AC20 Virtual Conference & Expo







CONFERENCE PROGRAM



PROTECTING CALIF®RNIA'S MOST CRITICAL RESOURCE

WORKING WITHOUT DISTRACTION

CAN LEAD YOU TO AMAZING PLACES.



Engineers...Working Wonders With Water®

Imagine if you could focus on a single goal, every day, without distractions. What would you accomplish? Where would it take you? At Carollo, we don't have to imagine. We focus on just one thing—water. Combined with our passion for innovation and technology, that focus has helped us become the largest water-only engineering firm in the country. In fact, for over 85 years we've been providing clients with amazing solutions to their water, wastewater, and reuse issues. And today that journey continues.

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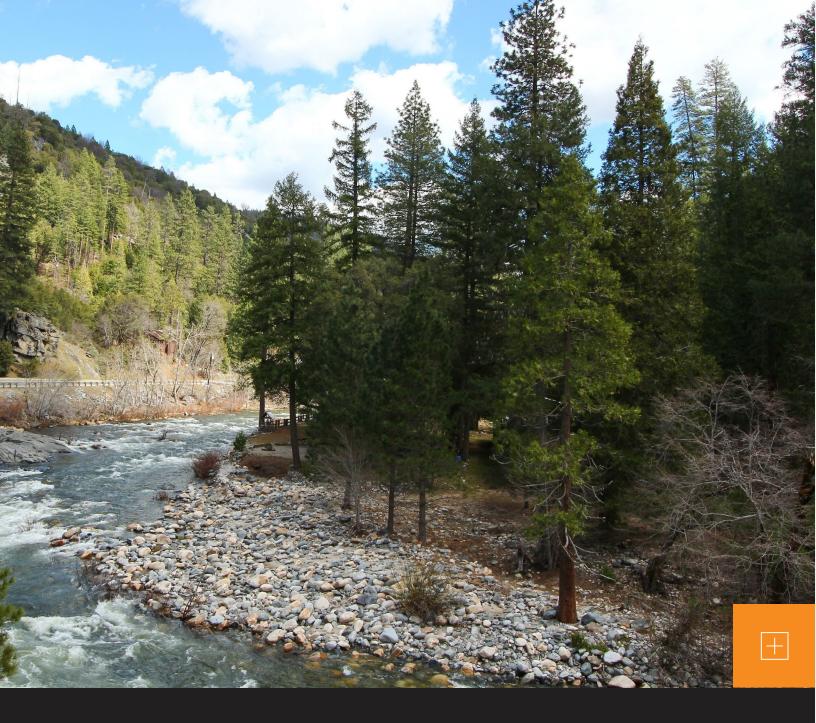


A virtual event eliminates travel costs, enabling more wastewater professionals to join AC20 than ever before!

See group discount info on the registration form.

AC20 BY THE NUMBERS

Total number of sessions live and on-demand: **64** Total number of CWEA contact hours: **80** Total number of SWRCB Drinking Water contact hours: **4.6** Total number of SWRCB Wastewater contact hours: **6.21** *Estimates as of 9/9/20*



Sustainable water solutions

Stantec proudly supports the Truckee Meadows with the planning and implementation of innovative technologies that promote sustainable solutions for our community's water and wastewater needs.



Design with community in mind

THANK YOU TO OUR AC20 SPONSORS!

PURE WATER+ LEVEL



WATER INFRASTRUCTURE ENGINEERS

FJS

PURE WATER LEVEL



TERTIARY LEVEL





SECONDARY LEVEL







Stantec

SUPPORTING ORGANIZATIONS













REAL CONCERTOR® PUMPING SYSTEM WITH INTEGRATED INTELLIGENCE

WORLD'S FIRST WASTEWATER PUMPING SYSTEM WITH INTEGRATED INTELLIGENCE

This revolutionary system delivers optimal performance while reducing your total cost of ownership. It also offers unparalleled flexibility and simplicity on a whole new level. You might even say it thinks for itself. We invite you to enter a new era in wastewater pumping with Flygt Concertor.

One powerful solution. Unlimited possibilities.



www.xylem.com

THIS IS WHY

KEVIN CALDERWOOD, CWEA PAST PRESIDENT GARY WARREN, AC20 CO-CHAIR

o doubt this has been a challenging year for many of us, especially those serving in new roles as essential workers. CWEA members typically spend time together at conferences and events talking about what we do as wastewater professionals and *how* we do it—and there will be plenty of that at AC20 in our new virtual conference format. This year, with *This Is Why*, we want to give some thought to why we do what we do.

People in wastewater are among the smartest, most motivated, most capable people in the world. Our conference theme this year, This Is Why, is our way of reminding us to think about why we work so hard, and to celebrate your successes. Just think of all the ways water is used in California. Without you, none of that is possible.

Technical Sessions and Featured Tracks

We hope to see more members than ever on our new virtual conference platform. The Program Team has assembled a wide range of technical sessions and training that will cover collection systems, operations and maintenance, advanced treatment technologies, engineering and research, laboratory, State regulations and more.

Thank you to our expert speakers for leading conversations online with AC20 attendees and sharing your knowledge and experience with peers. The majority of presentations this year are "Curated Tracks," tailored to cover hot-button issues within the sector. Be sure to check them out for deep dives into critical current topics. Session content will be recorded for future access, and depending on the registration option you've selected, you can have access to all on-demand content for up to 90 days after the event. The online conference training will be more accessible than ever without the added cost or burdens of traveling.

AC20 Virtual Expo

CWEA's dynamic virtual conference platform provides a fully interactive Virtual Expo, featuring exhibitors from across California. We've included plentiful opportunities for exhibitor and sponsorship networking, all while attendees connect from the comfort and safety of their home or office.

Networking Opportunities

One of the cornerstones of CWEA's Annual Conference



is networking, allowing attendees to get together to see old friends and make new ones. While we will be unable to gather in person for the foreseeable future, we're designing AC20 to capitalize on the best of what online delivery affords and building numerous opportunities to safely participate in meaningful collaboration with colleagues near and far.

Join us on the AC virtual platform for:

- Four live channels each day featuring multiple presentation topics and Q&As with speakers
- · Daily networking lunches with California's top wastewater leaders plus small group video chats
- Meet the presenter in small group video chats so you can talk with a speaker
- Chat and video meeting options in the expo to ask questions of the vendors
- Return of the ever-popular Women in Water Networking Lunch on Tuesday, October 20th
- And don't miss AC20's line-up of fun competitions with fantastic prizes

See You Online!

It's going to be an amazing, first of its kind conference. Join 1,000 or more wastewater professionals to help celebrate This Is Why! We hope you can also benefit from the new conference format. Get registered today.

Special thanks to all the volunteers and staff contributing to make this event and online format an amazing success.



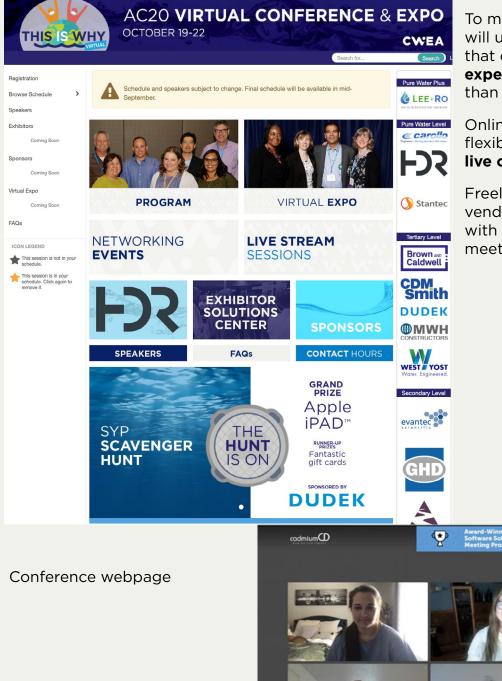
HDR

Kevin Calderwood Gary Warren **CWEA Past President**



AC20 Co-Chair EBMUD

VITURAL CONFERENCE PLATFORM



To maximize collaboration, AC20 will utilize a premier platform that offers an **immersive experience** far more valuable than a standard webinar.

Online delivery affords us flexibility - watch presentations live or on-demand at any time.

Freely connect with speakers, vendors and other attendees with direct chat and during video meetings.

Virtual Tech

Sponsored By:

um



Video meetings (Cadmium CD)



AC20 CONFERENCE APP

THE APP WILL BE AVAILABLE ONE WEEK BEFORE THE CONFERENCE START DATE

By downloading the free conference app to your mobile device or tablet, you will be able to enhance your experience with additional features such as:

- Connect and network with fellow attendees
- Create your conference schedule by adding it to your personal calendar
- View presenter bios and presentation materials
- Take notes on the presentations
- View exhibitors and add notes to the booths you visit
- Participate in the SYP Scavenger Hunt and win prizes

"I ABSOLUTELY LOVED BEING ABLE TO TAKE NOTES WITH THE SLIDES ON THE CONFERENCE APP!" - AC ATTENDEE Sponsored By:













Complete Engineering & Consulting Services

Sacramento Regional San, EchoWater Project San Mateo Wastewater Treatment Plant Upgrade and Expansion Project



VIRTUAL CONFERENCE ORIENTATION & ICEBREAKER RECEPTION ROUNDTABLES

• MONDAY, OCTOBER 19, 3:30 P.M. - 5:00 P.M.

Whether you are new to the field or a seasoned professional, attend this Virtual Conference Orientation to discover how to optimize your online conference experience and chat with fellow attendees, CWEA board members, conference volunteers and CWEA staff.

Identify educational tracks and sessions that will be the most useful to you. Learn how to star the sessions you plan to attend and get your questions answered about the new platform.



NEW MEMBER BREAKFAST

• TUESDAY, OCTOBER 20, 8:00 A.M. - 9:00 A.M.

CWEA Staff and board members will be on hand to provide an overview of CWEA's membership benefits.

DUDEK dudek.com | 800.450.1818 | hello@dudek.com

YOUR PROJECT. YOUR SUCCESS. OUR BUSINESS.

PP

Dudek's civil engineering, environmental permitting, construction management, and operational experts provide a one-stop solution for any wastewater project challenge:

- Treatment Design
- Collection System Design and Rehabilitation
- GIS-based Master Planning

- Contract Operations Staffing

ROADWAY

- Right of Way Management
- Construction Management
- Environmental Permitting

Environmental Analysis Compliance without Compromise

Streamline your water analysis workflow with our extractors, evaporators and SPE consumables



Learn more from the environmental sample prep experts at Biotage, Salem, NH. www.biotage.com



CWEA OPENING GENERAL SESSION

• TUESDAY, OCTOBER 20, 9:30 A.M. - 11:30 A.M.

This is Why: Inspiring Water's Next Generation



Water. Engineered. WESTYOST.COM

Fredi Lajvardi, a nationally recognized STEM educator, will share his amazing story of mentoring a high school engineering club in Phoenix. With Fredi's guidance and inspiration, the students never gave up on their quest to compete at a national underwater robotics competition.



The first competition they entered was a university-level competition at UC Santa Barbara. They went head-to-head with teams from MIT and other colleges. With humor and passion, Fredi reveals the simple secrets to his national

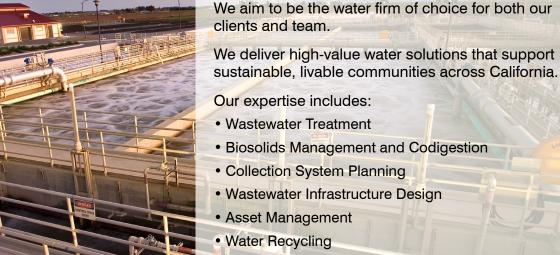
championship winning team. He'll share the same wisdom, spirit of inventiveness, and determination that transformed an improbable group of Sponsored by:

teenagers from a disadvantaged neighborhood in Phoenix into an unstoppable national powerhouse. His presentation captures the imagination and will spark the creativity in all of us.



Honored with numerous awards for his spirited passion for WATER INFRASTRUCTURE ENGINEERS teaching, Fredi continues to serve as a prominent advocate for STEM education nationwide.

Committed to advancing water resources for future generations



- Regulatory Compliance Support
- Funding/Grants
- Program & Construction Management
- Operations Technology, Cybersecurity and Resilience

West Yost is a proud supporter of CWEA.

SCHEDULE AT A GLANCE

MONDAY, OC	CTOBER 19
ALL DAY	ON-DEMAND - For a listing of the on-demand sessions, please visit AC.CWEA.org
3:30 - 4:00 p.m.	Virtual Conference Orientation
4:00 - 5:00 p.m.	Icebreaker Reception - Video Roundtables
TUESDAY, O	CTOBER 20
ALL DAY	ON-DEMAND - For a listing of the on-demand sessions, please visit AC.CWEA.org
ALL DAY	Virtual Expo
8:00 - 9:00 a.m.	New Member Breakfast
8:00 - 9:00 a.m.	Yoga Win Prizes
9:00 - 5:00 p.m.	SYP Scavenger Hunt Sponsord by Dudek
9:30 - 11:30 a.m.	Opening General Session: This is Why: Inspiring Water's Next Generation
11:30 - 1:30 p.m.	Virtual Expo - Live Chat Open
12:00 - 1:15 p.m.	Women Impacting Water Lunch
1:30 – 3:30 p.m.	Afternoon Sessions Win Prizes
4:00 - 5:00 p.m.	Trivia Roundtables by the SYP Committee
WEDNESDA	r, OCTOBER 21
ALL DAY	ON-DEMAND - For a listing of the on-demand sessions, please visit AC.CWEA.org
ALL DAY	Virtual Expo
8:00 - 9:00 a.m.	Local Section Roundtables Prizes
9:00 - 5:00 p.m.	SYP Scavenger Hunt Sponsord by Dudek
9:30 - 11:30 a.m.	Morning Sessions
11:30 - 1:30 p.m.	Virtual Expo - Live Chat Open
12:00 – 1:15 p.m.	Engineering & Research Lunch: Operation and Management Practices at Central San
1:30 – 3:30 p.m.	Afternoon Sessions
THURSDAY, O	OCTOBER 22
ALL DAY	ON-DEMAND - For a listing of the on-demand sessions, please visit AC.CWEA.org
ALL DAY	Virtual Expo
8:00 - 9:00 a.m.	Committee Roundtables
9:30 - 11:30 a.m.	Morning Sessions
11:30 - 1:30 p.m.	Virtual Expo - Live Chat Open
12:00 – 1:15 p.m.	Career Pathways in Water/Wastewater Lunch
1:30 - 3:30 p.m.	Afternoon Sessions
4:00 - 5:00 p.m.	CWEA Annual Business Meeting, Closing Session and Prize Winners Announced
FRIDAY, OCT	OBER 23
ALL DAY	ON-DEMAND - For a listing of the on-demand sessions, please visit AC.CWEA.org

VIRTUAL EXPO

CWEA's **AC20 Virtual Expo** is a powerful online engagement experience for attendees and exhibitors. We have created an interactive digital experience for attendees with an on-demand Virtual Expo that will be available for up to 90 days.

Attendees who visit the Virtual Expo will have the opportunity to discover new products and services, interact with exhibitors via chat, and engage with companies they currently do business with. You'll also be able watch videos, download product information, play games and win prizes.

TUESDAY, OCTOBER 20

11:30 a.m. - 12:00 p.m. Virtual Expo - Live Chat Open

WEDNESDAY, OCTOBER 21 11:30 a.m. - 12:00 p.m. Virtual Expo - Live Chat Open

THURSDAY, OCTOBER 22 11:30 a.m. - 12:00 p.m. Virtual Expo - Live Chat Open



The Virtual Expo will be open for 30 days after AC20. Virtual Expo only passes will be good for 30 days with no access to content.

EXPO EVENTS

• SYP SCAVENGER HUNT OCTOBER 20 - OCTOBER 21

All conference attendees who download the conference app are eligible to participate in this year's Student's and Young Professionals Scavenger Hunt sponsored by **DUDEK**.

Visit participating exhibitors, scan the QR code and answer the questions to win points all on the app. Accumulate over 1,000 points and you'll be entered into a drawing to win the Grand Prize, an Apple iPad. Winners will be announced on October 21.

You do not need to be present to win. All you need to join the fun is a smartphone or tablet and the Eventscribe app. App will be available for download in October.



NETWORKING OPPORTUNITIES

WOMEN IMPACTING WATER LUNCH

● TUESDAY, OCTOBER 20, 12:00 P.M. - 1:15 P.M. ● FREE

Plan for an inspiring morning of networking and discussion with female water leaders, engineers, operators, scientists, and those that support them in the industry. Our goal is to expose attendees to methods for building authentic, genuine, and enduring connections with others in the industry and beyond.

Attendees can expect a panel of dynamic women speakers with very different roles in the industry sharing their unique stories and perspectives in an interactive forum. The focus of this session will be **Expanding** Your Network for Success, including ideas and resources for meaningful expansions of both personal and professional networks.

> SPEAKERS: Megan Yoo Schneider, Municipal Water District of Orange County & Eleanor Allen, Water For People





Women Impacting Water

We are proud of our workforce and the women who impact water across the globe.

This is Why...





about teamwork; there's no one person who can do it all by themselves."



"For the first five critical" years of my consulting career, I showed persistence, listened to my colleagues and quite literally got my hands dirty. My current role is my dream job, but I have been taking strategic steps over the years to build my career. There are no shortcuts."

Dora Chiang, PhD, PE



essential role in the development of sustainable engineering and environmental solutions, and this role should not only be celebrated but advocated for and nurtured throughout generations."

"Women play an

Melissa Harclerode, PhD, Env SP



Sarah Stewart, PE

"My husband and I are both engineers, but when you ask my 9-year old son what he wants to be when he grows up, he'll tell you, 'I want to be an engineer like my mom."

listen, think, deliver,

ENGINEERING & RESEARCH LUNCH: OPERATION AND MANAGEMENT PRACTICES AT CENTRAL SAN

• WEDNESDAY, OCTOBER 21, 12:00 P.M. - 1:15 P.M. • FREE

Director of Engineering and Technical Services, **Jean-Marc Petit** will be presenting Operation and Management Practices at Central Contra Costa Sanitary District (Central San). The discussion will include the Comprehensive Wastewater Master Plan, Strategic Plan, as well as all the major best practice tools Central San is implementing. Learn how Central San maximizes their use of GIS data base to optimize a 1,500 miles sewer maintenance and replacement program, how Central San has implemented a robust Computerized Asset Management System (CMMS), and including how they are managing their 20-year \$1.8 B Capital Improvement Program.



CAREER PATHWAYS IN WATER/WASTEWATER LUNCH

• THURSDAY, OCTOBER 22, 11:45 A.M. - 1:15 P.M. • FREE



This event features a cohort of high school and college-age interns (students) presenting on careers in the industry, as well as a panel of professionals discussing their own "career story" and the roles that are available at their organizations.

Participants will learn about careers in the wastewater industry, while professionals will have the opportunity to promote employment with their organization.

SPEAKERS: Drew Lehman, Environmental and Public Infrastructure Careers & Timeyin Dafeta, City of LA/LA Sanitation & Environment

BREWERY RESOURCE RECOVERY LUNCH

• THURSDAY, OCTOBER 22, 12:00 P.M. - 1:15 P.M. • FREE

Charlie Arnold of **Stone Brewing** will describe the brewery's onsite water treatment system that converts spent brewing water into reusable water to reduce the facility's resource and carbon footprint. Attendees will learn to identify the treatment technology used by Stone Brewing as well as successes and challenges of the system.



✓ Circumnavigation
 ✓ The horseless carriage
 ✓ Human flight
 ✓ Artificial intelligence
 □ Sustainable water infrastructure for California

Everything is impossible. Until it's not. Celebrating 40 years as partners in possibility.



WASTEWATER TREATMENT WASTEWATER CONVEYANCE WATER TREATMENT WATER CONVEYANCE ELECTRICAL ENGINEERING CONSTRUCTION MANAGEMENT RECYCLED WATER Los Angeles Headquarters 1199 South Fullerton Road City of Industry, CA 91748 626-912-3391

Bay Area 1550 Parkside Drive Suite 320 Walnut Creek, CA 94596 925-937-4050

Sacramento 8950 Cal Center Drive Suite 120 Sacramento, CA 95826 916-631-0111

San Diego 10640 Scripps Ranch Blvd. Suite 150 San Diego, CA 92131 858-558-4411

lee-ro.com



TRIVIA ROUNDTABLES

• TUESDAY, OCTOBER 20, 4:00 P.M. - 5:00 P.M.

Be prepared to test your knowledge on popular culture, the California wastewater industry and more as the **Students and Young Professionals** host a night of trivia. Win prizes, network with fellow wastewater professionals and have fun!

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LOCAL SECTION & COMMITTEE ROUNDTABLES

• WEDNESDAY, OCTOBER 21, 8:00 A.M. - 9:00 A.M.

• THURSDAY, OCTOBER 22, 8:00 A.M. - 9:00 A.M.

Join your Local Section and/or Tech Committee for small group networking and discussion opportunities.

Thinking of water in new ways

Water in all forms is precious. Together, we are helping communities to reimagine the water cycle and create sustainable new supplies for a bright future.



BrownandCaldwell.com

Water is everyone's business.

From catchment to tap – we make it our business to understand the issues.

GHD is one of the world's leading professional services companies. We operate in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, advisory, digital, and construction services to help our clients create lasting community benefit.

Today, more than 10000 empowered people in 200+ offices on five continents collaborate with our clients and sustain relationships to achieve innovative outcomes across services, markets, and geographies.

www.ghd.com



• TIMES TBD FREE

Marble Bluff Fish Passage Facility

Aiding cutthroat trout's ability to migrate to their spawning habitats about the dam in the Truckee River. The high-tech fish lock can move as many as 2,000 fish in 15 minutes.

Learn about the evolution, population trends, and resurgence of these historic fish species.

Reno-Stead WRF/University of Nevada, Reno IPR Feasibility Study

With the University of Nevada, Reno (UNR), the facility is pilot testing the feasibility of indirect potable reuse (IPR) and groundwater augmentation. Technologies include Coagulation-Flocculation-Clarification Granular Media Filtration (CFC-GMF), Ozone-Biologically Activated Carbon (O3-BAC), and Ultraviolet Disinfection and Effluent Polishing (UV+).

SoL Cannabis Tour SoL

A one-of-a-kind grow facility with a hybrid greenhouse, state-of-the-art commercial kitchen and extraction lab directly connected to a dispensary. Most cannabis is grown using 100% artificial lighting. SoL has been focused on using natural sunlight.

Learn about the day-to-day operations of the facility and the challenges encountered in this field.

Customized Project Delivery Water & Wastewater Facilities Construction 200-Year Legacy

CONFERENCE COMMITTEE

CWEA PAST PRESIDENT CONFERENCE CO-CHAIRS

EDUCATION PROGRAM TEAM CHAIR EDUCATION PROGRAM TEAM MEMBER

ENGAGEMENT AND FUN CHAIR WOMEN IMPACTING WATER NETWORKING **LUNCH CHAIR OPENING GENERAL SESSION CHAIR 5S CHAIR EXHIBITS CHAIR** SYP EVENTS OVERALL CHAIR Sami Hunkler AWARDS CHAIR Matt Winkelman

- **Kevin Calderwood** Monica Myhill **Gary Warren Kathryn Gies** Chathura Abeyrathna **Howard Brewen** Mike Falk **Dennis Lambert** Linda Leong Diana Messina **Billy Wong** Laurie Brenner **Doug Wing Garry Parker Penny Darlington**
- EBMUD West Yost Associates **Central San** Jacobs HDR **CWEA SF Bay Section CWEA SF Bay Section** State Water Board Stantec **Union Sanitary District Carollo Engineers**

HDR

CWEA

San Bernardino Valley College **MISCOwater** LACSD GHD

CONFERENCE TOTE BAG

Would you like us to mail you an AC20 tote bag? If so, please click <u>HERE</u> to claim your bag. Tote bags will be shipped on a first come, first served basis. CWEA thanks **STANTEC** for sponsoring the tote bags!



Your FREE AC20 **Gifts Are Here!** ac.cwea.ord

Sponsored by:



TUESDAY OCTOBER 20

Opening General Session – T	his is Why: Inspiring Water's Next	Opening Gen	eral Session	
	VIRTUAL EXPO: LIVE CHAT	VIRTUAL EXP	O: LIVE CHAT	
VIRTUAL NET	WORKING LUNCH: WOMEN IMPACT	NG WATER	VIRTUAL NETWORKING LUNCH	H: WOMEN IMPACT
SCADA Implementation from Multiple Perspectives	Emerging Nutrient Removal	Collection System I&I Control Strategies	Good Practices for Plant Improvement Projects	New and Eme Pro
Charles Aycock Municipal Automation Services	Michael Walkowiak Brown and Caldwell	Dave Schwartz CDM Smith	William Schilling West Yost Associates	Kath West Yo
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Stantec	Brown AND Caldwell	CDM Smith		WEST Water,
SCADA Implementation from the Consultant's Perspective Michael Johnson Jacobs Engineering Group	Membrane Aerated Biofilm Reactors: Full-Scale Implementation and Illustrative Pilots Amit Kaldate, Suez	Effective I&I Reductions Using Adaptive Asset Management Approach Eva Agus East Bay Municipal Utility District	Why and How of Improving Operator Involvement with Wastewater Designs Lance Salerno Brown and Caldwell	Collaborativ Addressi Regulatory Debbi Central Water
SCADA Implementation from the Integrator's Perspective Stephen Goldsworth JEGO Systems	Nutrient Removal Intensification Using MABRs: Pilot Study at Hayward WPCF Sandeep Sathyamoorthy Black & Veatch	I&I Micro Detection: Pinpointing Inflow and Infiltration Simply Matthew Scaglione Duke's Root Control	When Should Start-up Begin? Tom Hendrey West Yost Associates	Whole Eff How New Regu NPDE Paul Robert
SCADA Implementation from the Owner's Perspective & Panel Discussion Charles Aycock Municipal Automation Services	Advancements and Considerations for Flow: Through Aerobic Granular Sludge Processes John Fraser, Carollo Engineers Benefits of Converting Conventional Activated Sludge System to Granular Activated Sludge	Seductive Lure of Level-Only Meters for Measuring I&I Jay Boyd ADS Environmental Services	Maintenance Lessons Learned from 66 MGD Bypass of Influent Structure Sanjay Reddy Carollo Engineers	Integrated Wastewater Pl Long-Term Inve Based on Con <i>Trent S</i>
	VIRTUAL NET SCADA Implementation from Multiple Perspectives Charles Aycock Municipal Automation Services ALL SCADA Implementation from the Consultant's Perspective Michael Johnson Jacobs Engineering Group SCADA Implementation from the Integrator's Perspective Stephen Goldsworth JEGO Systems SCADA Implementation from the Integrator's Perspective Stephen Goldsworth JEGO Systems	VIRTUAL EXPO: LIVE CHAT VIRTUAL NETWORKING LUNCH: WOMEN IMPACT SCADA Implementation from Multiple Perspectives Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Image: Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Image: Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Image: Charles Aycock Municipal Automation Services Membrane Aerated Biofilm Reactors: Full-Scale Implementation and Illustrative Pilots Amit Kaldate, Suez SCADA Implementation from the Consultant's Perspective Michael Johnson Jacobs Engineering Group Membrane Aerated Biofilm Reactors: Full-Scale Implementation and Illustrative Pilots Amit Kaldate, Suez SCADA Implementation from the Integrator's Perspective Stephen Goldsworth JEGO Systems Nutrient Removal Intensification Using MABRs: Pilot Study at Hayward WPCF Sandeep Sathyamoorthy Black & Veatch SCADA Implementation from the Owner's Perspective & Panel Discussion Charles Aycock Municipal Automation Services Advancements and Considerations for Flow: Through Aerobic Granular Sludge Processes John Fraser, Carollo Engineers	VIRTUAL NETWORKING LUNCH: WOMEN IMPACTING WATER SCADA Implementation from Multiple Perspectives Emerging Nutrient Removal Collection System 1&1 Control Strategies Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Dave Schwartz CDM Smith Image: Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Dave Schwartz CDM Smith Image: Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Dave Schwartz CDM Smith Image: Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Dave Schwartz CDM Smith SCADA Implementation from the Consultant's Perspective Michael Johnson Jacobs Engineering Group Membrane Aerated Biofilm Reactors: Full-Scale Implementation and Illustrative Pilots Amit Kaldate, Suez Effective I&I Reductions Using Adaptive Asset Management Approach Eva Agus East Bay Municipal Utility District SCADA Implementation from the Integrator's Perspective Stephen Goldsworth JEGO Systems Nutrient Removal Intensification Using MABRs: Plack & Veatch I&I Micro Detection: Pinpointing Inflow and Infiltration Simply Mathew Scagione Duke's Root Control Seductive Lure of Level-Only Meters for Measuring I&I Jay Boyd ADS Environmental Services	VIRTUAL EXPO: LIVE CHAT VIRTUAL EXPO: VIRTUAL NETWORKING LUNCH: WOMEN IMPACTING WATER SCADA Implementation from Multiple Perspectives VIRTUAL EXPO: VIRTUAL EXPO: SCADA Implementation from Multiple Perspectives Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Colspan="2">Colspan="2">VIRTUAL EXPO: VIRTUAL EXPO: Charles Aycock Municipal Automation Services Michael Walkowiak Brown and Caldwell Colspan="2">VIRTUAL EXPO: VIRTUAL EXPO: Charles Aycock Municipal Automation Services Constructions Michael Walkowiak Brown and Caldwell Dave Schwartz CDM Smith Constructions of the Construction Services VIRTUAL EXPO: SCADA Implementation from the Consultant's Perspective Michael Johnson Jacobs Engineering Group Mark Kaldate, Suez Seductive Lure of Level-Only Michael Johnson Jacobs Engineering Group Nutrient Removal Intensification Using MARRs: Pilot Study at Hayward WpCP Sandeep Sathyamoorthy JEGO Systems Seductive Lure of Level-Only Meters for Measuring I&M Jacobs Propoch Engineering Converting Coharies Aycock Municipal Automation Services Seductive Lure of Level-Only Meters for Measuring I&M Jacobs Root Control SCADA Implementatio

Speakers and moderators of live sessions will be available through the chat and question & answer features during their session. After the session stick around for **Meet the Presenters** to video chat with the speakers. Registered attendees will have access to all sessions on-demand. Recordings of live sessions will be posted 72+ hours after the original session time. These can be accessed for up to 90 days after the conference, depending on your registration type.

The full session must be attended to receive contact hour(s).

Schedule and speakers subject to change. Final schedule will be available in late September.

CTING WATER

nerging Regulatory Programs

athryn Gies Yost Associates

ALL



tive Strategies for ssing Emerging bry Requirements

bie Webster al Valley Clean er Association

Effluent Toxicity: gulations Will Impact DES Permits

aul Bedore ertson-Bryan

ed Stormwater/ Planning: Adaptive, nvestment Strategies ommunity Priorities

Stober, HDR

CODES FOR PRACTICE AREAS

- COLLECTION SYSTEMS
- ELECTRICAL & INSTRUMENTATION
- ER ENGINEERING & RESEARCH
- LABORATORY
- OPERATIONS & MAINTENANCE
- ALL CROSS DISCIPLINE

WEDNESDAY AM OCTOBER 21

8:00 - 9:00 a.m	LOCAL SECTION ROUNDTABLES				LOCAL SECTION ROUNDTABLES					
TRACK NAME	Workforce Development	Co-Digestion	Collection Systems 101		Pipeline Rehabilitation	Advanced Water Treatment	PFAS Summit			
MODERATOR	Helen Hu, Sacramento Regional County Sanitation District	Sarah Deslauriers Carollo Engineers	Jennifer Rojas Long Beach Water Department		Adam Brown West Yost Associates	Andrew Salveson Carollo Engineers	Stephen Jepsen SCAP			
PRACTICE AREAS	ALL	ER	CS		OM CS ER		ALL			
SPONSOR	FC	EngineersWorking Wonders With Water®					DUDEK			
	Leveraging Agency Research to Engage College Students Ruth Spierling Cal Poly State University	Overview of SB 1383 Regulations Sarah Deslauriers Carollo Engineers			Rehabilitating Aging Collection Systems While Minimizing Related		PFAS: What It is, What It Comes From, Where It's Found and Its			
9:30 - 11:30 a.m.	Developing the Leaders Around You: Building Depth for Succession Planning Keith Sorsdal Vallejo Flood & Wastewater District	Statewide POTW Co-Digestion Capacity Elizabeth Charbonnet Carollo Engineers	Easements 101 Travis Fisher Ojai Valley Sanitary District	Travis Fisher		Impacts Mark Carey MC Engineering	Advanced Technologies In-Depth (training for advanced water treatment operators and engineers)	Dangers Arlene Blum Green Science Policy Institute UC Berkeley		
9:50 - 11:50 a.m.	On Boarding New Maintenance Staff Sergio Ramirez West Bay Sanitary District	Food Waste Co-digestion Project	Eliminating Inflow and		Lessons Learned Rehabilitating a	Andrew Salveson Carollo Engineers	Status of Regulations Jared Voskuhl CASA			
	On Boarding: The Real World Experience of Implementing Agency-wide Onboarding Program Shelly Cortez Sacramento Area Sewer District	Regulatory Challenges and Benefits Ganesh Rajagopalan Kennedy Jenks Consultants	Infiltration in the Collection System Travis Fisher Ojai Valley Sanitary District		Travis Fisher	Collection System Travis Fisher		105" Sewer Interceptor Kingsley Kuang East Bay Municipal Utility District		PFAS Panel Discussion Stephen Jepsen SCAP

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The full session must be attended to receive contact hour(s).

WEDNESDAY PM OCTOBER 21

11:30 - 1:30 p.m.	VIRTUAL EXPO: LIVE CHAT			
12:00 - 1:15 p.m.	ENGINEERING & RESEARCH LUN	CH: OPERATION & MANAGEMENT PRA	CTICES AT CENTRAL SAN	
TRACK NAME	Condition Assessments	Crisis Management	Pumping Physics 101	Reg Ch
MODERATOR	Lani Good Black & Veatch	Colin Bailey GCR	Dennis Lambert SFBS	
PRACTICE AREAS	CS ER OM	ALL	СЅОМ	
SPONSOR	WATER INFRASTRUCTURE ENGINEERS		WATER INFRASTRUCTURE ENGINEERS	
	Going Beyond Just Looks: an Integrated Approach to Condition Assessment	Outreach: Handling Media Requests During a Crisis Rebecca Schmidt UC Davis Health System	NPSHA vs. NPSHR and Effect on Pump Operation	Balancin Unce
1:30 - 3:30 p.m.	David Baranowski South Orange County Wastewater Authority	Disaster Mitigation and Recovery Colin Bailey GCR	Ronald Aceto Cornell Pump Company	Lo C East B
	CMMS Success: Post Collection System Assessment	Lessons Learned from the Camp Fire	Pumping Systems: Energy Efficiency vs. Operating Efficiency	Innovati or
	Nahum Padilla Valenzuela Coachella Valley Water District	<i>Michael Lindquist</i> University of California at Davis	Ronald Aceto Cornell Pump Company	Over D

ENGINEERING & RESEARCH I	UNCH: OPERATION & MANAGEMENT PR	ACTICES AT CENTRAL SAN
Regulatory & Optimization Challenges with Digester Gas Systems	Advanced Water Treatment	PFAS Summit
Charles Ro Lee & Ro	Andrew Salveson Carollo Engineers	Stephen Jepsen SCAP
ALL	OM ER	ALL
Balancing Regulatory Deadlines with Uncertain Biogas Generation Derya Dursun Hazen and Sawyer		PFAS Treatment Technologie Jenny Reina Jacobs
LCFS Credits for WRRF Co-Digestion Products Eva Agus East Bay Municipal Utility District	Advanced Technologies In-Depth (training for advanced water treatment operators and engineers)	PFAS in Biosolids Kathryn Gies West Yost Associates
Innovative Tool Helps with Decisions on Biogas Utilization for City of Riverside Christian Tasser Carollo Engineers	Andrew Salveson Carollo Engineers	PFAS and the Lab Agustin Pierri Weck Laboratories
Overcoming Mixed Signals for Digester Gas Utilization Victoria Evans HDR		PFAS Panel Discussion Stephen Jepsen SCAP

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THURSDAY MORNING OCTOBER 22

8:00 - 9:00 a.m.	COMMITTEE ROUNDTABLES				COMMITTEE ROUNDTABLES		
TRACK NAME	Co-Digestion O&M	Regional San Summit: The EchoWater Project		llection Systems for pervisors/Managers	Using Big Data to Improve Process Operations	Laboratory	
MODERATOR	David Bachtel Bachtel Wastewater Engineers	Mike Falk HDR		TBD	Howard Brewen Jacobs	Amber Baylor SOCWA	
PRACTICE AREAS	OM ER	ALL		CS	OM ER	LB	
SPONSOR	WOODARD					evantec	
	Co-digestion of Organics from Mixed Solid Waste (MSW) Yaniv Scherson Anaergia	Program Introduction, Program Implementation and Where We Are Now Dan Wilson Sacramento Regional County Sanitation District			Smart Digital Solutions Haley Lehman Water Systems Consulting	Maintaining a Safe Working Envi- ronment in an Environmental Pro- duction Lab Aaron Nelsen Caltest Analytical Laboratory	
	Assessing Impact of Food Waste Addition to Liquids Treatment Zakir Hirani Stantec	Benefits of the Pilot Program Seppi Henneman Brown and Caldwell			Artificial Intelligence for Cost Optimization of Treatment Processes Richard Loeffler Yulom Digital Solutions		
9:30 - 11:30 a.m.	Evaluation of Feedstocks for Co-Digestion at POTWs Colin Moy East Bay Municipal Utility District	Reliability Centered Design/Maintenance Kenneth Abraham HDR Collection Systems Compliance Best Practices and Case Studi James Fischer Fischer Compliance	actices and Case Studies James Fischer	Amber Baylor South Orange County Wastewater Authority			
	Lessons Learned: Pilot Food Waste Co-Digestion at Goleta SD James Dunbar Lystek International	Asset Management: Data Collection and Transfer			Process Controls to Meet Stringent Effluent Limits and Improve	Working Smart: Using a LIMS to Achieve Your California Regulatory Requirements	
	Breaking Down the Co-digestion Question: Lessons Learned at Encina Scott Goldman, Woodard & Curran	Amanda Morrow Brown and Caldwell			Operational Sustainability Victoria Boschmans Hazen and Sawyer	Richard Danielson Accelerated Technology Laboratories	
11:30 - 1:30 p.m.	VIRTUAL EXP	D: LIVE CHAT			VIRTUAL EXPO: LIVE CHAT		

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"GETTING DIFFERENT PERSPECTIVES ON THINGS FROM PEOPLE AND PRESENTATIONS WAS GREAT. I CAN **USE THOSE TOOLS TO IMPROVE.**"

-AC19 ATTENDEE

THURSDAY AFTERNOON OCTOBER 22

11:45 a.m 1:15 p.m.	CAREER PATHWAYS IN WATER/WASTEWATER LUNCH				
TRACK NAME	Collection Systems for Front Line	Regional San Summit: The EchoWater Project			
MODERATOR	Steve Cano Costa Mesa Sanitary District	Mike Falk HDR			
PRACTICE AREAS	OM ER	ALL			
1:30 - 3:30 p.m.	Combination Machine Maintenance & Daily Maintenance Carey Olcott Haaker Equipment	Innovation: Sidestream Treatment William Yu Sacramento Regional County Sanitation District Challenges with Commissioning Large Treatment Processes Leslie Knapp Brown and Caldwell			
	Flow Pressure for Nozzles Carey Olcott Haaker Equipment	3D/4D/5D: Planning and Design Christina Romano Brown and Caldwell			
	naaker Equipment	3D/4D/5D: Construction Ron Perkins HDR			

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Operations 201: Complex P&ID Drawings with Control Narratives	ELAI
Chathura Abeyrathna Central San	Josie City
ALL	
Operations 201: Complex P&ID Drawings with Control Narratives Linda Leong	The Sta Jacob California State Contr
SFPUC	Our Road to Bruce Mammoth Water

CWEA ANNUAL BUSINESS MEETING AND CLOSING SESSION • THURSDAY, OCTOBER 22 4:00 P.M. - 5:00 P.M.

Don't miss the closing session of CWEA's first virtual conference. We'll discuss the future of the association, how you can become more involved and announce the winners to the SYP Scavenger Hunt!



WATER/WASTEWATER LUNCH			
_AP & TNI	Collection Systems		
osie Tellers ty of Davis	Lani Good Black and Veatch		
LB	CS		
State of ELAP Sob Oaxaca ate Water Resources Introl Board	Collection System Regulatory Compliance TBD		
to TNI Compliance ce Medhurst oth Community iter District			

REGISTRATION INSTRUCTIONS

efore you register one or more persons online, please read all instructions. You will need your online **CWEA** password or the ability to do a group registration for all those you are registering. All conference attendees, including speakers and exhibitors, are required to register.

MEMBER-DISCOUNTED RATES

Only CWEA, WEF, or CA-NV AWWA membership qualifies for member-discounted rate and memberships will be verified. The additional cost of a non-member registration will be applied toward one year of CWEA membership, unless otherwise stated on the registration form. To ensure accuracy, read all instructions prior to filling out the Registration Form and all other necessary forms.

RETIRED MEMBERS

Retired Members are eligible for a special registration rate. CWEA Bylaws state that a retired member is any person retired from and not currently affiliated professionally or technically with the water quality field. Retired members are asked to contact Member Services directly at 510.382.7800 x0 or memberservices@cwea.org.

STUDENT REGISTRATION

Full-time students are eligible for free registration. This registration type is not available online since students must provide verification of current enrollment (nine or more units per semester). Students are asked to contact Member Services directly at 510.382.7800 x0 or memberservices@cwea.org.

EXHIBITORS & SPONSORS

For more information about CWEA Exhibits, please contact CWEA Senior Manager, Exhibitions & Sponsorship Sales, Christine Carchia at <u>ccarchia@cwea.org</u> or 510.746.7415.

REGULATORS AND ACADEMICS

REGISTRATION Full-time employees of academic institutions and full-time employees of federal or state regulatory agencies are eligible for our discounted Regulators and Academics registration fee – please contact Member Services directly at 510.382.7800 x0 or memberservices@cwea.org.

REFUND POLICY

Written cancellation notice is required and must be received at least 30 days prior to the conference date. A 25% service fee shall be retained on all cancellations. No refunds will be given for cancellations made less than 30 days prior to the conference. If you are not able to attend, please consider transferring your registration.

REGISTRATION PAYMENT

Payment can be made by check payable to: CWEA AC20. Credit card payments are also accepted using the enclosed registration form or through CWEA's secure website (AC.CWEA.org).

All fees for conference registration shall be paid in full at the time of registration. Full payment may be made by credit card, personal check or company/agency check. Purchase orders are also accepted. Registrations received without full payment or purchase order will not be processed. You must be registered for the conference as an attendee to receive contact hours.

REGISTRATION QUESTIONS

Contact Member Services at 510.382.7800 x0 or memberservices@cwea.org.

SPEAKER QUESTIONS

THIS SWHY

OCTOBER 19-

Contact Monica Myhill, Director of Education, at <u>mmyhill@cwea.org</u>.

DISCLAIMER

CWEA and its Board members and volunteers are not responsible for the actions of speakers or the content of their sessions. No endorsement is implied or given of any persons or their philosophies, ideas or statements; nor of any products or processes; nor of any organizations or companies who volunteer to serve as speakers at the conference or exhibitors who purchase display space in the Virtual Expo.

Mail registration payment and form to: CWEA 7677 Oakport St, Suite 600 Oakland, CA 94621-1935

> Need assistance? Contact Member Services 510-382-7800 x0 memberservices@cwea.org

REGISTRATION FORM

Register online: *MyCWEA.org*

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rst Name: Last Name:				
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	NV AWWA MEMBER #			
Check here if you do not wish to take advantage of members	ship: 🗆 (Non-member rates include 1 year mem	bership in CWEA.)		
Tell us a bit about you. Please select one respons	se for each question.			
1. WHAT IS YOUR CAREER STAGE?	2. WHAT IS YOUR PRIMARY PRACTICE AF	REA?		
Entry-level Journey-level Enginee	on Systems	each		
3. WHAT TYPE OF ORGAN	IZATION DO YOU WORK FOR?			
Municipal – Small (< 50K customers)				
REGISTRATION MONDAY, OCTOBER 19 - THUERSDAY, OCTOBER 22 202	20			
Live Conference	On-Demand Member Content Price	Non-Member Price		
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EXTENDED 60 FULL ACCESS	60 days access \$475	\$667		
PREMIUM 90 FULL ACCESS	90 days access \$525	\$717		
□ Group discounts 6-10 Attendees 11-20 Attendees 21+ Attendees 10% Discount 15% Discount 20% Discount				
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Fee Total \$				

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Name of account holder:	Billing zip code: