30pm - 3:00pm	<p>Using Demonstration Facilities For Effective and Lasting Community Engagement</p> <p>Megan Drummy, Katz &amp; Associates</p>	<p>Transitioning to DPR: Effects on microbial communities in distribution systems</p> <p>Lauren Kennedy, University of California, Berkeley</p> <p>Rose Kantor, Scott Miller and Kara Nelson UC Berkeley</p>	<p>New and Exciting! Communicating about Innovation in a Potable Reuse Program</p> <p>Rupam Soni, Metropolitan Water District of Southern California</p> <p>Carolyn Schaffer, Metropolitan Water District of Southern California</p>	
3:00pm - 3:30pm				





Monday, March 16	Seacliff AB	Seacliff CD	Bayview A	Bayview B
Technical Sessions	A5: Climate-Energy-Resiliency	B5: Potable Reuse Planning - Part 2	C5: Matching Supply with Demand	D5: Panel Session
Sponsor	San Diego County Water Authority			
Moderator	Ryujiro Tsuchihashi, Jacobs	Eric Hansen, Silicon Valley Clean Water	Claudia Llerandi, Kennedy Jenks	Christy Kennedy, Woodard & Curran
3:30pm - 4:00pm	Utilizing Multiple Alternative Water Resources in Reuse Projects  Sunny Wang, City of Santa Monica  Selim Eren and Chris Aguillon City of Santa Monica	Treated Water Augmentation – The right fit for California’s Silicon Valley?  Hossein Ashktorab, Valley Water  Nina Hawk and Zach Helsley, Valley Water	Supplemental Supply Alternatives for the San Ramon Valley Recycled Water Program  Florence Wedington, EBMUD  Reena Thomas, EBMUD	A Virtuous Cycle: Recycling Water to Achieve Groundwater Sustainability  Adam Hutchinson, Orange County Water District  Mel Lytle, City of Stockton  Jennifer Burke, City of Santa Rosa
	The Energy Implications of Advanced Water Recycling in Southern California  Nicholas Chow, UCLA Luskin Center for Innovation	A Survey of Microplastics Occurrence in Global Drinking Water Systems  William Lipps, Eurofins Eaton Analytical  John Cosgrove, Eurofins Eaton Analytical	Adapting to Change: Informing Water Use Efficiency and Declining Flows  Rucker Alex, Brown and Caldwell  Jocelyn Lu, Brown and Caldwell	Terrie Mitchell, Sacramento Regional County Sanitation District  Bob McDonald, Carpinteria Valley Water District



Monday, March 16	Seacliff AB	Seacliff CD	Bayview A	Bayview B
4:30pm - 5:00pm	<p>Stormwater Capture and Reuse at San Diego International Airport</p> <p>Richard Gilb, San Diego County Regional Airport Authority</p>	<p>Recycled Water, Onsite Reuse, and the Road to Sustainability</p> <p>Eric Rosenblum, Water Resource Consultant</p>	<p>Strategic Water Reuse Partnership in the Heart of Silicon Valley</p> <p>Nina Hawk Valley Water (Santa Clara Valley Water District)</p> <p>Phil Bobel City of Palo Alto</p> <p>Gregg Hosfeldt City of Mountain View</p>	



## Tuesday, March 17, 2020

Tuesday, March 17	Seacliff AB	Seacliff CD	Bayview A	Bayview B
<b>Technical Sessions</b>	A6: Brine Management	B6: Sustainable Groundwater Basin Management	C6: Regulatory, Policy and Compliance	D6: Panel Session
<b>Sponsor</b>	HDR			
<b>Moderator</b>	Jeff Neeman, Black & Veatch	Melanie Holmer, Brown and Caldwell	Kevin Booker, Sonoma Water	Paul Friedlander Carollo Engineers
10:00am - 10:30am	Trace Metals Removal from RO Concentrate via Low-Energy Capacitive Coagulation  Galen O'Toole, Valley Water  Cameron Lippert, PowerTech Water, LLC	Alternative Framework to the TOC Standard for GWR Surface Spreading Projects  Bryan Trussell, Trussell Technologies, Inc  Roshanak Aflaki, Rhodes Trussell, Brian Pecson, Teresa Venezia and Fernanda Bacaro Los Angeles Sanitation and Trussell Technologies	Developing Criteria for Direct Potable Reuse  Brian Bernados, Division of Drinking Water	Non-Potable Reuse Using Microfiltration: Perspectives from 3 Bay Area Agencies  Levi Fuller Dublin San Ramon Services District  Shelly Masuda East Bay Municipal Utility District  Mike Prinz Las Gallinas Valley Sanitary District



<b>Tuesday, March 17</b>	<b>Seacliff AB</b>	<b>Seacliff CD</b>	<b>Bayview A</b>	<b>Bayview B</b>
10:30am - 11:00am	<p>FO/RO for Centralized and Decentralized Potable Reuse</p> <p>William Mitch, Stanford University</p> <p>Aleksandra Szczuka, Stanford University</p>	<p>Finding the Water Reuse-SGMA Nexus in Southern San Joaquin Valley</p> <p>Zita Yu, Parsons</p> <p>Surendra Thakral and Brian Leto, Parsons</p>	<p>California Direct Potable Reuse Coalition: Implementation Guide for Utilities</p> <p>Jeff Mosher, Carollo Engineers</p> <p>Andrew Salveson and Kevin Hardy Carollo Engineers and National Water Research Institute</p>	
11:00am - 11:30am	<p>Brine Recovery and Minimization Technology Overview</p> <p>Daniel Sampson, HDR</p>	<p>Reuse in the Nongrowing Season – Blessing or Blasphemy?</p> <p>Michael Cook, Idaho Department of Environmental Quality</p>	<p>No New Drop Squandered: Santa Clarita's Approach to Increasing Water Recycling</p> <p>Erica Wolski, Woodard &amp; Curran</p> <p>Steve Cole, Santa Clarita Valley Water Agency</p>	



Tuesday, March 17	Seacliff AB	Seacliff CD	Bayview A	Bayview B
11:30am - 12:00pm	<p>A 4-Year Journey to Minimize Brine with Closed Circuit RO and 95% Recovery</p> <p>Eileen Idica, Trussell Technologies, Inc.</p> <p>Seval Sen, Rodrigo Tackaert, Shane Trussell Padre Dam Municipal Water District, Trussell Technologies, Inc.,</p>	<p>Creating Sustainability: Role of Recycled Water in SGMA GSPs</p> <p>Daniel Heimel, Water Systems Consulting</p> <p>Rob Morrow, Water Systems Consulting</p>	<p>Navigating a Recycled Water Project through the Water Code Section 1211 Process</p> <p>Leah Walker City of Petaluma Department of Public Works &amp; Utilities</p>	
12:00pm - 2:30pm				



<b>Tuesday, March 17</b>	<b>Seacliff AB</b>	<b>Seacliff CD</b>	<b>Bayview A</b>	<b>Bayview B</b>
<b>Technical Sessions</b>	<b>A7: Treatment Technologies</b>	<b>B7: Elected Officials and Agency Perspective</b>	<b>C7: Data Collection and Optimization</b>	<b>D7: Panel Session</b>
<b>Sponsor</b>				
<b>Moderator</b>	Zeynep Erdal, Black & Veatch	Patrick Shields, West Basin Municipal Water District	Dennis Murphy, Sustainable Silicon Valley	Mark Millan and Patricia Tennyson, Data Instincts and Katz & Associates
2:30pm - 3:00pm	Using Pipeline Contacting for High Dose Ozone Applications – Pure Water Monterey  Srikanth Pathapati, Mazzei Injector Company LLC	Collaboration between Agencies for Sustainable Cost and Supply of Recycled Water  Kimberly Duong, Los Angeles Department of Water and Power  Everett Ferguson, Water Replenishment District of Southern California	Demonstrating Real-Time Collection System Monitoring for Enhanced Source Control  Eva Steinle-Darling, Carollo  Gina Dorrington, Jeremy Grant, Nancy Nye, Scott Mansell, Penny Carlo, Nicola Fontaine, Prathana Pradhan, Andrew Salveson Ventura Water, El Paso Water, Clean Water Services, Carollo Engineers	Explaining CECs & PFAs to the Public: Best Messages & Dreadful Pitfalls  Jean Debroux, Kennedy/Jenks Consultants  Gina Ayala, Orange County Water District  Keel Robinson, Trussell Technologies  David Sedlak, Institute of





<b>Tuesday, March 17</b>	<b>Seacliff AB</b>	<b>Seacliff CD</b>	<b>Bayview A</b>	<b>Bayview B</b>
3:00pm - 3:30pm	<p>Advancements in Ozone/BAF for Achieving Potable Reuse Goals</p> <p>Vijay Sundaram Stantec</p> <p>Kevin Flis, Lydia Peri, David Foster and Krishna Pagilla Xylem and TMWA</p>	<p>Trust Building - Steps to building trust and buy-in for your project</p> <p>Stephen Groner, SGA Marketing</p>	<p>Improving RO Treatment Operations with Direct Online Membrane Fouling Detection</p> <p>Anditya Rahardianto, Noria Water Technologies</p> <p>Bilal Khan, Sivan Cohen, Yoram Cohen, Noria Water Technologies Han Gu, Megan Plumlee, Orange County Water District</p>	Environmental Science and Engineering
3:30pm - 4:00pm	<p>MBR vs. TMBR – Which Makes More Sense in a Potable Reuse Train?</p> <p>Ufuk Erdal ARCADIS</p>	<p>Pure Water Oceanside – The Path to Delivering Water by 2021</p> <p>Adam Hoch, Hoch Consulting</p>	<p>How big data can protect wastewater quality</p> <p>Zohar Scheinin, Kando</p> <p>Anne-li Steutel-Marón, Kando</p>	