



Honolulu Board of Water Supply
Stakeholder Advisory Group Meeting 51
Thursday, July 18, 2024, 4:00 – 6:00 pm
Blaisdell Center – Hawaii Suite

Meeting Notes

PURPOSE AND ORGANIZATION OF MEETING NOTES

The purpose of these notes is to provide an overview of the Board of Water Supply (BWS) Stakeholder Advisory Group meeting. They are not intended as a transcript or as minutes. Major points of the presentations are summarized herein, primarily for context. Copies of presentation materials were provided to all participants and are available on the BWS website. Participants made many comments and asked many questions during the meeting. These are paraphrased to be more concise.

ATTENDEES

This was an online meeting in which 9 stakeholders participated, in addition to BWS staff, consultants and members of the public. The stakeholders represent diverse interests and communities island wide.

The following Stakeholders Advisory Group members attended:

Matt Bailey	Castle Resorts
Bill Clark	Resident of Council District 6
Helen Nakano	Resident of Council District 5
Dana Okano	Hawaii Community Foundation
Elizabeth Reilly	Resident of Council District 4
Cynthia Rezentes	Resident of Council District 1
Alison Richardson	Coca-Cola Co.
Cruz Vina, Jr.	Resident of Council District 8
Guy Yamamoto	YHB Hawaii

WELCOME

Facilitator Dave Ebersold welcomed everyone to the 51st meeting of the BWS Stakeholder Advisory Group. Meeting objectives were identified as:

- Seek input on Source Water Protection Plan
- Review current Water Master Plan and seek input on proposed updates
- Accept notes from meeting #50
- Learn about Public Safety Power Shutoff and BWS updates

PUBLIC COMMENTS: None.

SOURCE WATER PROTECTION PLAN UPDATE

Dave introduced BWS Assistant Program Administrator for Water Resources, Marc Chun, and CDM Smith's Water Resources Engineer, Bill Fernandez, who presented details on the Source Water Protection Plan. Marc Chun began his presentation by providing background on the Source Water Protection Plan, emphasizing that the plan has been under development for several years and involves multiple stakeholders. He highlighted the importance of preventing contamination rather than relying on mitigation and cleanup efforts after the fact. The plan aims to be a living document that actively guides water protection efforts rather than a static report.

Marc outlined the three main objectives of his presentation: to review the plan's development and results, discuss the major takeaways, and gather feedback from the attendees. He elaborated on the extensive work that had gone into the plan, including collaboration with multiple stakeholders and the identification of unexpected challenges along the way. One of the most pressing issues was the widespread presence of contamination threats, which have only grown more severe due to urban development and environmental changes. He noted that protecting the island's limited aquifer is crucial, as it provides about 145 million gallons of water per day to nearly one million residents.

Marc provided a timeline of regulatory efforts that have shaped water protection policies, starting with the Clean Water Act of 1972. He explained that these regulations have evolved over time, driven by both federal and state initiatives, and that the Source Water Protection Plan builds on these foundations. He emphasized that the guiding principle of the plan is that prevention of contamination is far preferable to mitigation, setting the stage for a proactive, risk-reduction approach.

Marc invited Bill Fernandez to provide a more detailed look at the technical aspects of the plan. Bill began by outlining the four key steps of the planning process: identifying risks, developing Best Management Practices (BMPs), compiling these BMPs into projects, and prioritizing those projects based on their impact and feasibility. He presented a visual that illustrated the distribution and scale of Potentially Contaminating Activities (PCAs) across the island, such as cesspools, underground storage tanks, and historical agricultural sites. Bill revealed that the team had identified over 19,000 PCAs, with a significant portion located within critical zones that could directly impact BWS supply wells.

Bill emphasized the importance of assessing the risk levels of these PCAs, using a scoring system that considered factors like proximity to water sources and the likelihood of contamination. This system allowed the team to prioritize which PCAs needed the most urgent attention. He also discussed the development of BMPs, which involved reviewing existing regulations, identifying gaps, and proposing new actions to fill those gaps. Bill highlighted examples of BMPs, such as clarifying distance requirements for individual wastewater systems near wells and enhancing procedures for sealing abandoned wells.

Bill also discussed the critical role of agency collaboration. The project team developed a detailed matrix that mapped out the responsibilities of various federal, state, and local agencies involved in water quality and protection. This matrix is a key tool for ensuring coordinated efforts across multiple jurisdictions, reducing overlap, and clarifying which agencies were responsible for specific tasks. He underscored the necessity of transparency and communication among these agencies to effectively protect the island's water resources.

This concluded the Source Water Protection Plan Update and Dave opened the floor for questions and further discussion.

COMMENT: Elizabeth Reilly noted that there was a strong public interest in hiking and accessing

natural areas, but also a lack of awareness about how these activities could impact watersheds and aquifers. Elizabeth suggested that BWS should enhance its public messaging to educate communities about the importance of protecting water sources, not just at specific well sites but across the entire island's watershed.

RESPONSE: Marc thanked Elizabeth for her comments, agreeing that public education was a critical component of the plan's success. He acknowledged the need to incorporate more messaging about the impacts of recreational activities on water resources and committed to considering her suggestions in future outreach efforts.

COMMENT: Cynthia Rezendes raised concerns about abandoned wells, recalling a past initiative where she and BWS partnered to survey wells in the Waianae District. She noted a low response rate from property owners and the general lack of awareness about wells on their land, which highlighted a significant gap in data and coordination.

RESPONSE: Bill confirmed that locating abandoned wells remains a challenge and stressed the importance of continued collaboration with agencies like the Commission on Water Resource Management to address this issue. He noted that BWS is exploring ways to improve the regulatory process, including potential permit requirements for parcels with known abandoned wells.

BWS Program Administrator for Water Resources, Barry Usagawa, provided an update on recent efforts to manage abandoned wells, noting that the Water Commission had recently hired a geologist to conduct field surveys and had secured a \$2.4 million grant to seal wells statewide. He emphasized that ongoing collaboration between BWS and the Water Commission is essential for prioritizing which wells to seal, particularly those within critical capture zones that directly affect the water supply.

BWS Manager and Chief Engineer, Ernest Lau, added that, while agencies play a key role in managing water resources, property owners also bear responsibility for sealing abandoned wells properly. He suggested that BWS review its regulations to enhance enforcement and integrate well-sealing requirements into the building permit process, aligning with broader efforts to protect water quality.

COMMENT: Cynthia Rezendes suggested that BWS should become more involved in Sustainable Communities Plan updates, particularly to address the intersection of land use changes and water resource protection. She noted that integrating water-related considerations into these plans could help ensure that community development aligns with the goals of the Source Water Protection Plan.

Dave thanked the attendees for their insightful contributions, underscoring the importance of continued collaboration. He reiterated that protecting the island's water resources is a shared responsibility that requires active participation from all stakeholders. Dave assured the group that BWS would continue to refine the plan based on the feedback received and keep stakeholders updated on progress. He emphasized that the next steps would include enhancing public messaging, developing BMPs, strengthening inter-agency partnerships, and exploring regulatory updates to support the plan's objectives.

WATER MASTER PLAN UPDATE

Dave Ebersold took the floor to provide the group with an update on the BWS Water Master Plan, which was developed in 2016. Dave emphasized the significance of revisiting the plan to reflect on progress made since its inception and to plan for the future. He reminded the group of the plan's

critical role in ensuring that BWS can continue to deliver safe, dependable, and affordable water to the community and also reminded them of the scope of BWS's operations, which include the daily treatment, movement, and delivery of 145 million gallons of water, as well as the production of 8 million gallons of recycled water for industrial and irrigation purposes.

Dave illustrated population growth and water use from 1980 to 2010, highlighting a significant conservation success story. Despite the increase in population, water usage had decreased, resulting in savings of approximately 10 billion gallons annually since 1990. However, he acknowledged that varying trends in population projections across different regions presented challenges that required BWS to adapt its strategies to balance water demand with available resources.

Dave reviewed the comprehensive condition assessment conducted on the water infrastructure, which included evaluations of reservoirs, leak detection, and pipeline conditions. This assessment aimed to determine the system's capacity to handle projected demands through 2040, taking into account factors like climate change and other environmental trends. He noted that while most infrastructure was in good condition, some critical areas needed improvements.

Dave further discussed key recommendations from the 2016 Water Master Plan, such as developing new drinking water supplies for Ewa-Waipahu and Honolulu, doubling non-potable water production, and enhancing reservoir storage and pipeline infrastructure. Dave pointed out that the plan recommended maintaining an \$80 million annual budget for capital improvements, although this figure has since increased to meet growing needs. He explained that the Capital Improvement Program (CIP) is designed to address growth and maintain system reliability, with significant investments planned in new and replacement pipelines and water sources.

Dave then outlined several changes that had affected the water system since the plan was first developed in 2016. He highlighted the impact of COVID-19 on water demand and revenues, the contamination incident at Red Hill, and the evolving water quality regulations related to PFAS and other emerging contaminants. Dave emphasized the need for BWS to reassess system needs and update evaluations to effectively address these changes.

In discussing the focus areas for the updated plan, Dave highlighted the importance of revisiting key elements such as condition assessments, water demand forecasts, water source evaluations, and climate resilience planning. He advocated for a strategic approach, leveraging existing data while focusing on the most critical issues, including reducing unaccounted-for water and integrating advanced technologies to improve system efficiency. He noted the importance of achieving an unaccounted-for water level within the industry best practice range of 8-9%, a target that would require substantial effort and investment.

Dave discussed the potential for artificial intelligence and other advanced technologies to streamline data analysis, improve operational reliability, and enhance overall system performance. He emphasized the importance of aligning technological advancements with the CIP and operational needs to ensure that BWS remains at the forefront of water management innovation.

Dave highlighted the importance of updating water demand forecasts to reflect changes in water usage patterns, particularly those observed in the wake of the COVID-19 pandemic. He underscored the need to critically evaluate water sources, especially given ongoing contamination risks, and to explore alternative supplies such as desalination, stormwater capture, and the potential for potable reuse in the future.

Dave then addressed the evolving regulatory landscape, outlining anticipated changes to regulations on lead, copper, and other emerging contaminants. He stressed the need for coordinated planning to address these regulatory requirements and ensure a comprehensive approach to system assessments. He also spoke about the multiple risks that climate change poses to BWS operations, including reductions in recharge rates, seawater intrusion, and impacts on infrastructure from extreme weather events. He emphasized that a comprehensive approach to climate resilience planning would be essential to safeguard water resources and maintain service reliability.

Recognizing the importance of public engagement, Dave commended the efforts of the public communications team in keeping stakeholders informed and involved. He proposed the development of an updated scorecard to measure progress in implementing the updated Water Master Plan and to reinforce transparency and accountability. Barry Usagawa provided additional insights on updating the scorecard, noting the need for realistic objectives that effectively measure performance and drive improvements.

COMMENT: Elizabeth Reilly raised concern about recent housing laws that promote increased density, such as the subdivision of single-family homes into smaller lots with tiny houses. She questioned how these changes might impact water demand and stressed the need for BWS to adapt its planning to accommodate these shifts.

RESPONSE: Dave acknowledged the complexity of the issue and noted that similar trends in other regions could significantly alter water demands.

COMMENT: Cynthia Rezendes addressed the transition from cesspools to more advanced treatment facilities and its potential impact on water management. She highlighted opportunities for BWS to collaborate with wastewater treatment facilities to increase the availability of recycled water for non-potable uses, such as irrigation.

RESPONSE: Ebersold agreed with Cynthia, noting that such collaboration aligns with the goals of the One Water initiative, which seeks to integrate water management across various sectors and sources.

COMMENT: Helen Nakano commended BWS for its forward-thinking approach in developing a 30-year plan and updating it to look forward another 30 years. She emphasized the importance of highlighting BWS's achievements to inspire other agencies and to increase public understanding of the scale and complexity of water management efforts.

COMMENT: Cynthia Rezendes raised concern regarding the Public Safety Power Shutoff (PSPS) program and its implications for water supply reliability in areas like Waianae. She emphasized the need for adequate reservoir capacity to ensure water availability during power outages and emergencies.

Dave thanked the SAG for their valuable input and engagement, underscoring the importance of continued collaboration as BWS moves forward with updating the Water Master Plan. The collective efforts of all stakeholders are crucial to ensuring that the water system remains resilient and capable of meeting the needs of the community for future generations.

BWS UPDATES AND PUBLIC SAFETY POWER SHUTOFFS

Dave invited Ernest Lau, BWS Manager and Chief Engineer, to share BWS updates and information on Public Safety Power Shutoffs.

Ernest began his presentation by providing an update on the status of Red Hill, explaining that Red Hill had started the process of cleaning two of its fourteen tanks, having already removed 104.7 million gallons of fuel that once threatened the aquifer. The focus now is on cleaning out residual sludge from each tank, a task expected to take several years. Following the cleaning, the next step will involve dismantling the pipeline connecting the tanks to Pearl Harbor. Ernest stressed the importance of aggressively identifying and addressing all fuel and contaminant traces, including PFAS, in the underground aquifer to protect the community's water supply.

Shifting the focus to Public Safety Power Shutoffs, Ernest highlighted recent wildfires on Maui and Kauai, which showed the growing wildfire risk across the islands. He described how these fires rapidly expanded due to dry conditions and invasive grasses, which flourished following the closure of traditional plantations that once managed the land with roads and controlled vegetation. Ernest noted a small fire in Hanapepe on Kauai that had exploded from just a few acres to over 1,000 acres in a single day, forcing the Kauai Islands Utility Corporation (KIUC) to shut down power along the western coastline. This situation illustrated a new reality that communities must prepare for as climate change and changing land use patterns increase wildfire risks.

Ernest explained that Hawaiian Electric is adapting its wildfire safety measures in response to these growing threats. A key component of this strategy involves altering operational protocols to prevent the automatic re-energizing of power lines after an outage, a change aimed at minimizing the risk of fires sparked by downed lines. He elaborated on the company's plans, which include fortifying power poles, many of which are currently made of wood and can snap under high winds, and exploring the possibility of replacing overhead wires with underground lines in strategic areas. Additionally, Hawaiian Electric is focusing on better vegetation management, especially in zones where power lines traverse mountainous regions. Ernest mentioned a recent incident in East Honolulu, where a power outage caused by a fallen tree branch disrupted electricity for several days, emphasizing the need for vigilant maintenance of areas near power lines.

COMMENT: Elizabeth Reilly voiced concerns about Hawaiian Electric's ability to manage these challenges, pointing out that they lack manpower and prioritization to adequately maintain their easements and manage tree growth near power lines. She expressed her belief that incidents like the one in East Honolulu would continue unless more robust preventive measures were implemented.

RESPONSE: Ernest acknowledged the enormity of the task, admitting that power shortages are likely to become more common.

Ernest described PSPS as a preemptive measure intended to reduce the risk of wildfires caused by electrical infrastructure, particularly during high-risk weather conditions such as winds exceeding 45 miles per hour and low humidity levels below 45%. He stressed that these shutdowns are not solely reactive to existing wildfires; instead, they are designed to prevent potential fires during hazardous weather. For instance, on Kauai, the power was shut off preemptively in response to a wildfire, demonstrating the utility's readiness to act swiftly in the face of emerging threats.

Ernest further detailed Hawaiian Electric's approach, noting that the company's Incident Management Teams (IMTs) are on standby during the wildfire season, ready to respond to evolving conditions. He explained that PSPS decisions are based on real-time data from weather stations strategically placed along high-risk areas like the Waianae Coast, rather than relying solely on National Weather Service advisories. The PSPS plans for Oahu focus primarily on the Waianae Coast, stretching from Nanakuli to Makaha, with potential implementations on Maui, Molokai, and the west side of Hawaii Island.

Ernest outlined the BWS's preparedness strategy, highlighting the critical role of deploying generators to maintain water supply operations on the Waianae Coast during power outages. Currently, the BWS plans to deploy at least three generators to key well stations to keep the system running and pressurized, ensuring a continued water supply for residents even if the power is cut off. However, Ernest emphasized the need for community cooperation, urging residents to conserve water during these events, as the water system would be operating at a diminished capacity.

COMMENT: Cynthia Rezentes raised the need for clear communication during PSPS events. She suggested that the BWS issue water restriction bulletins in tandem with power shutoff notices from Hawaiian Electric to prevent residents from misinterpreting the availability of running water as a sign that they can continue with non-essential water uses like car washing.

RESPONSE: Ernest agreed, stressing the importance of coordinated messaging with Hawaiian Electric and the City and County of Honolulu's communications team to reinforce the need for aggressive water conservation.

Looking ahead, Ernest discussed the BWS's efforts to secure federal grants through the Hazard Mitigation Grant Program to fund the installation of permanent generators at critical well sites on the Leeward Coast. He acknowledged the challenges associated with building new water reservoirs, including finding suitable land and securing funding, but noted that enhancing generator capacity remains the most immediate priority. He also mentioned exploring additional resilience measures, such as evaluating generators at key locations like Halawa Shaft, which could potentially be redeployed to serve other critical areas of Honolulu.

Dave Ebersold concluded the meeting by reflecting on the complexity of the issues discussed and the ongoing need for comprehensive planning and resilience building. He noted that the topics covered would be integrated into the upcoming updates to the Water Master Plan and the Board's risk and resilience assessment. Ebersold reminded everyone of the next scheduled meeting on Thursday, October 17th, from 4:00 to 6:00 PM, and thanked all participants for their engagement and contributions.

The meeting underscored the critical importance of preparedness and collaboration as Hawaiian Electric and the Board of Water Supply navigate the evolving challenges of climate change, wildfire risk, and infrastructure resilience. With proactive measures, clear communication, and community cooperation, the stakeholders aim to mitigate risks and safeguard essential services for the islands' residents.

NEXT STEPS

Dave noted the last Stakeholder Advisory Group meeting in 2024, which will be held on Thursday, October 17 from 4 to 6 p.m. He noted that an update on the Risk and Resilience Assessment will be a future topic.