AC20 Virtual Conference & Expo

CONFERENC

PROGRAM

THIS IS WHY VIRTUAL
OCTOBER 19-22

CWEA

PROTECTING CALIFORNIA’S MOST CRITICAL RESOURCE
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.
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!

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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
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.
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:
**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
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

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 start 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’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 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
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 of us.

Honored with numerous awards for his spirited passion for 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, OCTOBER 19

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<th>Time</th>
<th>Event</th>
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<tr>
<td>ALL DAY</td>
<td>ON-DEMAND - For a listing of the on-demand sessions, please visit AC.CWEA.org</td>
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<tr>
<td>3:30 - 4:00 p.m.</td>
<td>Virtual Conference Orientation</td>
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<td>4:00 - 5:00 p.m.</td>
<td>Icebreaker Reception - Video Roundtables</td>
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#### TUESDAY, OCTOBER 20

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<tr>
<td>8:00 – 9:00 a.m.</td>
<td>New Member Breakfast</td>
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<td>8:00 – 9:00 a.m.</td>
<td>Yoga</td>
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<td>9:00 – 5:00 p.m.</td>
<td>SYP Scavenger Hunt Sponsord by Dudek</td>
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<tr>
<td>9:30 – 11:30 a.m.</td>
<td>Opening General Session: This is Why: Inspiring Water’s Next Generation</td>
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<tr>
<td>11:30 - 1:30 p.m.</td>
<td>Virtual Expo - Live Chat Open</td>
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<tr>
<td>12:00 – 1:15 p.m.</td>
<td>Women Impacting Water Lunch</td>
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<td>1:30 – 3:30 p.m.</td>
<td>Afternoon Sessions</td>
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<td>4:00 - 5:00 p.m.</td>
<td>Trivia Roundtables by the SYP Committee</td>
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#### WEDNESDAY, OCTOBER 21

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<td>8:00 – 9:00 a.m.</td>
<td>Local Section Roundtables</td>
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<td>Morning Sessions</td>
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<td>Virtual Expo - Live Chat Open</td>
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<tr>
<td>12:00 – 1:15 p.m.</td>
<td>Engineering &amp; Research Lunch: Operation and Management Practices at Central San</td>
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<td>1:30 – 3:30 p.m.</td>
<td>Afternoon Sessions</td>
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#### THURSDAY, OCTOBER 22

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<td>Committee Roundtables</td>
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<td>Virtual Expo - Live Chat Open</td>
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<tr>
<td>12:00 – 1:15 p.m.</td>
<td>Career Pathways in Water/Wastewater Lunch</td>
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<td>1:30 – 3:30 p.m.</td>
<td>Afternoon Sessions</td>
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<tr>
<td>4:00 – 5:00 p.m.</td>
<td>CWEA Annual Business Meeting, Closing Session and Prize Winners Announced</td>
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#### FRIDAY, OCTOBER 23

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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.

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**SYP SCAVENGER HUNT**

**GRAND PRIZE**
Apple iPad™

**RUNNER-UP PRIZES**
Fantastic gift cards

**SPONSORED BY**
DUDEK
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

Sponsored by:

Women Impacting Water

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

This is Why...

“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

“This industry is all about teamwork; there’s no one person who can do it all by themselves.”

Sogol Gremi, PE

“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.”

Dora Chiang, PhD, PE

“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.”

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.’

Megan Yoo Schneider, Municipal Water District of Orange County & Eleanor Allen, Water For People
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.

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

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.
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!

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.
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
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

mwhconstructors.com
CONFERENCE COMMITTEE

CWEA PAST PRESIDENT
CONFERENCE CO-CHAIRS

CWEA PAST PRESIDENT
CONFERENCE CO-CHAIRS

CONFERENCE TOTE BAG

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

CONFERENCE TOTE BAG

Your FREE AC20 Gifts Are Here!

This Is Why
October 19-22
Virtual
ac.cwea.org

Sponsored by:

Stantec
### TECHNICAL PROGRAM

#### TUESDAY OCTOBER 20

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<td>VIRTUAL EXPO: LIVE CHAT</td>
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<tr>
<td>12:00 - 1:15 p.m.</td>
<td>VIRTUAL NETWORKING LUNCH: WOMEN IMPACTING WATER</td>
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<th>SCADA Implementation from Multiple Perspectives</th>
<th>Emerging Nutrient Removal</th>
<th>Collection System I&amp;I Control Strategies</th>
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<td>Charles Aycock, Municipal Automation Services</td>
<td>Michael Walkowiak, Brown and Caldwell</td>
<td>Dave Schwartz, CDM Smith</td>
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<th>SCADA Implementation from the Consultant’s Perspective</th>
<th>Membrane Aerated Biofilm Reactors: Full-Scale Implementation and Illustrative Pilots</th>
<th>Effective I&amp;I Reductions Using Adaptive Asset Management Approach</th>
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<tr>
<td>Michael Johnson, Jacobs Engineering Group</td>
<td>Amit Kaldate, Suez</td>
<td>Eva Agus, East Bay Municipal Utility District</td>
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<th>SCADA Implementation from the Integrator’s Perspective</th>
<th>Nutrient Removal Intensification Using MABRs: Pilot Study at Hayward WPCF</th>
<th>I&amp;I Micro Detection: Pinpointing Inflow and Infiltration Simply</th>
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<tr>
<td>Stephen Goldsworth, JEGO Systems</td>
<td>Sandeep Sathyamoorthy, Black &amp; Veatch</td>
<td>Matthew Scaglione</td>
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<th>SCADA Implementation from the Owner’s Perspective &amp; Panel Discussion</th>
<th>Advancements and Considerations for Flow: Through Aerobic Granular Sludge Processes</th>
<th>Seductive Lure of Level-Only Meters for Measuring I&amp;I</th>
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<td>Charles Aycock, Municipal Automation Services</td>
<td>John Fraser, Carollo Engineers</td>
<td>Jay Boyd, ADS Environmental Services</td>
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<th>Good Practices for Plant Improvement Projects</th>
<th>New and Emerging Regulatory Programs</th>
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<td>William Schilling, West Yost Associates</td>
<td>Kathryn Gies, West Yost Associates</td>
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<th>Why and How of Improving Operator Involvement with Wastewater Designs</th>
<th>Collaborative Strategies for Addressing Emerging Regulatory Requirements</th>
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<tr>
<td>Lance Salerno, Brown and Caldwell</td>
<td>Debbie Webster, Central Valley Clean Water Association</td>
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<th>When Should Start-up Begin?</th>
<th>Whole Effluent Toxicity: How New Regulations Will Impact NPDES Permits</th>
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<td>Tom Hendrey, West Yost Associates</td>
<td>Paul Bedore, Robertson-Bryan</td>
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<th>Maintenance Lessons Learned from 66 MGD Bypass of Influent Structure</th>
<th>Integrated Stormwater/Wastewater Planning: Adaptive, Long-Term Investment Strategies Based on Community Priorities</th>
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</thead>
<tbody>
<tr>
<td>Sanjay Reddy, Carollo Engineers</td>
<td>Trent Stober, HDR</td>
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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.

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

Find full session and speaker info at AC.CWEA.ORG
# TECHNICAL PROGRAM

**WEDNESDAY AM OCTOBER 21**

<table>
<thead>
<tr>
<th>Time</th>
<th>LOCAL SECTION ROUNDTABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 - 9:00 a.m.</td>
<td><strong>LOCAL SECTION ROUNDTABLES</strong></td>
</tr>
<tr>
<td>TRACK NAME</td>
<td>Workforce Development</td>
</tr>
<tr>
<td>MODERATOR</td>
<td>Helen Hu, Sacramento Regional County Sanitation District</td>
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<tr>
<td>PRACTICE AREAS</td>
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<td>SPONSOR</td>
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<tr>
<td>9:30 - 11:30 a.m.</td>
<td><strong>LOCAL SECTION ROUNDTABLES</strong></td>
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<tr>
<td>TRACK NAME</td>
<td>Pipeline Rehabilitation</td>
</tr>
<tr>
<td>MODERATOR</td>
<td>Adam Brown, West Yost Associates</td>
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<tr>
<td>PRACTICE AREAS</td>
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</tbody>
</table>

## SCHEDULE

- **9:30 - 11:30 a.m.**
  - **Leveraging Agency Research to Engage College Students**
    - Speaker: Ruth Spierling, Cal Poly State University
  - **Overview of SB 1383 Regulations**
    - Speaker: Sarah Deslauriers, Carollo Engineers
  - **Easements 101**
    - Speaker: Travis Fisher, Ojai Valley Sanitary District
  - **On Boarding New Maintenance Staff**
    - Speaker: Sergio Ramirez, West Bay Sanitary District
  - **Food Waste Co-digestion Project Regulatory Challenges and Benefits**
    - Speaker: Ganesh Rajagopalan, Kennedy Jenks Consultants
  - **Eliminating Inflow and Infiltration in the Collection System**
    - Speaker: Travis Fisher, Ojai Valley Sanitary District
  - **Rehabilitating Aging Collection Systems While Minimizing Related Impacts**
    - Speaker: Mark Carey, MC Engineering
  - **Status of Regulations**
    - Speaker: Jared Voskuhl, CASA
  - **PFAS: What It Is, What It Comes From, Where It’s Found and Its Dangers**
    - Speaker: Arlene Blum, Green Science Policy Institute UC Berkeley
  - **Lessons Learned Rehabilitating a 105” Sewer Interceptor**
    - Speaker: Kingsley Kuang, East Bay Municipal Utility District
  - **PFAS Panel Discussion**
    - Speaker: Stephen Jepsen, SCAP

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## TECHNICAL PROGRAM

**WEDNESDAY PM OCTOBER 21**

<table>
<thead>
<tr>
<th>Time</th>
<th>VIRTUAL EXPO: LIVE CHAT</th>
<th>ENGINEERING &amp; RESEARCH LUNCH: OPERATION &amp; MANAGEMENT PRACTICES AT CENTRAL SAN</th>
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<tbody>
<tr>
<td>11:30 - 1:30 p.m.</td>
<td>VIRTUAL EXPO: LIVE CHAT</td>
<td>ENGINEERING &amp; RESEARCH LUNCH: OPERATION &amp; MANAGEMENT PRACTICES AT CENTRAL SAN</td>
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<td>12:00 - 1:15 p.m.</td>
<td>VIRTUAL EXPO: LIVE CHAT</td>
<td>ENGINEERING &amp; RESEARCH LUNCH: OPERATION &amp; MANAGEMENT PRACTICES AT CENTRAL SAN</td>
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<tr>
<td>TRACK NAME</td>
<td>Condition Assessments</td>
<td>Crisis Management</td>
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<td>Pumping Physics 101</td>
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<tr>
<td>MODERATOR</td>
<td>Lani Good</td>
<td>Colin Bailey</td>
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<td>Black &amp; Veatch</td>
<td>GCR</td>
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<td>Dennis Lambert</td>
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<td>PRACTICE AREAS</td>
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<td>WATER INFRASTRUCTURE ENGINEERS</td>
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<td>1:30 - 3:30 p.m.</td>
<td>Going Beyond Just Looks: an Integrated Approach to Condition Assessment</td>
<td>Outreach: Handling Media Requests During a Crisis</td>
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<td></td>
<td>David Baranowski</td>
<td>Rebecca Schmidt</td>
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<td>South Orange County Wastewater Authority</td>
<td>UC Davis Health System</td>
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<td>NPSHA vs. NPSHR and Effect on Pump Operation</td>
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<td>Ronald Aceto</td>
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<td>Cornell Pump Company</td>
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<td>Disaster Mitigation and Recovery</td>
<td>Colin Bailey</td>
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<td>CMMS Success: Post Collection System Assessment</td>
<td>Lessons Learned from the Camp Fire</td>
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<td>Nahum Padilla Valenzuela</td>
<td>Michael Lindquist</td>
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<td>Coachella Valley Water District</td>
<td>University of California at Davis</td>
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<td>Pumping Systems: Energy Efficiency vs. Operating Efficiency</td>
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**TECHNICAL PROGRAM**
**THURSDAY MORNING OCTOBER 22**

8:00 - 9:00 a.m.  **COMMITTEE ROUNDTABLES**

<table>
<thead>
<tr>
<th>TRACK NAME</th>
<th>COMMITTEE ROUNDTABLES</th>
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<tbody>
<tr>
<td>Co-Digestion O&amp;M</td>
<td>Regional San Summit: The EchoWater Project</td>
</tr>
</tbody>
</table>

**MODERATOR**
- David Bachtel
  - Bachtel Wastewater Engineers
- Mike Falk
  - HDR

**PRACTICE AREAS**
- DM
- ER
- OM
- ALL
- LB
- CS

**SPONSOR**
- Woodward-Wade

9:30 - 11:30 a.m.

**Co-digestion of Organics from Mixed Solid Waste (MSW)**
- Yanir Scherson
  - Anaergia

**Assessing Impact of Food Waste Addition to Liquids Treatment**
- Zakir Hirani
  - Stantec

**Evaluation of Feedstocks for Co-Digestion at POTWs**
- Colin Moy
  - East Bay Municipal Utility District

**Lessons Learned: Pilot Food Waste Co-Digestion at Goleta SD**
- James Dunbar
  - Lystek International

**Breaking Down the Co-digestion Question: Lessons Learned at Encina**
- Scott Goldman
  - Woodard & Curran

**Program Introduction, Program Implementation and Where We Are Now**
- Dan Wilson
  - Sacramento Regional County Sanitation District

**Benefits of the Pilot Program**
- Seppli Henneman
  - Brown and Caldwell

**Reliability Centered Design/Maintenance**
- Kenneth Abraham
  - HDR

**Asset Management: Data Collection and Transfer**
- Amanda Morrow
  - Brown and Caldwell

11:30 - 1:30 p.m.  **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
TECHNICAL PROGRAM
THURSDAY AFTERNOON OCTOBER 22

11:45 a.m. - 1:15 p.m. CAREER PATHWAYS IN WATER/WASTEWATER LUNCH

TRAVES 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

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

3D/4D/5D: Construction
Ron Perkins
HDR

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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

Before 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 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
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

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

(PLEASE PRINT OR TYPE)

First Name: _____________________________________  Last Name: _____________________________________

Agency/Company: _______________________________  Title: ____________________________________________

Address: __________________________________________________________________________________________

City:   __________________________________________  State:   ______________________  Zip: ______________

Phone Number: __________________________________  E-Mail: __________________________________________

☐ CWEA MEMBER  ☐ WEF MEMBER  ☐ CA-NV AWWA MEMBER # _______________________________

Check here if you do not 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?
   ☐ Student  ☐ Job Seeker  ☐ Entry-level  ☐ Journey-level  ☐ Supervisor  ☐ Management  ☐ Executive  ☐ Retiree  ☐ Other

2. WHAT IS YOUR PRIMARY PRACTICE AREA?
   ☐ Collection Systems  ☐ Electrical/Instrumentation  ☐ Engineering  ☐ Laboratory  ☐ Plant Maintenance  ☐ Plant Operations  ☐ Pretreatment  ☐ Public Outreach  ☐ Safety  ☐ Stormwater  ☐ Utility Executive  ☐ Other

3. WHAT TYPE OF ORGANIZATION DO YOU WORK FOR?
   ☐ Municipal - Large (400K+ customers)  ☐ Municipal - Medium (50K-400K customers)  ☐ Municipal - Small (< 50K customers)  ☐ Non-municipal - Consulting Firm  ☐ Non-municipal - Manufacturer or sales representative  ☐ Non-municipal - Regulator, State or Federal  ☐ Other

REGISTRATION

MONDAY, OCTOBER 19 - THURSDAY, OCTOBER 22 2020

<table>
<thead>
<tr>
<th>Plan</th>
<th>Live Conference</th>
<th>On-Demand Content</th>
<th>Member Price</th>
<th>Non-Member Price</th>
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<td>6-10 Attendees 10% Discount</td>
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<td>11-20 Attendees 15% Discount</td>
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<td>21+ Attendees 20% Discount</td>
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</table>

☐ Students, retired members, academics and regulator discount
   Please call member services 510.382.7800 x0

Fee Total $ 

PAYMENT INFORMATION

For payments by check or money order, make payable to: CWEA AC20.

For payments by credit card, please print clearly.

Credit card: ☐ VISA  ☐ MASTERCARD  ☐ DISCOVER  ☐ AMEX  Signature: ________________________________

Credit card number: ________________________________  Expiration date: ________________________________

Name of account holder: ________________________________  Billing zip code: ________________________________