ADVANCED WASTEWATER TREATMENT WORKSHOP

MONDAY, DECEMBER 6TH 1:00 P.M. TO 4:30 P.M.

Join the Clean Water Summit Partners for a free webinar focusing on opportunities and challenges for advanced wastewater treatment. This workshop is designed to provide a high-level overview of various advanced treatment options as well as costs and limitations, particularly in the context of finding the most effective means of addressing constituents of emerging concern (including PFAS), nutrients, energy consumption and emissions issues, and recycled water production and usage.

This workshop is intended for:

- State Legislative Officials and Staff
- State and Regional Water Board Members and Staff
- Environmental Advocacy Organizations

This event is free, but advance registration is required: <u>Advanced Treatment Workshop</u> <u>Registration</u>

Hear from the experts on wastewater planning and treatment, including specific case studies and examples being implemented or planned across California.

1:00pm	Introduction and Purpose of the Workshop	Adam Link, Executive Director California Association of Sanitation Agencies
1:10pm	Advanced Treatment 101	Jim Herberg, General Manager Orange County Sanitation District
1:35pm	Advanced Treatment and Nutrients Management	Mike Falk, Senior Professional Associate HDR Inc.
2:00pm	General Q&A	Lorien Fono, Executive Director Bay Area Clean Water Agencies
2:25pm	Break	
2:40pm	Advanced Treatment and CECs	Kathryn Gies, Engineering Manager West Yost Associates
3:05pm	Advanced Treatment and the Water-Energy Nexus	Sarah Deslauriers, Vice President and National Climate Change and Resilience Lead Carollo Engineers
3:35pm	Advanced Treatment, Water Recycling Opportunities, and Reducing Ocean Discharges	Dave Richardson, Practice Leader Wastewater Treatment Design Woodard & Curran
3:55pm	General Q&A	Dave Jones, Vice President Hazen and Sawyer
4:10pm	Synthesizing How the Opportunities and Challenges Should Impact State Policies	Erin Mackey, National Technical Innovation Leader Brown & Caldwell

Clean Water Summit Partners Hosted by the Clean Water Summit Partners:

California Association of Sanitation Agencies (CASA) Bay Area Water Quality Agencies (BACWA) Central Valley Clean Water Association (CVCWA) California Water Environment Association (CWEA)

Southern California Alliance of Publicly Owned Treatment Works (SCAP)

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SPEAKERS



Adam Link

Adam Link is CASA's Executive Director. He brings over 10 years of experience dealing with wastewater regulatory, legislative, and legal issues to managing the association and ensuring that CASA fulfills its mission of providing trusted information and advocacy on behalf of California clean water agencies. Prior to joining CASA in 2013, Adam was a practicing attorney focusing on water quality, environmental and local government issues, and previously worked in the California Legislature and for the business consulting firm Accenture. Adam holds degrees from the University of California, Santa Barbara, and University of the Pacific, McGeorge School of Law.

Summit Portners



Jim Herberg, PE, MS

Jim Herberg has served as General Manager of the Orange County Sanitation District (OCSD) since 2013 and has more than 30 years of professional experience. OCSD provides regional wastewater service to 2.6 million residents, with an annual operating and capital budget of approximately \$450 million. He is a registered Civil Engineer in the State of California and is a Board Certified Environmental Engineer by the American Academy of Environmental Engineers. Jim holds a B.S. Degree in Civil Engineering from the University of Oklahoma, and a M.S. Degree in Civil Engineering from Long Beach State. Jim has been with the Orange County Sanitation District since 1995.



Dave Jones, PE, MS, MBA

Dave Jones PE is Vice President in Hazen and Sawyer's Los Angeles office. Jones has more than 35 years of project and program management experience specializing in stormwater, wastewater, drinking water, recycled water, and solid waste engineering throughout the state of California. Jones received a BS degree in Civil Engineering from Northeastern, a MS degree Civil/Environmental Engineering from Stanford University, and a MBA from the University of Southern California. He is also a Board Certified Environmental Engineer from the American Academy of Environmental Engineers and Scientists.



Kathryn Gies, PE

Kathryn has over 20 years experience planning and permitting wastewater treatment and reuse projects. Particular areas of expertise include wastewater treatment facilities planning, treatment process design and modeling, nutrient removal, sustainability evaluations, recycled water facilities planning, natural wastewater treatment systems, NPDES regulatory permitting, and biosolids land application.



Mike Falk, PhD, PE

Michael Falk is a Senior Professional Associate at HDR where he specializes in process engineering at water resource recovery facilities with an emphasis on nutrient management. Dr. Falk has been employed at HDR since receiving his PhD from UC Davis in 2008.

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Sarah Deslauriers, PE, MS, MSE

Sarah Deslauriers is a Vice President at Carollo Engineers and serves as their National Climate Change and Resilience lead. Sarah is also CASA's climate change expert, tracking and coordinating responses to regulatory issues and policy initiatives that impact the wastewater sector. She proactively engages state agencies in discussions on both mitigation and adaptation related issues to create opportunities for the wastewater sector in building resilient communities. Sarah holds a BS and MS in Atmospheric, Oceanic, and Space Science, a MSE in Environmental and Water Resources Engineering, and a graduate certificate in the Program of Industrial Ecology from the University of Michigan. Sarah is also a registered professional engineer.

Summit



Dave Richardson, PE, MS, MBA

Dave Richardson is a National Practice Leader for Woodard & Curran, focused on the Wastewater and Recycled Water markets. He has decades of engineering experience and understands how social, environmental, and economic considerations contribute to sustainable projects. He is skilled at guiding participatory decision-making through work on multi-stakeholder projects. He has developed water recycling projects throughout northern California for both wastewater discharge reduction (Santa Rosa, Windsor and San Jose) and for water supply enhancement (Palo Alto, Monterey, West Bay Sharon Heights, and others), and is currently Program Manager of the \$455 M Harvest Water Recycled Water and Conjunctive Use Program for Regional San in South Sacramento County, funded by Prop 1 and USBR Dave holds a B.S. and M.S. degree in Civil Engineering, as well as an M.B.A. from Stanford.



Lorien Fono, PhD, PE

Dr. Fono is the Executive Director of the Bay Area Clean Water Agencies (BACWA), a joint powers agency whose members include the many municipalities and special districts that provide sanitary sewer services to more than 7.1 million people. She has more than 15 years of experience in wastewater, recycled water, stormwater regulatory compliance, water resources management, and wastewater treatment planning. Her background also includes research of water and air quality issues, with a focus on the occurrence, fate, and transport of emerging wastewater-derived contaminants. Dr. Fono holds a B.S. in Chemistry from the University of Toronto, and an M.S. and Ph.D. in Environmental Engineering and Science, both from the University of California at Berkeley. She is a licensed Professional Civil Engineer in California.



Erin Mackey, PhD, PE

As Brown and Caldwell's UV process lead, Dr. Mackey's background includes over 20 years of experience in highly technical drinking water, recycled water, wastewater, and industrial projects, ranging from pilot studies to design and regulatory guidance. Her expertise includes UV disinfection; advanced oxidation and adsorptive processes; regulatory compliance; and water quality and treatability evaluation. In addition to conventional process engineering, Dr. Mackey manages municipal, federal, and research projects. She has published numerous reports and peer-reviewed papers on UV disinfection systems and technologies for the treatment of contaminated water. A licensed professional engineer, Dr. Mackey holds a doctorate and a master's in environmental science and engineering from Rice University, and a bachelor's in environmental engineering.