

US EPA/PWB Webinar Program: Enhanced Aquifer Recharge: Influence of Stormwater on Groundwater Quality and Aquifer Recharge
Wednesday, April 28, 2021

Webcast Summary:

Overview:

Enhanced aquifer recharge (EAR) has tremendous potential as a process to replenish and supplement existing groundwater supplies. EAR using stormwater, however, also presents a risk of groundwater contamination. In EAR application, it is important to understand not only the quantity of water that can be replenished, but also the potential impacts to water quality.

This webinar will highlight the following ongoing EPA and EPA supported research investigating the application and potential impacts to water quality using EAR technologies: (1) state of the science on information leading to best practices for EAR using stormwater; (2) methods currently being investigated to understand water movement and quality in karst aquifers; and (3) highlights of a recently completed field project supported by EPA to evaluate green infrastructure system pollutant removal performance in the arid Intermountain West and to document the potential for stormwater harvesting and groundwater recovery to enhance water availability in Utah's Salt Lake Valley.

Presenter Biography Information

Tom Johnson, Ph.D

Tom is a hydrologist with EPA's Office of Research and Development (ORD), Center for Public Health and Environmental Assessment . His research interests include climate and land use change impacts on water and watershed systems and the resilient design of urban water quality BMPs. Tom holds a Ph.D. from Penn State University.

Doug Beak, Ph.D.

Doug is an environmental chemist with EPA ORD, Center for Environmental Solutions and Emergency Response. His current research focuses on water quality, vadose zone transport of contaminants, and the geochemistry of naturally occurring contaminants in EAR and green infrastructure systems. Doug holds a Ph.D. in environmental/ soil chemistry from The Ohio State University.

Ryan Dupont, Ph.D.

Ryan is a professor of environmental engineering in the Department of Civil and Environmental Engineering and a research associate in the Utah Water Research Laboratory at Utah State University. His applied research focuses on soil and groundwater remediation, wastewater treatment evaluation, risk assessment of water reuse, and implementation of green infrastructure for stormwater harvesting in the Intermountain West. Ryan holds a Ph.D. in environmental health engineering from the University of Kansas.

US EPA/PWB Webinar Program: Water Utilities as Anchor Institutions Confirmation
Friday, April 30, 2021

Webcast Summary:

Overview:

Water utilities can root themselves as anchor institutions within their communities.

Anchor institutions are:

- Public service entities—like hospitals, universities, or utilities—which are tied to a location due to infrastructure or mission.
- Entities that provide critical services and vital assets to improve economy, health, environment, and well-being in communities.
- Organizations that provide active civic leadership and participate in and add to the public life and character of their community.

View the following webinar to learn what some water utility leaders are doing above and beyond their day-to-day operations to root themselves as Anchor Institutions within their communities. The webinar is an overview of Anchor Institution Activity Areas from the utility leaders, themselves, about these amazing efforts to create additional benefits to their community.

Presenter Biography Information

Charlotte Katzenmoyer -- Capital Region Water

Charlotte graduated from the University of Akron with a Bachelor of Science in Civil Engineering and graduated from Lehigh University with Master of Science in Environmental Engineering. She has over 20 years of experience in the water industry and most recently led a team of 200 employees as Director of Public Works with the City of Lancaster. While in Lancaster, Charlotte oversaw the modernization of its water and sewer infrastructure and developed a nationally recognized green stormwater infrastructure program.

Cathy Bailey -- Greater Cincinnati Water Works

Cathy Bernardino Bailey is the Executive Director of Greater Cincinnati Water Works for the City of Cincinnati. Ms. Bailey is the first woman and African American woman to lead the utility since its formation 200 years ago. She began with the utility in 1992 as a chemist. The following year Cathy took on the role of Water Quality and Treatment Data Manager. She later earned several promotions to other key managerial positions, including Information Technology Help Desk Administrator, Strategic Planning and Performance Measurement Manager, and Project Manager. Cathy was temporarily promoted to the Director of Greater Cincinnati Water Works beginning July 12, 2015. On September 20, 2015, she was permanently appointed as the Executive Director, where she demonstrates unrelenting drive, consistent perseverance, and perpetual optimism -- leading her to the top of her profession. She holds a Bachelor of Science degree in Chemistry from the University of Cincinnati and has been with GCWW her entire 28-year career. Cathy annually speaks and participates on panels at the American Water Works Association, the Association of Metropolitan Water Agencies (AMWA), and the Engaging Local Government Leaders conferences, and other water summits sharing knowledge on strategic planning, employee engagement, workforce diversity, and continuous improvement. She is the

Policy Committee Chair for AMWA and a Water Research Foundation Board Director. She has distinguished herself as a leader throughout her career, focusing on communications, strategic thinking, innovation, outreach, and teamwork to bring forward solutions that positively impact the community. Her local community work and leadership roles were recognized as she was one of 2018 Greater Cincinnati YWCA's Career Women of Achievement, and one of the Cincinnati Venue Magazine's Women of Influence. In 2019, Ms. Bailey was named one of seven African American leaders in Cincinnati that residents should get to know and understand their impact in the region. She is a board member of the Cincinnati Playhouse in the Park, serves on the Leadership Cincinnati Steering Committee, and is a member of Delta Sigma Theta Sorority, Inc.

Jeremiah Johnson -- Beckley Sanitary Board

Value of Water Webinar Program: Meeting the Moment: The Urgency and Opportunity to Invest in Water Systems

Friday, May 14th, 2021

Webcast Summary:

Overview:

Earlier this year, the American Society of Civil Engineers (ASCE) released its quadrennial report card for America's infrastructure. Once again, the grades were concerning – especially for water. While the drinking water grade improved over past report cards, a C- still indicates there are serious deficiencies in the nation's drinking water systems. The grades for wastewater and stormwater were even worse. ASCE and the Value of Water Campaign released a report in 2020 that found our annual national water infrastructure investment gap is over \$81 billion dollars, and it is growing every year.

Join us for an event on Friday, May 14th at 11:00 AM ET / 8:00 AM PT hosted by the Value of Water Campaign as part of United for Infrastructure 2021. Hear from expert voices on the scale and scope of our water infrastructure challenges, the unprecedented \$111 billion proposed by the Biden administration to make what would be a historic commitment to water infrastructure and a specific commitment to removing lead from water, and what this all could mean for job creation and the communities that water providers serve.

Presenter Biography Information

Radhika Fox -- Principal Deputy Assistant Administrator, Office of Water, Environmental Protection Agency

Radhika Fox is the Principal Deputy Assistant Administrator for the U.S. Environmental Protection Agency's Office of Water. The Office of Water works to ensure that drinking water is safe, wastewater is safely returned to the environment, and surface waters are properly managed and protected. Prior to joining EPA, Radhika served as Chief Executive Officer for the U.S. Water Alliance, Director for policy and government affairs for the San Francisco Public Utilities Commission, and the Federal Policy Director at PolicyLink. Radhika has used her

20+ years of experience to address the most salient water issues facing the nation—including climate change, affordability, equity, governance, innovative finance, and the evolution of the One Water movement. Radhika holds a B.A. from Columbia University and a Masters in City and Regional Planning from the University of California at Berkeley where she was a HUD Community Development Fellow.

Ike Irby, PhD -- Policy Advisor, Office of the Vice President, The White House

In 2017 Ike earned a PhD in marine science at William & Mary's (W&M) Virginia Institute of Marine Science, where he studied the effectiveness of environmental regulations in the face of climate change. The focus of his prize-winning dissertation was the development of a model to investigate how climate change and reduced nutrient levels affect the waters of Chesapeake Bay. Irby's model is used by the Environmental Protection Agency in its efforts to restore water quality in the Chesapeake. Irby also has a master's in public policy from W&M. After majoring in geology at Bowdoin, Irby was set to join the Peace Corps, but those plans were derailed when his loan company went under—this was during the financial crisis in 2009—and he found himself unable to defer payments on his undergrad loans. Instead, Irby taught science at a prep school in Missouri for three years before heading to graduate school. Irby's previous role was that of Harris's senior policy advisor in the US Senate, covering climate, environment, energy, transportation, and infrastructure. Irby's academic credentials make him impeccably suited for his job.

Rick Callender -- CEO, Valley Water

Rick Callender is the first African American to serve in the chief executive officer role in Valley Water's 90-year history. Callender's immediate priorities will be navigating the agency through COVID-19, while focusing on the Anderson Dam Seismic Retrofit, Pacheco Reservoir Expansion, Rinconada Water Treatment Plant Reliability Improvement, and the Safe, Clean Water and Natural Flood Protection Program. Callender, a longtime advocate for racial equality, also announced that he will establish a new unit within Valley Water, the Office of Racial Equity, Diversity, and Inclusion. This office will ensure effective diversity and inclusion practices are in place internally and also within the communities Valley Water serves. Valley Water's Board of Directors approved Callender's appointment in June to take over for Norma Camacho. Camacho announced her planned retirement in December 2019. Callender has worked for Valley Water since 1996, most recently as the Chief of External Affairs (CEA). As CEA, he led the district's strategic external communications, all government relations efforts on local, regional, state, and federal levels, and was responsible for keeping the agency informed of public policies that directly affect the water district. Before joining Valley Water, Callender worked as a Special Assistant to former City of San Jose Mayor Susan Hammer, as a Field Campaign Organizer for the California Democratic Party, as a Congressional Fellow for the United States House of Representatives, Subcommittee on Energy, and as a Congressional Fellow to Congressman Ronald V. Dellums. Callender earned his Bachelor of Science degree in Industrial Engineering and Technology with an emphasis in electronic and computer technology from California State University, Chico, completed all coursework for his Master of Arts in Public Administration from San Jose State University, earned his Juris Doctorate from Northwestern California University School of Law, and is a member of the California State Bar. He has also attended and graduated from eight executive leadership programs at different universities throughout the nation.

Callender currently serves as Vice President of the California State Conference National Association for the Advancement of Colored People (NAACP) and has previously served as President of the San Jose/Silicon Valley NAACP

Emily Feenstra -- Managing Director, Government Relations, and Infrastructure Initiatives, ASCE
Emily Feenstra is Managing Director of Government Relations and Infrastructure Initiatives of ASCE, which represents more than 150,000 civil engineers worldwide and is America's oldest national engineering society. Prior to that, Feenstra was the Director of Infrastructure Initiatives and Public Affairs for ASCE. Before her tenure at ASCE, she was the Deputy Director of the U.S. Water Alliance, where she led policy initiatives and strategic partnerships. Her work in infrastructure began as a public affairs consultant for the Washington State Department of Transportation in Seattle, Washington, where she worked on the Alaskan Way Viaduct project. Additional transportation experience includes work with the Washington State Transportation Center and as Director of Communications for the Intelligent Transportation Society of America. Feenstra oversees ASCE government relations, including federal and state legislative affairs, regulatory affairs, grassroots, and policy development in addition to media relations. She earned a bachelor's degree in Public Policy Studies from Duke University and a master's in Public Administration from the University of Washington.

Josina Morita -- Commissioner, Metropolitan Water Reclamation District of Greater Chicago
On Nov. 8, 2016, Commissioner Josina Morita became the first Asian American elected county-wide in Cook County. Commissioner Mori-ta is currently serving as the Chairman of the Budget & Employment Committee, the Information Technology Committee and the Maintenance & Operations Committee. She is also the Vice Chairman of the Engineering and Monitoring & Research Committees. Commissioner Morita is director of the United Congress of Community and Religious Organizations, a multiethnic alliance of community organizations working together across 30 communities in Cook County. She serves on the State of Illinois' Racial Profiling and Data Oversight Board, the Asian American Employment Plan Council, and the city of Chicago's Commission on Equity. She also presides on the boards of the Woods Fund of Chicago and the Asian American Action Fund of Greater Chicago. In 2007, the Community Renewal Society named Commissioner Morita one of Chicago's "35 Under 35," fighting racism and poverty. In 2012, she was elected as a delegate to the Democratic National Convention. The same year, she was selected as a Jim Edgar Fellow and a Leadership Greater Chicago Fellow. In 2013, she received the Emerging Leader Award from the Illinois Campaign for Political Reform and the Breaking Barriers Award from the Chicago Foundation for Women. Commissioner Morita's human rights and social justice work has been recognized by the Rainbow PUSH Coalition and the Japanese American Citizens League. She holds a master's degree in Urban Planning and Public Policy from the University of Illinois at Chicago and a B.A. in Sociology and Inter-national Race Relations from Pitzer College. Will Pickering, CEO, Pittsburgh Water and Sewer Authority.

US EPA Webinar Program: Harmful Algal Blooms and Algal Toxins

Tuesday, May 25th, 2021

Webcast Summary:

Overview:

Presentation 1: How Cyanobacteria Work: Converting Sunlight into Usable Energy.

Cyanobacteria are widely known for their toxin producing and bloom-forming capabilities. Although cyanobacterial blooms can be a threat to public and ecosystem health, they are also globally important producers of oxygen. This presentation will give a detailed introduction of photosynthesis in cyanobacteria. It will also explore how the photosynthetic processes differ between cyanobacteria and plants and will provide some explanation as to why cyanobacteria seem to thrive in conditions that would hinder the growth of green algae. (Presentation Anna Boegehold, EPA's Office of Research and Development)

Presentation 2: Cyanotoxins in Oregon: Transitioning to Mandatory Monitoring for Susceptible Sources. In 2018, when a large system detected cyanotoxins above the EPA health advisory level in treated water, Oregon moved from a voluntary cyanotoxin sampling program to mandatory monitoring. This presentation will cover how Oregon transitioned from the voluntary program to mandatory monitoring for cyanotoxins at susceptible sources and will discuss what the regulations require and statewide results, issues encountered, and what resources have been created to assist public water systems. Attendees will learn about the risk of cyanotoxins and what system operators can do to minimize this risk. (Presentation by Kari Salis, Oregon Health Authority)

Presenter Biography Information

Anna Boegehold, Ph.D. -- EPA's Office of Research and Development Anna is a research scientist working with EPA's Office of Research and Development, Center for Environmental Solutions and Emergency Response/ Water Infrastructure Division under contract through Oak Ridge Associated Universities. She began with EPA in November 2019 and has been working on projects to evaluate cyanotoxin removal through drinking water treatment and investigating invitro biomarkers of infectious Legionella strains. Anna is broadly interested in aquatic contaminants and ecotoxicology and holds a Ph.D. in biology from Wayne State University where she studied the relationship between cyanobacteria and invasive mussels.

Kari Salis, P.E. -- Oregon Health Authority

Kari is the Technical Services Manager with Oregon Health Authority's Drinking Water Program, where she has worked for 26 years. She has been the Technical Services Manager for the last 11 years and, in her previous role, she worked as a regional engineer for 15 years. Prior to joining the Oregon Health Authority, Kari worked with rural water systems during her service with the Peace Corps in Nepal

**US EPA: Road Salts and Freshwater Salinization Syndrome: An Emerging Water Quality Threat
Wednesday, May 30th, 2021**

Webcast Summary:

Overview:

Streams throughout the U.S. and world-wide have increased in salinity due to multiple processes, including road salt and human-accelerated weathering of impervious surfaces, reductions in acid rain, and other anthropogenic legacies. This freshwater salinization, in turn, mobilizes chemical cocktails via ion exchange and other biogeochemical processes. This webinar will examine fate and transport of salts and chemical cocktails, describe the litany of environmental impacts, and discuss the use of real-time sensor data to characterize trends of nutrients and metals using long-term data from urban streams in the Chesapeake Bay watershed. Finally, presenters will discuss approaches to managing this growing environmental and health problem.

Presenter Biography Information

Paul Mayer, Ph.D

Paul is a Research Ecologist and Special Assistant to the Director at Pacific Ecological Systems Division in EPA's Office of Research and Development (ORD) Center for Public Health and Environmental Assessment (CPHEA). Paul's research interests are in stream restoration, riparian ecosystems, and ground water with a focus on how green infrastructure and stormwater management can improve water quality. Paul received a B.S. from North Dakota State University, M.S. from University of Missouri, and Ph.D. from University of Minnesota-Twin Cities.

Tammy Newcomer-Johnson, Ph.D.

Tammy is an ecologist in EPA ORD Center for Environmental Measurement and Modeling (CEMM). Her current research is focused on watershed restoration and ecosystem services in the Great Lakes Areas of Concern. She is the technical lead on EPA tools like the EcoService Models Library and the National Ecosystem Services Classification System (NESCO Plus). Tammy holds a Ph.D. from University of Maryland. Joe Galella

Joe is a doctoral candidate at the University of Maryland College Park where he studies how road salt application mobilizes metals, cations, and nutrients under Dr. Sujay Kaushal. Joe recently concluded an ORISE fellowship in EPA's Center for Public Health and Environmental Assessment (CPHEA). His article "Sensors track mobilization of 'chemical cocktails' in streams impacted by road salts in the Chesapeake Bay watershed" was recently published in Environmental Research Letters. Joe holds a M.S. from Shippensburg University.

Sujay Kaushal, Ph.D.

Sujay is a Professor in the Department of Geology and Earth System Science Interdisciplinary Center at the University of Maryland, College Park. His areas of expertise are Biogeochemistry, Environmental Geochemistry, and Hydrology with

focuses on long-term chemistry of inland waters, impacts of land use and climate change on water quality, and managing and restoring freshwater ecosystems. He holds a B.A. in Biology (Ecology and Systematics) from Cornell University and a Ph.D. in Biology (Biogeochemistry) from the University of Colorado, Boulder.