2025 Hawaii WaterWorks Association Annual Conference, Aulani Hotel, Ko Olina Resort Oct. 15-17, 2025

Technical Program v.9/25

KAHE HOʻOKAHI NĀ WAI - The Waters Flow as One

Date/Time	Activity				
Oct. 15, 2025					
7:30 a.m. - 9:00 a.m.	Continental breakfast/registration	**General Session 1 Large Room**	**Climate Change Track**		
8:55 a.m.	Announcements	Conference Moderator			
9:00 a.m. (15 min)	Welcome Address	Ernest Lau, Manager & Chief Engineer Mayor Rick Blangiardi Video Message	Welcome and Opening Remarks Conference highlights of note		
9:15 a.m.(45 min)	Presentation	**Honolulu's Climate Ready Oahu Strategy for Climate Adaptation** Ben Sullivan, Chief Resilence Officer Office of Climate Change Sustainability and Resiliency	The City's first climate adaptation strategy enhances the City and community's resilience to climate impacts through specific, measurable actions that prepare us for the worst scenarios while also charting a course toward a more equitable, resilient, and climate ready O'ahu. Stopping the cause of climate change is a global responsibility, but adapting to impacts is a local one. Climate Ready O'ahu is a science-based, community-driven strategy for O'ahu to adapt to the impacts of climate change. Climate Ready O'ahu lays out a detailed list of strategies, policies, and actions that the City can take, alongside individual, community, state and federal actions, to prepare, protect, and safeguard community members, ʻāina, and infrastructure from climate hazards today and for generations to come.		
10:00 a.m.	Break				
10:15 a.m. (45 min)	Presentation	**One Water Honolulu's Collaboration Framework** Lenise Marrero Wendy Broley Brown and Caldwell	The One Water approach focuses on collaboration strategies for stormwater, wastewater, groundwater, freshwater, and recycled water as one integrated system supporting the community and environment. One Water Honolulu integrates responsibilities across a broad range of partners to tackle climate change impacts collaboratively. As part of the One Water Honolulu Plan, the City embarked on the development of a trailblazing Collaboration Framework to provide a clear and effective process of who should be working together and how to build resilience into the ongoing and planned projects, programs, and policies related to water management. The Collaboration Framework is an adaptable process for working together to advance a shared vision. It provides guidance to sustain collaboration by aligning actions and decisions.		
11:00 a.m. (45 min)	Presentation	**A Climate Adaptation Approach to One Water Honolulu's CIP** Rachel Duncan Carollo Engineers Tess Sprague Brown and Caldwell	The One Water Honolulu Plan will develop a climate resilient CIP that will help shape the development of infrastructure across water, wastewater, and stormwater systems while working to support, steward, and protect our communities and natural environment. The approach to create this CIP includes both a Collaboration Framework and a Climate Change Adaptation Framework. The focus of this presentation will primarily be on the building blocks of the Climate Change Adaptation Framework. These include: a detailed risk screening and vulnerabilities mapping process to identify climate hotspots using the most recent hazard mapping for sea level rise, hurricanes, precipitation-based flooding, extreme heat, drought, and wildfires; a review and analysis of known concerns by region for each of O'ahu's planning districts; development of potential adaptation strategies; and development of potential prioritization criteria. The presentation will also include how this effort works toward CIP project development and the identification of potential triggers that influence project phasing. The above is an ongoing effort and content presented will focus on sharing and communicating the process for implementing this framework, some preliminary results, and the overall approach for how this supports the development of a climate resilient and adaptive CIP across the City and County of Honolulu.		
12:00 noon	Lunch				

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Date/Time	Activity								
Wed Oct. 15 PM	Breakout Session 1, Large Room			Breakout Session 2 , Small Room 1			Breakout Session 3, Small Room 2		
	Projects Track			Operations/Systems Track			Consultant/Vendor/Agency Track		
1:30 p.m.	Presentation	**Who Picked This Site Anyway? Kalaeloa Seawater Desalination Challenges and Progress** Barry Usagawa BWS Water Resources	BWS issued a fixed price DBOM contract to Kalaeloa Desalco LLC in July 2023 to provide 1.7 mgd, expandable to 5 mgd of freshwater to the Campbell Industrial Park water system. The project is in the design development and permitting phase with construction targeted in early 2026. This presentation will disclose design concepts and challenges in troubleshooting unforeseen risks involving environmental, archaeological sites, critical biological habitat, regulation, aquifer hydraulic separation, and Federal land conveyance & funding requirements.	Presentation	**BMPs Suck* – Handling Runoff During Main Break Repairs** Tyler Wong BWS Field Operations	Best Management Practices are an essential component in the protection of our environment and receiving waters. In this presentation, BWS Field Operations Division will highlight several techniques and methods they utilize throughout the main repair process to minimize the environmental impacts resulting from repairs; specifically focusing on use of vacuum trucks in minimizing or removing runoff.	Presentation	**Calibration of source meters to identify and reduce water loss** Charles Jury Francis Cheng Okahara & Assoc.	BWS water loss percentage has been slowly increasing over the last decade, from approximately 10% to 15% and while most of the revenue meter MXU's have been replaced providing accurate AMR reads and BWS Field Operations Leak Detection Team steadily fixing leaks with the satellite leak detection contract, BWS source meters need to be assessed and calibrated. Using an AWWA meter calibration method and a prioritized list of BWS meters at source and line booster stations, ultrasonic meters are used for calibration. This presentation will present the approach and preliminary findings.
2:00 p.m.	Presentation	**Regulatory and Enhanced Water Quality Pilot, Kalaeloa Seawater Desalination** Dawn Halpern Kalaeloa Desalco, LLC	This presentation provides an overview of the Seawater Reverse Osmosis (SWRO) pilot study conducted to support the development of a new, sustainable potable water source for the community. The project included extensive customer outreach to engage and inform stakeholders on the benefits and reliability of the proposed water supply. Key components of the pilot included validation of the existing seawater wells to confirm their suitability as a source, and performance verification of the full-scale RO facility design. The pilot focused on demonstrating the design and operating parameters under real-world conditions and optimization of proposed treatment processes. Comprehensive water quality analyses were performed to characterize the source water as well as the RO permeate and post-treated water, ensuring a reasonable match to the community's existing potable water standards. A corrosion study was also conducted to confirm that the final product water will be compatible with the existing BWS distribution system materials and infrastructure. The pilot data and findings provided invaluable data and resulted in validation for the full-scale implementation, confirming the new water source is a safe, reliable, and sustainable for long-term use.	Presentation	**On-Site Gray Water Reuse Applications and Benefits for New Residential Developments** Randy Hiraki, President Commercial Plumbing Alana Kobayashi-Pakkala Kobayashi Group	Kuilei and Alia are two Kobayashi residential developments where innovative gray water reuse is being implemented as part of a forward thinking sustainability strategy to reduce potable water demand and wastewater generation for toilet flushing and cooling towers in chilled water air conditioning. Insights into the sustainability advocacy, regulatory coordination and design will be presented.	Presentation	**The Hawaii Water Plan Framework Update** Alyssandra V. Rousseve Commission on Water Resource Management	This presentation provides an overview of the Framework for the Hawaii Water Plan (HWP). The HWP is the guide for developing and implementing a comprehensive water resource planning program and includes the Water Resource Protection Plan (WRPP), Water Quality Plan (WQP), State Water Projects Plan (SWPP), Agricultural Water Use and Development Plan (AWUDP), and county Water Use and Development Plans (WUDP) (HRS §174C-2(b)). CWRM is currently revising the Framework document to improve the integration of component plans, ensure up-to-date data is incorporated into the planning process, and to overall increase the HWP's utility as a decision-making tool for water and land planning throughout the State. Key drivers behind the Framework update include a desire to reflect the importance of climate change, public trust obligations, Native Hawaiian water rights, and the need to improve inter-agency and community coordination during the planning process.

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2:30 p.m.	Presentation	**Kalaeloa Aquifer Test Plan Approach and Preliminary Findings for the determination of hydraulic separation of layered geologic formations** Kevin Gooding Intera	The Honolulu Board of Water Supply (BWS) is building a saltwater desalination facility in Kalaeloa, O'ahu, Hawai'i designed to pump 4.3 million gallons per day (mgd) of seawater-quality feed water from the deep (>1000 feet below ground surface(bgs)) basalt aquifer, treat the seawater to produce 1.7 mgd of potable water, then dispose of 2.6 mgd of brine concentrate by injection into the overlying caprock aquifer at a depth of about 300 ft bgs. The site is adjacent to Campbell Industrial Park and even though the producing zone is separated from the overlying activities by over 1000 vertical feet of caprock, the BWS is taking a conservative approach and wants to test for the potential for contamination of the deep production wells from industrial activities. In response to these concerns BWS, the BWS advisory team and INTERA prepared a workplan to test the hypothesis that the caprock provides adequate separation between the overlying industrial activities and the producing saltwater aquifer. The path from the workplan to implementation to preliminary conclusions has been a challenge with bumpy, exciting and interesting parts. The workplan includes 1) high-capacity testing of three wells while monitoring several water level wells, 2) sampling for an extensive list of analytes; 3) ocean sampling and 4) downhole geophysics. During the initial water level study, we found that one of the wells was damaged, so we had to quickly design, permit and repair the well before the workplan was implemented. The data is coming in now and we will present some of the results of our study.	Presentations	**Water Sensible, Water Conservation Rebate Program Update** Lorna Heller BWS Water Conservation Daniel Chen Honeywell	The Honolulu Board of Water Supply (BWS) completed its Water Conservation Program Plan (WCP) in 2011 to drive economic, resource, and social sustainability on O'ahu. The plan is one facet of a multi-pronged effort to ensure future water supplies via a significantly less costly mechanism as opposed to building additional water supplies including desalination. BWS is expanding efforts with Honeywell International, Inc's Smart Energy team in Honolulu to implement some of the recommended measures in the WCP through the Water Sensible Program. The incentive program is designed to incentive water efficiency and lower customer water bills. The presentation will explore the Water Sensible Program and other future conservation initiatives that allow BWS to preserve and protect our most essential resource - OUR WATER.	Presentations	**Backflow Prevention Programs** Mitch Lebas, P.E. Backflow Preventions Services, LLC, Sponsored by DOH SDWB	The Hawai'i Department of Health, through state rules and regulations, requires water systems to develop and implement cross-connection control and backflow prevention programs. While these rules and regulations are very general in regards to specific tasks water system must accomplish to achieve compliance, water system managers should recognize that their systems are at risk of contamination due to a backflow incident and the liability associated with not having an adequate backflow prevention program.
3:00 p.m.	Break			Break			Break		
3:30 p.m.	Presentation	**Adapt Waikiki 2050** Noelle Cole City Dept. of Planning and Permitting Kitty Courtney, Tetra Tech (3:30 to 4:15 pm)	Waikiki is increasingly vulnerable to coastal hazards such as sea level rise, high ground water, erosion, and storm driven flooding. These challenges are exacerbated by modern-day Waikiki's watery origins as reclaimed land drained via the early 20th century Ala Wai Canal project, its low lying topography, and its dense urbanization. The Honolulu Department of Planning and Permitting (DPP) with lead Consultant Tetra Tech, Inc. are working in close coordination with City infrastructure agencies and community partners to assess these challenges to the built environment as climate impacts increase. The Adapt Waikiki 2050 Plan is centered on 'no regrets' early actions to increase the resilience of the existing public infrastructure and help new and existing development to adapt in place to mid-century and beyond, while keeping an eye on farther future impacts. The Plan employs a One Water lens to identify recommendations for CIP projects, policy changes, and design solutions that can work synergistically across public and private properties. This presentation will summarize Waikiki's risk profile, the project work to date, and what is coming next.	Presentations	**Pipe Dreams: Optimizing Pipeline Rehab and Replacement** Isaac Hayashi BWS Water Systems Planning Tony Shing BWS Technical Engineering Projects Mark Zito, Trinnex	Water main infrastructure is a critical component of urban water systems. However, the aging nature of these systems poses significant challenges, including increased risk of failures and costs. Traditional methods of capital planning rely heavily on historical data and expert judgment, which may not adequately capture the complexities of the underlying risk factors. The presentation will outline the comprehensive CIP workflow from planning through construction, emphasizing the importance of asset management and the utilization of a risk model to prioritize pipeline rehabilitation and replacement. The presentation will demonstrate how data analysis including statistical and machine learning based approaches can be employed to analyze vast datasets, including historical break records, pipe descriptors, and other relevant information, to predict future failures and optimize maintenance strategies. By focusing on the most at-risk pipes, data backed modeling enables more targeted interventions to replace the pipes with the highest likelihood and consequence of failing.	Presentations	**Leveraging AMI, AI, and Operational Dashboards to Reduce Field Work and Operating Expenses in Water Utilities** Joseph Rogers Ryan Carnathan Xylem	Advanced Metering Infrastructure (AMI) continues to transform water utility operations by enabling real-time data collection, reducing manual fieldwork, and lowering operational expenses. Through Sensus' FlexNet® AMI system, utilities gain a scalable, long-range communication network that supports two-way communication with endpoints for water, gas, and electric meters. One of the most impactful benefits of AMI is the ability to remotely monitor, analyze, and act on system conditions without dispatching field personnel. Combined with high-resolution telemetry, utilities can preemptively identify leaks, pressure drops, or overpressure conditions, significantly reducing system stress and water loss. Operational dashboards within the Xylem Data Lake (XDL) provide utilities the ability to monitor and analyze water consumption patterns in near-real-time. These insights—enhanced through AI-driven analysis and intelligent alerting—are surfaced via configurable thresholds and usage trend graphs that allow utilities to rapidly prioritize service calls or notify customers before water loss becomes substantial. In a practical case, utilities have also used XDL dashboards to track pressure alarms by zone, then correlate those trends with valve operations or construction activities, eliminating the need for on-site inspections. Together, AMI, AI, and operational analytics empower utilities to move from reactive maintenance to proactive management, conserving resources, reducing truck rolls, and enhancing customer satisfaction. As Hawaii faces both unique topographic challenges and increasing climate-related stresses, adopting such digital strategies is essential to building a resilient, efficient water network.
4:00 p.m.	Panel	**One Water Honolulu Climate Change Adaptation Panel (4:15-5:00 pm)** Facilitator: Christin Reynolds Tentative Panelists: Barry Usagawa-BWS, Alex Yee-CCSR, Noelle Cole-DPP, Tetra Tech Brown & Caldwell Carollo Engineers	Most climate impacts involve water, too much or too little of it… One Water is an integrated water resource management strategy that considers the water cycle as an integrated system recognizing the interconnectedness of freshwater, stormwater, wastewater, recycled water, and seawater. In 2020, The City and County of Honolulu enacted Ordinance 20-47 to create a One Water climate adaptation policy that will proactively adapt to climate disruption, inform community planning, improve infrastructure resilience and mitigate damages and costs. The One Water Panel convenes directors and divisions of eight City departments to coordinate a unified response to the myriad challenges that face public water infrastructure in the age of climate change. One Water Honolulu provides a platform to share learning and collaborate across City agencies to capture synergies and efficiencies that would not be apparent otherwise. Listen to a panel discussion around the latest progress and what's ahead.	Presentation	**Cybersecurity for Water Systems and Operational and Information Technology** Giovanni D. Williams Cybersecurity Advisor (CSA) Cybersecurity and Infrastructure Security Agency (CISA) Department of Homeland Security	The water and wastewater system sector is a critical component of national infrastructure, providing essential services that sustain public health, economic stability, and environmental safety. As digital transformation accelerates across utilities, the sector faces growing cybersecurity risk from nation-state actors, criminal groups, and insider threats. This briefing provides an overview of the current cyber threat landscape targeting water systems, highlights vulnerabilities in operational technology (OT) and information technology (IT). Attendee will gain insight into best practices and federal support available to strengthen cyber resilience. The session aims to empower decision-makers, operators, and cybersecurity professional with actionable strategies to detect, prevent, and respond to cyber threats that could disrupt vital water services.	Presentation	**Understanding System Pressure and Leak Detection for Non-Revenue Water Loss Reduction** Kevin Barnes National Sales Manager Fluid Conservation Systems	Controlling and regulating the pressure in the water distribution network saves resources and reduces the level of non-revenue water (NRW) loss. Pressure management is one of the most beneficial and cost-effective leakage management activities that can have an immediate impact. Knowing what the pressure is doing dynamically throughout your system can overnight reduce the water loss through leaks that you have not yet been able to detect and repair. In short, a reduction in pressure by a few PSI at the right times can mean less water being pushed through the holes, reduction in how much water is being treated/distributed, less chemical cost, less energy cost, and increased infrastructure longevity. Modulating pressure at your pressure-reducing valve (PRV) in one of three ways can save water loss, improve distribution network infrastructure, and even a cost reduction for the operational effectiveness of the water system. Pairing this with active acoustic leak detection and you have a multiplying affect on your non-revenue water loss for your system. The return on investment can be greatly accounted for and help to justify being proactive versus reactive.
4:30 p.m.								Presentation	**Enhancing Asset Management through Digital Condition Assessment and Data Visualization** Michael Flores HDR	Systematic assessment of pumping and treatment facilities is both labor- and data-intensive. This presentation explores strategies to streamline data collection and manage information digitally throughout all phases of a condition assessment project. The approach supports capital improvement planning by evaluating mechanical, electrical, instrumentation and control, and emergency power assets. A key innovation was the implementation of a fully digital workflow—from mobile field data collection to real-time cloud-based transmission and centralized analysis. Standardized assessment criteria were developed to evaluate asset condition, performance, reliability, and obsolescence. These metrics enabled calculation of the Asset Health Index (AHI), Likelihood of Failure (LoF), and Remaining Service Life, which guided the prioritization of rehabilitation and replacement projects. A major success of the project was the creation of a Microsoft Power BI dashboard that visualized assessment data, analytical results, and project recommendations. This interactive platform allows users to explore system health, asset-level insights, and investment planning across the full planning horizon. The presentation will highlight the methodology, digital tools, and visualization strategies used in the project, demonstrating how data-driven asset management enhances decision-making, transparency, and long-term infrastructure reliability.
5:00 - 8:30 p.m. Until 10 pm	Meet and greet Hospitality room									

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Oct. 16, 2025

7:30 a.m. - 9:00 a.m. Continental breakfast

Date/Time	Activity	General Session 2 Large Room	Strategic Initatives Track
8:25 a.m.	Announcements		
8:30 a.m.(45 min)	Presentation	**Water Research Foundation Updates** Jim Siriano WRF Senior Account Manager	The Water Research Foundation's One Water research programs touch the entire water cycle by addressing issues holistically and providing communities with actionable solutions to our water-related challenges. This presentation will include a brief overview of the Water Research Foundation, a review of our recent and ongoing projects with a focus on some of the topics that are most important to Hawaii, and a discussion of Hawaii's future research interests and priorities.
9:15 a.m.(45 min)	Presentation	**BWS Emerging Contaminants Management Program** Sierra Johnson Brown & Caldwell Marc Chun BWS Water Resources	Honolulu BWS is currently implementing a long-term program for management of PFAS and other emerging contaminants. BWS operates a large number of wells and must therefore handle more decisions on how to manage PFAS at each site. However, low concentrations at most sites gives BWS more flexibility to develop a proactive strategy for managing PFAS that can be translated for other emerging contaminants in the future. In the short-term, the project addresses sites with current PFAS detections only. GAC treatment designs will be completed for three well sites that have higher regulated PFAS concentrations and are most crucial to the system; construction is timed to meet the regulatory deadline. Analysis for 12 other sites with detected PFAS will also be completed to evaluate whether future treatment, piping to consolidated treatment, or shut off are appropriate. In parallel, a long-term islandwide management plan for emerging contaminants will be completed to proactively address PFAS and provide a consistent framework for BWS to continue future evaluations, regardless of what contaminant is being considered. Critical to these evaluations are finished water goals, monitoring plans, and determining decision criteria for alternatives selection. On most projects, pilot testing is used solely to determine treatment performance. In this project, ongoing pilot testing of GAC and IX treatment will provide additional value to support both short-term and long-term efforts. Pilot data will be used in the short-term to refine operating conditions for new systems and plan for media replacement. In the long-term, data will inform realistic water quality goals and required monitoring frequency. This presentation will provide a general update on the overall program approach with focus on pilot testing considerations and lessons learned that can be applied to other (non-PFAS) projects.
10:00 a.m.	Break		
10:30 a.m.(45 min)	Presentation	**Healthy Waters After Wildfires - Evaluating Post-Fire Water Quality Using Advanced Analytical Methods** Mel Tokuda and Scott Murakawa DOH Safe Drinking Water Branch Yvonne Heaney Californa Division of Drinking Water	Post-wildfire drinking water quality has garnered international attention since 2017, when volatile organic compounds (VOCs) were discovered inside a drinking water system's pipelines following a wildfire in California. Since then, multiple states across the US, including California, Oregon, Colorado, and Hawaii, have experienced drinking water system contamination after fast-moving and destructive wildfires swept through their service areas. Under these extreme conditions, water system infrastructure can become vulnerable to the intrusion of combustion byproducts and the formation of harmful chemical compounds, leading to contamination events. After such events, utilities face the extensive task of conducting comprehensive water quality testing and repairing or replacing damaged infrastructure. This presentation explores the use of innovative analytical techniques to identify previously undetected contaminants in post-wildfire drinking water systems, including those in Paradise, CA; Lahaina, HI; and Los Angeles, CA. These advanced methods have been applied to better characterize the chemical profiles of impacted systems, guide remediation strategies, and inform public health decision-making. Additional topics will include water system recovery processes and emerging areas of research.
11:15 a.m.(45 min)	Presentation	**BWS Updates Islandwide Water Master Plan** Carl Lundin CDM Smith	The Water Master Plan 10-year update is a comprehensive initiative led by the Honolulu Board of Water Supply (BWS) to ensure the long-term sustainability, reliability, and resilience of O'ahu's water system. Building upon the foundation of the 2016 WMP, this update will assess current infrastructure conditions, forecast future water demand through 2045, evaluate water sources and quality, and incorporate climate resilience strategies. Key components include revisiting condition assessments of reservoirs and other facilities, analysis of groundwater sources, and identification of alternative water sources. The plan also integrates modern technologies, such as drone inspections, and addresses emerging challenges like climate change, regulatory shifts, and unaccounted-for water losses. To support strategic decision-making, the WMP will develop a 30-year Capital Improvement Plan (CIP), financial planning tools, and updated Water System Facilities Charges (WSFC). Public engagement is a central focus, with Stakeholder Advisory Group meetings and community engagement designed to ensure transparency and community input. This update aims to guide BWS in maintaining a resilient and efficient water system that meets the needs of future generations while aligning with environmental and regulatory standards.
12 Noon	Lunch		

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Date/Time	Activity								
Thurs Oct. 16, PM	Breakout Session 4, Large Room			Breakout Session 5, Small Room 1			Breakout Session 6, Small Room 2		
		Regulatory Track			Planning Track			Communications Track	
1:30 p.m.	Presentation	**CWRM Goals and Major Projects** Ciara Kahahane Deputy Director State Commission on Water Resource Management	CWRM Goals and Major Projects over the next 2 years		**Wildfire Modeling and Emergency Response Plan Coordination on Oahu** Michael Cubas CDM Smith	Conflagration is no longer just a phrase or scholastic term—it's an increasingly measurable threat reshaping firefighting response and infrastructure resilience. This presentation explores advanced wildfire risk modeling, which integrates baseline weather scenarios with extreme models representing the 99th percentile of fire-inducing conditions. By combining terrain, vegetation, climate, and infrastructure proximity with extreme heat, directional winds, fuel moisture, and relative humidity, these models expose heightened facility vulnerabilities. The extreme models also determines extents for Urban Conflagration, where fires leap from structure to structure beyond wildland fuels. We examine how intensified fire behavior, extended ember travel zones, and diminished suppression capabilities converge and threaten water systems. The research underscores the need for proactive mitigation: hardening assets, retrofitting infrastructure and enhancing emergency coordination.	Presentation	**From Supervisors to Leaders: Empowering the Frontline for Tomorrow's Challenges** Michele Rodriguez-Flores Ridgecresta Inc.	As a wave of retirements reshapes the workforce landscape, organizations face a critical question: how do we prepare the next generation of leaders starting at the frontline? This session explores a strategic approach to developing frontline supervisors into empowered, forward-thinking leaders. Attendees will walk through the essential steps to align workforce training with long-term organizational goals, ensuring readiness for tomorrow's challenges. Through practical insights and proven frameworks, this presentation will highlight the cornerstones of effective leadership development—fostering growth, resilience, and adaptability at the supervisory level. Whether you're building a new training program or refining an existing one, this session offers actionable guidance to elevate your frontline talent and secure your leadership pipeline. Drawing inspiration from the One Water philosophy, we'll examine how leadership, like water, flows through every part of an organization—linking people, processes, and purpose. Participants will gain practical strategies for cultivating leadership capacity at the frontline, aligning development efforts with organizational values, and creating a ripple effect of positive change. Join us to discover how investing in your supervisors today can ensure a resilient, unified workforce for tomorrow.
2:00 p.m.	Presentation	**Addressing Contamination Incidents in RRAs and ERPs** William Platten Charlene Kormondy US Environmental Protection Agency	The U.S. Environmental Protection Agency's Water Infrastructure and Cyber Resilience Division (WICRD) provides free resources for water and wastewater utilities to prepare for, respond to, and recover from water-related emergencies. WICRD also implements Safe Drinking Water Act (SDWA) section 1433, which was amended by America's Water Infrastructure Act (AWIA) section 2013, and requires community water systems (CWS) serving more than 3,300 people to prepare (or revise) and certify risk and resilience assessments (RRAs) and emergency response plans (ERPs) to EPA by specified deadlines every five years. Five-year recertification deadlines are upon us, with deadlines occurring throughout 2025 and 2026. Drinking water contamination can occur from natural, accidental, and intentional causes. It can result from other emergencies (e.g., wildfires), from specific contamination scenarios, or from an intentional malevolent act. Utilities may want to address contamination from malevolent acts or natural hazards in their RRA and ERP. In this session, EPA will discuss SDWA Section 1433 requirements and deadlines, and then provide examples of how utilities can address contamination incidents in their RRA and ERP.	Presentation	**Granular Activated Carbon Reactivation Facility** Jay Stone Bowers & Kubota	The BWS needs to address a long-term solution for the disposal and/or reactivation of spent granular activated carbon (GAC) generated from their water treatment facilities. Recent actions and future changes to the City's solid waste management operations that are beyond BWS' control have impacted the current GAC disposal operations resulting in the need for this action. This includes: 1) the closure of the AES Hawai'i Power Plant last year; and 2) the future closure of the Waimānalo Gulch Sanitary Landfill. This paper will discuss the development of a design-build operation and maintain request for proposal for a GAC reactivation facility as a long-term sustainable disposal method for spent GAC from BWS facilities. Disposal options, site selection, life-cycle costs, preliminary design, manpower planning, alternative procurement, and permitting requirements will be discussed in this paper.	Presentation	**Communicating Complicated Analyses to Utility Leaders and the Public** Glen Barnes of Water Financing Assistance	Utilities generate complicated analyses such as water audits, asset management plans, risk-resilience assessments, rate studies and others to gather the information needed to make smart policy decisions that will sustain operations for years to come. These analyses, however, are only helpful if community leaders and the public at large understand the results. Spreadsheets and data tables rarely move hearts and minds. The results have to be "translated" into stories. Attendees will learn how to identify the most compelling story from the analysis, tell that story into plain language that would be understood by a non-technical audience, focus on aspects of the analysis that will resonate with utility leaders and the public, and create effective visuals to emphasize key findings.
2:30 p.m.	Break			Break			Break		
2:45 p.m.	Presentation	**Adjusting Sewer Rates to Support Affordability and Water Conservation while also meeting Revenue Requirements.** Roger Babcock, Director ENV Dave Ebersold, Vice President CDM Smith	The Honolulu Department of Environmental Services (ENV) is facing several challenges, including compliance with known upcoming permit requirements, potential new regulations on PFAS and microplastics, addressing climate change and sea level rise, upgrading aging infrastructure, managing workforce shortages, addressing cesspools, and completing costly upgrades for a 2010 consent decree. The consent decree, involves three phases, with Phase 3—Sand Island WWTP upgrades to be completed by 2035—being the most expensive at $2.3 billion. Meeting these challenges requires significant increases in ENV revenues, which are solely derived from sewer charges to its customers. In June 2025, the Honolulu City Council approved a 7-year package of sewer fee increases that involve significant changes to the rate structure. The purpose of these changes is to facilitate equity and affordability by giving customers greater control over their sewer bill, encourage water conservation, and complement the Board of Water Supply's tiered water rate structure. This presentation will summarize the specific drivers of the revenue requirement, review the various rate options considered and their impact on customer bills, summarize stakeholder advisory group input regarding required rate changes, and describe the final result as adopted by the City Council, including sample sewer bills. We will also present affordability metrics for Honolulu in comparison to other major cities. Lastly, we will present the results of BWS's recently completed price elasticity evaluation and consider how the alignment of water and sewer rate structures may influence future water use behavior by customers	Presentation	**Haiku Tunnel Bulkhead Study, a Groundwater Storage and Stream Restoration Evaluation** Nancy Matsumoto, PG, CHG BWS Hydrology-Geology Charles Luxford, PE, SE Brierley Assoc.	The Haiku Tunnel Bulkhead Study investigated the tunnel's hydrogeology, bulkheads and discharge piping to determine if storage was increasing. This study was in response to the CWRM order to reduce production from 1.3 MGD to 0.3 MGD. The reduction in tunnel production was required to increase Heeia Stream flows for the expansion of loʻi kalo in Heeia wetland. As part of the study, various alternatives for rehabilitation and /or replacement of the facility were evaluated.	Presentations	**Educational and Participatory Communications** Community Relations Specialists, BWS Communications Office Ani Turner Kaua'i Board of Water	Education is a cornerstone of outreach efforts by water utility Communications teams. Often they focus on specific audiences, such as students and tour groups, gardening beginners to enthusiasts, and organizations focused on watershed stewardship, in order to make lasting impacts on behavioral change. In this session, representatives from the Honolulu Board of Water Supply and the Department of Water on Kaua'i will highlight best practices in their educational programs and the impact of their efforts on everything from demonstration facilities, current community and interagency partnerships to tackle invasive species, and building on watershed partnership outreach.

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3:15 p.m.	Presentation	**Pure Water Hawaii, Guidelines for Potable Reuse** Andy Salveson Mike Miyahira Carollo Engineers	Today's Hawaii water resources managers face a myriad of challenges from droughts to uncertain water supply availability and quality. Potable water reuse, which is also called Purified Recycled Water, or PRW, has been demonstrated across the continental U.S. and the world as a feasible solution to these water supply challenges. The proposed Pure Water Hawaii Framework follows the state of Colorado's measured step-by-step process of stakeholder engagement, facilitated workshops, and the use of a decision matrix to ultimately arrive at PRW guidelines – the precursor to actual regulatory rules. The first step of this process, stakeholder engagement, will identify and flesh out project goals and approaches; consider environmental, social, political, and cultural issues; and identify relevant audiences and messaging strategies. A comprehensive survey was distributed to over a dozen stakeholders across the state of Hawaii in August 2025, initiating a discussion of these issues. The results are presented here, with a look towards next steps in the process of developing PRW guidelines. The initial list of stakeholders was developed by the Carollo team from a cross section of major State and County regulatory, wastewater and drinking water entities; private water and wastewater industry entities; NGOs and educational institutions. *Subject to available funding* , future Pure Water Hawaii phases will facilitate the development of actual Hawaii Revised Statutes and Hawaii Administrative Rules for the potable reuse of domestic wastewater.	Presentation	**Nuuanu Hydro-Managed Aquifer Recovery, a stormwater capture, treatment, energy recovery and aquifer recharge solution for a climate change future** Judy Nishimoto CDM Smith	Climate change poses increasing threats to freshwater availability in Hawai'i, necessitating innovative and sustainable water management strategies. This project explores the historical and future significance of Nuuanu Reservoir, once a primary source of drinking water for Honolulu, as a key component in climate-resilient water infrastructure. By leveraging the Nuuanu Reservoir and surrounding valley for managed aquifer recharge (MAR), this initiative aims to restore its hydrological function and enhance groundwater sustainability. The unique geology of Nuuanu Valley—characterized by permeable basalt formations and natural infiltration pathways—makes it an ideal site for groundwater replenishment. This approach not only supports long-term water security but also contributes to ecological restoration and community resilience in the face of climate variability.	Presentations	**Hawaii's Watershed Partnerships, Protecting our Water Source in Mauka Forests** Amy Tsueyoshi BWS Watershed Program Yumi Kam Waianae Mountain Watershed Partnership	Our forests are essential for water security. For over 25 years, the coordinators of these partnerships and their dedicated staff have been working with their diverse partners – including the county water supplies – to protect, maintain and restore our native watershed forests. This presentation will provide an overview of the Watershed Partnership model, and the types of management actions required to protect and maintain our mauka native forests that are so essential to our State's water supply and the community and stakeholder outreach necessary to implement those actions.
3:45 p.m.	Break			Break			Break			
4:00 p.m.	Presentation	**PFAS Challenges for a Small Public Water System** Judy Hayducsko Ann Kam DOH Safe Drinking Water Branch	The State Department of Health, Safe Drinking Water Branch conducted a per- and polyfluoroalkyl substances (PFAS) monitoring project in Hawaii to identify areas with PFAS presence. Kunia Village, a small system on Oahu, was the first community in the state to find PFAS in its drinking water sources. Luckily, Kunia Village was able to establish an emergency connection to a nearby public water system until a solution was found. SDWB staff, Ann Kam and Judy Hayducsko, will present the following: - SDWB's PFAS sampling and findings at Kunia Village - The Environmental Protection Agency's assistance provided through its national PFAS treatment research project, PFAS Innovative Treatment Team; and - The Drinking Water State Revolving Fund program's role in the design and construction of granular activated carbon (GAC) treatment for the existing source and eventually, a replacement well.	Presentation	**State of Hawaii Water Audit Program an Overview** Nicholas Ing State Commission on Water Resource Management	In 2016, Act 169, Session Laws of Hawai'i was signed into law and established the Hawai'i water audit program which requires affected public water systems (PWS) to submit Level 1 validated American Water Works Association (AWWA) Water Loss Audits to the Commission on Water Resource Management (Commission) on an annual basis. In 2020 AWWA released an updated FWAS v6.0, which provides a new interactive data validity grading matrix and a dashboard for data validity and Key Performance Indicators (KPI) benchmarking. This presentation will discuss the Commission's WAVE program, annual water audits, ver.6 training, and may touch upon the water meter testing program that is being planned this year as a part of the annual water audit program outcomes.	Panel	**Panel: Adapting communications for optimal impact despite increasing polarizing community, political, and social perceptions** Moderator: Kathleen Elliott-Pahinui Steven Norstrom BWS Communications Office Stella Bernardo BWS Communications Office Kawika Uyehara Deputy Manager, Hawaii Board of Water Adam Mundy, PIO Maui DWS Ani Turner, Information & Education Specialist Kauai DWS	In a world inundated with information and views in all sorts of forms, advancing technology, and those looking to use that chaos to their advantage, it can be difficult to figure out what you can trust and believe. In this panel, water industry and communicators will share their perspectives on the impact of increasing polarizing community, political and social perceptions and the impact of technology on how they approach public outreach, especially when it comes to core messaging such as water conservation, water resource protection, and long-term planning or infrastructure investments.
4:30 p.m.	Presentation	**GAC vs IX for PFAS Treatment** Kevin Lavery Sam Yearby Carbon Supply, Inc.	Per- and polyfluoroalkyl substances (PFAS) pose persistent challenges to water treatment due to their chemical stability and resistance to conventional methods. This presentation compares granular activated carbon (GAC) and ion exchange resins (IX) in terms of removal efficiency, media longevity, and selectivity across various PFAS compounds. GAC, while cost-effective and widely deployed, shows variable performance depending on chain length, with lower affinity for short-chain PFAS. In contrast, IX offers higher selectivity and faster kinetics, especially for short-chain variants, but may face limitations in regeneration and upfront costs. By examining breakthrough curves, operational considerations, and emerging field data, this session provides a perspective on optimizing media choices for site-specific PFAS remediation.	Presentation	**East Honolulu Watershed Management Plan, a holistic ahupua`a and community based water management plan** Melissa May Hadley Aldrich Barry Usagawa BWS	The BWS watershed management planning framework incorporates innovative components including climate change, Native Hawaiian cultural values, and a long-range water demand forecast that considers impacts from sea level rise and climate change. This framework has been referenced as setting a standard for the development of water plans statewide. The East Honolulu Watershed Management Plan (EHWMP) is BWS' most recent watershed management plan. It was adopted with unanimous support from the City Council and testimony from area neighborhood boards, and received the 2025 Outstanding Planning Award from APA Hawai'i. The EHWMP incorporates innovative approaches to addressing threats like sea level rise, increased storms, and changing rainfall patterns. It utilizes current scientific projections and policies to guide adaptive management, emphasizing infrastructure resilience and ecosystem-based solutions. A key feature is its forward-looking, risk-based approach that evaluates divergent rainfall projections ranging from significant decreases to increases highlighting the uncertainty of future hydrologic conditions. This encourages conservation and flexible water management strategies to ensure a secure future water supply regardless of climate outcomes. The plan promotes resilience by supporting infrastructure upgrades, shoreline protections, and buffer zones, along with restoring native marshes and wetlands. These comprehensive, science-driven strategies are being incorporated into all of BWS' watershed management plans, providing a proactive framework for adapting to climate change and safeguarding Hawai'i's watersheds and communities for the future.			
5:00 p.m.-9:00 p.m.	Thompson Award, Banquet									
Until 10 pm	Hospitality Room									

2025 Hawaii WaterWorks Association Annual Conference, Aulani Hotel, Ko Olina Resort Oct. 15-17, 2025

Technical Program v.9/25

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Date/Time	**Activity**

Oct. 17 2025

7:30 a.m. - 9:00 a.m. Continental breakfast

	Announcements	General Session 3 Large Room	Business Track
8:00 a.m. (45 min)	Presentation	**Local Forecasts and Analysis of Economic, Demographic, and Business Trends in Hawaii** UHERO Dr. Steven Bond-Smith	Hawaiʻs economic outlook as expansive federal policy shifts impact the local economy. Fluctuating increases in US import tariffs, sweeping federal layoffs, and volatile fiscal and immigration policies are undermining consumer confidence, raising inflation expectations, and worsening the business outlook—both nationally and in Hawaiʻs visitor-dependent economy. Will be updated with the September 2025 UHERO Fall economic outlook.
8:45 a.m. (45 min)	Presentation	**Our Kuleana: Leveling Up in Water Advocacy** Ann Miyahira Hajnosz, PE Harris & Associates	The water industry is facing significant challenges - rapidly aging infrastructure; climate impacts; dwindling staff resources; continued regulatory pressure - all adding up to continued affordability challenges for ratepayers and communities. This presentation will suggest ways to "level up" our thinking and communications around water, with the goal of everyone coming away with one new idea and/or one act, that they can implement to increase their water advocacy. It will also provide background on the specific financial challenges facing water utilities today and how water advocacy plays a direct role in the financial sustainability of an agency.
9:30 a.m. (45 min)	Panel Discussion	**Manager's Roundtable:** Ernest Lau, Honolulu BWS Keith Okamoto, Hawaii DWS John Stufflebean, Maui DWS Joe Tait, Kauai DWS	Conference Issues of Note. Action Items Moving Forward

10:00 a.m.and 11:30 am	**Field Trips**	**Watershed Field Trip 10 am** **Bento Lunch**	**Kapolei Golf Tournament Check-in 10:30 am, Shotgun 11:30 am** **Bento Lunch**