

## **WRF Webinar Program:**

**Tuesday, January 28, 2020**

### **Presenter Biography Information**

**Rucker Alex** – Urban Water Planner and Principal, California Urban Water Agencies

Rucker Alex is an urban water planner and Principal with Brown and Caldwell's Northern California One Water group. Her project experience includes water reuse, resilience and adaptation, stormwater, economic analyses, policy research, and business process implementation. As staff for the California Urban Water Agencies not-for-profit organization, she serves as the facilitator for the Water Reuse Committee. Rucker holds degrees from Harvard College and U.C. Berkeley.

**Wendy Broley** – One Water Leader, California Urban Water Agencies

Wendy Broley is the One Water Leader at Brown and Caldwell and she also acts as a staff engineer for the California Urban Water Agencies where she has led the development of multiple projects, technical papers and issue briefs related to water reuse and One Water implementation. She is a licensed professional engineer in the State of California with a B.S. degree in Chemical Engineering from University of California, San Diego and has over 19 years of experience in the water and wastewater treatment industry. Her expertise includes integrated One Water planning as well as process engineering for a wide range of membrane and advanced treatment systems in potable reuse, surface water treatment, and groundwater desalination applications. Wendy led the development of CUWA's original white paper on Adapting to Change: Utility Systems and Declining Flows and was a Co-Principal Investigator on the Water Research Foundations Blueprint for One Water.

**Chris Castaing** – Operations & Maintenance, San Diego County Water Authority

Mr. Castaing is an Operations & Maintenance manager for San Diego County Water Authority overseeing the operations and technical services departments. He has been employed with SDCWA since 2004. He began his career in water with Valley Center Water District as a Meter Reader in 1997. He also is an instructor for Palomar College and Mt. San Jacinto College where he teaches Backflow Tester Certification, Cross Connection Control, Management & Supervision, Advanced Water Treatment, and Water Distribution. Chris holds a D5 Water Distribution Operator Certificate and a T2 Water Treatment Operator with the state of California along with a Backflow Tester Certificate and Cross Connection Control Specialist with CA/NEV AWWA.

**Seppi Hanneman** – Process Engineer, Brown and Caldwell

Seppi is a process engineer for Brown and Caldwell in Walnut Creek, California. He has a bachelor's and master's in Civil and Environmental Engineering from Cal Poly San Luis Obispo. He focuses his work on wastewater process planning and design as well as recycled water projects. He was involved in the El Estero Water Resource Center secondary upgrades since 2012, and has been involved in subsequent evaluations looking at how the influent wastewater pollutant concentrations have changed due to the California drought and other related impacts.

**Tom Rosales** – Deputy Director, City of San Diego

Tom Rosales is currently a Deputy Director with the City of San Diego in the City's Public Utilities Department. In this role, Mr. Rosales is responsible for overseeing the day-to-day operations and maintenance of the City's Wastewater Treatment Division, which has four treatment

facilities, numerous pump stations and the City's Pure Water Demonstration Facility. Before joining the City, Mr. Rosales served as the Wastewater Manager for the City of Klamath, Oregon and as General Manager for the South Orange County Wastewater Authority. Mr. Rosales has also served on numerous state and regional Boards, including the California Association of Sanitation Agencies and the California Sanitation Risk Management Authority. Mr. Rosales holds a Grade 5 wastewater certification issued in California, has a Bachelor's degree in Economics and a Master of Science degree in Environmental Sciences.

**WRF & WEF Webinar Program:**

**Tuesday, February 25, 2020**

**Presenter Biography Information**

**Mark Sobsey, PhD** – Research Professor, Dept. of Environmental Sciences and Engineering, University of North Carolina, Chapel Hill

Recently retired from his full-time position as Kenan Distinguished Professor, Dr. Mark Sobsey studies human exposure to and health effects from pathogens (disease-causing) microbes in water, food and other environmental media to which people can become exposed in the developed and developing world.

An important focus of this research is combining microbial detection of pathogens (and microbial indicators for them) in these media with human health effects studies (such as diarrheal disease prevalence and incidence) in populations exposed to these media in order to quantify disease risks and burdens, devise and evaluate interventions to reduce these risks, such as water treatment processes that reduce pathogens, and use this information to conduct risk assessments and inform policy decisions for risk management. Hence this research shifts the axis of the university to work that informs integrated environmental decision-making and influences state, national and global policy on water, sanitation and health.

**Matt Arduino, DrPH** – Senior Adviser, Environmental Hygiene and Infection Prevention, CDC Matthew J Arduino, MC, DrPH, FSHEA, M(ASCP); Sr Adviser for Environmental Hygiene and Infection Prevention, DHQP, CDC. Dr. Arduino received his BS in Biology from the College of Mount Saint Vincent, MS in Microbiology from New York Medical College, and DPH from the University of North Carolina at Chapel Hill. He has been at the CDC for over 30 years and worked in the Division of Healthcare Quality Promotion (and formerly Hospital Infection Program) for all of this time. He specializes in dialysis-associated diseases, water treatment and disinfection, nontuberculous mycobacteria, cleaning, disinfection and sterilization, and the role of the environment in disease transmission. He serves as consultant to FDA CDRH and CDER and the Antimicrobics Division of the EPA. He is an author or coauthor on 154 papers and 13 book chapters.

**Christopher Brown, PhD** – Acting Director, Office of Science and Technology Assessment, OSHA Christopher K. Brown is a scientist with the Occupational Safety and Health Administration. He holds a PhD in biodefense from George Mason University, a Master of Public Health in biostatistics and epidemiology from the University of Nebraska Medical Center, and a bachelor's degree in biology from the University of Louisville.

**Christine Tomlinson, PhD** – Senior Biologist, Consequence Management Advisory Division, Office of Emergency Management, U.S. Environmental Protection Agency

Dr Christine (Christy) Tomlinson, Senior Biologist, CBRN Consequence Management Advisory Division, Office of Emergency Management, has recently joined EPA after serving as a scientific advisor for U.S. Federal Government clients for the past nine years. As a technical support contractor, Christy has worked with U.S. Army Special Operations Command, the Chemical and Biological Defense Division within the Science and Technology Directorate at the Department of Homeland Security (DHS), and Defense Advanced Research Project Agency (DARPA), supporting programs involving characterization of biological threats, risk assessments of bioterrorism, viral evolution, synthetic biology, host response to disease, and rapid chem/bio detection systems and clinical diagnostics development. She received her Ph.D. from the University of North Carolina (Chapel Hill) in microbiology and immunology in 2007. Prior to that, she received her B.S. in Biological Sciences from Colorado State University (Fort Collins).

**Rasha Maal-Bared, PhD** – Senior Microbiologist, EPCOR Water Services, Inc.

*Dr. Maal-Bared* is the senior microbiologist at EPCOR Water Services Inc. She runs both the drinking water and wastewater microbiology laboratories and conducts research related to optimization of water monitoring, treatment and distribution.

Dr. Maal-Bared is an environmental microbiologist with a strong background in ecosystem approaches to public health. Her work focuses on protecting public health by understanding waterborne pathogen ecology, survival and transmission in both natural and engineered environments. She completed a PhD in Environmental Microbiology at the University of British Columbia. She has been the recipient of several Canadian Institutes for Health Research (CIHR) Research and Science Policy Awards, the National Science and Engineering Research Council Visiting Postdoctoral Fellowship, and the American Society of Microbiology Science Teaching Fellowship.

She is currently a Registered Microbiologist with the Canadian College of Microbiologists, a Professional Biologist with the Alberta Society of Professional Biologists, and a participant in the 2018 Water Environment Federation's Water Leadership Institute.