Honolulu Board of Water Supply

Stakeholder Advisory Group Meeting 57

Thursday, January 15, 2026, 4:00 – 6:00 pm

Neal S. Blaisdell Center

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 in-person meeting in which 17 stakeholders participated, in additionto BWS staff, consultants and members of the public. The stakeholders represent diverse interests and communities island wide.

The following Stakeholders Advisory Group members attended:

Alison Richardson	Coca-Cola Company
Bob Leinau	Resident of Council District 2
Brian Miyamoto	Hawaii Farm Bureau
Cynthia Rezentes	Resident of Council District 1
Dana Okano	Hawaii Community Foundation
Dean Okimoto	ʻNalo Farms, Inc.
Elizabeth Reilly	Resident of Council District 4
Helen Nakano	Resident of Council District 5
Jicky Ferrer	AARP Hawaii
Josh Stanbro	Hawaiian Council
Kaleo Manuel	Kamehameha Schools
Mahealani Cypher	Resident of Council District 3
Mark Fox	Environmental
Mary Kishimoto	Chamber of Commerce Hawaii
Matt Bailey	Castle Hospitality Group
Ryan Obrero	Honolulu Board of Realtors
Wayne Tanaka	Sierra Club

WELCOME

Facilitator Dave Ebersold welcomed everyone to the 57th meeting of the BWS Stakeholder Advisory Group.

Meeting objectives were identified as:

- Provide BWS updates
- 2025 Customer Satisfaction Survey Results
- 2026 WMP Update Roadmap
- Accept notes from meeting #56
- CIP Process and Prioritization
- Review SAG meeting dates for 2026

WELCOME: Dave welcomed new Stakeholder Advisory Group members Mary Kishimoto and Josh Stanbro.

PUBLIC COMMENTS: None.

BWS UPDATES

Dave invited Ernest Lau, BWS Manager and Chief Engineer, to share BWS updates. He announced that BWS recently held a joint press conference with the Department of Environmental Services (ENV) to expand the WaterSensible rebate program and formalize a new partnership that will help fund conservation rebates. This collaboration has allowed BWS to significantly increase rebate amounts for both residential and commercial customers.

For residential customers, rebates for high-efficiency toilets (1.28 gallons per flush or less) have increased from $100 to up to $200 per unit. Energy Star or WaterSense-certified clothes washers have increased from $75 to $150. The Smart Water Monitor rebate has doubled from $200 to $400. This device, installed on the customer's side of the plumbing system, monitors water use, detects leaks, and in some cases allows remote shutoff through a smartphone. Ernest emphasized that because BWS meters are read monthly, these devices can help customers detect leaks and avoid unusually high bills.

Commercial rebates have also expanded, particularly for cooling tower upgrades associated with

chilled water air conditioning systems in large buildings such as hotels and office towers. Ernest encouraged both residents and business owners to take advantage of the increased incentives.

Since the WaterSensible program began in 2018, cumulative savings have reached approximately 1.2 billion gallons of water. Over 13,000 washing machine rebates and more than 5,000 toilet rebates have been issued. Ernest hopes that the enhanced rebate amounts will further increase participation. Printed flyers were made available at the meeting, and customers can visit www.boardofwatersupply.com for additional information.

COMMENT: Dave commended the partnership between BWS and ENV, noting that such collaboration between water and wastewater utilities on conservation rebates is rare in other regions and represents a progressive and impactful approach.

QUESTION: Bob Leinau asked whether BWS could provide technical assistance to commercial customers interested in smart water monitoring technology. Ernest explained that BWS works with its contractor, Honeywell, to administer the rebate program, and technical staff are available to consult with businesses. BWS Information Specialist Steven Norstrom added that Honeywell can provide presentations and site-specific guidance upon request.

Ernest commented that water conservation is the most cost-effective way to develop new water supply. Drilling a new well can cost millions of dollars and may take up to ten years from site selection to production. In contrast, conservation provides immediate benefits and extends existing resources.

QUESTION: Dean Okimoto asked whether smart water monitors could be used in agricultural applications. Ernest responded that this is a great idea since irrigation systems are a common source of water loss. Currently, these devices are sized primarily for residential use.

COMMENT: Jicky Ferrer suggested incorporating emergency water filtration straws into BWS preparedness outreach, both as a conservation and emergency readiness tool. Ernest responded that BWS currently distributes collapsible emergency water storage bags and agreed that exploring additional preparedness tools in coordination with the Department of Emergency Management is worthwhile. Mahealani Cypher cautioned that some emergency filtration straws may not remove all pathogens, such as leptospirosis, and advised careful evaluation of filtration capabilities.

COMMENT: Helen Nakano shared personal conservation practices, including using buckets to capture water while brushing teeth, reducing towel size to save on laundry water use, and promoting practical daily habits to reduce household consumption.

COMMENT: Bob Leinau suggested requiring waterless urinals in building codes to reduce flushing demand and mentioned behavioral practices such as reducing flush frequency. Ernest noted that waterless urinals are successfully used in some school facilities and acknowledged the potential for additional conservation.

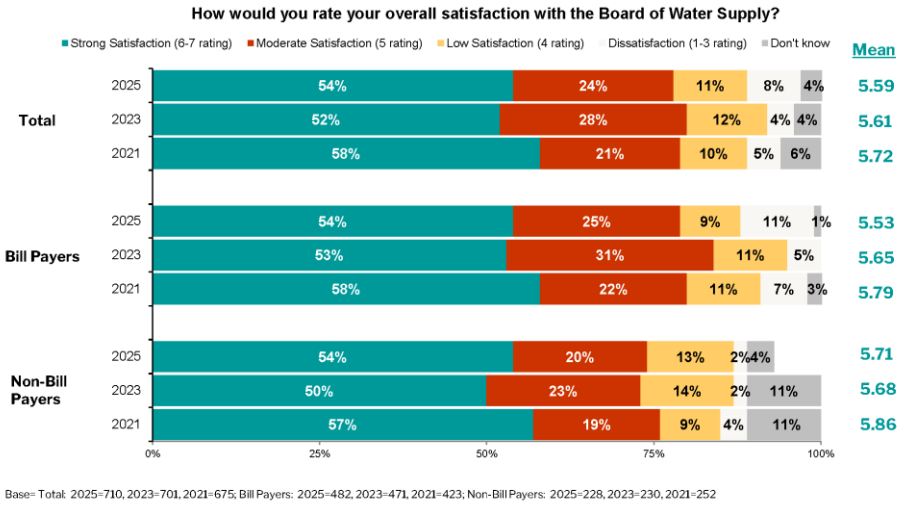
2025 CUSTOMER SATISFACTION SURVEY:

Dave introduced Kathleen Elliott-Pahinui, BWS Public Information Officer, to provide an overview of the BWS's 2025 Customer Satisfaction Survey. The survey is conducted every two years to track satisfaction levels and other key perceptions related to BWS and its mission. The survey included 710 interviews and the results have a high confidence level with a margin of error under plus or minus 3.7%.

Kathleen reported that overall satisfaction with BWS increased, with 54% of respondents indicating

strong satisfaction. She noted that this result was consistent across bill payers and non bill payers, both at 54%, but she also pointed to a growing share of "don't know" responses, particularly among non bill payers who may not directly interact with BWS.

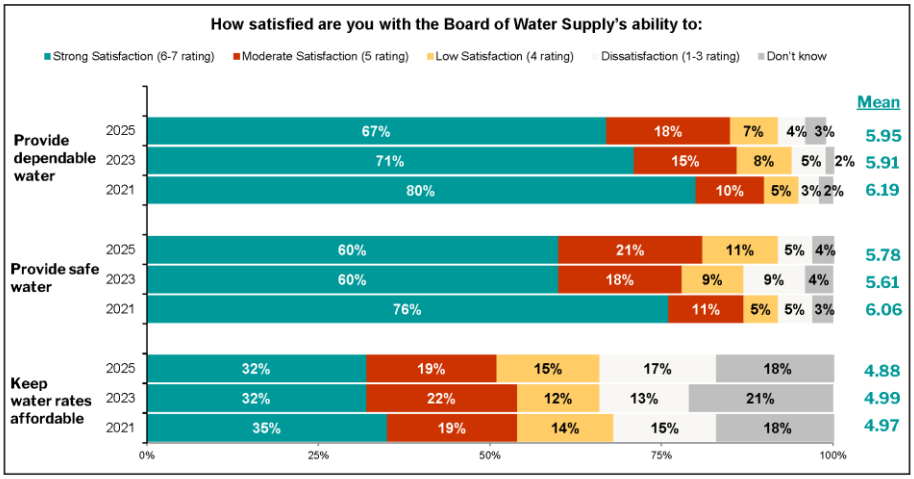
Overall Satisfaction with the BWS



Base= Total: 2025=710, 2023=701, 2021=675; Bill Payers: 2025=482, 2023=471, 2021=423; Non-Bill Payers: 2025=228, 2023=230, 2021=252

Kathleen reported that perceptions of BWS accomplishing its mission to provide dependable water have declined over the last few years, which could reflect broader dissatisfaction with government. Providing safe water remained steady at 60%, and keeping water rates affordable held steady at 32%. Kathleen noted that 2025 falls in the middle of the current five-year rate schedule, yet the affordability rating remained stable. She emphasized, however, that the increasing "don't know" responses skew interpretation, so she is considering future surveys to analyze certain questions differently for bill payers versus non bill payers.

The BWS Mission



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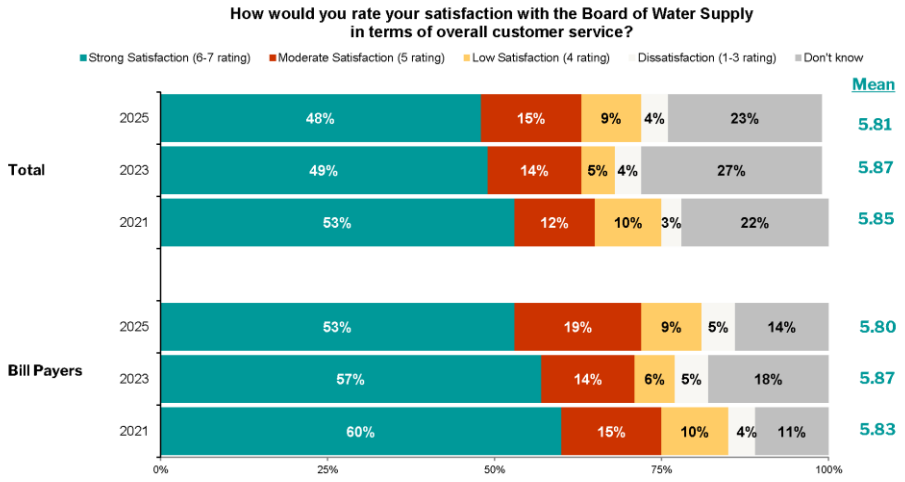
Kathleen reviewed customer service findings, noting that overall satisfaction dipped slightly. Bill payer only results showed strong satisfaction with how questions were resolved, while total customer service ratings appeared lower. Other service measures were generally positive, including strong ratings for professionalism and problem solving. Kathleen noted that courtesy and efficiency held steady, while accessibility declined slightly, which she suggested may relate to long wait times.

Satisfaction with Overall Customer Service



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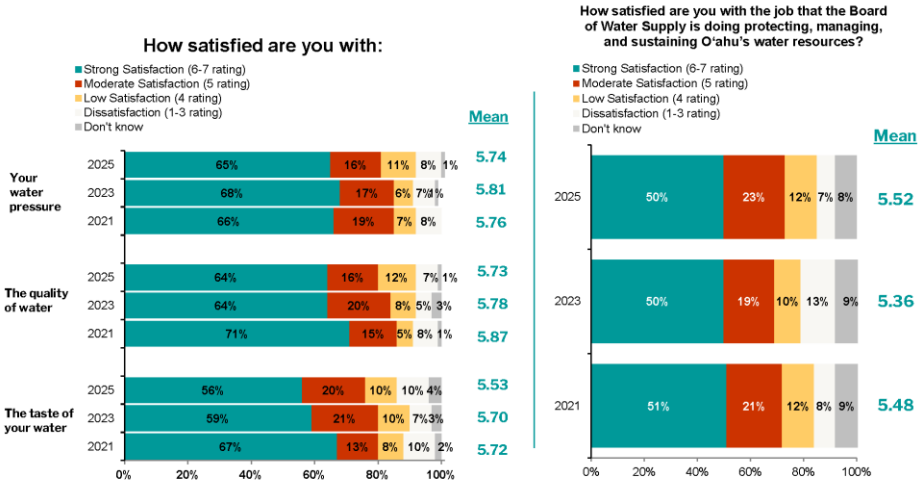
Kathleen then discussed customer perceptions of water quality and service delivery. She said most respondents were generally satisfied with water pressure. Ratings for water quality remained steady compared to 2023 but were lower than 2021. She said water taste also declined slightly, though taste issues can originate from household plumbing on the customer's side of the meter.

The Quality of Water



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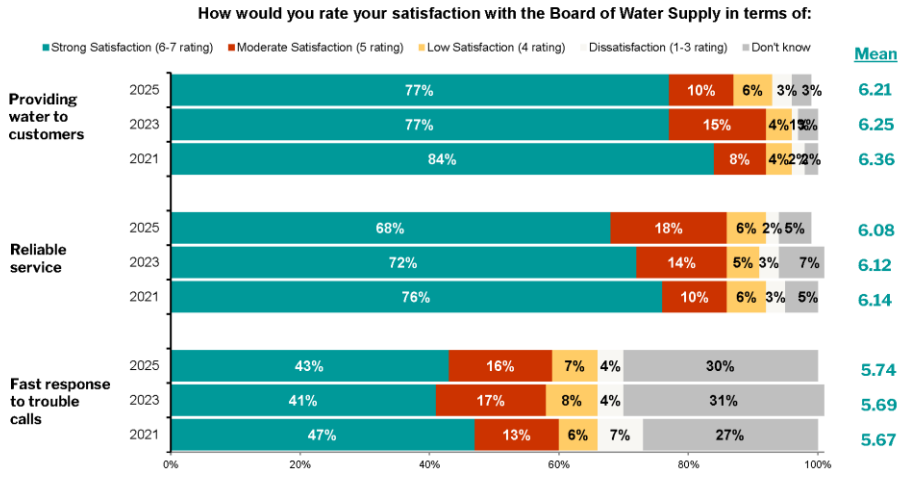
Kathleen reported that satisfaction with BWS's work to protect, manage, and sustain Oahu's water resources stayed steady, while satisfaction with delivery of water service remained strong . She noted that the rating for reliable service dropped slightly, while fast response to trouble calls improved slightly. Kathleen also reported that perceptions of BWS's performance in repairing, maintaining, and replacing the water delivery system increased slightly compared to 2023, and she noted that the combination of a slight drop in reliability alongside improved system maintenance perceptions may indicate the need to review question framing in future surveys.

The Delivery of Water Service



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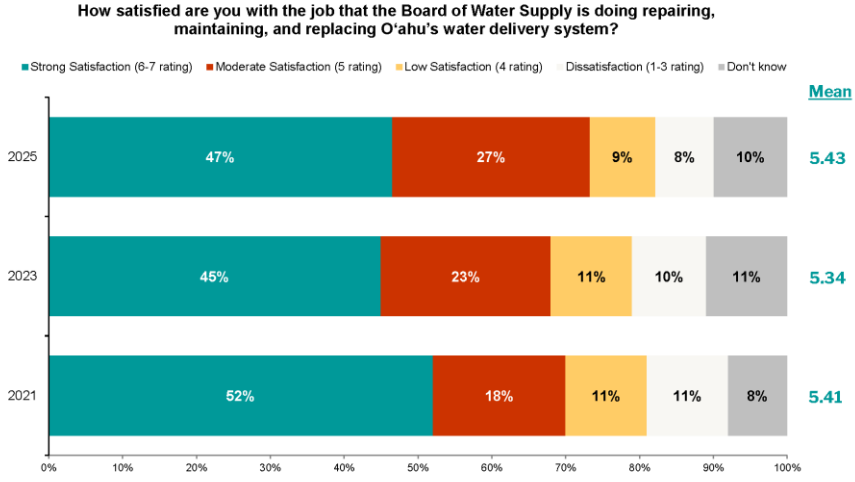
The Water Delivery System



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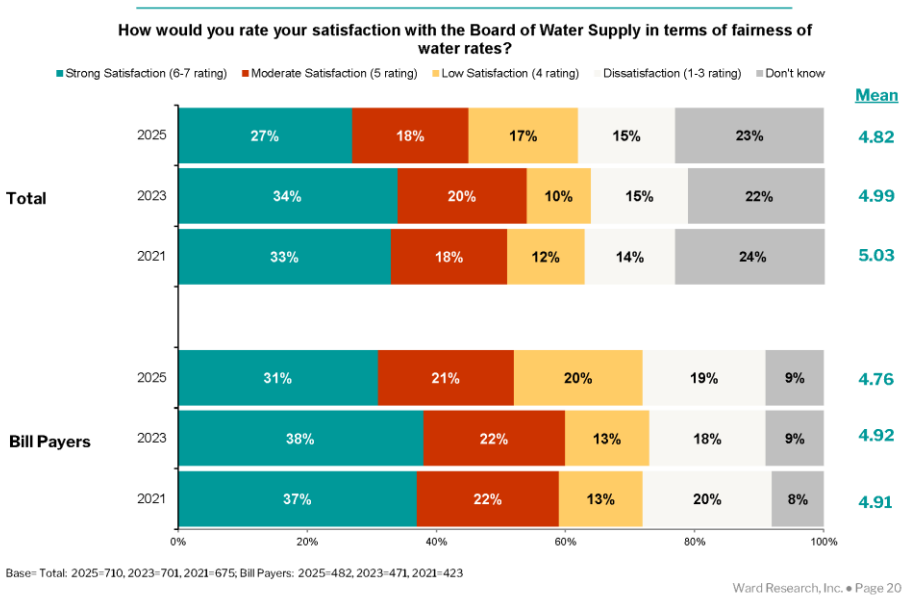
Kathleen reviewed responses related to rates and billing. She said perceptions of fairness of water rates declined in 2025, which she attributed to inflation and other cost pressures. She said perceptions about affordability of water service increased overall and stayed steady among bill payers, which she said may again suggest differences in how bill payers versus non bill payers interpret these questions.

Fairness of Water Rates



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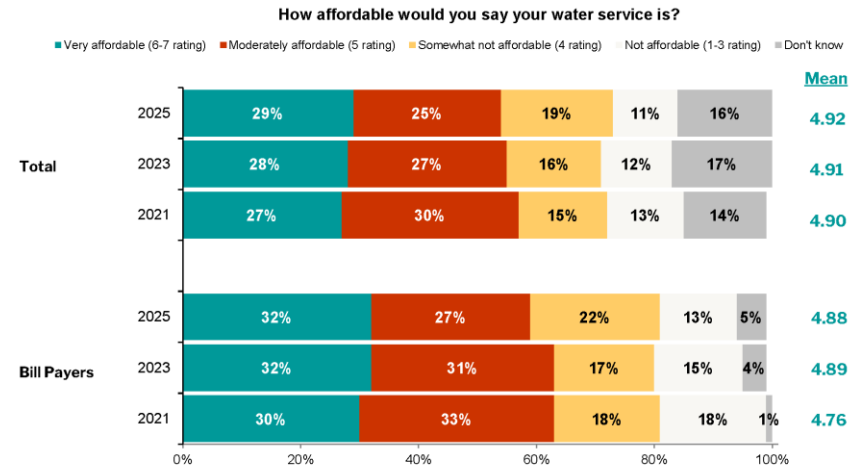
Perceptions about Affordability of Water Service



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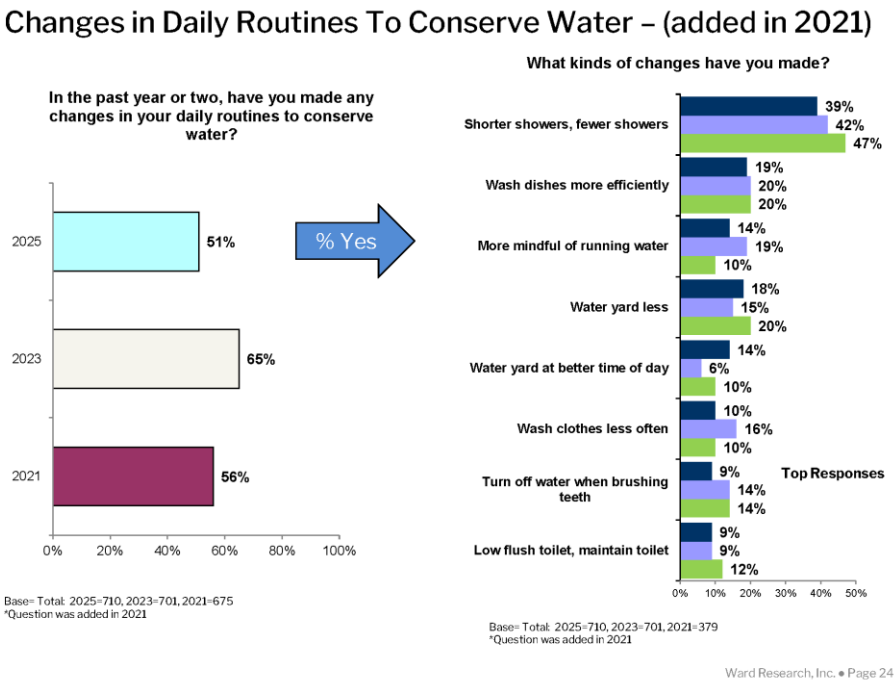
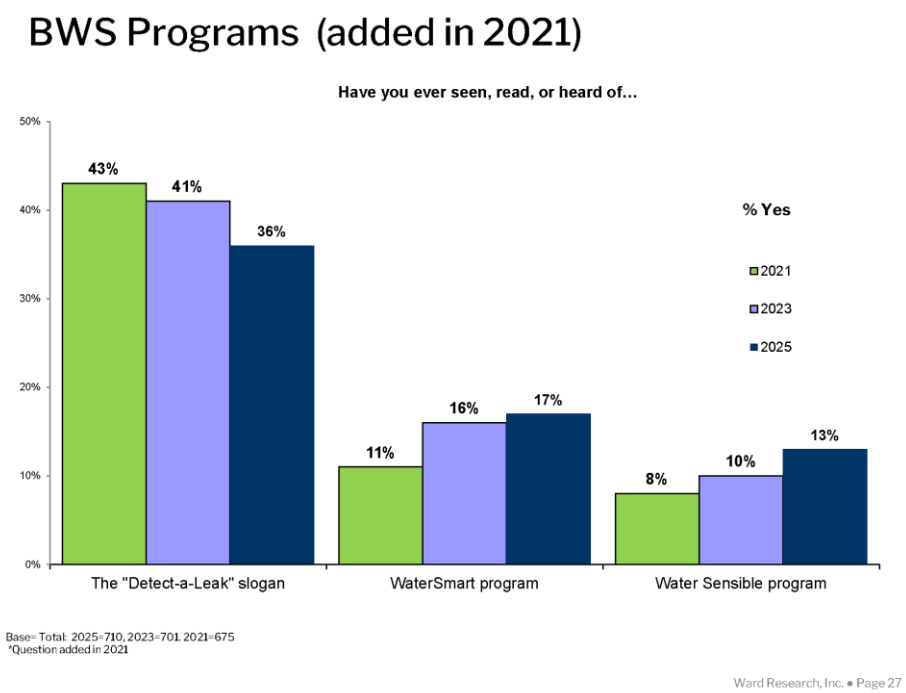
Kathleen highlighted results related to outreach and conservation messaging, noting that the rating for BWS's efforts to inform residents about conserving water and keeping bills lower increased by a few points. She said BWS asked respondents whether they made changes in the past year or two, and she noted that there may be some message fatigue because many people feel they have already implemented what they can. She said BWS plans to adjust its outreach approach in the coming year by diversifying messaging and increasing direct engagement through events and community outreach,

which she believes can be more effective than advertising alone. She said BWS is also focusing more on outreach to multifamily communities through HOAs and AOAO groups, including building management shows and industry publications, because these audiences have historically been harder to reach.



COMMENT: Dave Ebersold commented that if someone adopted a conservation behavior years ago, such as taking shorter showers, they may answer "no" to whether they changed behavior recently, even though they are conserving. Kathleen agreed and said this reflects the saturation effect that can make it harder to measure incremental behavior change over time.

Kathleen emphasized that while people often see conservation as BWS's responsibility, BWS views it as a shared responsibility across the community. She noted that message recall results showed improved recall for water conservation in 2025, and she said awareness of WaterSensible increased, which she credited to coordinated efforts among BWS Communications, Honeywell, and BWS Water Resources Division staff. She noted that recall of Red Hill messaging declined compared to the 2023 spike, which she said was expected as news coverage decreased.



Kathleen reviewed preferred communication channels and said email ranked as the top method people want to receive information, including among younger residents, which she suggested may reflect increased skepticism toward social media. She said respondents reported trusting BWS the most as a source of water information, followed by scientists.

Kathleen concluded that overall satisfaction remained relatively unchanged with some minor shifts in dependable and safe water perceptions that were not deemed statistically significant, and she summarized that residents continue to view BWS as the most trusted authority on water while expressing stable but cost-sensitive attitudes about rates, affordability, and conservation communications.

COMMENT: Mahealani Cypher said non bill payers are still affected by water quality, main breaks, and service issues and recommended they not be excluded from analysis, especially since condo residents still pay indirectly through association fees. Kathleen Elliott-Pahinui said BWS does not intend to ignore non bill payers, but may need to adjust how the data is analyzed and parsed because high "don't know" responses likely come disproportionately from non bill payers, and separating analysis may help interpretation.

COMMENT: Mahealani Cypher said water taste may have changed over the last 20 years due to increased chlorine levels, potentially related to tank cleaning frequency and bacterial findings, and suggested more frequent tank cleaning could reduce the need for higher chlorine and improve taste. Kathleen Elliott-Pahinui said BWS does not receive many calls about chlorine taste but said she would review whether the trend has been steady over time. She added BWS continues cleaning tanks on a five to ten year cycle. Ernest Lau said chlorine residual levels are also influenced by EPA regulatory requirements to maintain a disinfectant residual throughout the system.

COMMENT: Mahealani Cypher said there were past concerns about nationwide chlorine standards not reflecting Hawaii's water quality and noted that customers often attribute sewer charges to BWS, affecting perceptions of fairness. Kathleen Elliott-Pahinui acknowledged that even when BWS explains

the difference, many customers still associate the full bill with BWS, and she noted sewer rate changes had not yet taken effect when the survey was conducted, so future results may shift once customers experience them longer.

COMMENT: Alison Richardson noted that there is a general perception that Hawaii's water tastes better. She referenced the recent closure of the Mapunapuna Coca-Cola plant and said there had been public concern that importing product from the mainland might affect taste. She explained that Coca-Cola follows global water treatment standards to ensure consistent taste regardless of location. She also emphasized that conservation efforts are more effective when people receive regular performance metrics and updates, saying that when employees see data and results, they are more likely to identify leaks and suggest improvements. Kathleen Elliott-Pahinui agreed and said BWS shares program metrics such as rebate results, but believes face-to-face communication remains the most effective way to build awareness.

QUESTION: Jicky Ferrer asked whether there could be an app-based alert system so residents receive notifications about localized water quality issues and can notify neighbors and kupuna. Kathleen Elliott-Pahinui said BWS uses the City's HNL Alert system to push urgent notifications and encouraged people to sign up. She also said BWS is planning to launch its first mobile app this year, which would support location-based alerts.

QUESTION: Jicky Ferrer asked whether the Stakeholder Advisory Group could participate as an external beta group and provide feedback and accessibility considerations. Kathleen Elliott-Pahinui said BWS expects to begin testing internally with staff first and will consider a second beta group later. She welcomed the accessibility perspective and said it would be valuable input.

QUESTION: Jicky Ferrer asked whether residents would be alerted to localized water contamination so they could help notify neighbors or bring water to those affected. Dave Ebersold clarified that BWS water quality does not typically fluctuate in ways that would require neighbors to supply water to one another, though localized issues can occur following water main breaks. Ernest Lau added that in those cases BWS may deploy water buffalos or tankers while crews address the issue, and emphasized the importance of signing up for HNL Alert to receive official notifications.

QUESTION: Bob Leinau asked whether the 710 survey responses were collected in person or online. Kathleen Elliott-Pahinui said the survey used online and phone methods.

COMMENT: Bob Leinau asked about billing concerns and whether additional fees related to sewer and how that might affect customer reactions. Kathleen Elliott-Pahinui said water and sewer billing have been combined for decades. Ernest Lau said BWS is in discussions with ENV about potentially separating water and sewer billing in the future, with ENV issuing its own bill.

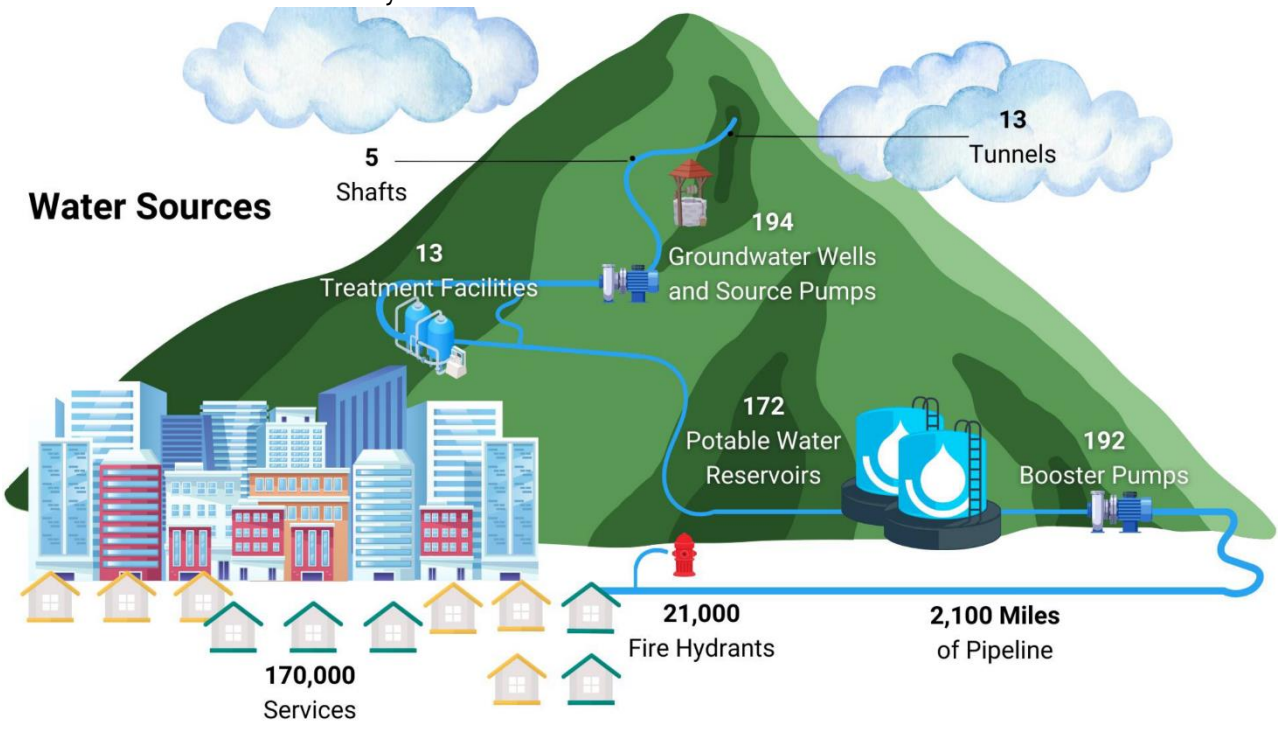
COMMENT: Bob Leinau said some North Shore residents who are not connected to sewer may soon see a new separate fee and asked if it would be added. Dave Ebersold said there is no new stormwater fee currently in effect. He explained that North Shore residents not on sewer do not pay sewer charges, and while the City is discussing the potential creation of a stormwater utility and fee, it has not been approved and is not scheduled to go into effect at this time.

2026 WATER MASTER PLAN ROADMAP

Dave Ebersold presented an overview of the roadmap for updating the Water Master Plan. He began by explaining that while recent meetings have focused on specific elements of the Water Master Plan

update, the group had not yet reviewed the overall roadmap for how BWS will move from the current phase to an updated Water Master Plan. He said the purpose of this discussion was to outline the sequence of technical work, identify when stakeholder input will be requested, and explain how in-person and virtual meetings will fit together before the plan is ultimately considered by the BWS Board.

Dave provided an overview of the BWS system, beginning with watershed sources, including five shafts, 13 tunnels, and 194 groundwater wells and pumps across the island. He noted there are 13 treatment facilities, primarily addressing legacy agricultural contamination, and 172 potable water reservoirs. From there, water moves through approximately 2,100 miles of pipeline to roughly 170,000 service connections serving about one million people. He emphasized that the Water Master Plan addresses all elements of this system.

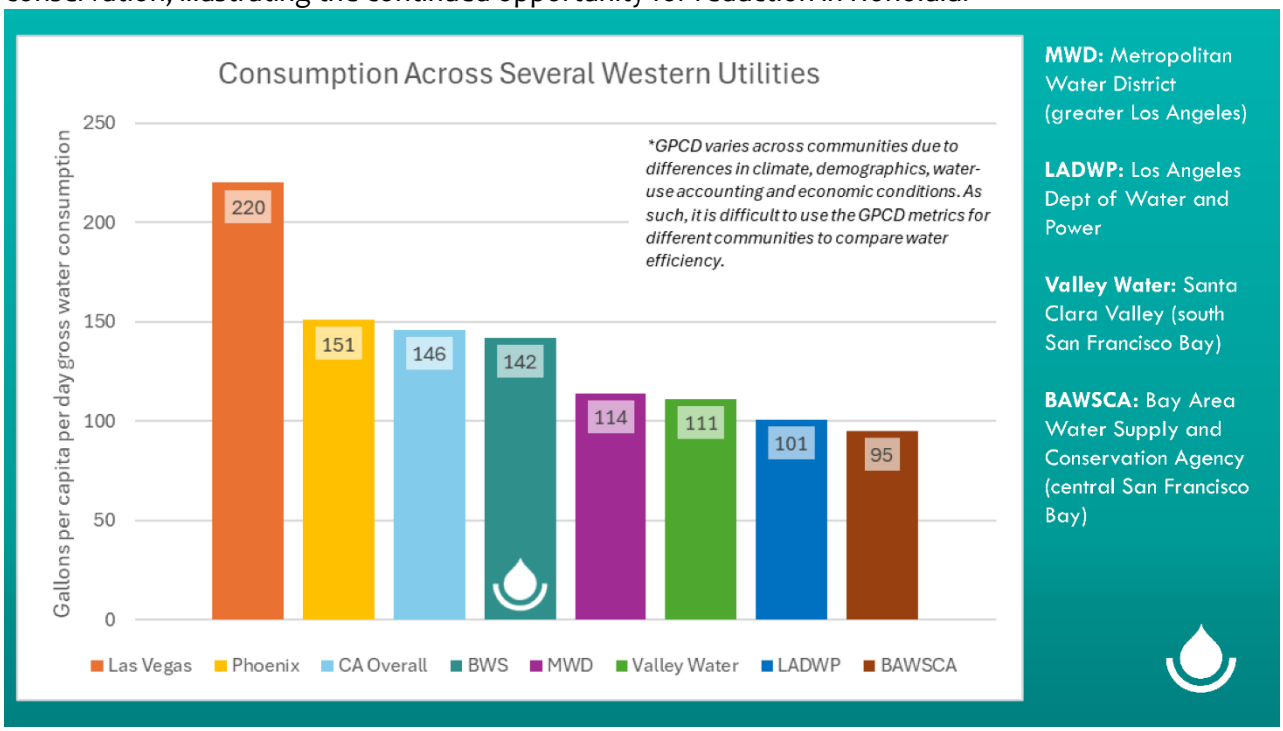


The Water Master Plan update consists of three primary components.

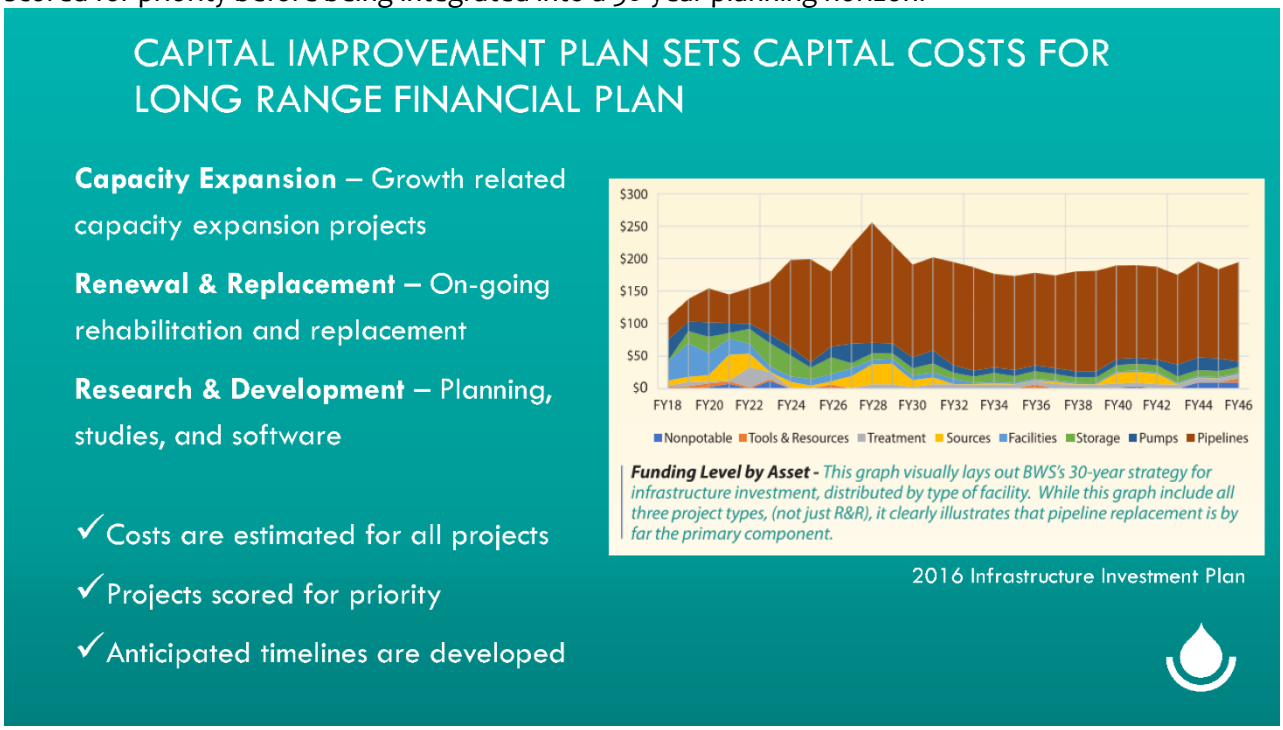
- Technical evaluations, which include demand and capacity analysis, facility condition assessments, and source evaluations. Demand refers to how much water customers use, while capacity refers to the ability to move that water from source to areas of higher consumption. Condition assessments include both physical inspections and climate vulnerability evaluations. Source assessments examine the adequacy of existing water resources, potential need for new sources, and associated treatment requirements.
- Capital Improvement Program (CIP), identifies facilities that must be repaired, replaced, or constructed to meet current and future needs.
- Long-range financial plan, which integrates capital costs, operational expenses, debt service, working capital requirements, and financial policies. This financial plan informs updates to the water system facilities charge, a one-time impact fee paid when new development connects to the system.

To provide context on conservation and demand, Dave shared a gallons-per-capita-per-day (GPCD) data graph from several western U.S. utilities. He explained that BWS, at approximately 142 gallons per person per day, falls in the mid-range among its peer agencies. He highlighted that Los Angeles has

achieved one of the lowest per-capita use rates in the country through aggressive indoor and outdoor conservation, illustrating the continued opportunity for reduction in Honolulu.



Dave then reviewed the structure of the CIP process, describing it as cyclical. Annual projects are completed within a rolling six-year program, while every few years the six-year program is refreshed. The broader Water Master Plan update represents a longer-term cycle in which technical evaluations inform new projects and long-term priorities. Projects are categorized into capacity expansion, renewal and replacement, and research and development. Each project is costed, assigned a schedule, and scored for priority before being integrated into a 30-year planning horizon.



Dave outlined the Water Master Plan roadmap and upcoming discussions and decision points. He explained that in April the Stakeholder Advisory Group will review demand projections. In July, BWS will present major findings from the technical evaluations and provide an overview of what the draft CIP is expected to include. He said the September meeting will focus on coordination with the Honolulu One Water program, followed by an October meeting that will bring together the draft Water Master Plan CIP, long-range financial plan, and water system facilities charge. November will be used for feedback and iteration, and in January the group will be asked to provide recommendations to the BWS Board of Directors. After the January meeting, the Board will receive a report on the updates, leading to a draft Water Master Plan in April, an opportunity for final stakeholder recommendations in July, and BWS Board consideration or adoption of the plan in July 2027.

STAKEHOLDER MEETINGS THROUGH 2026

Type	Date	Topic	Stakeholder Input
In-Person	15-Jan-26	2026 WMP Roadmap CIP Process and Prioritization	WMP Input Milestones CIP Priorities
Virtual	26-Feb-26	Existing scorecard update New Scorecard Objectives CIP Prioritization Methodology	New Scorecard Priorities
Virtual	19-Mar-26	Condition Assessment Results Preliminary Climate Resilience Options	Preferences for level of climate facility mitigation
In-Person	16-Apr-26	Demand Projections Potential Additional Supplies	Preferences for supply hardening and diversification
In-Person	16-Jul-26	Major Findings Draft CIP	Input on CIP Priorities and Funding Levels
Virtual	17-Sep-26	One Water Coordination	Feedback on One Water CIP Integration
In-Person	15-Oct-26	Draft Reports and Policy Feedback: WMP, CIP, LRFP, WSFC	Feedback on overall plan and policy recommendations to BWS Board
Virtual	19-Nov-26	Feedback and Discussion	Feedback on overall plan and policy recommendations to BWS Board
In-Person	15-Jan-27	Recommendations to the Board: WMP, CIP, LRFP, WSFC	Feedback on overall plan and policy recommendations to BWS Board
In-Person	15-Apr-27	Draft WMP Final Review	Concurrence with Board-approved Draft WMP
In-Person	15-Jul-27	Final WMP and Summaries (pending Board Adoption)	Recommendation for Board adoption of Final WMP

QUESTION: Cynthia Rezentes asked whether the roadmap and timeline could be provided in a calendar format. Dave Ebersold confirmed the materials will be distributed to the group.

QUESTION: Jicky Ferrer asked whether advanced treatment systems could be installed at all wells to proactively address contaminants, and whether State green fee could help pay for such improvements.

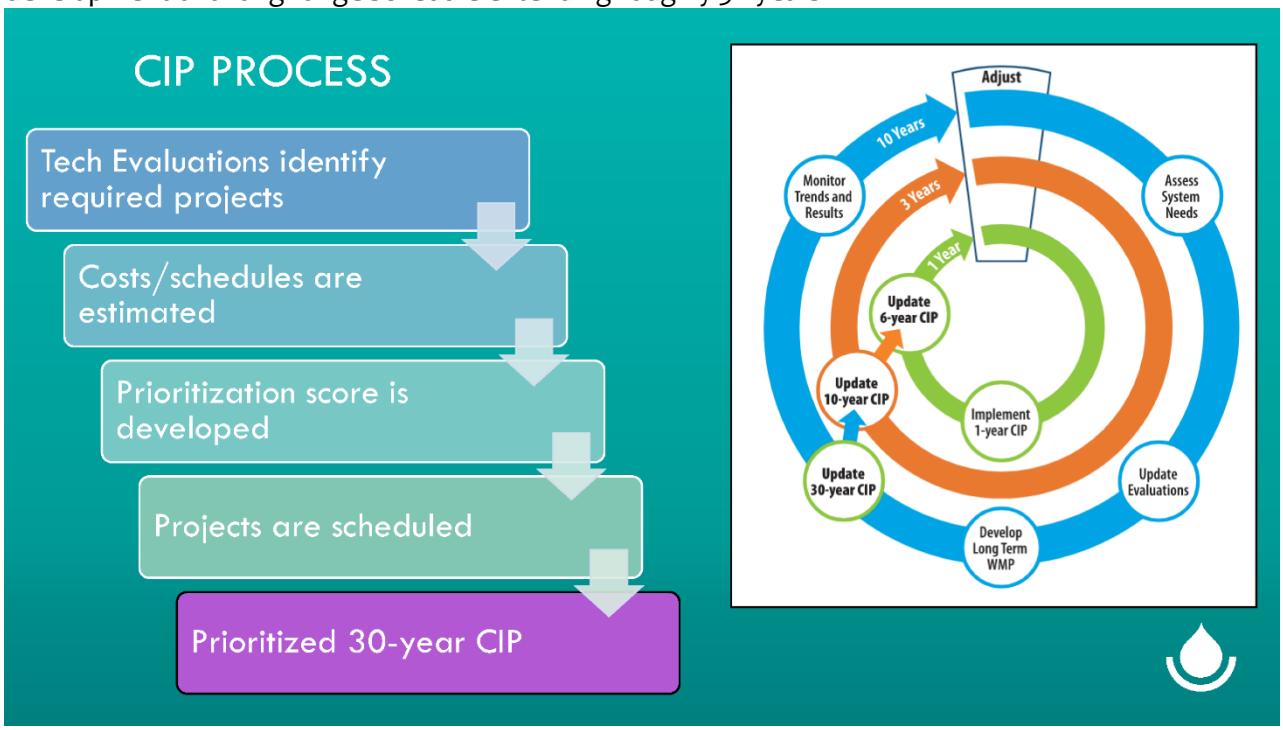
Dave Ebersold responded that installing treatment at every well is expensive and would make water rates unaffordable. He said BWS instead closely monitors water quality at all sources and uses long-term data trends to identify when treatment may be needed. He noted BWS is proactively planning treatment for emerging contaminants such as PFAS.

Ernest Lau added that BWS is proposing three PFAS treatment systems at three well locations at an estimated cost of over $50 million, noting that both capital and long-term operating costs must be considered. He explained that BWS's operating and capital budgets are each roughly in the $280 million range, for a combined FY2026 budget of over $500 million, and emphasized the need to balance safe, dependable service with affordability. He also noted PFAS regulations are expected to take effect in 2029 and that BWS must have treatment systems in place before that deadline.

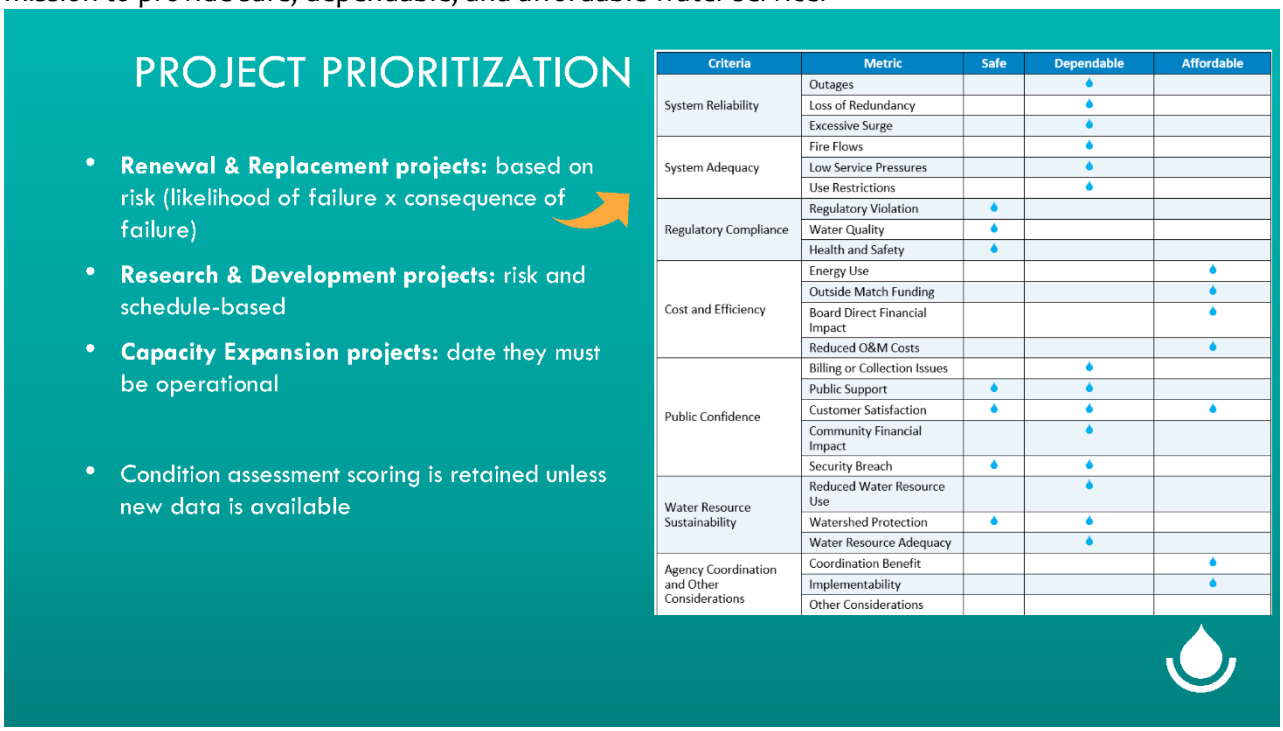
COMMENT: Bob Leinau commented that he had read the EPA may be allowing additional PFAS into industrial use and suggested utilities nationwide should advocate for stronger controls at the source rather than only treating contamination after it occurs.

CAPITAL IMPROVEMENT PLAN PROCESS AND PRIORITIZATION

Dave invited CDM Smith Environmental Engineer Carl Lundin to provide an overview of the CIP development and prioritization process. Carl explained that the CIP operates on a cyclical basis, with projects completed annually while the multi-year CIP is continuously refreshed and expanded as part of the broader Water Master Plan update cycle. He said the process begins with technical evaluations to identify needed projects, followed by cost and schedule estimates, prioritization scoring, and development of a long-range schedule extending roughly 30 years.



Carl explained that prioritization is risk-based and follows American Water Works Association best practices, with risk defined as likelihood of failure multiplied by consequence of failure. He said the scoring framework combines AWWA guidance with BWS's existing criteria and aligns with BWS's mission to provide safe, dependable, and affordable water service.



Criteria	Metric	Safe	Dependable	Affordable
System Reliability	Outages		💧	
	Loss of Redundancy		💧	
	Excessive Surge		💧	
System Adequacy	Fire Flows		💧	
	Low Service Pressures		💧	
	Use Restrictions		💧	
Regulatory Compliance	Regulatory Violation	💧		
	Water Quality	💧		
	Health and Safety	💧		
Cost and Efficiency	Energy Use			💧
	Outside Match Funding			💧
	Board Direct Financial Impact			💧
	Reduced O&M Costs			💧
Public Confidence	Billing or Collection Issues		💧	
	Public Support	💧	💧	
	Customer Satisfaction	💧	💧	💧
	Community Financial Impact		💧	
	Security Breach	💧	💧	
Water Resource Sustainability	Reduced Water Resource Use		💧	
	Watershed Protection	💧	💧	
	Water Resource Adequacy		💧	
Agency Coordination and Other Considerations	Coordination Benefit			💧
	Implementability			💧
	Other Considerations			

QUESTION: Marc Fox asked whether there is a numeric rubric used to evaluate the consequence of failure. Carl Lundin confirmed that there is, explaining that the scoring framework includes criteria, metrics, and measures with quantitative thresholds such as service demand impacts or pressure surge effects. He noted that some categories, such as renewal and replacement projects, rely heavily on risk-based prioritization, while others such as research and development or capacity expansion are more schedule-driven but still receive risk scores for reference.

Dave then directed participants to an in-room exercise to review the prioritization criteria and metrics. He asked members to suggest any changes to the criteria and to identify which metrics they considered most important, which will help determine weight within the prioritization framework.

Criteria	Metric	Measure
SYSTEM RELIABILITY	Outages	Loss of service caused by failure or deficiency
	Lack of Redundancy	Lack of redundant capacity where failure or deficiency causes immediate outage
	Excessive Surge	Positive or negative surge caused by subject facility. May be either operational, failure, or re-operational
SYSTEM ADEQUACY	Fire Flows	Inability to supply fire flow caused by failure or deficiency
	Low Service Pressures	Low supply pressure caused by failure or deficiency
	Use Restrictions	Reduced supply caused by failure or deficiency
REGULATORY COMPLIANCE	Regulatory Violation	Treatment or MCL violation caused by failure or deficiency
	Water Quality	Water quality issue caused by failure or deficiency
	Health and Safety	Health and safety incident caused by failure or repair
COST AND EFFICIENCY	Energy Use	Increased energy use caused by failure or deficiency, or failure to implement solution
	Outside Funding	Matching funds provided by outside entity. Higher of either total or percentage
	Board Direct Financial Impact	Additional cost of emergency (rather than planned) repair of failure or deficiency including claims against BWS
	Reduced O&M Costs	Payback period vs status quo. Includes reduced maintenance and reduced energy type projects (incl ESCO)
PUBLIC CONFIDENCE	Billing or Collection Issues	Billing or collection issue caused by failure or deficiency
	Public Support	Erosion of public opinion caused by embarrassment of BWS
	Customer Satisfaction	Complaints generated by failure or deficiency
	Community Financial Impact	Losses borne by community not reimbursed by the BWS
	Security Breach	Unauthorized access to the BWS facilities
WATER RESOURCE SUSTAINABILITY	Reduced Water Resource Use	Unrealized conservation or sustainability caused by failure to complete solution
	Watershed Protection	Not implementing the proposed project results in the following consequences (defined in scoring)
	Water Resource Adequacy	Failure or deficiency results in an impact to the yield of a source
AGENCY COORDINATION AND OTHER CONSIDERATIONS	Coordination Benefit	Reduction in total cost by coordinating two projects vs. completing project separately
	Implementability	Ease of implementing (planning, design, permitting, construction, etc.) of solution
	Other Considerations	Other considerations not otherwise included in the criteria. Add comment to describe

Criteria	Metric	Measure
SYSTEM RELIABILITY	Outages	Loss of service caused by failure or deficiency
	Lack of Redundancy	Lack of redundant capacity where failure or deficiency causes immediate outage
	Excessive Surge	Positive or negative surge caused by subject facility. May be either operational, failure, or re-operational
SYSTEM ADEQUACY	Fire Flows	Inability to supply fire flow caused by failure or deficiency
	Low Service Pressures	Low supply pressure caused by failure or deficiency
	Use Restrictions	Reduced supply caused by failure or deficiency
REGULATORY COMPLIANCE	Regulatory Violation	Treatment or MCL violation caused by failure or deficiency
	Water Quality	Water quality issue caused by failure or deficiency
	Health and Safety	Health and safety incident caused by failure or repair
COST AND EFFICIENCY	Energy Use	Increased energy use caused by failure or deficiency, or failure to implement solution
	Outside Funding	Matching funds provided by outside entity. Higher of either total or percentage
	Board Direct Financial Impact	Additional cost of emergency (rather than planned) repair of failure or deficiency including claims against BWS
	Reduced O&M Costs	Payback period vs status quo. Includes reduced maintenance and reduced energy type projects (incl ESCO)
PUBLIC CONFIDENCE	Billing or Collection Issues	Billing or collection issue caused by failure or deficiency
	Public Support	Erosion of public opinion caused by embarrassment of BWS
	Customer Satisfaction	Complaints generated by failure or deficiency
	Community Financial Impact	Losses borne by community not reimbursed by the BWS
	Security Breach	Unauthorized access to the BWS facilities
WATER RESOURCE SUSTAINABILITY	Reduced Water Resource Use	Unrealized conservation or sustainability caused by failure to complete solution
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QUESTION: Bob Leinau asked how BWS can influence watershed protection when much of the land is not owned by BWS. Barry Usagawa explained that BWS identifies priority watersheds tied to major sources and works through watershed partnerships to fund and support projects such as fencing and invasive species control on lands owned by others. He said BWS funding supports partnerships such as the Waianae and Koolau Watershed Partnerships, DLNR Division of Forestry and Wildlife, and the Oahu Invasive Species Committee to protect recharge areas that benefit BWS sources.

COMMENT: Jicky Ferrer noted that he emphasized outside funding from the military during the exercise, citing concerns about historic fuel infrastructure extending from Wahiawa and Wheeler to Pearl Harbor. He said that if legacy infrastructure poses potential contamination risks beyond Red Hill, he believes the military should help fund advanced treatment systems at wells rather than relying solely on ratepayer funding and asked whether the integrity of those older pipelines has been evaluated.

ACCEPTING MEETING 56 NOTES

Meeting 56 notes were approved.

NEXT STEPS

Dave shared the list of stakeholder advisory group meetings for 2026:

- February 26 (virtual)
- March 19 (virtual)
- April 16 (in person)
- July 16 (in person)
- September 17 (virtual)
- October 15 (in person)
- November 19 (virtual)

Dave thanked the attendees for their attention and participation and concluded the meeting.