

AWWA Webinar Program: Let's Talk Lead: New LCRR Communications Tools to Strengthen Public Trust
December 2nd, 2022

Webcast Description

Overview:

The EPA's revised Lead and Copper Rule (LCRR) presents water utilities with new challenges and opportunities to communicate about lead in water, its public health risks, and water professionals' continued commitment to provide healthy water to their communities.

AWWA's new *Lead Communications Guide* and tools will help water utilities develop effective strategies to talk with their customers. From lead service line inventory requirements to outreach with schools, daycare centers, healthcare agencies and historically disadvantaged communities, the LCRR requires bold and effective communications to inform communities about lead in water and strengthen public trust.

Learning Objectives:

1. Understand the communications requirements in the Revised Lead and Copper Rule.
2. Develop strategies to implement the LCRR requirements while strengthening the public's trust in their utility and its water.
3. Review best practices for communicating water quality information with their communities and meeting the LCRR requirements.
4. Develop strategies to avoid misinformation in their communities about water quality and water service and prevent one-sided news stories, customer complaints and public opposition by communicating proactively and effectively.

Presenter Biography Information

Ameerah Palacio; Strategic Communications Lead (KY, TN, AR) HD

Ameerah Palacios is a strategic communications lead for HDR. She has more than a decade of working in the public sector and currently focuses on helping water utilities, educators and childcare professionals confront the unique challenges of the LCRR with communications, customer service, and community engagement.

Andrea Hay; Director of Communications Green Bay Water

Andrea leads the team responsible for all communications initiatives for Wisconsin's third-largest drinking water provider, Green Bay Water. She began at Green Bay Water in 2018 after working as a journalist for more than a decade. Some of her most exciting jobs have been working at CNN International in the United Nations and reporting for the New York Post.

**AWWA Webinar Program: From Systemic Inequities to Systemic DEI
December 7th, 2022**

Webcast Description

Overview:

For centuries, systemic inequities have plagued our culture. They have shaped mindsets, impacted programs and embedded advantages for some while placing barriers for others. As a result, the awareness of unconscious bias has risen to the point where many organizations now have provided trainings and education to combat this. DEI can no longer be trendy, the hot issue of the moment or be relegated to the fringes of our mental construct. It must be built into our organizational culture as best practice for business operations, so that the needs of our customers and the communities we serve are properly met by our own diverse, equitable and inclusive workforce.

Presenter Biography Information

Logan Carmichael, PHR, SHRM-CP; Chief People & Culture Officer, Pittsburgh Water & Sewer Authority

Logan Carmichael joined Pittsburgh Water and Sewer Authority (PWSA) as Director of Human Resources in February 2021, and currently serves as the Chief People & Culture Officer. Mr. Carmichael is responsible for developing and driving the human resources strategy and administration aligned to the overall business plan and strategic direction of the organization, while ensuring that workplace culture, practices, policies, and operations support and achieve organizational objectives and values. Specific areas of focus include organizational development, talent acquisition, training & development, total compensation & benefits planning, change management, employee and labor relations, and workforce planning. Mr. Carmichael is a graduate of Robert Morris University with a Bachelor of Arts in Communications, and a Master of Science in Human Resources Management.

Chitra Kumar; Director Office of Policy, Partnerships, and Program Development, Office of Environmental Justice and External Civil Rights — US Environmental Protection Agency

Chitra Kumar is a public policy and planning expert and manager at the US

Environmental Protection Agency. Throughout her career, she has worked to develop more equitable strategies for environmental protection, land use and infrastructure. Currently, Ms. Kumar is the Director of the Office of Policy, Partnerships and Program Development within EPA's newly reorganized Office of Environmental Justice and External Civil Rights. She leads major EJ and equity initiatives, oversight of funding increases through the American Rescue Plan Act, and coordination of equity and Justice40 goals during a period of unprecedented growth and attention for the agencywide EJ program. From March 2020-2021 Ms. Kumar was Senior Fellow with the Aspen Institute's Community Strategies Group and Thrive Rural. From 2015-2019 she directed the Federal and State Division of EPA's Office of Community Revitalization. From 2013-2014, she served at the White House Council on Environmental Quality as the Deputy Associate Director for Water. Ms. Kumar holds a Master in City Planning from MIT.

April Bingham; Director, City of Richmond Department of Public Utilities

April N. Bingham is the first woman director to lead the Department of Public Utilities within the City of Richmond, VA. With more than 24 years of utility industry experience, covering gas and water, Bingham seeks to improve the customer service experience and enhance DPU's overall service delivery and workforce. Bingham holds a Bachelor's Degree in Business Administration along with a Master's Degree in Public Administration and is responsible for the operation of five utilities (i.e. natural gas, water, wastewater, stormwater and electric streetlighting), serving more than 500,000 residential and commercial customers in the Richmond VA and surrounding metropolitan region. Bingham looks forward to advancing technologies and new processes that can deliver performance, achieve results and realize success for the utility industry and the City of Richmond as a whole. Bingham recognizes that the employee experience is closely tied to the customer experience and strives to ensure that DEI is a realized benefit for DPU.

**AWWA Webinar Program: 2022 AWWA Regulatory Update Webinar
December 7th, 2022**

Webcast Description

Overview:

Federal regulations are on the horizon for per- and poly-fluoroalkyl substances. EPA just released its long-awaited hexavalent chromium health assessment. Requirements for water systems to take steps to reduce their cybersecurity vulnerability are in development. All occurring while the sector is waiting on EPA to reveal additional changes to the Lead and Copper Rule and craft revisions to rules for disinfection practice and disinfection byproducts. The webinar speakers will summarize the latest developments on these and other developing requirements.

As a result of this webinar, the attendees will be able to:

- Allow water utility managers to assess how future regulatory developments will likely affect them.
- Allow water utility staff to plan ahead to engage EPA, states, and their own communities to move forward in the interim period before new regulatory requirements take effect.

Presenter Biography Information

Sandra L. Kutzing, PE, PMP; Vice President, Discipline Leader— Distribution System Water Quality, CDM Smith

Ms. Kutzing leads CDM Smith's LCRR Task Force assisting utilities comply with the Lead and Copper Rule Revisions and guiding their Lead Service Line Replacement Programs. As a Project Manager with 19 years of experience, she has experience in the design of water and wastewater treatment and conveyance facilities and planning for multi-faceted programs. Her expertise is in corrosion control optimization, LSLR Programs, Lead and Copper Rule, and distribution system water quality. She has experience performing studies, including master planning, pipeline condition assessments, treatment evaluations, and route evaluation. She managed the Trenton LSLR Program, and the planning phase of the Newark LSLR Program and is currently assisting many utilities with their inventories including evaluating and implementing service line material identification methods. She is also active member on the AWWA Distribution System Water Quality Committee and AWWA Lead and Copper Rule Technical Advisory Workgroup (TAW). Ms. Kutzing holds a BSCE in Civil Engineering from the University of Illinois at Urbana-Champaign and a MSCE in Civil Engineering from the University of Washington.

Nestor Murray, PE; Senior Project Manager, CDM Smith

Mr. Murray is a senior project manager with more than 15 years of technical, management, and business development experience. He has expertise in delivering utility infrastructure, program management, design, and construction projects. He successfully manages projects from concept to design and through construction completion. He has successfully led project teams to develop Lead & Copper and Lead Service Line Replacement Programs. Mr. Murray holds a B.S. in Civil & Environmental Engineering and an M.S. in Environmental Engineering from Virginia Polytechnic Institute and State University.

Kevin M. Morley, PhD; Manager— Federal Relations, AWWA

Kevin M. Morley, PhD is Manager, Federal Relations for the American Water Works Association (AWWA). In this role he works closely with a variety of organizations tasked with advancing the security and preparedness of the Nation's critical infrastructure, including DHS/FEMA, EPA, USACE, CDC and the Water Sector Coordinating Council. This has included facilitating the expansion of mutual aid and assistance via the

Water/Wastewater Agency Response Network (WARN) initiative. He supports the development of water sector standards and guidance for security and preparedness including cybersecurity measures.

AWWA Webinar Program: How to Use the Effective Utility Management Framework to Improve Your Utility
February 1st, 2023

Webcast Description

Overview:

Learn how to use the nationally recognized Effective Utility Management (EUM) framework, including the organizational self-assessment tool and measures to track progress, and get firsthand accounts of how the framework has been used in Tulsa and Austin.

This webinar will be presented in three segments, beginning with an overview of the Effective Utility Management (EUM) framework, followed by two examples from utilities that have adopted the EUM framework. In the overview, participants will learn about the origins of the framework and how it is both relevant and applicable to every utility and the management and operational challenges they face in the water sector. Participants will learn how to use a self-assessment tool that identifies organizational strengths and areas that need improvement. Participants will also learn about the EUM Implementation Cycle and how to take assessment findings and translate them into organizational improvement, including the use of measures of progress as part of strategic planning and overall continual improvement. The first case example—from the City of Tulsa, OK—will tell the story of how this utility used the EUM framework and assessment to update their organization-wide strategic plan. A key area of emphasis for Tulsa was the involvement of a diverse group of team members in the process, representing all areas and multiple levels of the organization. The second case example—from Austin Water in Texas—will share the story of how they used EUM to identify key areas for improvement and then implemented those changes in the context of a continual improvement framework, including measuring and reporting progress and reevaluating their progress to identify new areas of focus.

Learning Objectives:

1. Learn how to use the EUM framework and the built-in set of tools to evaluate an organization's strengths and areas to improve.
2. Learn firsthand how a utility used the EUM framework to set the stage for an update of its organization-wide strategic plan, including extensive involvement of utility staff in the process.

3. Learn firsthand how a utility used the EUM assessment tool to identify key areas for improvement and then implemented a focused, continual improvement-based effort that featured the development of teams and the use of targeted measures of progress, and fostered a culture of participation, accountability, and teamwork.
4. Learn how to take initial steps toward organization-wide continual improvement, including the use of practical and useful measures to track and report progress.
5. Learn how the EUM assessment tool is used to understand employee perspectives of the utility to develop and improve internal and external communications.

Presenter Biography Information

Jim Ginley; Owner/Manager, Jim Ginley Consulting, LLC

Jim Ginley has nearly 35 years of experience in the water utility sector, including nearly 17 years on the headquarters staff of AWWA in Denver and another 17 plus years as a utility consultant. Jim was part of the team that built the original EUM framework (2008) and since 2017 (when EUM was updated), he has served as an instructor for both AWWA and USEPA to teach the framework and how it can be used. Jim is a Life Member of AWWA.

Eric Lee; Director of Water & Sewer, City of Tulsa

Eric Lee has 26 years of experience in water, wastewater and solid waste utilities. Eric manages financial, strategic planning, emergency management, communications, legislative Lean Six Sigma and safety programs for the Water & Sewer Department. Eric has been a member of AWWA for 25 years and serves on the Rates & Charges Committee and is Past Chair of the Southwest Section.

Anna Bryan-Borja; Assistant Director — Business Services, Austin Water

Anna Bryan-Borja has more than 25 years of experience in utilities and government. As Austin Water's

Assistant Director of Business Services, she oversees legislative activities, strategic planning, auditing, emergency management, security, and facility management. She has led Austin Water's Effective Utility Management initiative since 2016 and currently serves on the AWWA's Strategic Management Practices Committee.

**AWWA Webinar Program: Digital Twins for Small Systems
February 8th, 2023**

Webcast Description

This webinar was prepared around small systems. Following the SWAN (Smart Water Networks Forum) digital twin framework, we will discuss implementation methodologies a small system can leverage (or software as a service, or SaaS), the challenges associated with digital twin technologies for small systems, and a case study.

AWWA's new Digital Twins Committee was formed in 2021 and has rapidly grown to become a powerhouse of technical experts guiding the water industry in education and clarity on the topic. Founded in 2010, SWAN is uniquely focused on increasing the awareness and acceleration of smart, data-driven solutions in drinking water, wastewater, and stormwater networks worldwide by bringing like-minded people together.

The Digital Twins Committee, in collaboration with SWAN, has prepared this webinar focused on sharing tools and resources for small systems to build a digital twin. This webinar will begin with a brief overview of challenges faced by small systems and follow the SWAN readiness to discuss how software as a service (also referred to SaaS) can be used to build a data culture. A case study will be presented and a question-and-answer period will follow.

Learning Objectives:

1. Learn the purposes and value of implementing digital twins in the water sector.
2. Understand the challenges of small utilities implementing digital twins.
3. Identify areas of interest where small systems can start leveraging SaaS digital twins.
4. Review a case study on how the owner of a small utility used SaaS digital twins.
5. How to accelerate digital twins for small systems.

Presenter Biography Information

Michael Karl; National Optimization Lead | SWAN Americas Chairman, Brown & Caldwell, SWAN Forum

Michael Karl is an experienced water and wastewater executive with a proven track record in developing and implementing digitally enabled solutions that improve organizational efficiency. Karl is currently Brown and Caldwell's National Optimization Services Leader (BC:Opta), where he works with utilities to help them run their operations and organization more efficiently, often through digitally enabled solutions.

Gigi Karmous-Edwards; Digital Twin for Water Sector Technical Consultant, Neom

Gigi Karmous-Edwards has spent most of her 25+ year career on state-of-the-art digital technologies, including IoT, big data, data analytics, control and automation, and most recently Digital Twin technology for the water sector. She is the founder and co-chair of

the SWAN Digital Twin Work Group to help advance the use of much-needed holistic utility management using digital twins. She collaborated with SWAN and Julius Education on the development of an online introductory course Demystifying Digital Twins.

Derwin Dy; Assistant Director, City of Lakewood

Derwin Dy is the Assistant Director of Water Resources for the City of Lakewood and has multiple years of experience managing water systems. He has a background in water system design, consulting, and public policy. Derwin has worked on several digital projects where he uses data to prioritize capital expenditures, reduce energy & operation costs and expand the capacity of the distribution system.

AWWA Webinar Program: Water Sector Compensation, Retirement, and Benefits Trends February 15th, 2023

Webcast Description

Each year, AWWA gathers data on the current utility compensation, retirement, and benefits and benefits programs. The result of the survey is the annual Water and Wastewater Compensation reports. This webinar presents key findings and market trends from AWWA's latest Water and Wastewater Compensation Survey.

2020 and 2021 were challenging years due to the pandemic. Late 2021 and early 2022 brought the “Great Resignation”. During the pandemic, utilities were conservative in salary increases due to market and societal uncertainties. Now faced with a highly competitive labor market, reasonable compensation packages are essential for recruiting and retaining staff. This event would provide learners an insight into the water sector compensation for small, medium and large water and wastewater utilities.

This unique, water-industry focused event will help utilities of all sizes better understand compensation practices in their industry.

As a result of this webinar, the attendees will be able to:

1. Compare their compensation programs to the water sector market
2. See resources that can assist with compensation planning
3. Learn about trends in attracting and retaining staff
4. Receive information with a view on national or international trends
5. Hear the latest statistics

Presenter Biography Information

Kevin Paulsen; Principal, The Newport Group

Kevin is a Principal at Newport Group. His specialty areas include wage and incentive plan design; Board compensation, survey initiatives, organizational planning; performance management design; human resources compliance. Over the past 25 years, Kevin has assisted hundreds of companies in the utilities, financial services, professional services, manufacturing, not-for-profit, and construction industries. Kevin has been the Project Leader on the AWWA annual compensation survey for the past 7 years.

Erica Brown; Chief Strategy and Sustainability Officer, Association of Metropolitan Water Agencies (Washington, D.C.)

Erica Brown is Chief Strategy and Sustainability Officer for the Association of Metropolitan Water Agencies (AMWA) in Washington, D.C. Erica provides the vision and direction for the creation and implementation of strategic programs for AMWA's membership. She develops strategies to support and promote policies and innovations that enable utilities to enhance their resilience and build a strong and sustainable organization amidst environmental, regulatory and community changes. She directs development of AMWA's comments and recommendations to federal agencies about climate adaptation, resilience and related agency rulemakings.

John Albert; Chief Research Officer, Water Research Foundation

John is originally from Fort Kent Maine (Northern Terminus of Route 1). John joined the Water Research Foundation in January 2005. Prior to that, John worked as a research associate focusing on on-site wastewater systems and bacterial source tracking. He holds an M.S. degree from the Colorado School of Mines, a Masters of Public Administration from University of Colorado Denver, and a B.A. in biology from Saint Anselm College, Manchester.

AWWA Webinar Program: Preparing Water Utilities for the Future of Energy Management — Part I: What Energy Information Should I Be Tracking?

March 1st, 2023

Webcast Description

Meeting quality and quantity goals for a utility is first and foremost— but that relies on energy. Some simple approaches to energy management can be integrated and complement those primary goals, all while reducing costs and increasing reliability.

Part 1: Learn where to start on the journey toward understanding energy. From tracking and monitoring to design and operational considerations, understand the changing energy landscape and how to work with your energy provider for mutual collaboration.

Learning Objectives:

1. Analyze your existing energy consumption and identify trends to watch out for.
2. Gain an understanding of the energy bill for discussions with energy providers
3. Create new standard operating procedures to help you understand and reduce costs.
4. Avoid being hit unexpectedly; create new strategies in anticipation of upcoming electricity trends.
5. Implement new policies to increase energy reliability, making you more resilient with distributed energy resources and microgrids.

Presenter Biography Information

Angela M. Hintz, PE, CEM; Senior Engineer, JM Davidson Engineering

Ms. Hintz has assisted both small and large water and wastewater utilities in saving energy, including performing energy audits and making recommendations for changes in operating strategies. She is an Association of Energy Engineers (AEE) Certified Energy Manager with specialized training in energy codes and standards, energy auditing, energy-efficient lighting, thermal storage, motors, heating/ventilation/air conditioning equipment and system optimization and building controls systems.

Peter Virag, CEA; Corporate Energy Manager, Essential Utilities Inc – AQUA

Peter Virag is the Corporate Energy Manager for Essential Utilities Inc -AQUA, located in Bryn Mawr PA. At AQUA Peter is responsible for managing over a 30-million-dollar energy spend and implementing corporate energy policy in the areas of energy efficiency and optimization, renewable energy infrastructure, energy purchasing/budgeting, decarbonization and sustainability reporting

Eric Dole, PE, PSAP; Water and Energy Practice Lead, Garver Consulting LLC

Eric is a senior project manager at Garver where he serves as the Water and Energy Practice Leader. He specializes in delivering sustainable infrastructure solutions through optimized hydraulic systems. Eric is the co-author of Chapter 3 of the AWWA M83 – Energy Management of Pumping and Treatment Processes MOP. He is a certified Pump Systems Assessment Professional (PSAP) through the Hydraulics Institute, and also an instructor in the HI PSAP course. One of his pump optimization projects was featured as the cover story for the WE&T Magazine in the November 2020 issue, titled “Pump Analysis – Training and Certification Drives Savings”.

AWWA Webinar Program: Benefits from the Application of Hydraulic Modeling for Small Water Systems

March 8th, 2023

Webcast Description

This webinar aims to help small system owners and consultants make better-informed decisions on system operation and planning to optimize the use of capital funds, enhance emergency response, and reduce operations and maintenance costs.

The main goal of the webinar is to present insights into and advantages of hydraulic models for small systems and how hydraulic models can help small utilities with their operation and planning. Hydraulic models can be applied to predict system pressure and water age, calculate available fire flow, identify bottlenecks within water systems, and aid in emergency response and preparedness. By testing different alternatives and their effectiveness, models can help utilities make planning and operation decisions in order to maximize system benefits within limited available funding.

This webinar will include following main components:

1. Basics of hydraulic modeling, including physics-based and data-based models
2. Challenges of hydraulic model builds specifically for small systems
3. Benefits of hydraulic models for small systems, including
 - a) Operations optimization for energy use reduction
 - b) Capital improvement planning
 - c) Project funding justification
4. Case studies and application of hydraulic models focusing on:
 - a) Development planning & growth
 - b) Data-based model application to small systems
 - c) Hydraulic model-assisted emergency response

Learning Objectives:

1. Understand benefits and challenges of hydraulic models for small systems
2. Gain knowledge of how models can be used to optimize operations and reduce energy requirements
3. Understand capabilities of hydraulic models to aid in emergency response and preparedness
4. Understand how the model results can be used for capital improvement projects
5. Introduce real-time, data-based models and how they can benefit small systems

Presenter Biography Information

Saša Tomić, PE, PhD; Digital Utility Lead Burns & McDonnell

Saša is Burns & McDonnell's Digital Utility leader with more than 30 years of digital water and hydraulic modeling experience. He offers a unique blend of practical, theoretical, and software development skills perfected as the lead designer of modeling software, and an internationally recognized digital water authority. Saša is an active member of SWAN, AWWA, and WEF committees.

Dr. Behnaz Khakbaz; Lead Hydraulic Engineer Lockwood, Andrews and Newnam, Inc

Dr. Behnaz is a Hydraulic Modeling Lead Engineer at Lockwood, Andrews and Newnam, Inc (LAN). She has experience with all kinds of hydraulic models for water distribution and sewer collection systems. She has over 8 years of experience working with hydraulic system models. She has a PhD in civil engineering – water resources and is a professional engineer in CA and TX.

Kendall Ryan; Associate and Group Manager | Water/Wastewater Master Planning Freese and Nichols

Kendall is an engineer with Freese and Nichols with over 11 years of experience in water and wastewater hydraulic modeling and master planning. He currently manages a team of full-time water and wastewater master planning engineers in the company's Western Gulf Coast Division. Kendall has invested his career in helping municipalities understand their water and wastewater infrastructure needs and advising on master planning, hydraulic modeling, capital project implementation, asset management, sanitary sewer evaluation studies, and water and wastewater impact fees.

AWWA Webinar Program Preparing Water Utilities for the Future of Energy Management — Part II: What Can I Do to Better Manage My Energy Use?

March 13th, 2023

Webcast Description

Meeting quality and quantity goals for a utility is first and foremost— but that relies on energy. Some simple approaches to energy management can be integrated and complement those primary goals, all while reducing costs and increasing reliability.

Part 2: The goal of this webinar is to raise awareness of energy consumption and discuss some of the expected challenges you may face. Learn about new issues on the horizon for energy

retailers and how water utilities can be proactive by assisting and leveraging, so you may benefit societies reliant on both.

Learning Objectives:

1. Analyze your existing energy consumption and identify trends to watch out for.
2. Gain an understanding of the energy bill for discussions with energy providers.
3. Create new standard operating procedures to help you understand and reduce costs.
4. Avoid being hit unexpectedly; create new strategies in anticipation of upcoming electricity trends.
5. Implement new policies to increase energy reliability, making you more resilient with distributed energy resources and microgrids.

Presenter Biography Information

Tom Walski, Ph.D., P.E.; Product Manager, Bentley Systems

Tom Walski has 40 years of experience in water and wastewater design and operation. He is currently senior product manager for Bentley Systems and has previously served as civil engineer for the Army Corps of Engineers, distribution system manager for the City of Austin, Tex., executive director the Wyoming Valley Sanitary Authority, and engineering manager for Pennsylvania American Water. Tom has written numerous papers and delivered many presentations and training classes on Energy Management.

Sanjay Patel; CTO, Confluency

Sanjay has 17 years of experience in optimization algorithms combined with simulation modeling platforms for reducing energy consumption for water distribution systems. Sanjay is CTO of Confluency - scaling the capabilities of simulation automation, optimization and artificial intelligence to engineers and operators.

Jamie Ferro; Climate, Energy & Reliability Practice Lead, West Yost Associates

A solutions-oriented strategist with extensive experience designing and implementing climate resilience and resource management initiatives by integrating scientific, financial, and policy concepts. Focused his 20-year water sector career on developing projects and programs to minimize water and wastewater systems' greenhouse gas (GHG) emissions, reducing reliance on imported energy, and improving the reliability of water system operations through process-based energy management and process optimization projects. Jamie leads the Climate-Energy-Reliability practice at West Yost