AC20 Virtual Conference & Expo







CONFERENCE PROGRAM



WORKING WITHOUT DISTRACTION

CAN LEAD YOU TO AMAZING PLACES.



WATER
OUR FOCUS
OUR BUSINESS
OUR PASSION

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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AC20 BY THE NUMBERS

Total number of sessions live and on-demand: 50

Total number of speakers: 174

Total number of CWEA contact hours: 80

Total number of SWRCB Drinking Water contact hours: **TBD**Total number of SWRCB Wastewater contact hours: **6.16**

Estimates as of 10/07/20

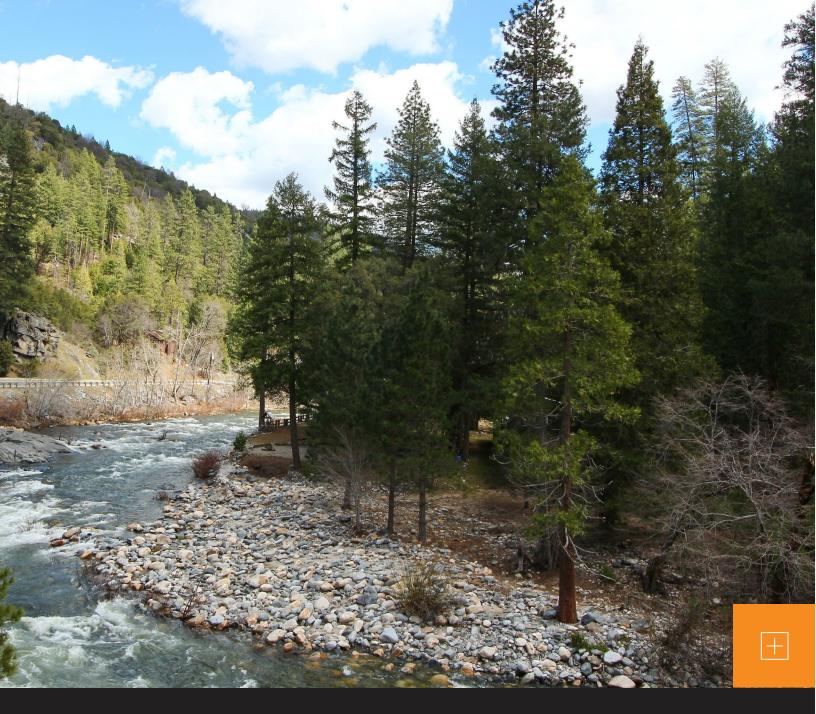






A virtual event eliminates travel costs, enabling more wastewater professionals to join AC20 than ever before!

See group discount info on the registration form.



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



PURE WATER LEVEL







TERTIARY LEVEL











SECONDARY LEVEL







SUPPORTING ORGANIZATIONS









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.



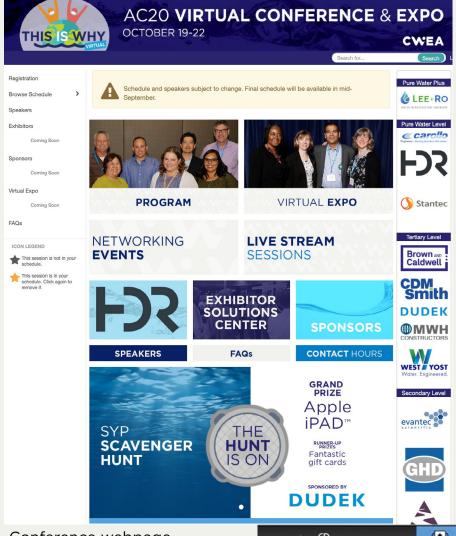
Kevin Calderwood Gary Warren

CWEA Past President HDR



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.

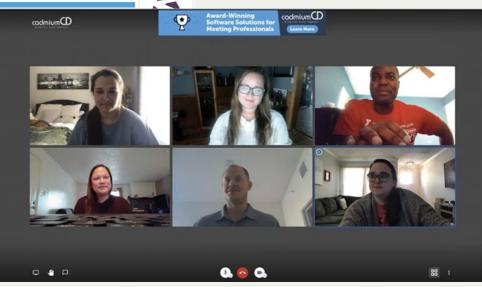
Online delivery affords us flexibility - watch presentations live or on-demand at any time.

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

Virtual Tech Sponsored By:

FD3

Conference webpage



Video meetings (Cadmium CD)

BENEFITS OF OUR VIRTUAL PLATFORM

WE USE A PREMIER VIRTUAL PLATFORM TO BENEFIT OUR MEMBERS



Log-in from the safety of your home and office.

3. Networking is Back

Catch-up online with old friends and meet new people during our online roundtables, contests, meet the presenter video chats and networking lunches. **Reachout virtually and say hello.** 2. You're in Control

With our online platform you can watch sessions live Oct 19-22 along with your friends and co-workers. Or watch the ondemand and recorded sessions anytime. Choose **30**, **60 or 90 days access** to all recorded and on-demand content



The Education Program Team has assembled **50 presentations**, **8 events and over 170 speakers**. Many of California's best wastewater experts are speaking at AC20.



At AC20 Virtual you can receive up to **80 CWEA contact hours, or collect SWRCB continuing education units**. Load-up on contact hours. There are a wide range of topics for every certification.

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

Sponsored By:









- AC ATTENDEE









Complete Engineering & Consulting Services

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



VIRTUAL CONFERENCE ORIENTATION & **ICEBREAKER RECEPTION ROUNDTABLE**

● 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.

Connect with your fellow water professionals at the AC20 Virtual Icebreaker Reception for a "Virtual Vacation" and share your favorite vacation pictures or dream vacation. Choose from a list of 15 travel destinations which one you want to participate in. Each room will have a facilitator to welcome you on your virtual vacation. Dress in your vacation attire with a beverage and/or food/snack representing the destination selected. Share your video cam and vacation photos to be entered into a prize drawing. Winners will be notified before the end of the conference. We look forward to virtually travelling with you!

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.

DUDE dudek.com | 800.450.1818 | hello@dudek.com



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
- Right of Way Management
- Construction Management
- Environmental Permitting

Environmental AnalysisCompliance 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

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

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

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.



Sponsored by:

Committed to advancing water resources for future generations



West Yost is a proud supporter of CWEA.

We aim to be the water firm of choice for both our clients and team.

We deliver high-value water solutions that support sustainable, livable communities across California.

Our expertise includes:

- Wastewater Treatment
- Biosolids Management and Codigestion
- Collection System Planning
- Wastewater Infrastructure Design
- Asset Management
- Water Recycling
- Regulatory Compliance Support
- Funding/Grants
- Program & Construction Management
- Operations Technology, Cybersecurity and Resilience

SCHEDULE AT A GLANCE

MONDAY, OC	TORED 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, OC	TOBER 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
9:00 - 5:00 p.m.	SYP Scavenger Hunt Sponsord by Dudek Win
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 Brownbag Lunch Session
1:30 - 3:30 p.m.	Afternoon Sessions
3:30 - 4:00 p.m.	Meet the Presenter Video Chat Roundtables
4:00 - 5:00 p.m.	Trivia Roundtables by the SYP Committee Prizes
WEDNESDAY	, 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
9:00 - 5:00 p.m.	SYP Scavenger Hunt Sponsord by Dudek Prizes
9:30 - 11:30 a.m.	Morning Sessions
11:30 - 12:00 p.m.	Meet the Presenter Video Chat Roundtables
11:30 - 1:30 p.m.	Virtual Expo - Live Chat Open
12:00 - 1:15 p.m.	Engineering & Research Brownbag Lunch Session: Operation & Management Practices at Central San
1:30 - 3:30 p.m.	Afternoon Sessions
3:30 - 4:00 p.m.	Meet the Presenter Video Chat Roundtables
THURSDAY, C	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 - 12:00 p.m.	Meet the Presenter Video Chat Roundtables
11:30 - 1:30 p.m.	Virtual Expo - Live Chat Open
11:45 - 1:15 p.m.	Career Pathways in Water/Wastewater Brownbag Lunch Session
12:00 - 1:15 p.m.	Brewery Resource Recovery Brownbag Lunch Session
1:30 - 3:30 p.m.	Afternoon Sessions
3:30 - 4:00 p.m.	Meet the Presenter Video Chat Roundtables
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

This year's virtual conference will include our regular offerings such as educational sessions, keynotes. And since networking is a cornerstone of our annual event, we've created a new, online opportunity for CWEA exhibitors to engage with our audience of water industry professionals.

CWEA's virtual expo is a dedicated online place for exhibitors and our audience of water industry professionals to interact, extending the exhibit experience for up to 30 days past our conference dates of Oct 19 - 23, 2020

Our **AC20 Virtual Expo** features multiple opportunities for attendees to:

- find new products and services
- conduct live chats with knowledgeable water industry sales staff
- have meaningful conversation water industry solutions providers
- test their knowledge of the waste water industry, win prizes and engage with solutions providers all from the comfort and safety of their home or office.

Where a live exhibit hall might last 3-4 days, our virtual expowill be available online for up to 30 days after our conference to allow even more meaningful engagement after our conference ends.

TUESDAY, OCTOBER 20

11:30 a.m. - 1:30 p.m. Virtual Expo - Live Chat Open

WEDNESDAY, OCTOBER 21

11:30 a.m. - 1:30 p.m. Virtual Expo - Live Chat Open

THURSDAY, OCTOBER 22

11:30 a.m. - 1:30 p.m. Virtual Expo - Live Chat Open



VIRTUAL EXPO

CWEA members can register to receive a **free pass** to visit over 100 vendors. This pass is available for CWEA members only

and will not allow access to sessions.

This interactive digital experience will be available for up to 30 days.







EXPO EVENTS

SYP SCAVENGER HUNT

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 each day with the grand prize drawing on Friday, October 22 during the Closing Session.

You do not need to be present to win. All you need to join the fun is a smartphone or tablet and Eventscribe app.

The AC20 conference app is the only way to compete in the scavenger hunt.



Earn 50 points and be entered to win \$50 Amazon gift card

Earn 100 points and be entered to win a \$100 Amazon gift card

WEDNESDAY:

Earn 50 points and be entered to win \$50 DoorDash gift card

Earn 100 points and be entered to win \$100 DoorDash gift card

THURSDAY:

Earn 50 points and be entered to win \$50 Target gift card

Earn 100 points and be entered to win \$100 Target gift card

GRAND PRIZE DRAWING:

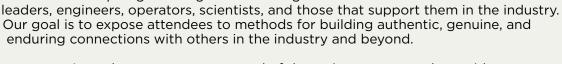
Earn 1000 points over three days and be entered to win an Apple iPad!



NETWORKING OPPORTUNITIES

WOMEN IMPACTING WATER BROWNBAG LUNCH SESSION

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



Plan for an inspiring morning of networking and discussion with female water

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

MODERATOR: Laurie Brenner, Union Sanitary District

Sponsored by:







Women Impacting Water

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

This is Why...



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





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."





"Women play an 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."

Melissa Harclerode, PhD, Env SP



"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."

Sarah Stewart, PE



ENGINEERING & RESEARCH BROWNBAG LUNCH SESSION: 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 BROWNBAG LUNCH SESSION

● 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: Sami Hunkler, LA County Sanitation
Districts; Drew Lehman, EPICNetwork.org (Environmental and Public Infrastructure Careers); Timeyin Dafeta,
City of LA/LA Sanitation & Environment; Cecilia Dominguez, LA
County Sanitation Districts; DJ Brookter, Young Community Developers
and Students

BREWERY RESOURCE RECOVERY BROWNBAG LUNCH SESSION

● 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.







WASTEWATER TREATMENT
WASTEWATER CONVEYANCE
WATER TREATMENT
WATER CONVEYANCE

ELECTRICAL ENGINEERING

CONSTRUCTION MANAGEMENT

RECYCLED WATER



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. Team up with other attendees and SYP Committee members in a video chat roundtable room to play a live trivia contest. Each video chat roundtable team will battle against other teams to answer the most questions correctly for prizes.

LOCAL SECTION & COMMITTEE ROUNDTABLES

- LOCAL SECTION: WEDNESDAY, OCTOBER 21, 8:00 A.M. 9:00 A.M.
- COMMITTEES: 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.





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



VIRTUAL TOURS

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.



CONFERENCE COMMITTEE

CWEA PAST PRESIDENT CONFERENCE CO-CHAIRS

EDUCATION PROGRAM TEAM CHAIR EDUCATION PROGRAM TEAM MEMBER **Kevin Calderwood** Monica Myhill **Gary Warren**

Kathryn Gies Chathura Abeyrathna

Howard Brewen

Mike Falk

Dennis Lambert

Linda Leong **CWEA SF Bay Section** Diana Messina **State Water Board**

ENGAGEMENT AND FUN CHAIR Billy Wong

WOMEN IMPACTING WATER NETWORKING **Laurie Brenner LUNCH CHAIR**

OPENING GENERAL SESSION CHAIR

5S CHAIR

EXHIBITS CHAIR

SYP EVENTS OVERALL CHAIR

AWARDS CHAIR

Doug Wing

Garry Parker Penny Darlington Sami Hunkler

Matt Winkelman

HDR

CWEA

EBMUD

West Yost Associates

Central San Jacobs

HDR

CWEA SF Bay Section

Stantec

Union Sanitary District

Carollo Engineers

San Bernardino Valley College

MISCOwater LACSD

GHD

CONFERENCE TOTE BAG

Would you like us to mail you an AC20 tote bag? Tote bags will be shipped on a first come, first served basis. CWEA thanks STANTEC for sponsoring the tote bags!





Sponsored by:



TUESDAY OCTOBER 20

Opening General Session - This is Why: Inspiring Water's Next Generation, Fredi Lajvardi		
VIRTUAL EXPO: LIVE CHAT		
WOMEN IMPACTING WATER: BROWNBAG LUNCH SESSION		H SESSION
SCADA Implementation from Multiple Perspectives	Emerging Nutrient Removal	Collection System I&I Control Strategies
Charles Aycock Municipal Automation Services	Michael Walkowiak Brown and Caldwell	Dave Schwartz CDM Smith
ALL	ER	CS
Stantec	Brown AND Caldwell	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: Pilot Study at Hayward WPCF Sandeep Sathyamoorthy Black & Veatch	I&I Micro Detection: Pinpointing Inflow and Infiltration Simply Michelle Harrod Duke's Root Control
SCADA Implementation from the Owner's Perspective &	Advancements and Considerations for Flow: Through Aerobic Granular Sludge Processes John Fraser, Carollo Engineers	Seductive Lure of Level-Only Meters for Measuring I&I
Panel Discussion Charles Aycock Municipal Automation Services	Benefits of Converting Conventional Activated Sludge System to Granular Activated Sludge Bryce Figdore	Jay Boyd ADS Environmental Services
	SCADA Implementation from Multiple Perspectives Charles Aycock Municipal Automation Services ALL Stantec 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	SCADA Implementation from Multiple Perspectives Charles Aycock Municipal Automation Services 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 SCADA Implementation from the Owner's Perspective & Panel Discussion Charles Aycock Municipal Automation Services MOMENTALE BROWNBAG LUNCI ER Membrane Aerated Biofilm Reactors: Full-Scale Implementation and Illustrative Pilots Amit Kaldate, Suez Nutrient Removal Nutrient Removal Nutrient Removal Sudge Processes John Fraser, Carollo Engineers Benefits of Converting Conventional Activated Sludge System to Granular Activated Sludge

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).

Opening Ge	Opening General Session		
VIRTUAL EX	PO: LIVE CHAT		
WOMEN IMPACTING WATER:	BROWNBAG LUNCH SESSION		
Good Practices for Plant Improvement Projects	New and Emerging Regulatory Programs		
William Schilling West Yost Associates	Kathryn Gies West Yost Associates		
ОМ	ALL		
WWH Building a Better World	WEST YOST Water. Engineered.		
Why and How of Improving Operator Involvement with Wastewater Designs Lance Salerno Brown and Caldwell	Collaborative Strategies for Addressing Emerging Regulatory Requirements Debbie Webster Central Valley Clean Water Association		
When Should Start-up Begin? Tom Hendrey West Yost Associates	Whole Effluent Toxicity: How New Regulations Will Impact NPDES Permits Paul Bedore Robertson-Bryan		
Maintenance Lessons Learned from 66 MGD Bypass of Influent Structure Sanjay Reddy Carollo Engineers	Integrated Stormwater/ Wastewater Planning: Adaptive, Long-Term Investment Strategies Based on Community Priorities Trent Stober, HDR		

Schedule and speakers subject to change.

CODES FOR PRACTICE AREAS

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

Find full session and speaker info at AC.CWEA.ORG 27 26

WEDNESDAY AM OCTOBER 21

8:00 - 9:00 a.m	LOCAL SECTION ROUNDTABLES		
TRACK NAME	Workforce Development	Co-Digestion	Collection Systems 101
MODERATOR	Helen Hu, Sacramento Regional County Sanitation District	Sarah Deslauriers Carollo Engineers	Jennifer Rojas Long Beach Water Department
PRACTICE AREAS	ALL	ER	cs
SPONSOR	FJS	EngineersWorking Wonders With Water®	
	Leveraging Agency Research to Engage College Students Ruth Spierling Cal Poly State University	Overview of SB 1383 Regulations Sarah Deslauriers Carollo Engineers	
	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
9:30 - 11:30 a.m.	On Boarding New Maintenance Staff Sergio Ramirez West Bay Sanitary District	Food Waste Co-digestion Project	Eliminating Inflow and
	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	Collection System Travis Fisher Ojai Valley Sanitary District

Schedule and speakers subject to change.

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

	LOCAL SECTION ROUNDTABLES	
Pipeline Rehabilitation	Advanced Water Treatment	PFAS Summit
Adam Brown West Yost Associates	Andrew Salveson Carollo Engineers	Stephen Jepsen SCAP
OM CS ER	OM ER	ALL
		DUDEK
Rehabilitating Aging Collection Systems While Minimizing Related Impacts Mark Carey MC Engineering	Advanced Water Treatment Operations: Carbon Advanced Treatment for Water Reuse Andrew Salveson Carollo Engineers	PFAS: What It is, What It Comes From, Where It's Found and Its Dangers Arlene Blum Green Science Policy Institute UC Berkeley
Lessons Learned Rehabilitating a		Status of Regulations Jared Voskuhl CASA
105" Sewer Interceptor Kingsley Kuang East Bay Municipal Utility District		PFAS Panel Discussion Stephen Jepsen SCAP

ON DEMAND SESSIONS:

For a list of all the on-demand sessions available, <u>click here</u>. These sessions will be available starting October 19. You will have access to all the on-demand sessions for up to 90 days depending on the type of registration you choose.

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WEDNESDAY PM OCTOBER 21

	11:30 - 1:30 p.m.	VIRTUAL EXPO: LIVE CHAT		
	12:00 - 1:15 p.m.	ENGINEERING & RESEARCH BROWNBAG LUNCH SES OPERATION & MANAGEMENT PRACTICES AT CENTRA		
	TRACK NAME	Condition Assessments	Crisis Management	Pumping Physics 101
	MODERATOR	Lani Good Black & Veatch	Andrew Ohrt West Yost Associates	Dennis Lambert SFBS
	PRACTICE AREAS	CS ER OM	ALL	CS OM
	SPONSOR	LEE+RO WATER INFRASTRUCTURE ENGINEERS		LEE+RO WATER INFRASTRUCTURE ENGINEERS
		Going Beyond Just Looks: an Integrated Approach to Condition Assessment David Baranowski South Orange County Wastewater Authority	Outreach: Handling Media Requests During a Crisis Rebecca Schmidt UC Davis Health System	NPSHA vs. NPSHR and Effect on Pump Operation
1:30 - 3:30 p.m.	Benefits of Coachella Valley Water District's Full System Condition Assessment James Reitmeier Black & Veatch	Disaster Mitigation and Recovery Andrew Ohrt West Yost Associates	Ronald Aceto Cornell Pump Company	
	ii.de dide piiii.	A Practical Approach to Assessing Concrete Structures at a Wastewater Treatment Plant Noy Phannavong V&A Consulting Engineers	Lessons Learned from the	Pumping Systems: Energy Efficiency vs. Operating
		Inside the Fence: Assessing/ Remediating 60+ Year Old Critical Plant Piping Daniel Rodriguez Black & Veatch	Camp Fire Michael Lindquist University of California at Davis	Efficiency Ronald Aceto Cornell Pump Company

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).

VIRTUAL LAPO. LIVE CHAI	TUAL EXPO: LIVE CHAT	RTUAL EXPO: LIVE CHAT	
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ENGINEERING & RESEARCH BROWNBAG LUNCH SESSION: OPERATION & MANAGEMENT PRACTICES AT CENTRAL SAN

OF ENAMOUS AFFICIAL TRACTICES AFFICENTIAL 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 Technologies Jenny Reina Jacobs
LCFS Credits for WRRF Co-Digestion Products Eva Agus East Bay Municipal Utility District	Advanced Water Treatment Operations: Membrane Bioreactor Innovations for Water Reuse Amos Branch Carollo 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		PFAS and the Lab Agustin Pierri Weck Laboratories
Overcoming Mixed Signals for Digester Gas Utilization Victoria Evans HDR		PFAS Panel Discussion Stephen Jepsen SCAP

Schedule and speakers subject to change.

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THURSDAY MORNING OCTOBER 22

8:00 - 9:00 a.m.	COMMITTEE ROUNDTABLES		
TRACK NAME	Co-Digestion O&M	Regional San Summit: The EchoWater Project	
MODERATOR	David Bachtel Bachtel Wastewater Engineers	Mike Falk HDR	
PRACTICE AREAS	OM ER	ALL	
SPONSOR	WOODARD & CURRAN		
	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	
9:30 - 11:30 a.m.	Assessing Impact of Food Waste Addition to Liquids Treatment Zakir Hirani Stantec	Benefits of the Pilot Program Seppi Henneman Brown and Caldwell	
	Evaluation of Feedstocks for Co-Digestion at POTWs Colin Moy East Bay Municipal Utility District	Reliability Centered Design/Maintenance Kenneth Abraham HDR	
	Lessons Learned: Pilot Food Waste Co-Digestion at Goleta SD James Dunbar Lystek International	Asset Management: Data Collection and Transfer	
	Breaking Down the Co-digestion Question: Lessons Learned at Encina Scott Goldman, Woodard & Curran	Amanda Morrow Brown and Caldwell	
11:30 - 1:30 p.m.	VIRTUAL EXPO: LIVE CHAT		

Schedule and speakers subject to change.

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.

Find full session and speaker info at AC.CWEA.ORG

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

	COMMITTEE ROUNDTABLES	
Collection Systems Regulatory Compliance	Using Big Data to Improve Process Operations	Laboratory
Lani Good Black & Veatch	Howard Brewen Jacobs	Mindy Boele City of Vacaville Utilities Department
cs	OM ER	LB
		evantec scientific
Collection Systems Compliance: Best Practices and Case Studies James Fischer Fischer Compliance	Smart Digital Solutions Haley Lehman Water Systems Consulting	Left or Right Approach Taken in Submitting CA ELAP's Laboratory Pre-Assessment Requests Jerry Tamura City of Stockton
Collection System: Regulatory Visions of the Future Paul Causey Causey Consulting	Artificial Intelligence for Cost Optimization of Treatment	Quality Assurance for the Most Frequently Analyzed Methods at POTW Labs
Q&A Panel James Fischer Fischer Compliance,	Processes Richard Loeffler Xylem Digital Solutions	Amber Baylor South Orange County Wastewater Authority
Sam Rose (Retired) South Placer Municipal Utility District, Paul Causey Causey Consulting (watch the on-demand session ABCs of P&IDs to prepare for this live session)	Process Controls to Meet Stringent Effluent Limits and Improve Operational Sustainability Victoria Boschmans Hazen and Sawyer	Working Smart: Using a LIMS to Achieve Your California Regulatory Requirements Richard Danielson Accelerated Technology Laboratories
	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

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THURSDAY AFTERNOON OCTOBER 22

11:45 a.m 1:15 p.m.	CAREER PATHWAYS IN WATER/WASTEWATER BROWNBAG LUNCH SESSION	
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
8 Daily Mail Carey C Haaker Equ 1:30 - 3:30 p.m. Flow Pressure Carey C	Combination Machine Maintenance & Daily Maintenance Carey Olcott	Innovation: Sidestream Treatment William Yu Sacramento Regional County Sanitation District
	Haaker Equipment	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
		3D/4D/5D: Construction Ron Perkins HDR

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

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.

CAREER PATHWAYS IN WATER/WASTEWATER BROWNBAG LUNCH SESSION		
Operations 201: Complex P&ID Drawings with Control Narratives	ELAP & TNI	
Chathura Abeyrathna Central San	Josie Tellers City of Davis	
ALL	LB	
Operations 201: Complex P&ID Drawings with Control Narratives Linda Leong SFPUC	The State of ELAP Jacob Oaxaca California State Water Resources Control Board	
	Our Road to TNI Compliance Bruce Medhurst Mammoth Community Water District	

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!



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 ccarchia@cwea.org 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

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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

Contact Monica Myhill, Director of Education, at mmyhill@cwea.org.

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

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REGISTRATION FORM

Register online: MyCWEA.org

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Check here if you do <u>not</u> wish to take advantage of membership: (Non-member rates include 1 year membership in CWEA.) Tell us a bit about you. Please select one response for each question. 1. WHAT IS YOUR CAREER STAGE? 2. WHAT IS YOUR PRIMARY PRACTICE AREA?			
□ Entry-level □ Journey-level □ Enginee □ Supervisor □ Management □ Plant Or □ Executive □ Retiree □ Other □ Safety	on Systems 🛮 Electrical/Instrumentation	intenance utreach	
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REGISTRATION MONDAY, OCTOBER 19 - THURSDAY, OCTOBER 22 2020			
Live Conference	On-Demand Member Content Price	Non-Member Price	
□ STANDARD 30 FULL ACCESS	30 days access \$375	\$567	
☐ EXTENDED 60 FULL ACCESS	60 days access \$475	\$667	
□ PREMIUM 90 FULL ACCESS	90 days access \$525	\$717	
□ VIRTUAL EXPO ONLY EXPO ONLY	No Access FREE	N/A	
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