

**BOARD OF WATER SUPPLY
KA 'OIHANA WAI
CITY AND COUNTY OF HONOLULU**

630 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96843
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MANAGER AND CHIEF ENGINEER
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ERWIN KAWATA
DEPUTY MANAGER
HOPE MANAKIA



NA'ALEHU ANTHONY, Chair
KAPUA SPROAT, Vice Chair
BRYAN P. ANDAYA
JONATHAN KANESHIRO
EDWIN H. SNIFFEN, Ex-Officio
GENE C. ALBANO, P.E., Ex-Officio

October 17, 2023

NOTICE

The Board of Water Supply, City and County of Honolulu, Regular Meeting will be held on Monday, October 23, 2023, at 2:00 p.m. in the Boardroom, Public Service Building, 630 South Beretania Street, Honolulu, HI 96843.

Limited seating will be available for in-person testifiers in the Boardroom. The public may also view the livestream of the meeting from the lobby of the Board of Water Supply, Public Service Building, 630 S. Beretania St., Honolulu, HI 96843.

TESTIMONY

Testimony may be submitted as follows:

- **Written testimony** should include the submitter's address, email address, and phone number. Testimony should be received by Monday, October 23, 2023, at noon. Submit written testimony by:
 - Email to board@hbws.org
 - Online at boardofwatersupply.com/testimony
 - Mail to Board of Water Supply, 630 S. Beretania St., Honolulu, HI 96843
 - Fax to (808) 748-5079

- **Oral testimony** will be accepted remotely and in person during the meeting. Pre-registration is encouraged to facilitate as much remote and in-person testimony as reasonably possible during the time allotted. Testifiers should also consider submitting a written version of their oral testimony.

- To testify remotely by phone or video using the Zoom videoconferencing platform, please submit your request by:

- Email to board@hbws.org
- Online at boardofwatersupply.com/testimony

Zoom registration instructions, as well as participant guidelines, will be sent to the contact information provided. Once confirmed as registered, testifiers will receive an email containing the links and instructions to join the Zoom session. Submit your request to testify remotely by Friday, October 20, 2023, at noon.

- To testify in person at the Board of Water Supply, Public Service Building, 630 S. Beretania St., Honolulu, HI 96843, please pre-register by submitting your request by Monday, October 23, 2023:

- Email to board@hbws.org
- Online at boardofwatersupply.com/testimony

In-person testifiers should check-in with building security and then with testimony staff located in the lobby. Testifiers will be escorted to and from the Board Room. On-site registration will be available for walk-in requests.

Testimony is limited to two (2) minutes and shall be presented by the registered speaker only. Testimony submitted in writing or orally, electronically or in person, for use in the meeting process is public information. All testimony will be included as part of the approved meeting minutes at boardofwatersupply.com/boardmeetings.

MATERIALS AVAILABLE FOR INSPECTION

Meeting materials ("board packet" under HRS §92-7.5) are accessible at www.boardofwatersupply.com/boardmeetings.

VIEWING THE MEETING

The meeting will be viewable via live streaming on the BWS website: www.boardofwatersupply.com/live. Video will appear on screen. You may have to click the arrow on video to start it. You may have to unmute audio as muted audio tends to be the default setting.

SPECIAL REQUESTS AND ACCOMMODATIONS

If you require special assistance, an auxiliary aid or service, and/or an accommodation due to a disability to participate in this meeting (i.e., sign language interpreter, interpreter for language other than English, or wheelchair accessibility), please call Joy at (808) 748-5172 or email your request to board@hbws.org **at least three business days prior to the meeting date**. If a response is received after the requested three business days before the meeting date deadline, we will try to obtain the auxiliary aid/service or accommodation, but we cannot guarantee that the request will be filled.

Upon request, this notice is available in alternate formats such as large print, Braille, or electronic copy.

The agenda for October 23, 2023, Regular Meeting of the Board of Water Supply is as follows:

ITEMS REQUIRING BOARD ACTION

1. Approval of the Minutes of the Regular Meeting Held on September 25, 2023
2. Authorizing a Public Hearing to Consider Revisions to the Schedule of Rates and Charges for the Furnishing of Water and Water Service for the Fiscal Years (FY) 2024 through 2029

ITEMS FOR INFORMATION

1. Update by the United States Navy on the Red Hill Bulk Fuel Storage Facility's Defueling, Closure, and Remediation Efforts
2. Discuss the Board of Water Supply Report to the Board by the HRS §92-2.5(b) Permitted Interaction Group on the Role of the Board in the Water Rate Study Process
3. Financial Disclosures: What You Need to Know
4. Recruitment Status
5. Status Update of Groundwater Levels at All Index Stations
6. Water Main Repair Report for September 2023

EXECUTIVE SESSION

1. Approval of the Minutes of the Executive Session Meeting Held on September 25, 2023
2. To Consult with the Board's Attorney on Questions and Issues Pertaining to Notices of Proposed Class Action Settlements in Regards to Aqueous Film-Forming Foams Products Liability Litigation MDL No. 2:18-mn-02873 (refers to: City of Camden et. al., v. 3M Company No. 2:23-cv-03147-RMG) [HRS §92-5(a)(4)]

MINUTES

To watch the recording of this meeting, please click on the following link:
<https://vimeo.com/bwshonolulu/oct-23-2023>. Closed captioning is available.

THE REGULAR MEETING OF THE BOARD OF WATER SUPPLY

October 23, 2023

At 2:01 PM on October 23, 2023, in the Public Service Building Board Room at 630 South Beretania Street, Honolulu, Hawai'i, Board Chair Na'alehu Anthony called to order the Regular Meeting.

Present: Nā'ālehu Anthony, Chair
Kapua Sproat, Vice Chair via Zoom
Bryan P. Andaya, Board Member via Zoom
Jonathan Kaneshiro, Board Member
Edwin H. Sniffen, Ex-Officio via Zoom

Also Present: Ernest Lau, Manager and Chief Engineer
Erwin Kawata, Deputy Manager
Jadine Urasaki, Acting Program Administrator,
Capital Projects Division
Kathleen Elliott-Pahinui, Information Officer,
Communications Office
Raelynn Nakabayashi, Executive Assistant I,
Executive Support Office
Jason Nikaido, Program Administrator,
Field Operations Division
Jennifer Elflein, Program Administrator,
Customer Care Division
Joseph Cooper, Waterworks Controller,
Finance Division
Michele Thomas, Executive Assistant I,
Human Resources Office via Zoom
Henderson Nuuhiwa, Program Administrator,
Information Technology Division
via Vimeo
Michael Matsuo, Land Administrator, Land Division
Roland Fenstermacher,
Acting Program Administrator,
Water Quality Division
Barry Usagawa, Program Administrator,
Water Resources Division
Kevin Ihu, Program Administrator,
Water System Operations Division
Kathy Mitchell, Administrative Services Officer
via Vimeo
Kimberly Kuwaye, Manager Secretary

Joy Cruz-Achiu, Board Secretary
Steven Norstrom, Information Specialist II,
Communications Office
Stella Bernardo, Information Specialist II,
Communications Office via Zoom
Michele Harman, Community Relations Specialist I,
Communications Office via Zoom
Wayne Maria, Information Specialist II,
Communications Office
Dave Ebersold, Senior Vice President, CMD Smith
Eric Irwin, Ethics Associate Legal Counsel,
City and County of Honolulu
via Zoom
Teri Keliipuleoli, Ethic Associate Legal Counsel,
City and County of Honolulu
via Zoom
John Wade, Vice Admiral, Commander of Joint
Task Force-Red Hill
Michelle Link, Brigadier General,
Deputy Commander of Joint Task
Force-Red Hill
Stephen Barnett, Rear Admiral, Commander of
Navy Region Hawaii
James Sullivan, Captain, Commanding Officer of
Naval Facilities Engineering
Systems Hawaii

Others Present: Jeff Lau, Deputy Corporation Counsel
Jessica Wong, Deputy Corporation Counsel
via Zoom

Absent: Gene C. Albano, Ex-Officio

Chair Nā'ālehu Anthony opened the Board meeting with an 'ōlelo no'eau:

Aloha mai kākou e nā hoa makamaka mai ka lā hiki a ka lā kau. Welina nui me ke aloha!

Mahalo nui no kēia 'ākoakoa 'ana o kākou no ka pono o ka lāhui, no ka pono o ka 'āina, a no ka pono o ka wai nō ho'i. Eia he 'ōlelo no'eau e kālele ana i ke ko'iko'i o ka wai.

Chair Anthony translated the 'ōlelo no'eau 2888 as Uwē ka lani, ola ka honua-When the sky weeps, the earth lives.

Chair Anthony stated that it is a pleasant reminder that our ancestors had abundant water and that it was all safe to drink.

Chair Anthony welcomed everyone to the October 23, 2023, Regular Meeting of the Board of Water Supply (BWS). He stated that the Board of Water Supply is dedicated to providing safe, dependable, and affordable supply of water now and into the future.

Before continuing the meeting, Chair Anthony stated that a recording would play to share reminders for public participation and virtual meeting regulations required by law.

The recording played: The meeting materials under HRS section 92, 7.5 are accessible at www.boardofwatersupply.com/boardmeeting. The public may attend this meeting in person at the Public Service building located at 630 South Beretania Street. The public may also view a live stream of today's meeting on our website at www.boardofwatersupply.com/live. We have been accepting written or oral testimony for today's meeting. Instructions and an online submittal form are available at boardofwatersupply.com/testimony. The deadline to submit advance written testimony has passed. Testimony received by noon today has been distributed to the board members. We will continue to accept written testimony today through our online form. Oral testimony in person or remotely will be accepted during today's meeting. To facilitate as much in-person and remote testimony as reasonably possible during the time allotted, preregistration and submittal of a written version of testimony at boardofwatersupply.com/testimony is strongly encouraged. To testify in person, please register using our online form or come to the public service building at 630 South Beretania Street. We have a representative in the lobby to provide intake and further instructions. To request to testify remotely, please complete the online form at boardofwatersupply.com/testimony. Requestors will receive an email containing links and instructions to join the Zoom session. Testifiers will have two minutes to state their position. A timekeeper will alert testifiers when there is one minute remaining. Once the two minutes are up, please summarize to allow time for questions from the board. Then, make room for the next testifier. Board members attending any board meeting remotely must be visible to the public to be considered, present, and meet quorum guidelines. Board members participating remotely must also disclose their location and anyone present at their location during roll call—meeting participants who are calling or video conferencing in. Please mute your microphone when you're not speaking. If you have a question, comment, or wish to enter or second a motion on an action item, please unmute your microphone and identify yourself before continuing to speak. If you encounter technical issues during today's meeting, please use the Zoom chat to send a direct message to our support team. Their names are listed in the message to all participants. To open the chat window, please click the text Bubble icon on the Zoom Toolbar.

Chair Anthony requested a roll call for the Regular Meeting. He asked those participating remotely to give the appropriate disclosures upon responding.

Vice Chair Kapua Sproat joined via Zoom, responded aye, and disclosed that she was alone at her location; Board Member Bryan Andaya joined via Zoom, responded aye, and disclosed that he was alone at his location; and Board Member Jonathan Kaneshiro responded aye, and was present in the Board room. Chair Nā'ālehu Anthony was present in the Boardroom. Board Member Edwin Sniffen and Board Member Gene Albano were absent.

Chair Anthony introduced those in the Boardroom: Manager Ernest Lau, Deputy Manager Erwin Kawata, Board Secretary Joy L. Cruz-Achui, Manager Secretary Kimberly Kuwaye, Information Specialists II Steven Norstrom and Wayne Maria, and Deputy Corporation Jeff Lau. City and County Corporation Counsel Deputy Jessica Wong joined via Zoom.

Chair Anthony announced that he would be taking the agenda out of order.

REGULAR MEETING

ITEM FOR INFORMATION NO. 2

“October 23, 2023

DISCUSS THE
BOARD OF WATER
SUPPLY REPORT
TO THE BOARD
BY THE
HRS §92-2.5(B)
PERMITTED
INTERACTION
GROUP ON THE
ROLE OF THE
BOARD IN THE
WATER RATE
STUDY PROCESS

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843
Chair and Members:

Subject: Discuss the Board of Water Supply Report to the Board by the HRS 92-2.5(b) Permitted Interaction Group on the Role of the Board in the Water Rate Study Process

On September 25, 2023, the Permitted Interaction Group on the role of the Board in the water rate study process submitted their report to the Board. The floor is now open for discussion on the report.

Respectfully Submitted,

/s/ ERNEST Y. W. LAU, P.E
Manager and Chief Engineer

Attachment”

The foregoing was for information only.

DISCUSSION: Joseph Cooper, Waterworks Controller, Finance Division, gave the report.

Due to time constraints, Chair Anthony allowed testimony to be given before the presentation.

There was in person testimony:

Michael Formby Managing Director (MD) Office of the Mayor, City and County of Honolulu	<i>Shared information on the different measures the City and County of Honolulu Mayor's office is working on to assist the public, such as the Rental and Utility Relief Program, and legal assistance for housing stabilization.</i>
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Manager Ernest Lau expressed appreciation for the Fiscal Recovery Funds (FRF) the Office of the Mayor granted. He stated that the FRF received is assisting with Capital Improvement Program (CIP) projects.

Board Member Jonathan Kaneshiro commented that the proposed rate schedule for the next five years balances maintaining the BWS

infrastructure and providing safe, affordable, and dependable drinking water without adding much strain on the ratepayers. He shared that the public positively received the proposed rate schedule presented during the Stakeholder Advisory Group (SAG) and Community meetings. Board Member Kaneshiro appreciated the concern that the Managing Director, Michael Formby, brought to the Board.

Board Member Bryan Andaya echoed Board Member Kaneshiro's comments. He added that the Permitted Interaction Group (PIG) deliberated and considered many factors while trying to balance the public's economic struggles and inflation. Board Member Andaya thanked Managing Director Formby for the information shared and is open to further feedback.

Chair Anthony appreciated that Managing Director Formby came to share the Mayor's Office views regarding the challenges the public faces due to the COVID-19 pandemic. He stated the BWS also saw and felt the effects of the pandemic, hence the decision not to shut water service off for those delinquent.

Manager Lau commented that the BWS is also faced with increasing challenges to operate a water system that supplies safe drinking water for a million people daily. He asked Ms. Raelynn Nakabayashi to share a PowerPoint that may help answer questions about why an updated rate schedule is necessary.

Chair Anthony offered Managing Director Formby to meet and discuss possible solutions. He thanked the City and County of Honolulu for the FRF granted to the BWS.

Managing Director Formby agreed with the BWS that balancing operating needs and economic challenges is difficult. He disagreed that postponing the proposed rate schedule would cause a delay in financial recovery; therefore, implementing a new rate schedule should be postponed to a later time.

Vice Chair Kapua Sproat asked Managing Director Formby what he would propose to the BWS regarding a new rate schedule.

Managing Director Formby replied that he did not come with an official proposal since the Office of the Mayor lacked information because the BWS is semi-autonomous. He stated that he came to share information and voice the Office of the Mayor's concerns with the BWS's proposed rate schedule start date. Managing Director Formby commented that the Office of the Mayor would work on gathering more information for the BWS November meeting.

Chair Anthony offered to meet before the BWS November Board meeting to share information and better understand how the BWS developed the proposed rate schedule.

Managing Director Formby agreed to meet. He suggested that since a lot of federal grant money is available, the BWS should include possible grants into its budget, change its mindset, defer the proposed rate schedule, and aggressively try to acquire as many grants as possible. Chair Anthony assured Managing Director Formby that the BWS continues to pursue various federal grants.

Board of Water Supply Permitted Interaction Group on Water Rates

Final Report September 15, 2023

At the Monday, June 26, 2023 Board of Water Supply (BWS) Board Meeting, a Permitted Interaction Group was formed to attend the community meetings, listen to testimony and discuss in-depth the proposed upcoming 5-Year Rate Schedule (FY2024-FY2029). The Permitted Interaction Group appointed by the Board was composed of: Board Member Bryan Andaya, Board Member Jonathan Kaneshiro, Board Member Max Sword.

The Permitted Interaction Group held its first meeting on Tuesday, July 11, 2023, where they discussed the overall proposal and reviewed the community outreach meeting schedule. They asked questions of the BWS rates team about the draft to clarify what was being proposed and affirmed, pending community input, their support for the current proposed rates as well as the new agricultural waiver of the Water System Facilities Charge and Meter Charge and kupuna direct install program.

Community Information Meetings were held on the following days and locations:

- Monday, August 14, Benjamin Parker Elementary School, Kaneohe – 9 attendees
- Tuesday, August 15, Japanese Cultural Center, Honolulu – 3 attendees
- Wednesday, August 16, Kapolei Hale, Kapolei – 6 attendees
- Wednesday, August 23, Mililani Highschool, Mililani – 3 attendees

Permitted Interaction Group member Jonathan Kaneshiro attended all four community meetings. Permitted Interaction Group member Max Sword attended the Kaneohe meeting.

On Wednesday, September 6, 2023, the Permitted Interaction Group met for the final time to discuss the input from the four Community Information Meetings as well as other meetings the BWS rates team was attending and presenting at. The Permitted Interaction Group stated the following:

- Jonathan Kaneshiro observations regarding the community meetings: The Community Information Meetings were informative, lots of good feedback. The rate proposal was well received. There were a few questions, and they were answered well. The different increases across the tiers were well received. Nobody said the rates were being raised to high.
- Max Sword observation regarding the community meeting he attended: No major negatives. The explanations were really good.

The BWS rates group then reported on the five Neighborhood Board meetings they presented at so far, stating that they have been getting common questions at all of meetings: desalination, Red Hill, tiered rates for non-residential (resorts should pay more), conservation initiatives, and sewer rates. This mirrors the questions heard at the Community Information Meetings. Overall reception by the public of the rate proposal has been positive. While the community is concerned about rates going up (along with

everything else), they understand the reasons behind the proposed increases and support that maintaining the integrity of the water system is critical.

The BWS rates group has another 16 Neighborhood Board meetings to present at through the rest of September and into October. Comments on the proposal are being accepted through October 15 to accommodate the presentation schedule. There are also other meetings the BWS rates group will be at or has attended where they spoke about the rates.

Permitted Interaction Group Member Andaya suggested that the low attendance at the Community Information Meetings may have reflected the impact of the Maui fires; however, it was noted that attendance was similar back in 2018.

The Permitted Interaction Group discussed that the proposed waiver for new farmers has been well received and there has been no pushback. The BWS rates group met with a small stakeholder group that has assisted in drafting the language for the waiver for new farm hookups and they are very supportive. Permitted Interaction Group Member Sword asked how many new farmers per year do we get? Can the BWS rates group provide a projection of what that might look like going forward? The BWS team will provide that information. Sword stated that he was curious about the numbers.

The proposed kupuna direct install program has also been receiving positive feedback and a lot of interest.

The Permitted Interaction Group felt it was important not to delay the roll out of the new rates slated for February 1, 2024, and that the BWS should continue to move forward with that date in mind.

This report is respectfully submitted to the Board of Water Supply Board by the Permitted Interaction Group Members Bryan Andaya, Jonathan Kaneshiro and Max Sword on Monday, September 25 at the regular meeting of the Board of Water Supply Board.

ITEM FOR INFORMATION NO. 1

“October 23, 2023

UPDATE BY
THE UNITED
STATES NAVY
ON THE
RED HILL BULK
FUEL STORAGE
FACILITY'S
DEFUELING,
CLOSURE, AND
REMEDIAION
EFFORTS

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843

Chair and Members:

Subject: Update by the United States Navy on the Red Hill Bulk
Fuel Storage Facility's Defueling, Closure, and
Remediation Efforts

The United States Navy will report on the Red Hill Bulk Fuel Storage Facility's Defueling, Closure, and Remediation Efforts.

Respectfully Submitted,

/s/ ERNEST Y. W. LAU, P.E
Manager and Chief Engineer

Attachment”

The foregoing was for information only.

DISCUSSION:

John Wade, Vice Admiral, Commander of Joint Task Force-Red Hill Michelle Link, Brigadier General, Deputy Commander of Joint Task Force-Red Hill; Stephen Barnett, Rear Admiral, Commander of Navy Region Hawaii; James Sullivan, Captain, Commanding Officer of Naval Facilities Engineering Systems Hawaii, gave the report.

At 2:50 PM, Board Member Edwin Sniffen joined the Board Meeting via Zoom.

At 2:54 PM, Board Member Bryan Andaya disconnected from Zoom and left the Board Meeting.

Board Member Jonathan Kaneshiro asked to confirm that the granulated activated carbon (GAC) system captures fuel from groundwater at one teaspoon per month.

Captain James Sullivan confirmed that in most recent times, the GAC has been capturing up to one teaspoon a month. He explained that in January of 2022, when the GAC was turned on and pillow-like absorbent pads were installed, there was a visible sheen on the water. Since then, the GAC and skimmer system has operated from Red Hill Shaft 24 hours a day, seven days a week, to create a capture zone. Captain Sullivan stated in recent times that sheen is visible only when there is heavy rain or during drill operations, which has disturbed the product, which is then caught in the capture zone.

Board Member Kaneshiro inquired if there have been any groundwater modeling advancements.

Captain Sullivan stated that the groundwater model will never be complete. However, sometime in June or July 2023, the best available groundwater model was submitted to the regulator, Manager Lau, and the public; more information will be available later in the fall. He shared that the University of Hawaii (UH) is conducting a tracer study that the Joint Task Force-Red Hill (JTFRH), Navy Region Hawaii, and the Naval Facilities Engineering Systems Hawaii are providing information to and continue to collaborate with the United States Geological Survey (USGS), UH, BWS, and the Commission of Water Resources Management (CWRM).

Chair Anthony asked if the 4.7 million gallons of water used to flush through the GAC system is to keep the plume from being pulled into the water system.

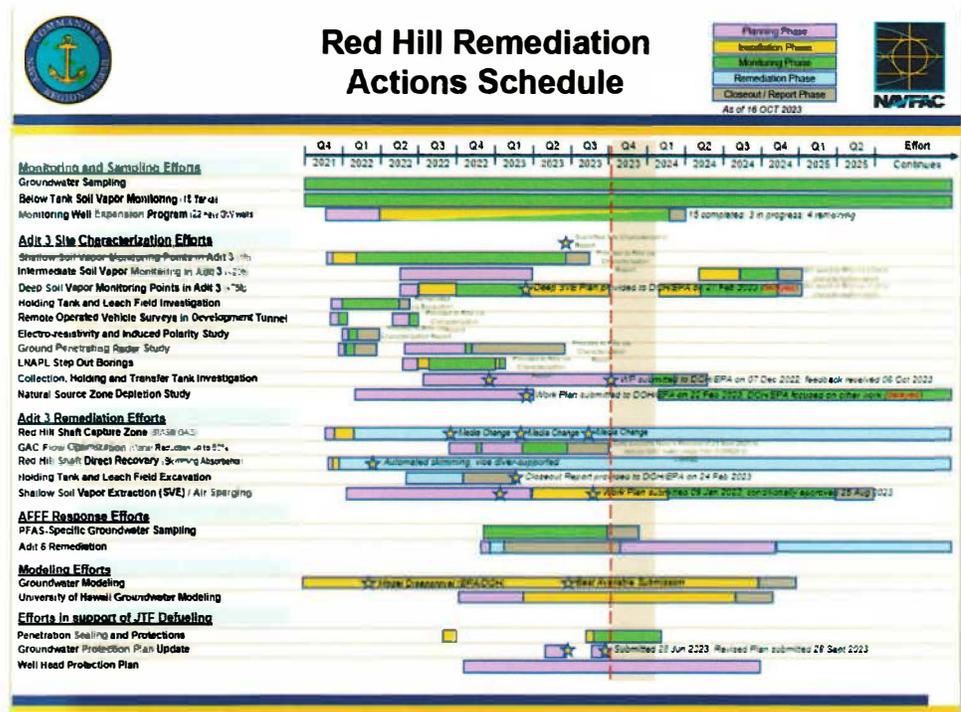
Captain Sullivan replied that is correct. He shared they are working with the Department of Health (DOH) and Environmental Protection Agency (EPA) on a pilot program that could maintain the same capture zone by allowing the GAC system to be turned on three times a week with an average use of only 1.8 million gallons per day (mgd). Captain Sullivan stated that the pilot program is pending approval.

Vice Admiral John Wade shared that the DOH also shares concerns about the amount of water being used. However, during the defueling process, the DOH prefers that the GAC system is running in case of any unlikely event.

Chair Anthony stated that during heavy rains or drilling operations, the monitoring wells detected elevated levels of Total Petroleum Hydrocarbons (TPH); he asked if any other data is available or what happens when the sheen is visible.

Captain Sullivan responded that the monitoring wells show a spike in TPH after heavy rain or unusual events. The JTFRH looks into any possible reasons and has discovered that it may be caused by the force of rain filtering through, allowing any trapped TPH to get loose. He stated that they have identified other fuel layers and are using the air sparging and the soil vapor extraction method, which uses air to push through and suck the substance. Captain Sullivan shared that all the information gathered is updated and entered into the Safe Water website.

Chair Anthony appreciated that a Remediation Action Schedule was provided, which noted a revised groundwater protection plan on September 28, 2023.



Vice Chair Sproat inquired if the Navy has considered pumping at levels other than 18 feet (ft.) since groundwater systems are not understood.

Captain Sullivan explained that the Red Hill infrastructure, the shaft, pumps, and pipes, were built 40 to 50 years ago; therefore, do not have the ability to change the infrastructure and pump from different levels. However, the JTFRH is taking samples from different levels, looking at recommendations, and discussing what measurements are necessary to monitor effectively.

Vice Chair Sproat stated that she understood that the infrastructure limits the capabilities of what can be measured. However, she asked if putting in different pumps or looking into additional wells to pump at different levels within the water column had been considered.

Captain Sullivan replied that the options mentioned had not yet been considered but could be discussed.

Manager Lau also suggested looking into different options for pump and treat to capture and repeal what might be in the aquifer and environment.

Chair Anthony commented that although he supports the GAC system continuing to run during defueling, he is concerned about the 35 billion gallons of water that have gone into the stream since turning on the system about 660 days ago. He commented that a better solution must be found at a teaspoon a month of collected substance.

Vice Chair Sproat inquired if there had been any concerns within the last two weeks about the quality of the water from the Navy's drinking water system.

Captain Sullivan replied that since defueling began, there have been some heightened drinking water quality concerns, which have been addressed. He shared that five homes were tested using the rapid response test, which returned non-detect, and collected long-term monitoring (LTM) samples that were sent to the mainland.

Vice Admiral Wade reassured everyone that every concern received was addressed and tested.

Vice Chair Sproat asked if any recent concerns include specific physical reactions from the Navy drinking water system.

Vice Admiral Wade stated that they received complaints of sheen in the water and rash.

Rear Admiral Stephen Barnett shared that the Navy has received complaints, most from the DOH or EPA, due to individuals and families feeling that the Navy would retaliate. He shared that some of the concerns received are: sheen seen inside a glass of soda, spots on dishes from a dishwasher, and rash. Rear Admiral Barnett stated that the Navy and JTFRH are doing their best to respond to any Navy water system concerns.

Vice Chair Sproat asked how long LTM test results take to be returned.

Rear Admiral Barnett responded that it takes seven to ten working days for LTM test results to return. He shared that the 402 rapid response test results have aligned with the LTM test results.

Vice Chair Sproat asked whether the rapid response test only tests for TPH.

Captain Sullivan explained that if an LTM test is warranted, the specimen is tested for a complete list of analytes, not only TPH.

Vice Chair Sproat inquired how many LTM tests have been sent for complete analytes since defueling began.

Captain Sullivan stated that five LTM tests had been sent to the mainland since defueling began.

Rear Admiral Barnett added that in September, only one LTM test was done; in October, there were less than ten as of October 23, 2023.

Vice Chair Sproat asked if it was out of the ordinary that there were ten concerns requiring an LTM test.

Rear Admiral Barnett stated that October was higher but expected since defueling started.

Vice Chair Sproat stated that she was curious about the groundwater modeling that is being done.

Captain Sullivan explained that the Navy's groundwater modeling that is being used was the best available during the June/July timeframe. The subsequent groundwater modeling should be ready by the summer of 2024. The UH groundwater modeling will be available in the third quarter of 2024. He offered to provide more exact dates at a later time.

Vice Chair Sproat inquired if the modeling that the UH was working on was a tracer test.

Captain Sullivan stated that the groundwater modeling UH is working on includes a tracer test.

Chair Anthony inquired if divers are performing the skimming operations at the Red Hill shaft.

Captain Sullivan replied that as an immediate response, divers were sent into the Red Hill shaft from November 2021 through January 2022 but have not used divers since.

Chair Anthony asked if there is any visible sheen on the rocks.

Captain Sullivan responded that in the fourth quarter of 2021 and second quarter of 2022, an unmanned submersible went through the tunnel and captured sheen at two different locations. He stated that those videos should be available on the Safe Waters website.

Chair Anthony inquired if a permanent GAC system would be used at some point to return the water into the water system.

Captain Sullivan stated that the military is working on a military construction project, AP716, a water treatment facility for the Red Hill shaft. The project design is complete and is being reviewed by the DOH. In the meantime, a temporary system is being worked on to reuse the water.

Chair Anthony asked about the timeline for a water system that could reuse the water.

Captain Sullivan responded that the interim solution may take a year, whereas Project AP716 would take a few years.

Chair Anthony inquired if the three pipes connecting Red Hill to Pearl Harbor would be removed.

Rear Admiral Barnett confirmed that all three pipes will be removed.

Chair Anthony asked when the JTFRH will stand down and transition operations into another structure.

Vice Admiral Wade replied that the Pentagon is still deciding on the formal transition of the JTFRH and returning Red Hill to the Navy. He stated that the decision is up to the Secretary of Defense, which he expects to be included in the next supplement released in November.

Manager Lau asked to confirm if 4,000 gallons of residual fuel would remain in the pipelines, approximately 28,000 gallons of sludge would remain in the tanks, and 32,000 gallons would stay in the facility once defueling is done.

Vice Admiral Wade confirmed. He explained that there likely will be closure again and will know once the Secretary of Defense decides. He further explained that the process will take longer to remove the remaining fuel and sludge due to the environmental assessments.

Manager Lau inquired if sludge removal would begin from the tanks or fuel the pipelines.

Rear Admiral Barnett replied that sludge from tanks would be removed before the fuel is removed from the pipelines, which would coincide with pipeline cleaning.

Manager Lau asked if any leaks or spills had occurred since the defueling began.

Vice Admiral Wade shared that there were no leaks on the first day. However, a minor leak from a clay valve during the pre-start procedures in the underground pump house was isolated and contained. There was no threat to the environment.

Manager Lau inquired about the strategy being used to protect the aquifer.

Brigadier General (BG) Michelle Link stated that the strategy is multifaceted. She explained that to protect the aquifer; they put additional seals and barriers to redirect the leak away from the aquifer and allow for quick fuel removal. BG Link shared that they wrapped flanges, added coverage over dresser couplings, and added a secondary containment under all mechanical valves for all tanks down to the underground pump house. She also shared that most French drains were sealed except for every tenth French drain used to manage rising groundwater levels. BG Link shared that as a response measure in case of a leak, Aqueous Film Forming Foam (AFFF) reclamation pumps are set,

Manager Lau commented that since the November 2021 spill, he had recommended regular sampling and testing at all monitoring wells to monitor migration. He mentioned that the most recent EPA AFFF report

indicated that testing for Polyfluoroalkly substances (PFAS) would be required.

Captain Sullivan shared that immediately after the AFFF release, nine monitoring wells surrounding the affected site were selected to test for PFAS weekly. He also shared that as of September 2023, JTFRH completed a groundwater sampling at all monitoring wells and expects results to return in a few weeks.

Manager Lau inquired if September was the only time a complete groundwater sampling for PFAS at all monitoring wells was done and wondered if there were any plans to perform complete samplings every month.

Captain Sullivan confirmed and replied that the military's September complete groundwater sampling at all monitoring wells was done before the EPA report requirements were released. He said that he would take the recommendation to his superior.

Manager Lau commented that based on contested case hearings and documents, the BWS estimated that 180,000 gallons had leaked over 80 years. He asked what the Navy estimates the total leakage from the 80-year-old Red Hill Bulk Fuel Facility.

Rear Admiral Barnett replied that he would look into the leak history at Red Hill.

Captain Sullivan added that it would take several years to process and complete the entire Red Hill site assessment, which would include the facility's history, and any potential leaks.

Manager Lau stated that knowing the total volume of releases would help determine where the contamination is located, what needs to be done, and how to remove it from the environment.

Rear Admiral Barnett understood Manager Lau's concern and requested time to get information on the site assessment.

There was remote testimony:

Meredith Wilson	<i>She shared her concerns and had questions regarding the Consolidated Groundwater Monitoring Program. Also, submitted written testimony.</i>
------------------------	--

Manager Lau requested Deputy Manager Erwin Kawata to respond to questions directed to the BWS.

Aloha, my name is Meredith Wilson and I lived in military housing at Joint Base Pearl Harbor-Hickam when our water was contaminated with jet fuel from the Red Hill Bulk Storage Facility. In just 2 days, on Oct. 25th, that will mark 2 years since this whole nightmare started for my family. That's the day I began to experience nauseating vertigo, incessant migraines, vision difficulty, life-altering anxiety, and a giant shift in my perspective.

I used to blindly trust that drinking water would flush *out* toxins, and yet it was the very thing introducing such horrible poison to our brains & bodies. There is no substitute for pure water.

I'm still very concerned about several major items regarding the newly Consolidated Groundwater Monitoring Program and this ultimately affects the Board of Water Supply as well:

1. Does BWS agree with the now monthly instead of weekly sampling for Groundwater contaminants based on the May 2023 NAVFAC Consolidation plan?
2. Does BWS test for Ethylene Glycol (or any antifreeze analytes) and would you support that this be added to the COPC list for the Navy's Consolidated Groundwater Monitoring Program?
3. What is your stance regarding the recently relaxed PFAS EALs from HDOH? Especially considering the federal lifetime drinking water health advisories for the (4) main ones w/ the most substantial available science?
 - a. PFOA 0.004 ppt (EAL in Dec. 2022 WAS: 6 ppt, Apr. 2023 NOW: 12 ppt = 3,000x's higher than federal lifetime advisory)
 - b. PFOS 0.02 ppt (EAL in Dec. 2022 WAS: 4 ppt, Apr. 2023 NOW: 7.7 ppt = 385x's higher than federal, we're going in the wrong direction) ***Both of these are already considered human carcinogens in CA***
4. Lastly, as an example of more-like opaque "transparency," The JBPHH Safe Waters website displays data from homes with relatively high TPH sums, and yet states they have 0 TPH Detections for the month of September. That information is incompatible and could be seen as deceiving.
 - a. For example, a sample from Sept. 23rd at 110 Ley Court measured 103 ppb TPH-d + 79.4 ppb TPH-o. Although the most conservative EAL for TPH is 266 ppb, this location is at risk should someone live or work there longer than 6 years (the basis of the toxicity factors used). Could be a retiree, etc. ***There's more than what meets the eye when it comes to data***

I pray that the Defueling process continues safely and you continue to hold strong in all the fronts that you have to face.

Mahalo, Ola I Ka Wai.

Deputy Manager Erwin Kawata responded to Ms. Meredith's question regarding switching from weekly to monthly sampling. He explained that the BWS would recommend that if weekly samples were taken previously, it would be best to continue taking weekly sampling for long-term data purposes since Red Hill monitor wells have exhibited different levels historically and continue to do so. He further explained that continuous, frequent monitoring will help better understand the characteristics happening within the environment and help inform future mitigation strategies.

Deputy Manager Kawata also responded to Ms. Meredith's question about testing for ethylene glycol. He stated that the BWS does not currently test for ethylene glycol. However, the BWS is looking at other test methods and is now validating those methods to get consistent results. Deputy Manager Kawata encouraged continued analysis of ethylene glycol, fuel additives or surfactants, and other substances used in the past for better understanding and information. He commented that the more information available will help determine what needs to be done to mitigate the issue.

Deputy Manager Kawata also responded to Ms. Wilson's question regarding the DOH's recent change to relax the PFAS Environmental Action Levels (EAL). He replied that the lifetime health advisory that the EPA released cited in Ms. Wilson's testimony was an advisory. He explained that the advisory is called a maximum equivalent contaminant level goal. The drinking standard uses this goal to derive a level that incorporates the ability to treat, remove, measure, and still protect the public's health. The EPA's proposed maximum contaminant limit for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS) is currently four parts per trillion and should be applied when measuring until the standards are finalized.

Lastly, Deputy Manager Kawata responded to the transparency of data shared with the public. He stated that the BWS believes in reporting all measurements, even those below the maximum contaminant level (MCL). Deputy Manager Kawata said, "We should report what is found using the test methods in use today to the lowest level it is capable of measuring and as it improves over time." He stated that continuous monitoring provides data and information to compare with the standard in use today.

At 3:55 PM, Chair Anthony called the Board meeting to a recess.

At 4:06 PM, Chair Anthony called the Board meeting back to order and requested Ms. Joy Cruz-Achui take roll call. Vice Chair Kapua Sproat joined via Zoom, responded aye, and disclosed that she was alone at her location; Board Member Jonathan Kaneshiro responded aye and was present in the Board room; and Board Member Edwin Sniffen joined via Zoom, responded aye, and disclosed that he was alone at his location; and Chair Nā'ālehu Anthony was present in the Boardroom. Board Members Bryan Andaya and Gene Albano were absent.

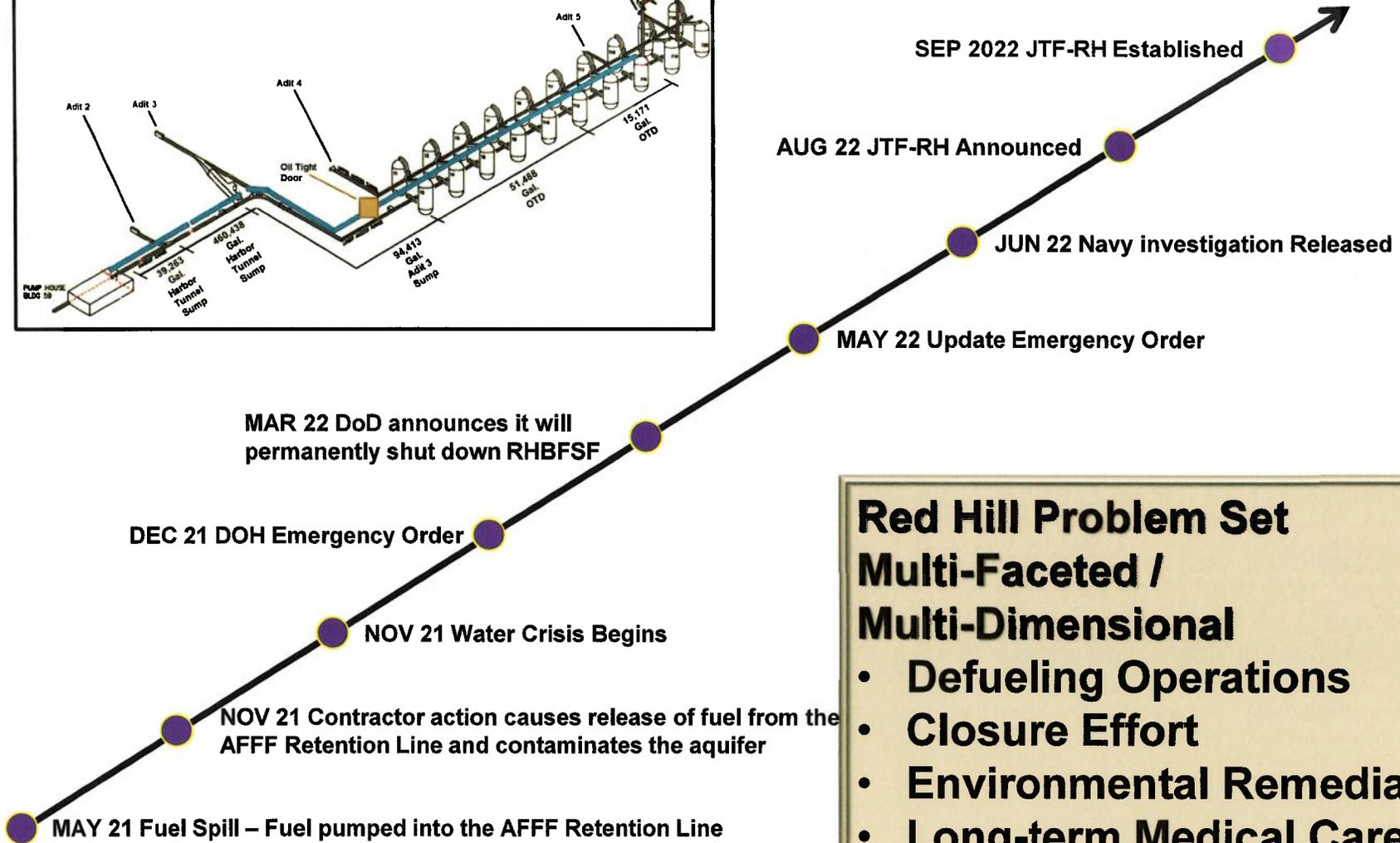
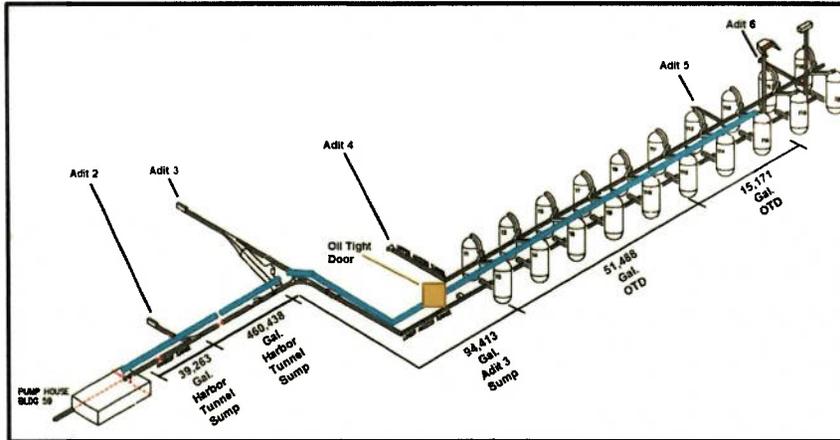
***Joint Task Force-Red Hill
BWS Board of Directors
UPDATE***



23 OCT 2023



Red Hill Timeline Overview



Red Hill Problem Set Multi-Faceted / Multi-Dimensional

- Defueling Operations
- Closure Effort
- Environmental Remediation
- Long-term Medical Care



Mission / End State

Mission: Joint Task Force-Red Hill (JTF-RH) ensures the **safe and expeditious defueling of the Red Hill Bulk Fuel Storage Facility (RHBFSF)** through coordination with State and Federal stakeholders in order to set conditions for closure while ***continuing to rebuild trust with the State of Hawai'i and the local community of O'ahu.***

End State: Red Hill Bulk Fuel Storage Facility is **safely defueled and conditions are set for closure**, while continuing to ***rebuild DoD trust with the State of Hawai'i and the community.***

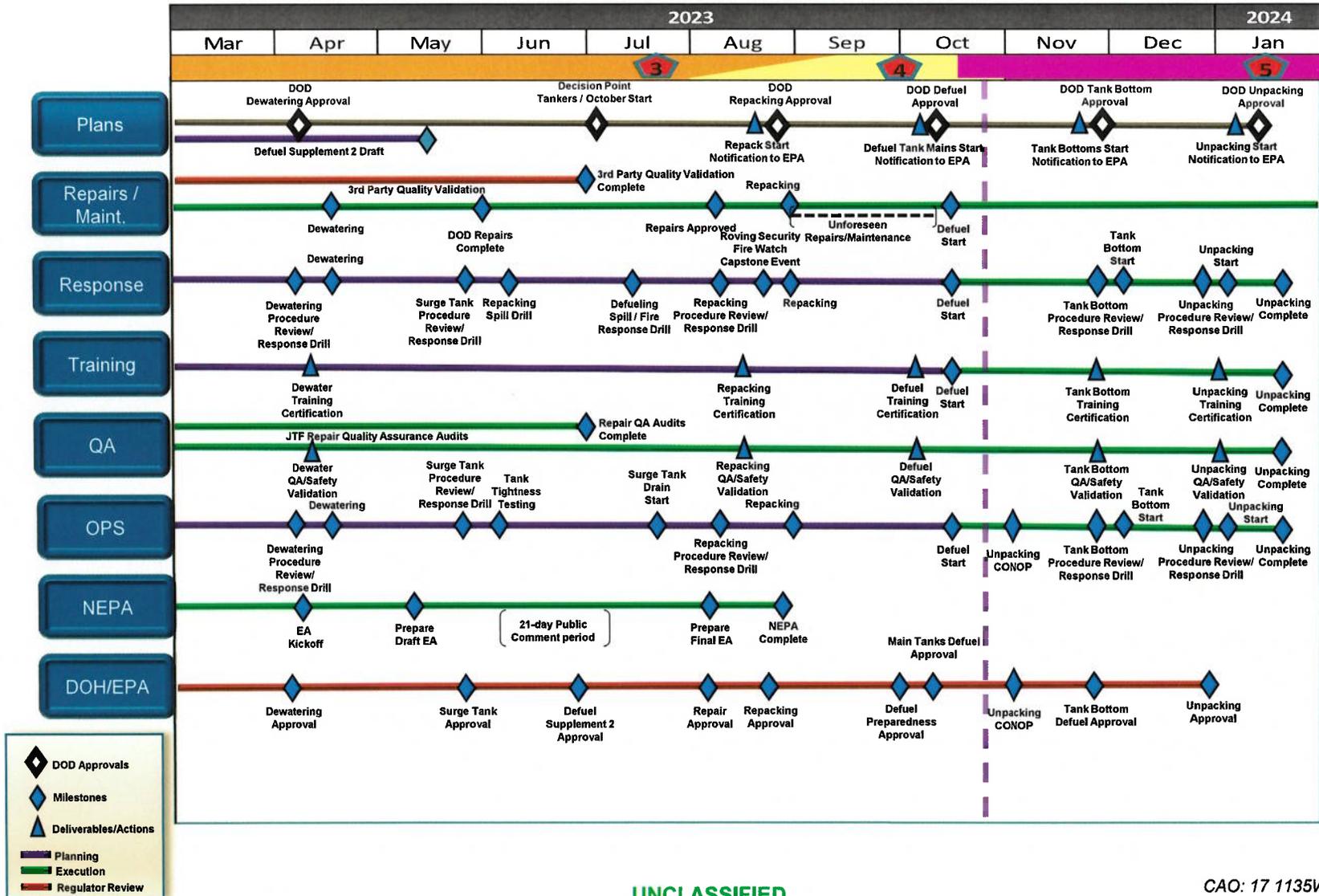


UNCLASSIFIED

JTF-RH Integrated Master Schedule (IMS) EXSUM

JTF-RH commenced gravity defueling on 16 OCT 2023

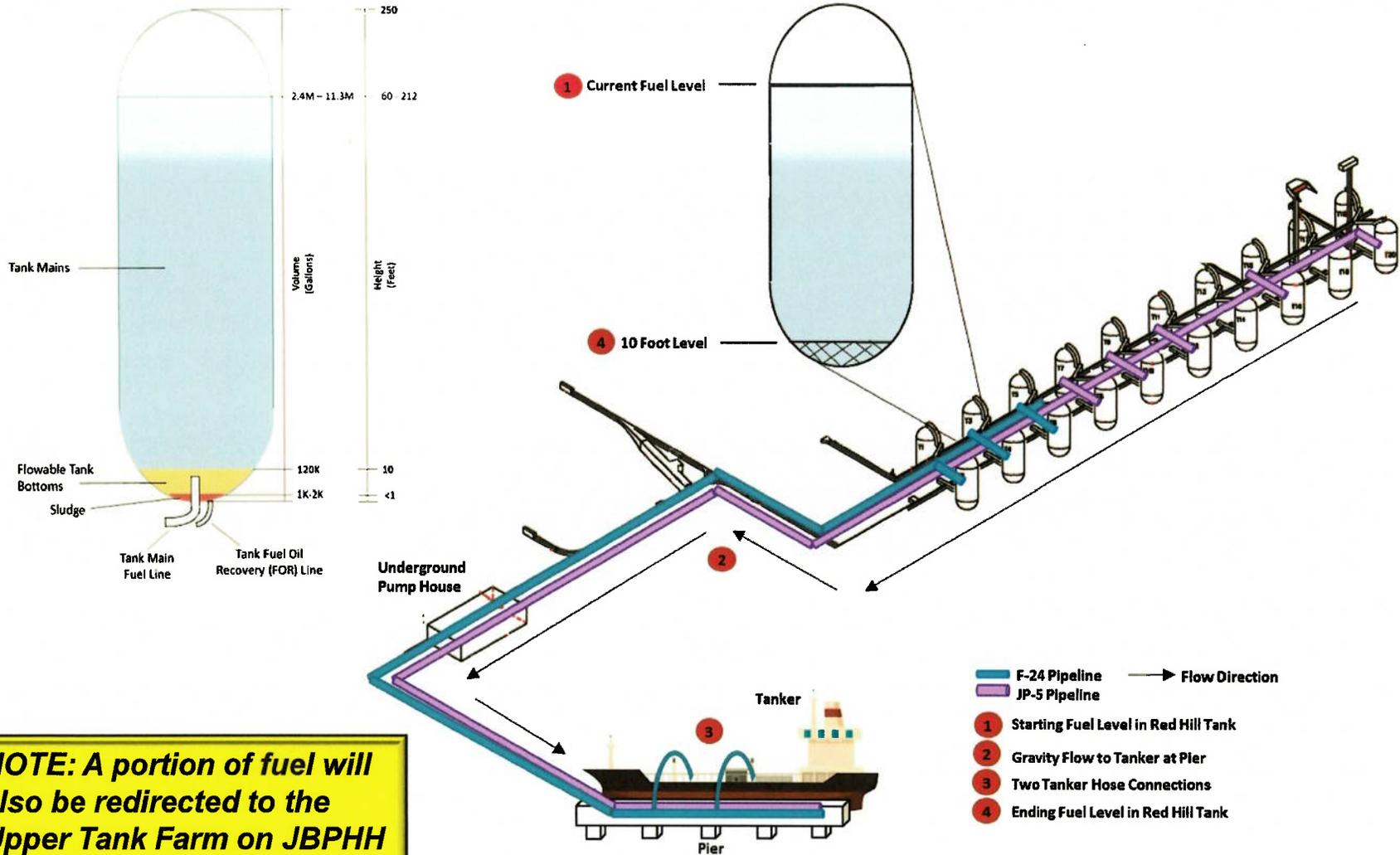
3: Initial Prep for Defueling
4: Final Prep for Defueling
5: Defuel and Relocate Fuel



UNCLASSIFIED



Defueling Operations Graphic

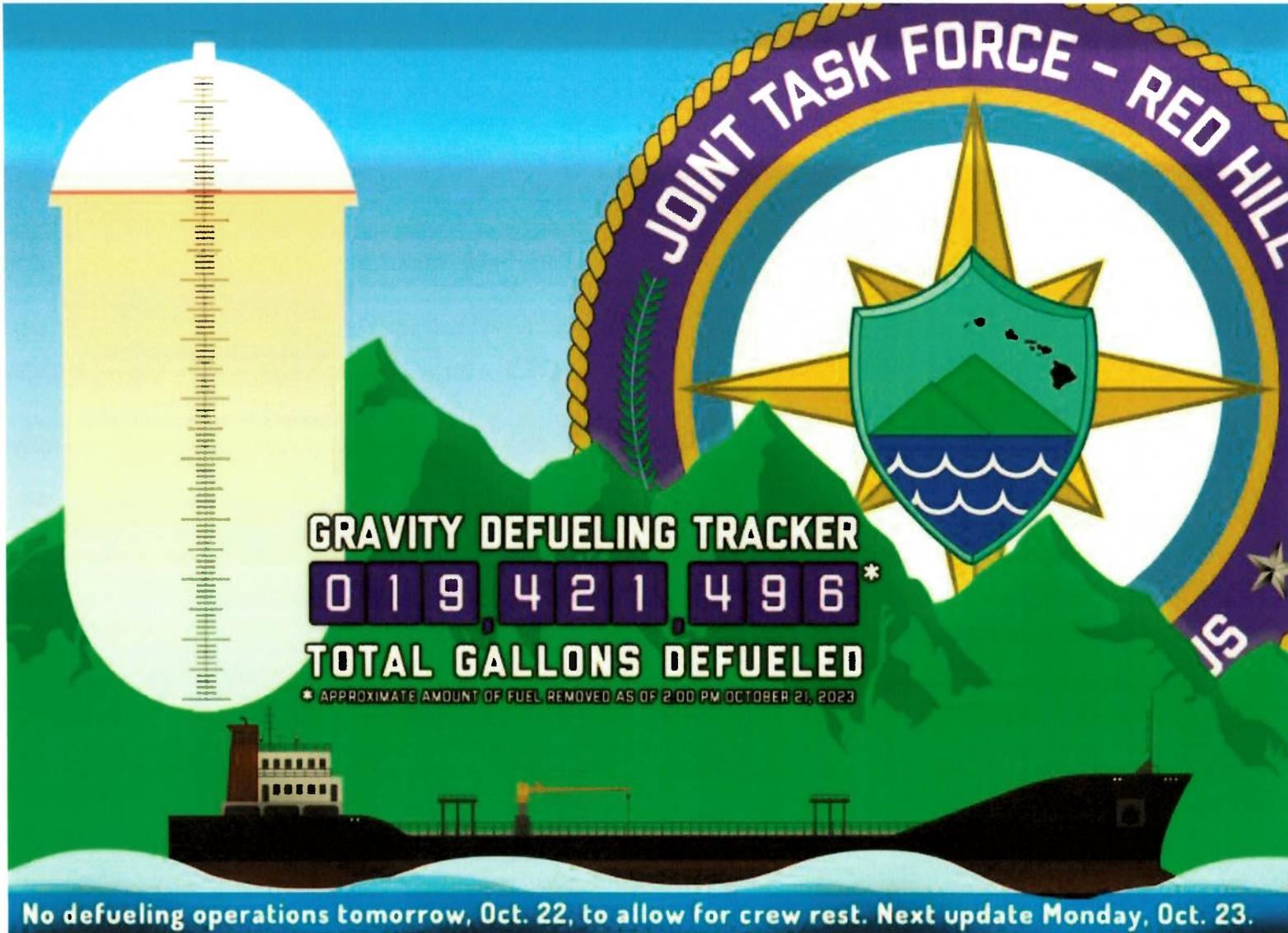


NOTE: A portion of fuel will also be redirected to the Upper Tank Farm on JBPHH to ensure sufficient fuel for operations.

16 OCT – o/a 18 NOV 23

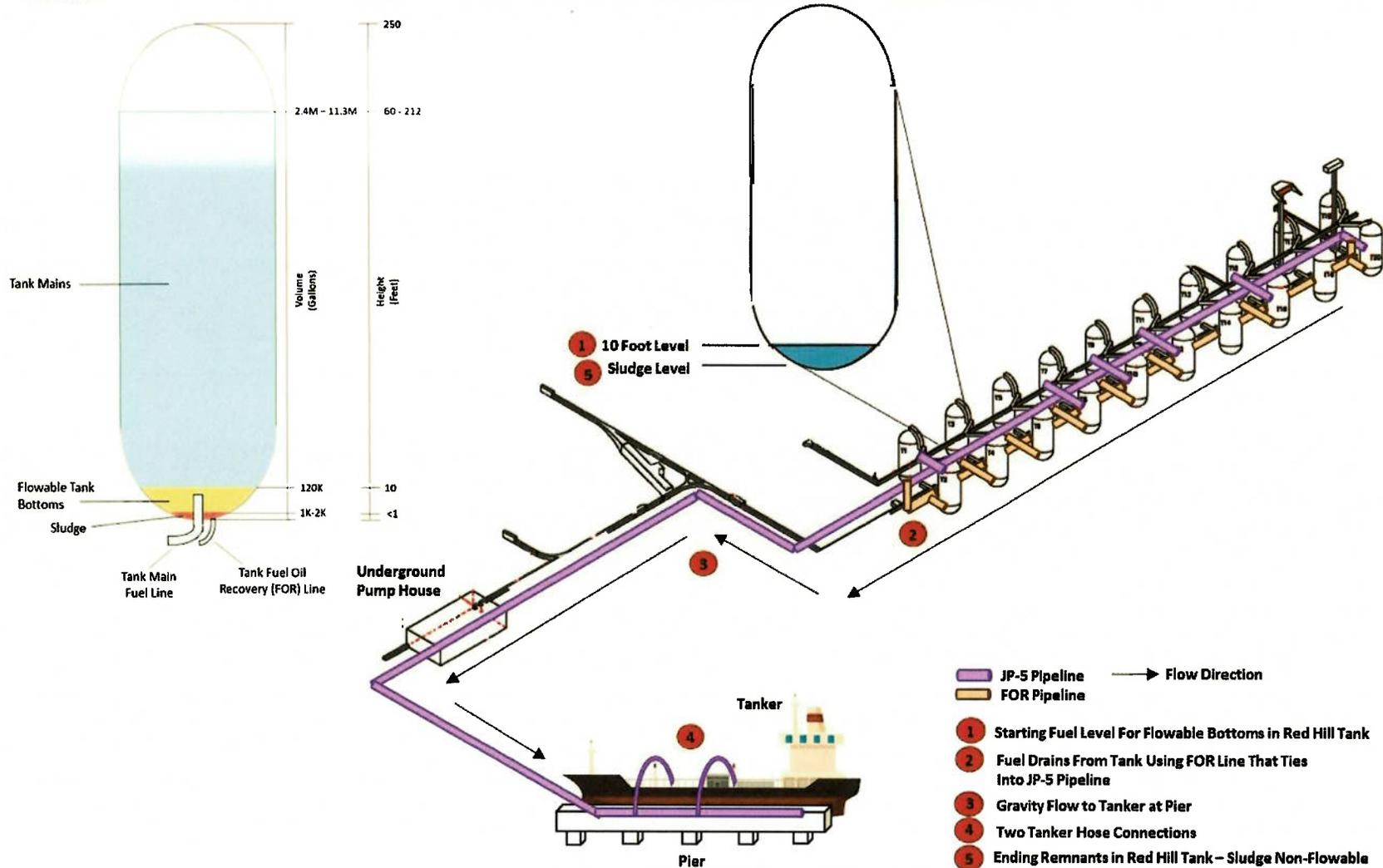


Gravity Defueling Update as of 21OCT23





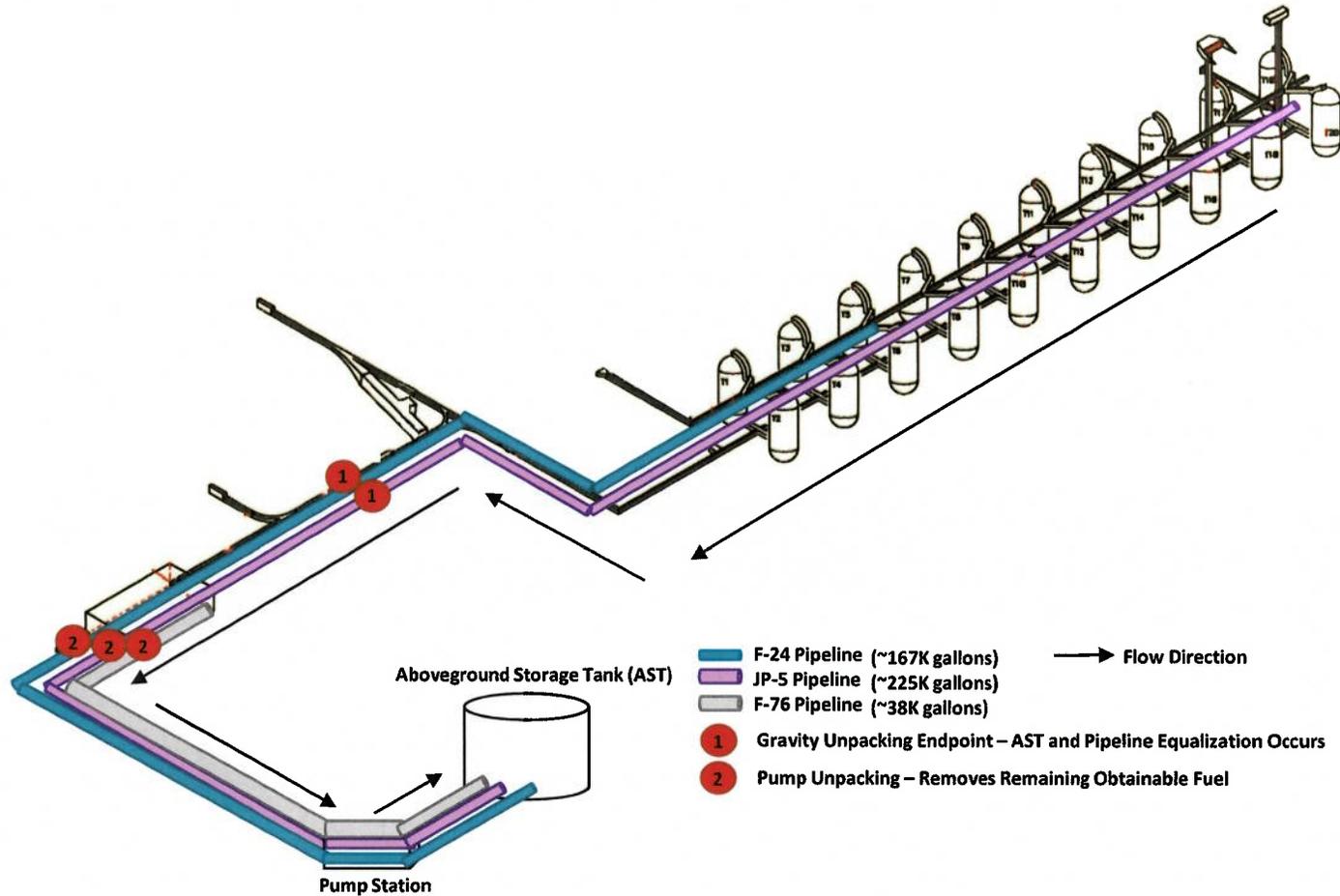
Flowable Tank Bottoms Operations Graphic



o/a 4 – 15 DEC 23



Unpacking Operations Graphic



o/a 15 – 19 JAN 23

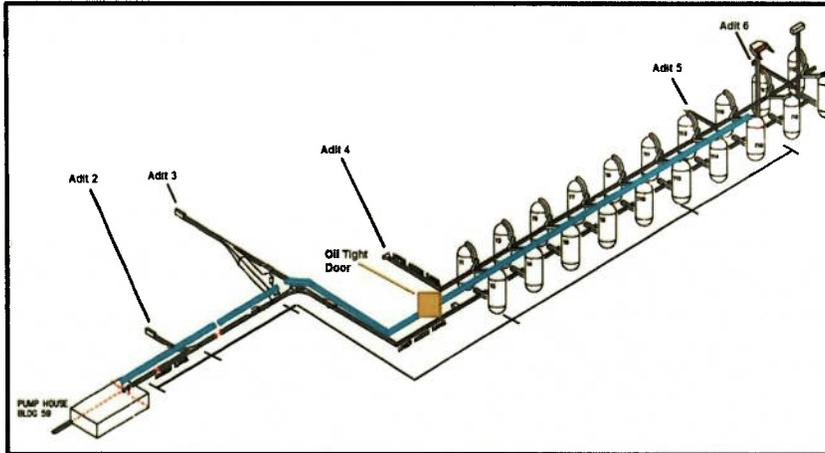


Defueling Risk Mitigations

Plans & Operations



Training



Repairs, Enhancements, & Modifications



Fuel Operations



Test



Safety & Quality Assurance

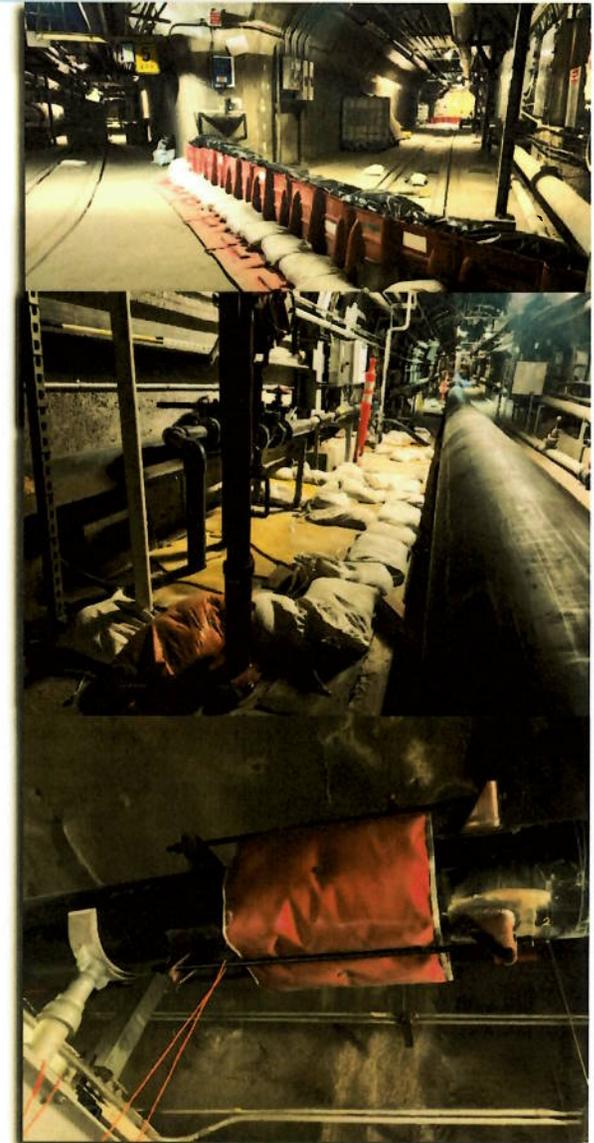
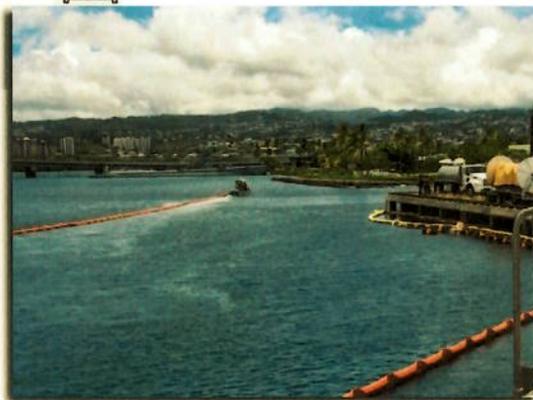
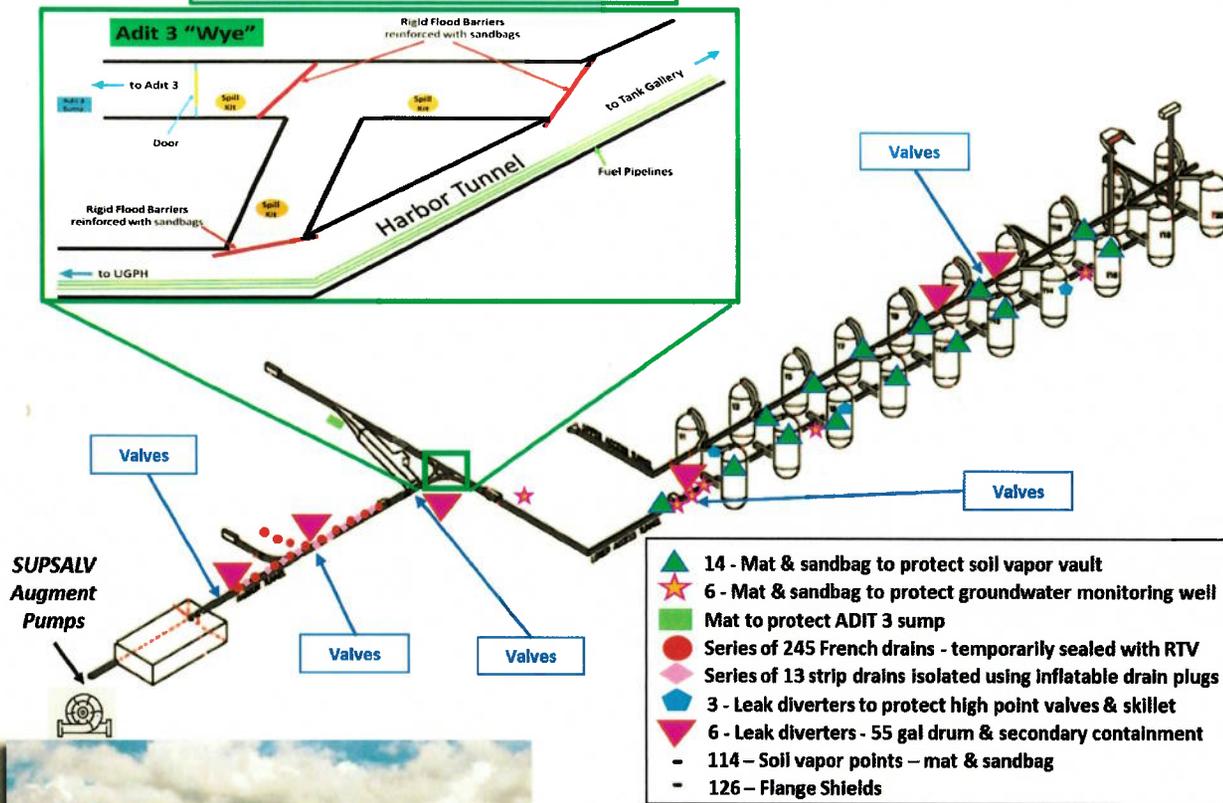


Multi-dimensional approach to reduce risk and build resiliency into the system



Response Preparedness / Aquifer Protection

ADIT 3/Aquifer Enhanced Protective Measures



Aggressive Training Regimen; 6 Drills; Proactive Federal, State, and Local Integration; Robust Mitigations; Over 400 protective measures to safeguard aquifer



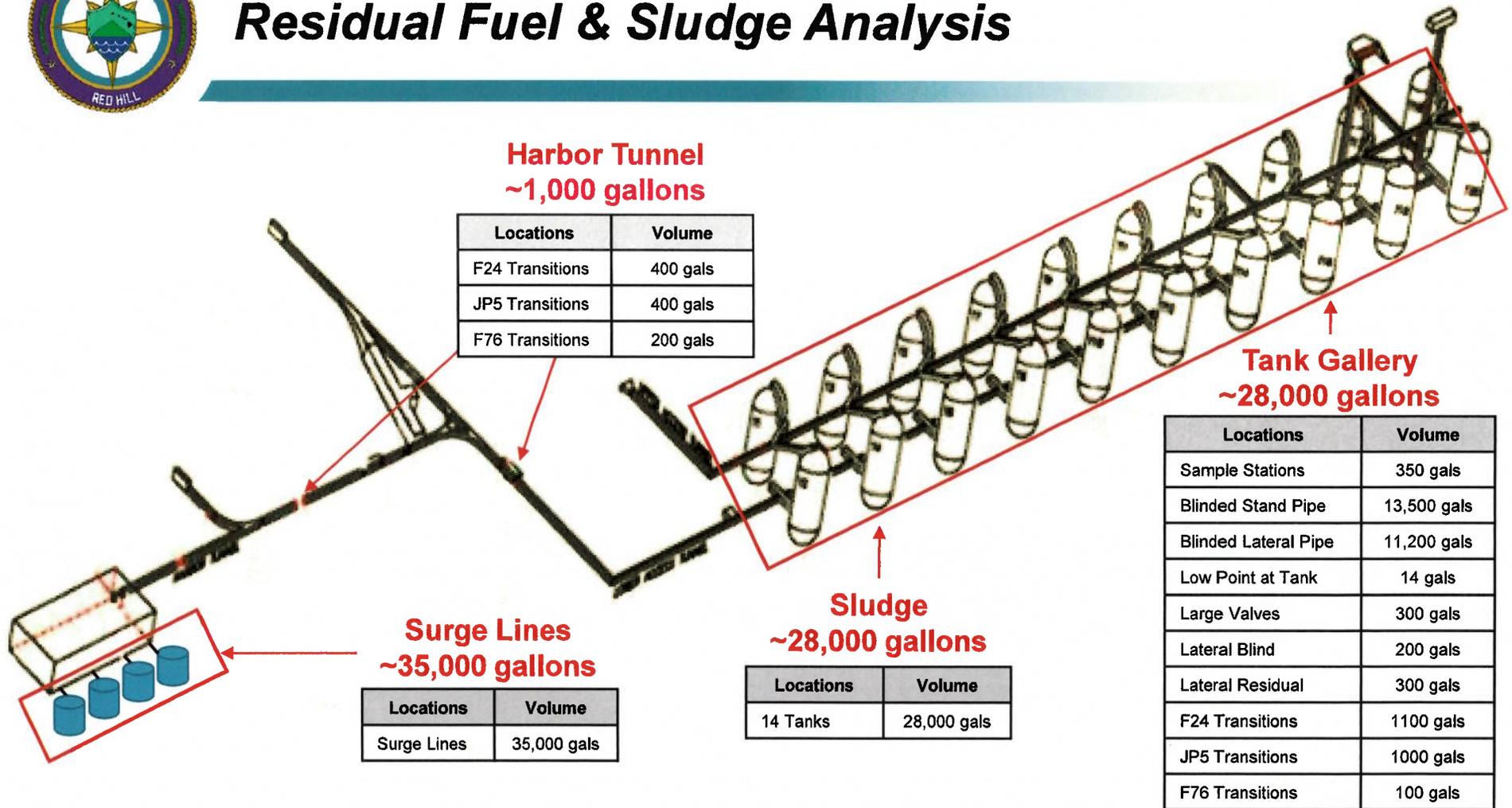
Continued Community Engagement



Consistent & Persistent Engagement with the Communities of Hawai'i



Residual Fuel & Sludge Analysis



- ~64,000 gals of Residual Fuel remain after gravity defueling in low points / bends in pipeline
 - ~60,000 gals to be removed in the next defueling phase

*** Mission Analysis is still on-going
Expect DoD Defueling Supplement #3
mid-November**

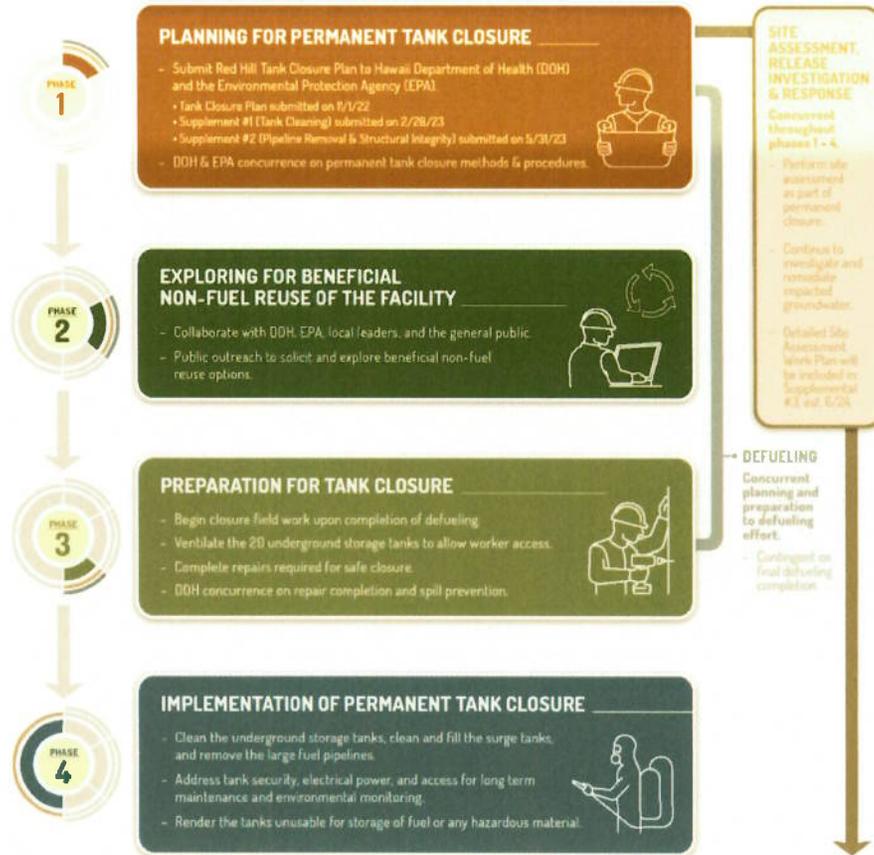
- ~4,000 gals of Residual Fuel in pipeline and ~28,000 gals of Sludge in the 14 tanks will be removed during the closure phase



RED HILL TANK CLOSURE

The DON will be regularly releasing information as the timeline progresses via the following:

- Press Releases
- Website Updates
- Virtual/Online Updates
- Neighborhood Boards



**COMMANDER,
NAVY REGION HAWAII
(CNRH)**

FIND US ONLINE

SCAN OUR QR CODE for more information on the Red Hill Bulk Fuel Storage Facility.

<https://hnhcncs.navy.mil/Operations-and-Management/Red-Hill>



CONTACT US

EMAIL
CNRH PA0@US NAVY MIL





JBPHH Water Distribution System Long-Term Monitoring (LTM)

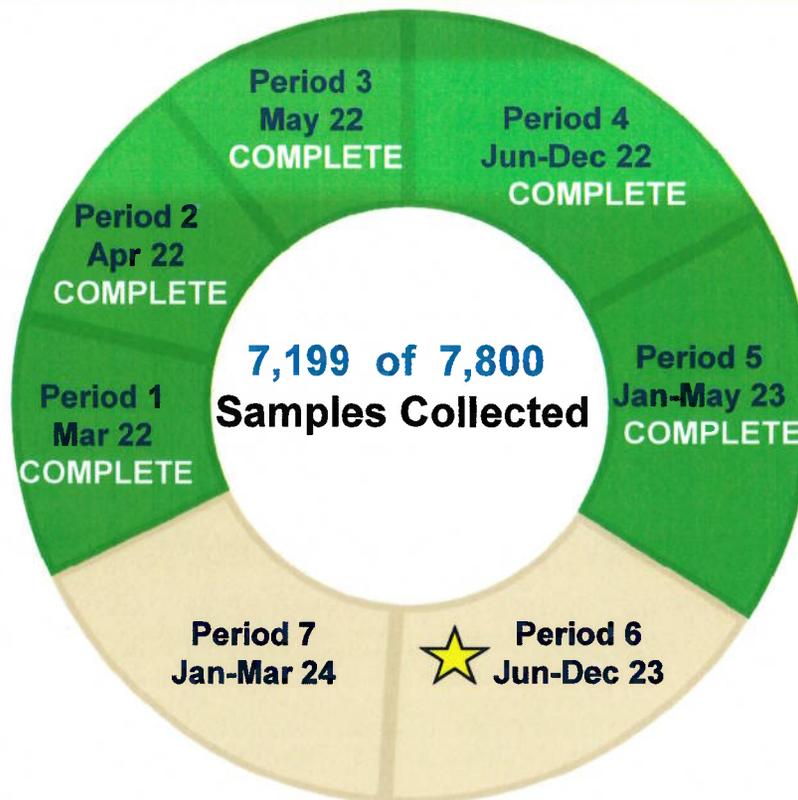


Water Distribution System Sampling:

- 24-mo LTM period through Mar 2024
- 65%+ of homes and non-residential buildings sampled
- Prioritized and randomized sampling:
 - Schools, Medical/Dental facilities
 - Child Development Centers & Homes
 - Across water distribution system

Rapid Response Team:

- Resident notification and engagement
- Bottled water supply
- House flushing and TPH testing
- Contact Water Response Team (808) 920-3616



Additional Info:

- <https://jbphh-safewaters.org>
- Samples analyzed and data validated by third-party contractor

Validated sampling has yielded zero detections of JP-5



Drinking Water Community Outreach



Outreach Engagement:

- Drinking Water (DW) Information Booth
- Civilian Community Liaison and Environmental Engineer (SME)
- Communities and centers served by JBPHH water distribution
- Neighborhoods, Navy Lodge and base shopping locations
- Recurring events, biweekly basis

"I am very grateful for the partnership. Having you and the team on campus to share the information with the families and my staff has made a huge difference in how they feel about our water. We have been able to move forward from the water crisis to the healing process. There is a change in the atmosphere. Thank you so much for all that you have done for our school and community."

- Principal, Iroquois Point Elementary



Recent Events:

- 25 Aug: Iroquois Pt Elementary Open House
- 08 Sep: Military Affairs Council Pearl Harbor visit
- 14 Sep: Navy Lodge at Ford Island
- 28 Sep: Main Navy Exchange, Pearl Harbor
- 11 Oct: Kapilina Beach Homes night market
- 12 Oct: Pearl City Peninsula NEX Mini Mart
- 23 Oct: BWS Board Meeting

Upcoming Events:

- 25 Oct: Pearl Harbor National Park Staff
- 26 Oct: Hickam Exchange
- 27 Oct: Iroquois Point Elementary Fall Festival
- Nov:
 - Halsey Terrace NEX Mini Mart
 - Moanalua Valley Community Association
 - Kapilina Homes night market

Resources:

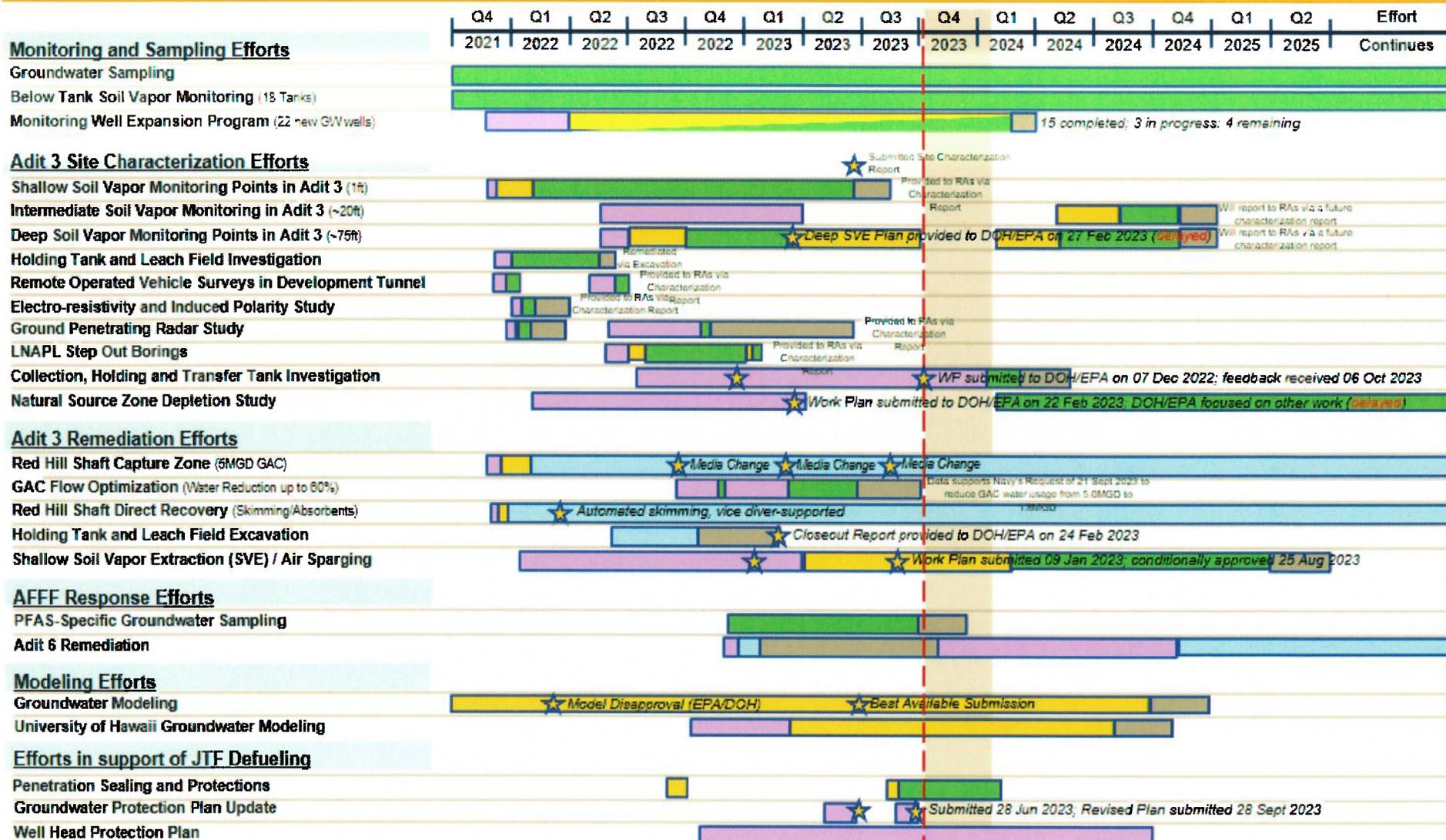
- DW data and information: <https://jbphh-safewaters.org>
- COMING SOON: Outreach Calendar



Red Hill Remediation Actions Schedule



As of 16 OCT 2023





Questions

ITEM FOR INFORMATION NO. 3

“October 23, 2023

FINANCIAL
DISCLOSURES:
WHAT YOU
NEED TO KNOW

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843

Chair and Members:

Subject: Financial Disclosures: What You Need to Know

Eric Irwin, Ethics Associate Legal Counsel, Ethics Commission, City and County of Honolulu, will report on What You Need to Know about the Financial Disclosures.

Respectfully Submitted,

/s/ ERNEST Y. W. LAU, P.E
Manager and Chief Engineer

Attachment”

The foregoing was for information only.

DISCUSSION: Eric Irwin and Teri Keliipuleole, Ethics Associate Legal Counsel, Ethics Commission, City and County of Honolulu, gave the report.

Chair Anthony inquired if the Ethics Commission website will be ready for use when it is time for Financial Disclosures to be submitted.

Mr. Eric Irwin replied that the website already exists; however, –minor technical issues are still being ironed out. It will likely be ready in time for filings on January 1, 2024.

Boards & Commissions
Financial Disclosure
Training



— HONOLULU —
ETHICS COMMISSION



Agenda

- FAQ's
- Due Dates
- How to Submit
- Penalties



FAQ's

- Are Board and Commission members required to file Financial Disclosures?
- Why are Financial Disclosures important?
- Is my Financial Disclosure confidential?



Honolulu Ethics Commission
925 Dillingham Boulevard, Ste. 190
Honolulu, HI 96817

TEL: (808) 768-9242
Email: ethics@honolulu.gov
www.honolulu.gov/ethics/ethicforms

THIS SPACE FOR OFFICE USE ONLY

CONFIDENTIAL FINANCIAL DISCLOSURE (FOR CY2021)
Board and Commission Members

PART A BOARD AND COMMISSION MEMBERS COMPLETE

Type of Filing: Initial - Appointment Date Annual Leaving Office/Resignation Date

Name _____

Last
First
Middle Initial
(Jr., Sr., III)

Board/Commission Name _____ Email Address _____

Home Mailing Address _____ Cell Phone _____

Name of Spouse _____ Name(s) of Dependent Child(ren) _____

PART B BOARD AND COMMISSION MEMBERS COMPLETE

Where you are asked to state a dollar amount, answer by using the appropriate letter code.

A - Less than \$1,000	E - \$50,000 - \$99,999	I - \$300,000 - \$399,999	M - \$700,000 - \$799,999
B - \$1,000 - \$9,999	F - \$100,000 - \$149,999	J - \$400,000 - \$499,999	N - \$900,000 - \$999,999
C - \$10,000 - \$24,999	G - \$150,000 - \$199,999	K - \$500,000 - \$599,999	O - \$800,000 - \$899,999
D - \$25,000 - \$49,999	H - \$200,000 - \$299,999	L - \$600,000 - \$699,999	P - At least \$1,000,000

1. **INCOME** of \$1,000 or more, source and services rendered, during the preceding calendar year. Include income of spouse and dependent child(ren).
 None Additional sheets attached

RECIPIENT	EMPLOYER/SOURCE	POSITION/ SERVICE RENDRED	ANNUAL INCOME (Use codes)
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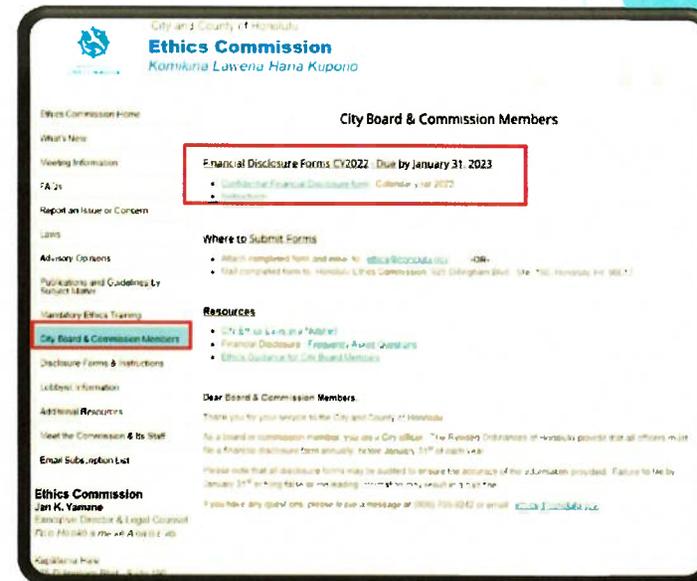


Important Due Dates

- **Initial:** Due 20 days from swear in date
- **Annual:** Due January 31st
 - Filing period begins January 1st
- **Final:** Due 10 days prior to leaving office

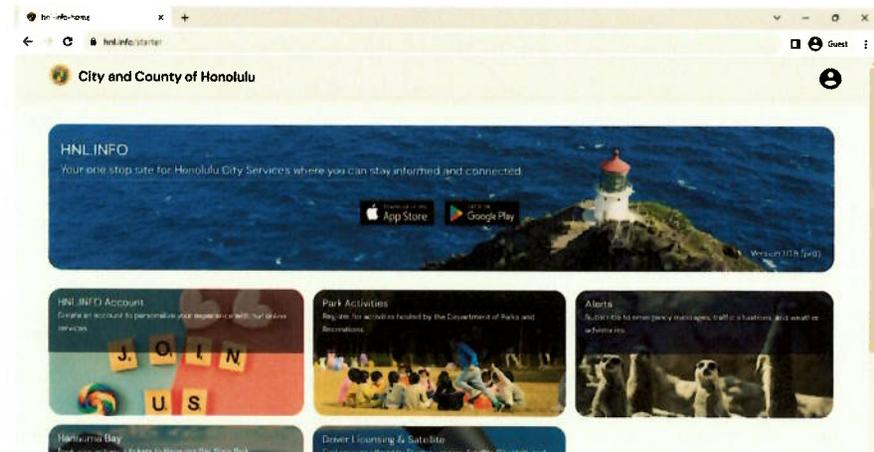
How to Submit

- **Current Process:**
 - **Access PDF form:**
 - Ethics website at honolulu.gov/ethics
 - Click on “City Board & Commission Members” tab
 - **Submit form:**
 - Email completed form to ethics@honolulu.gov; or
 - Mail to Honolulu Ethics Commission,
925 Dillingham Blvd Ste 190, Honolulu HI 96817



How to Submit, cont.

- **New Process:**
 - Electronic submission via DIT Database
 - HNL.INFO at hnl.info/starter
 - Create an account via “Self Register”
 - Create username and password
 - More information and handouts to come



Penalties

VIOLATION

Fines in accordance with applicable city statutes and/or rules:

- Failure to file FD within 10 days of NOAV receipt:
 - \$100 for the first-time;
 - \$200 for the second late filing;
 - For each additional late filing, the fine imposed for the previous late filing plus \$200.
- \$5,000 fine for failure to file FD within 30 days of NOAV receipt.

Criminal penalty:

- Fine of not more than \$2,000 or imprisonment of not more than one year, or both.

Contact us:

- Email: ethics@honolulu.gov
- Website: www.honolulu.gov/ethics
- Phone: (808) 768-9242



— HONOLULU —
ETHICS COMMISSION

Mahalo!

ITEMS REQUIRING BOARD ACTION

APPROVAL OF MINUTES

Approval of the Minutes of the Regular Meeting Held on September 25, 2023.

MOTION TO APPROVE

Jonathan Kaneshiro and Kapua Sproat motioned and seconded, respectively, to approve the Minutes of the Regular Meeting Held on September 25, 2023.

Ms. Cruz-Achui conducted a roll call: Vice Chair Kapua Sproat: aye; Board Member Jonathan Kaneshiro, aye; Board Member Edwin Sniffen, aye; and Chair Na’alehu Anthony, aye. Board Members Bryan Andaya and Gene Albano were absent.

THE MINUTES OF THE REGULAR MEETING HELD ON SEPTEMBER 25, 2023, WAS APPROVED AT THE OCTOBER 23, 2023, BOARD MEETING			
	AYE	NO	COMMENT
NA’ALEHU ANTHONY	X		
KAPUA SPROAT	X		
BRYAN P. ANDAYA			ABSENT
JONATHAN KANESHIRO	X		
EDWIN H. SNIFFEN	X		
GENE C. ALBANO			ABSENT

“October 23, 2023

AUTHORIZING A
PUBLIC HEARING
TO CONSIDER
REVISIONS TO
THE SCHEDULE
OF RATES AND
CHARGES FOR
THE FURNISHING
OF WATER AND
WATER SERVICE
FOR THE FISCAL
YEAR (FY) 2024
THROUGH 2029

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843

Chair and Members:

Subject: Authorizing a Public Hearing to Consider Revisions to the Schedule of Rates and Charges for the Furnishing of Water and Water Service for the Fiscal Years (FY) 2024 through 2029

We recommend that the Board authorize a public hearing to be held at 2:00 p.m. on November 27, 2023, to consider the resolution to adopt the Proposed Amendment to the Schedule of Rates and Charges of the Board of Water Supply for the Fiscal Years (FY) 2024 through 2029, Effective February 21, 2024 through June 30, 2029 to Remain in Effect Until Superseded by a Revision to the Schedule of Rates and Charges.

The Board of Water Supply has completed the cost-of-service study and rate making procedures according to the American Water Works Association M-1 Manual, “Principles of Water Rates, Fees and Charges” and conducted extensive outreach and communication with stakeholders, including members of the community and legislators. Mr. Dave Ebersold of CDM Smith will provide a presentation on the proposal.

Attached is the draft of the “Notice of Public Hearing” to be published prior to the hearing date.

Respectfully Submitted,

/s/ ERNEST Y. W. LAU, P.E
Manager and Chief Engineer

Attachment”

DISCUSSION: Dave Ebersold, Senior Vice President, CDM Smith, gave the report.

Vice Chair Kapua stated that she understands the Office of the Mayor’s concerns and how it would affect the community; however, the BWS has also done its best to cut costs even through inflation. She asked if delaying the BWS’s rate increase is advisable.

Mr. Dave Ebersold explained that delaying the BWS February 2024 rate increase to July 2024 would force the BWS to cut several million dollars from the current budget, leading to additional cuts to the proposed budget for capital expenditures and operating expenses in the next fiscal year since the BWS would lack the base to build on. He shared an example of

a scenario: The BWS delays the rate increase to 2026. In 2026, it would require an over 19% rate increase for the BWS to get back on track, causing rate shock for ratepayers. He shared that the initial January 2024 rate increase to February 2024 decreased days working capital. In response to Vice Chair Kapua's question, he replied that to maintain the guidelines that the Board has set, which is not to have rate increases over 10% or never to have less than 45 days working capital, it would be difficult to maintain those guidelines if the rate increase is delayed.

Chair Anthony inquired if a \$0.01 per 1,000 gallons would be enough to cover the cost with all the unanticipated rising power costs.

Mr. Ebersold explained that the cost adjustment is structured so that for every \$500,000 that the BWS exceeds the anticipated power costs, there is a penny increase to the rate per thousand gallons. Multiplying that penny increase across the entire rate base would generate \$500,000, which covers the increased cost.

Chair Anthony commented that he has received various correspondence from ratepayers regarding their bills, which include sewer charges and being able to differentiate what it costs for water service. He inquired about a low water user that uses 2900 gallons of water.

Manager Lau replied that the water user would move into the next tier.

Mr. Ebersold explained that the lowest water users would pay below the service cost, whereas water users using more water would pay a higher cost.

Chair Anthony asked Manager Lau if the proposed rate schedule was negotiable and to explain the process of implementing the new rate schedule.

Manager Lau stated that the proposed rates are not set until the Board adopts the new rate schedule. He explained that the action requested at today's meeting is for the Board to authorize a public hearing in November. If the Board authorizes a public hearing, a public hearing notice will be posted, and the public hearing will be held in November, where the public is invited to share their thoughts and opinions. After the public hearing is closed, the Board will be asked to adopt the proposed rate schedule in the regular meeting. If the Board chooses not to move forward with the proposed rate schedule after the public hearing, the process would start from the beginning. The BWS would require time to re-evaluate the financial impact on the Capital Improvement Projects (CIP) and Operating Budget, share the new rate proposal with the Board, and request a public hearing, followed by a vote by the Board to adopt the new rate schedule. Manager Lau commented that delaying the adoption of a new rate schedule does not invalidate the need for a rate increase. A delay in a rate increase would mean a higher percentage increase in the future to catch up.

Mr. Ebersold explained that if the rate increase of 10% is postponed to July 1, 2024, because of how compounding works, there would be a 16% decrease in the amount of money collected by June 30, 2029. He stated that the effect would be substantially dramatic by the end of the rate-setting period.

Manager Lau mentioned some factors to consider: the budget, which is adopted annually and consists of the operating and CIP budget, and the 200 vacancies. He stated that the BWS adopted flat budgets in Fiscal Year 2023 and Fiscal Year 2024, cutting as much as possible. Manager Lau said that adopting another flat budget would shrink the CIP drastically.

Vice Chair Kapua commented that she was in support of the rate schedule. She stated that the BWS has reduced costs, adjusted timelines, and considered its impact on the community, especially the kupunas. Vice Chair agrees with the timeline of the rate schedule; smaller increases over time are more manageable than creating a rate shock.

Manager Lau commented that it is a struggle to achieve the right balance for the community and provide such a critical service.

Board Member Kaneshiro shared that as a member of the Permitted Interaction Group (PIG), one heavily discussed and deliberated topic was the working capital days. He commented that going below the minimum of 45 working days would put the BWS at risk. He also added that the rate increase had already been deferred from July 2023 to January 2024 to February 2024.

Manager Lau shared that the working capital fund could be used if a major disaster hits the island. He explained that if a major disaster struck the island, it would be difficult for those affected to pay their bills; therefore, the BWS would probably suspend billing until the island had recovered.

Vice Chair Sproat agreed with Board Member Kaneshiro and Manager Lau and stated that the minimum working capital days was set at 60 days, now 45 days, which is a compromise. She commented that the BWS must be ready, considering the devastation in Maui and climate change.

Mr. Ebersold stated that the working capital fund guideline discussed in the PIG was 45 days, and the stakeholder advisory group (SAG) strongly voiced that the working capital days should not fall below 60 days. He stated that in the past three years, the BWS working capital has done exactly what it is designed to do. The BWS was able to spend down the working capital fund and respond to a global pandemic, inflation, and increasing energy prices without raising rates.

Board Member Kaneshiro mentioned that multi-generational homes were also considered.

Manager Lau stated that multi-generational homes would fall under single-family residential.

There was 1 in person testimony:

David Tupper	<i>Asked four questions and requested the responses be sent or given to him at a later time.</i>
---------------------	--

The following is a list of the questions submitted by Mr. David Tupper:

1. Does the federal government's plan for remediation of the Red Hill situation include funding and/or appropriations that the BWS could use to pay for water source replacement needed of water supply contamination caused by Red Hill fuel spills?
2. How are the members of each customer rate class established? How can they be changed?
3. If the BWS has approximately 175,000 accounts but services close to a million residents, then how many individuals never see their water bill? What percent of the population does not get an individual water bill? How do those people get BWS communications sent with the water bill?
4. How can a top water using community connect with the BWS to identify ways to reduce water usage as part of the BWS outreach program?

**MOTION
TO APPROVE**

Jonathan Kaneshiro and Kapua Sproat motioned and seconded, respectively, to Authorize a Public Hearing to Consider the Revisions to the Schedule of Rates and Charges for the Furnishing of Water and Water Service for the Fiscal Years (FY) 2024 through 2029.

Ms. Cruz-Achui conducted a roll call vote: Vice Chair Kapua Sproat, aye; Board Member Jonathan Kaneshiro; aye; Board Member Edwin Sniffen, aye; and Chair Na'alehu Anthony, aye. Board Members Bryan Andaya and Gene Albano were absent.

Ms. Cruz-Achui announced that the motion passed with four ayes.

AUTHORIZING A PUBLIC HEARING TO CONSIDER REVISIONS TO THE SCHEDULE OF RATES AND CHARGES FOR THE FURNISHING OF WATER AND WATER SERVICE FOR FISCAL YEARS (FY) 2024 THROUGH 2029 WAS APPROVED ON OCTOBER 23, 2023

	AYE	NO	COMMENT
NĀ'ĀLEHU ANTHONY	X		
KAPUA SPROAT	X		
BRYAN P. ANDAYA			ABSENT
JONATHAN KANESHIRO	X		
EDWIN H. SNIFFEN	X		
GENE C. ALBANO			ABSENT

At 5:36 PM, Chair Anthony called the Board meeting to a recess.

At 5:42 PM, Chair Anthony called the Board meeting back to order.



AUTHORIZING A PUBLIC
HEARING TO CONSIDER THE
REVISIONS TO THE SCHEDULE OF
RATES AND CHARGES FOR THE
FURNISHING OF WATER AND
WATER SERVICE FOR
FISCAL YEARS (FY) 2024
THROUGH 2029

Joe Cooper
Waterworks Controller

David Ebersold
Senior Vice President, CDM Smith

October 23, 2023
www.boardofwatersupply.com

AGENDA

- Need for update to existing water rates
- Updated water rate proposal
- Summary of public input received to date
- Proposed Notice of Public Hearing



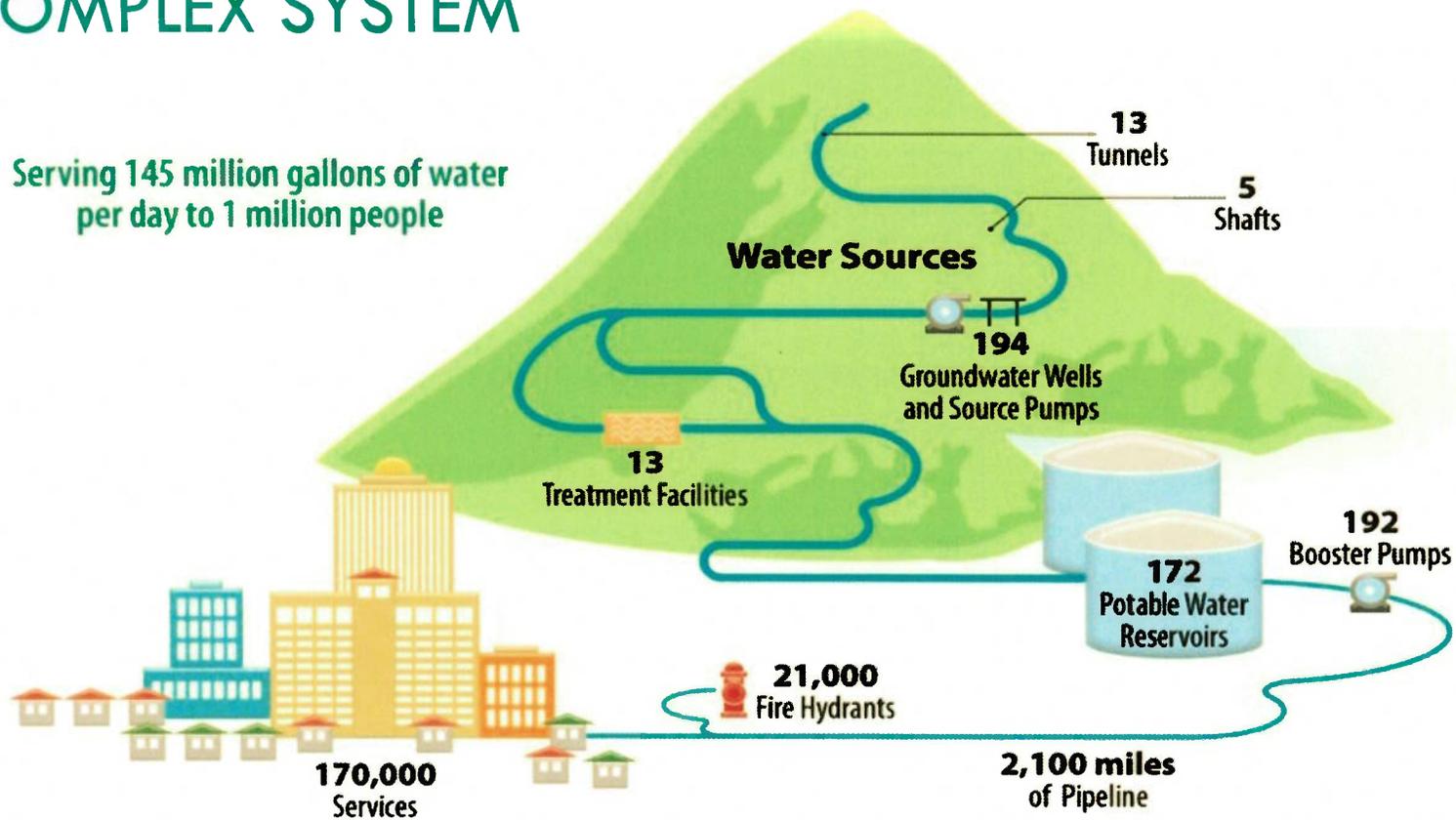
KA WAI OLA

ALL LIFE
DEPENDS
ON WATER



DELIVERING WATER FROM UNDERGROUND WATER SOURCES TO YOUR HOME REQUIRES A LARGE AND COMPLEX SYSTEM

Serving 145 million gallons of water per day to 1 million people



BOARD OF WATER SUPPLY RATES

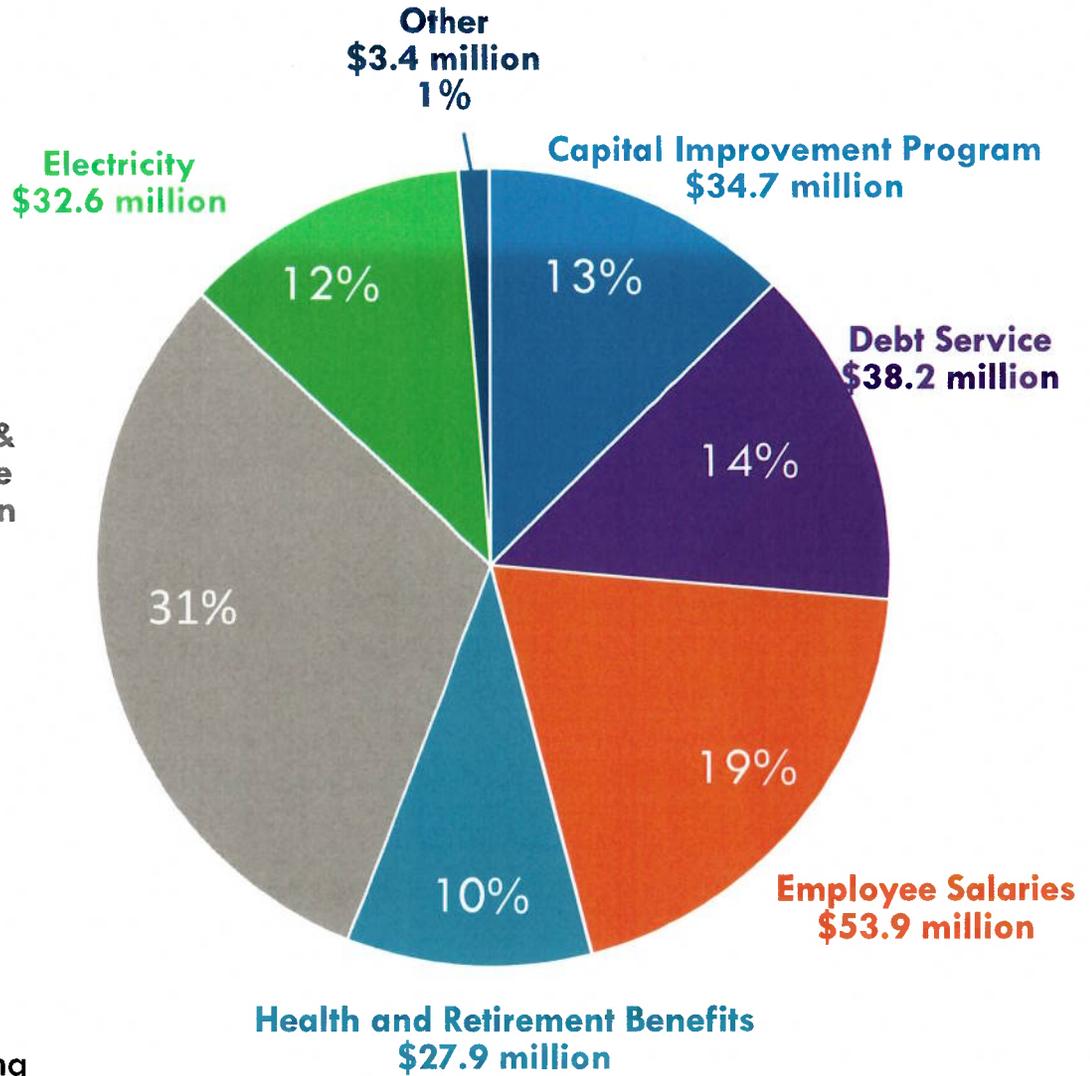
- The **Board of Water Supply** is
 - **Semi-autonomous** agency of the City and County of Honolulu.
 - Solely **funded by ratepayers**
 - Receives **no funding** from property taxes.
- Rates:
 - **Only apply to water**, not sewer.
 - Are approved by our board.
- Wastewater charges are determined by the Dept of Environmental Services and approved by the City Council.



WHERE YOUR MONEY GOES

Operating Fund Expenditures
Fiscal Year 2024
\$276.4 million*

Operations & Maintenance
\$85.6 million



* Individual amounts may not total due to rounding

TOTAL CAPITAL IMPROVEMENT PROJECTS (2018-2023)

Planning/Design Phase	196 PROJECTS	\$134,472,236
<u>Construction Phase</u>	<u>298 PROJECTS</u>	<u>\$635,069,548</u>
Total	494 PROJECTS	\$769,541,784





**COVID-19 CAUSED CHANGES IN CUSTOMER
WATER USE PATTERNS**

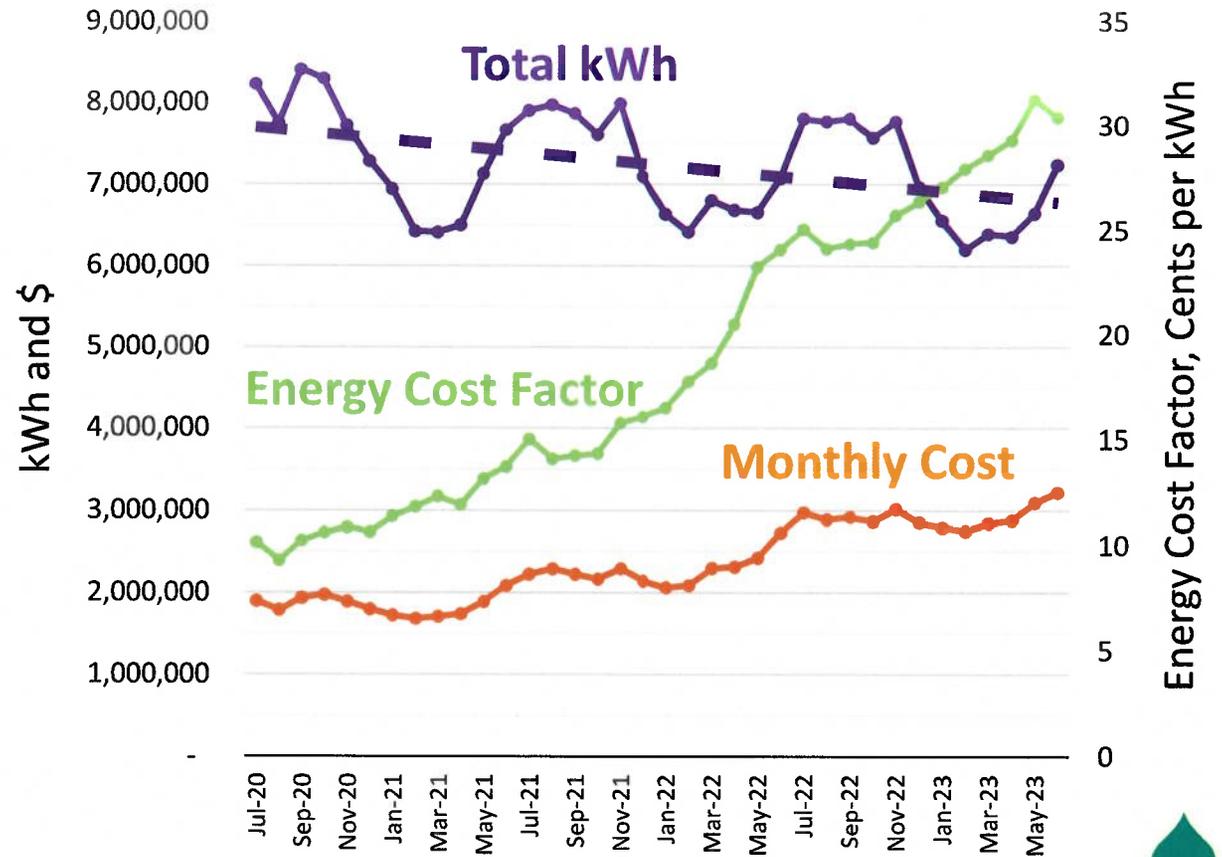
INFLATION HAS DECREASED OUR PURCHASING POWER



POWER COSTS TRENDING SHARPLY UPWARD

FY 2023 electricity costs \$33 million

\$5.5 million (20%) over budget



RED HILL RESPONSE REQUIRES LARGE INVESTMENTS IN NEW BWS FACILITIES

- **Monitoring wells** for information on how the contamination is moving and **exploratory wells** to find new sources outside of its path
- Replace **17.5 million gallons per day** of potable water well pumping capacity
- **Undetermined:** Full impact to water quality and supply, impact to Operations & Maintenance costs, and cost recovery from Navy



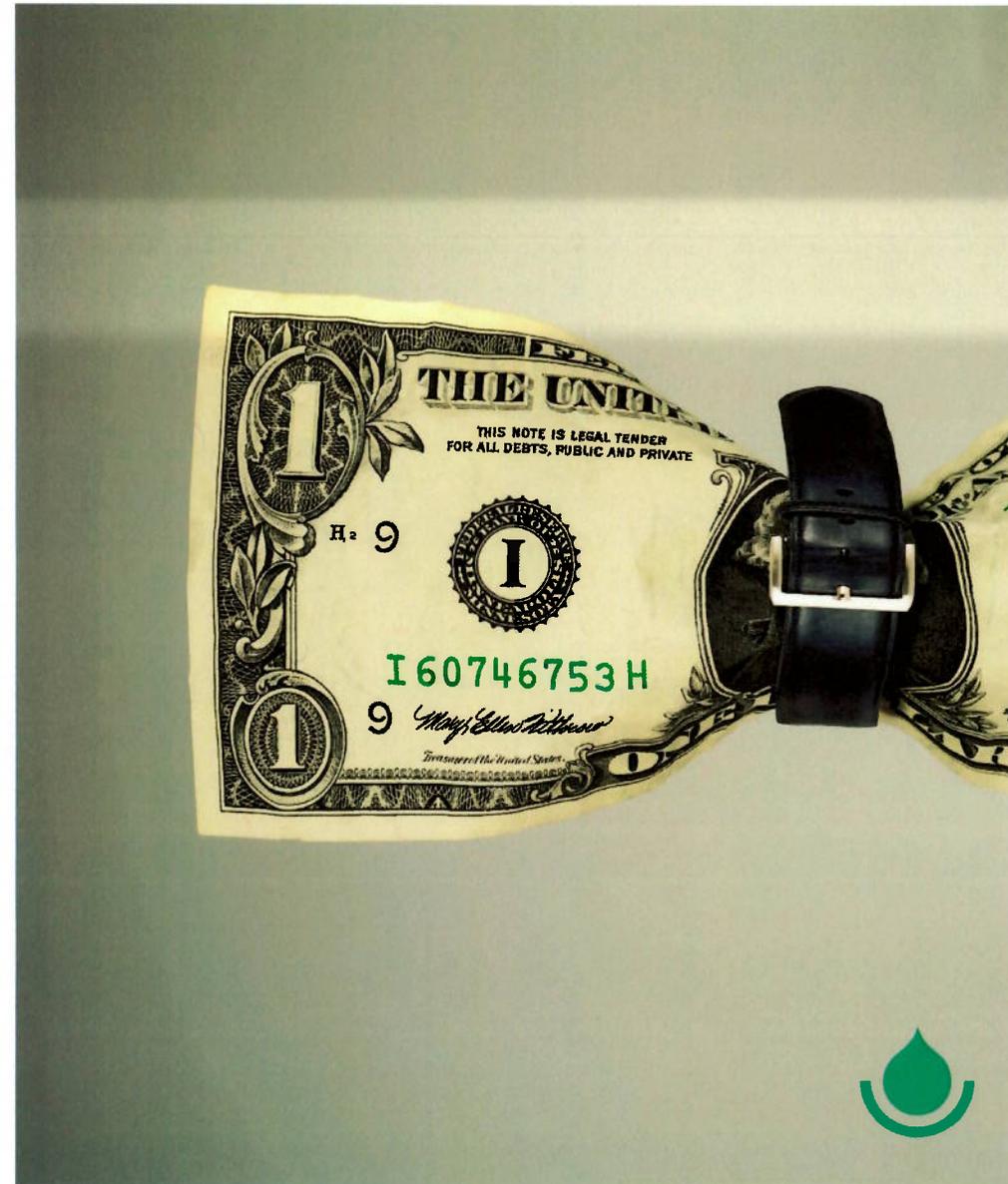
BWS HAS TIGHTENED ITS BELT

Actions

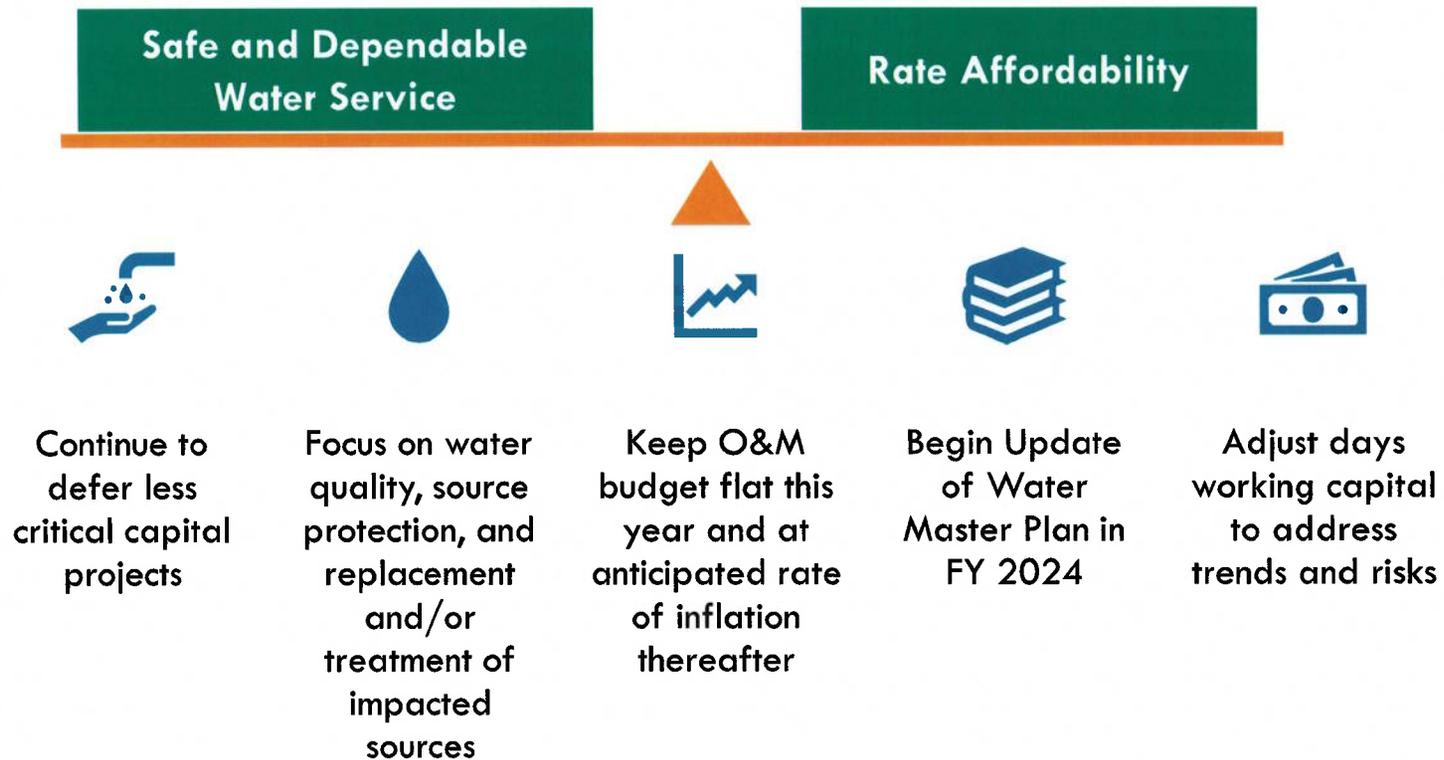
- Chose to not pass on energy cost increases to customers
- Deferred purchases of replacement vehicles and other equipment
 - Deferred less-critical capital projects

Benefits

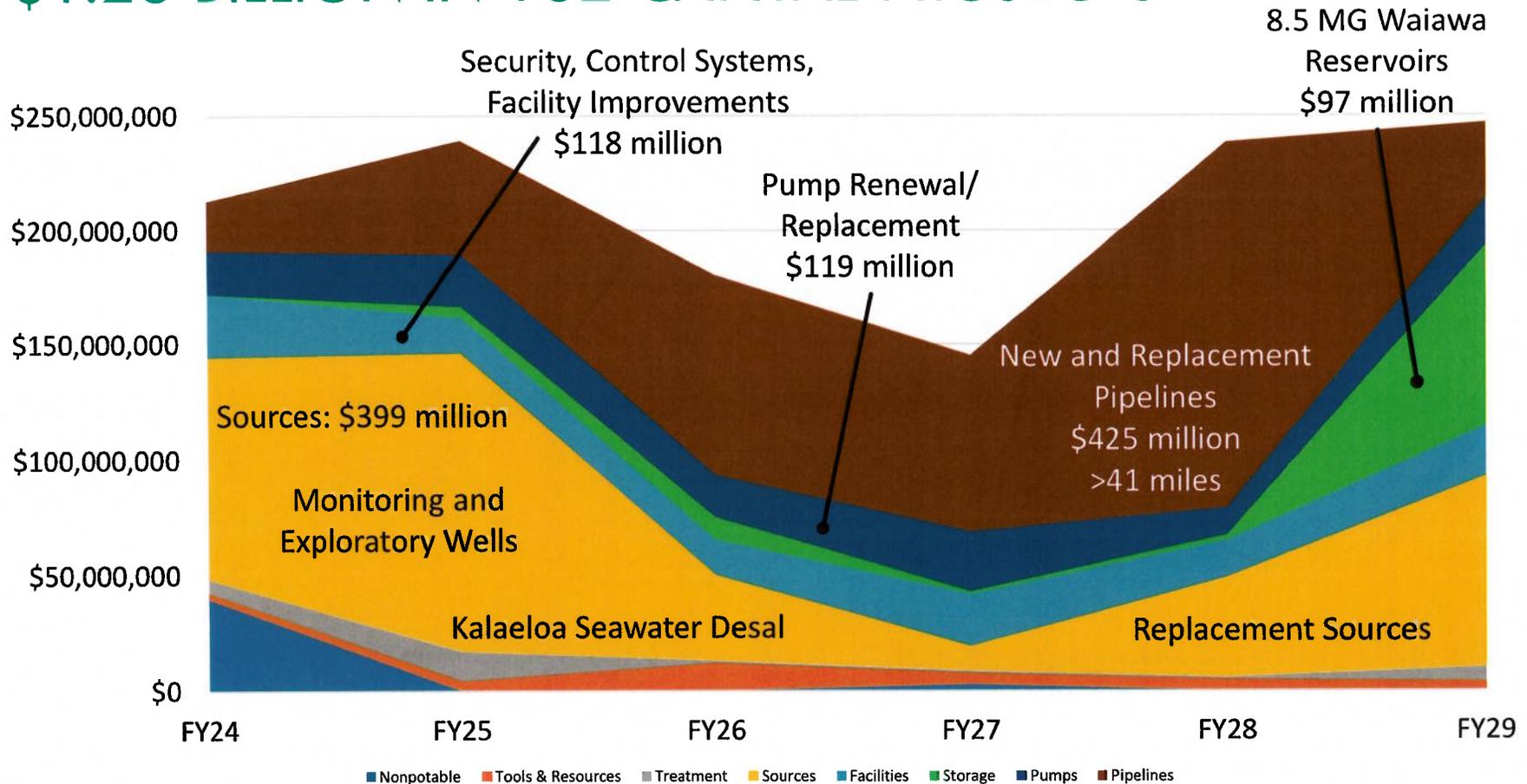
- Held to already-approved rate increases 2018-2023
 - 0.2% increase to 2024 Operations & Maintenance budget despite high inflation



OUR STRATEGY FOR RATE INCREASES STRIVES TO STRIKE A BALANCE



WHAT THE RATE INCREASES WILL PAY FOR \$1.26 BILLION IN 132 CAPITAL PROJECTS



BWS CUSTOMER CLASSES



Single-family residential



Multi-unit residential



Agricultural



Non-residential



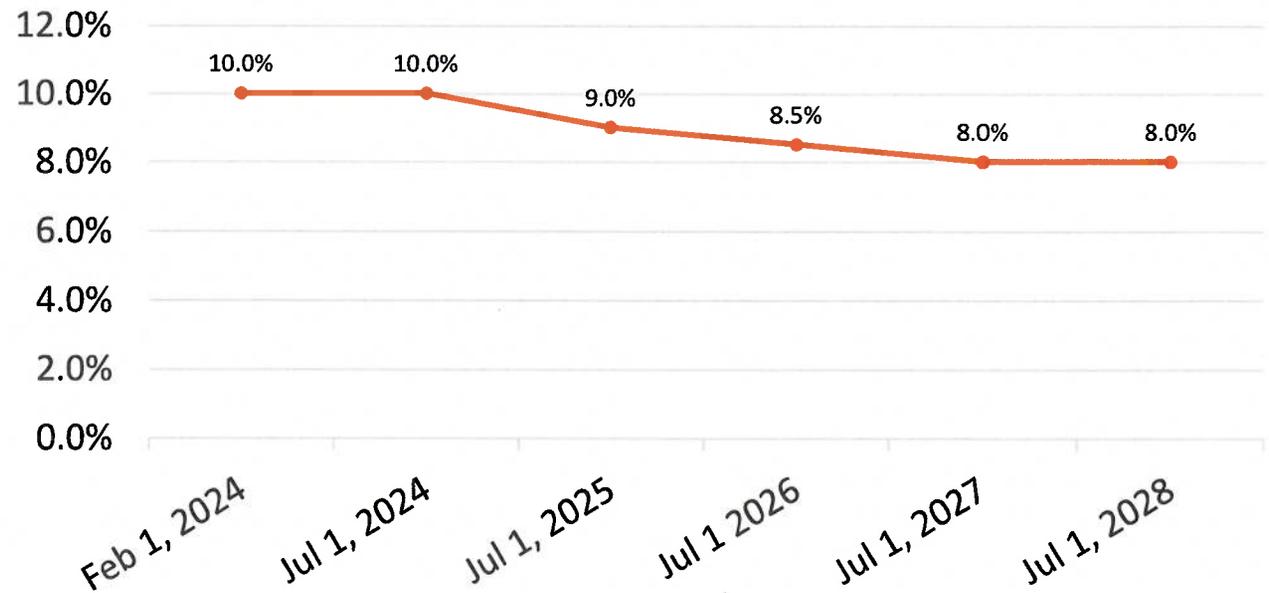
Non-potable and recycled

% of Customer Accounts*	% Usage*	Cost of Service Recovery
90%	35.4%	95%
4%	20.7%	100%
<1%	2.4%	60%
5%	33.9%	117%
<1%	6.3%	Varies from 32% to 94%

* May not equal 100% due to rounding

**WATER RATES BEING PROPOSED FOR 5 ½-YEAR PERIOD
BEGINNING FEBRUARY 1, 2024 – JUNE 30, 2029
RATES WILL REMAIN IN EFFECT UNTIL SUPERSEDED.**

**BWS planned
for rate
increases every
year**



ALL CUSTOMER CLASSES WILL HAVE SAME RATE INCREASE



Single-family residential

Tiered



Multi-unit residential

Tiered



Agricultural

Tiered



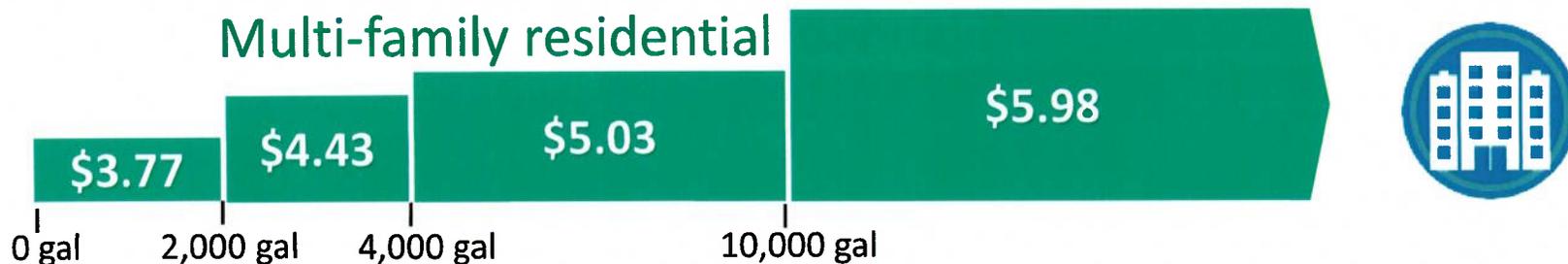
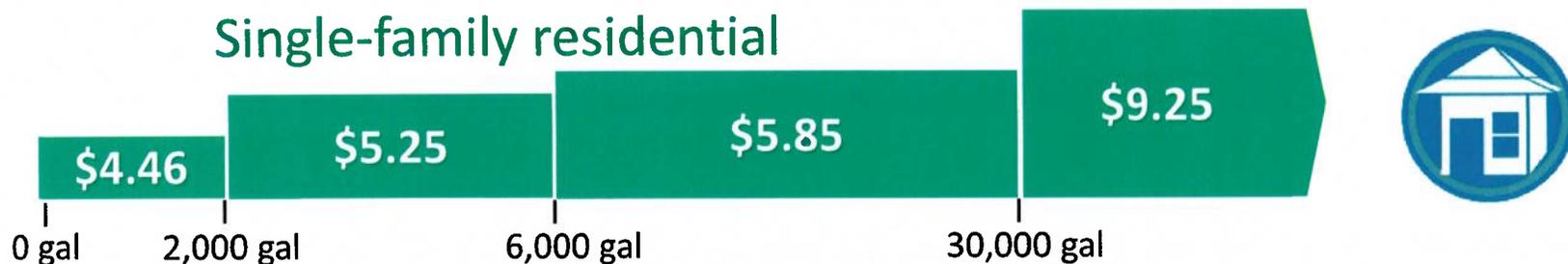
Non-residential



Non-potable and recycled

Changes may vary by tier,
but are consistent across
the class

RESIDENTIAL CUSTOMERS PAY MORE AS WATER USE INCREASES – CURRENT RATES



Current Charges per 1,000 gallons





**INCREASE FOR
ESSENTIAL NEEDS TIER
LIMITED TO
2.5% PER YEAR**

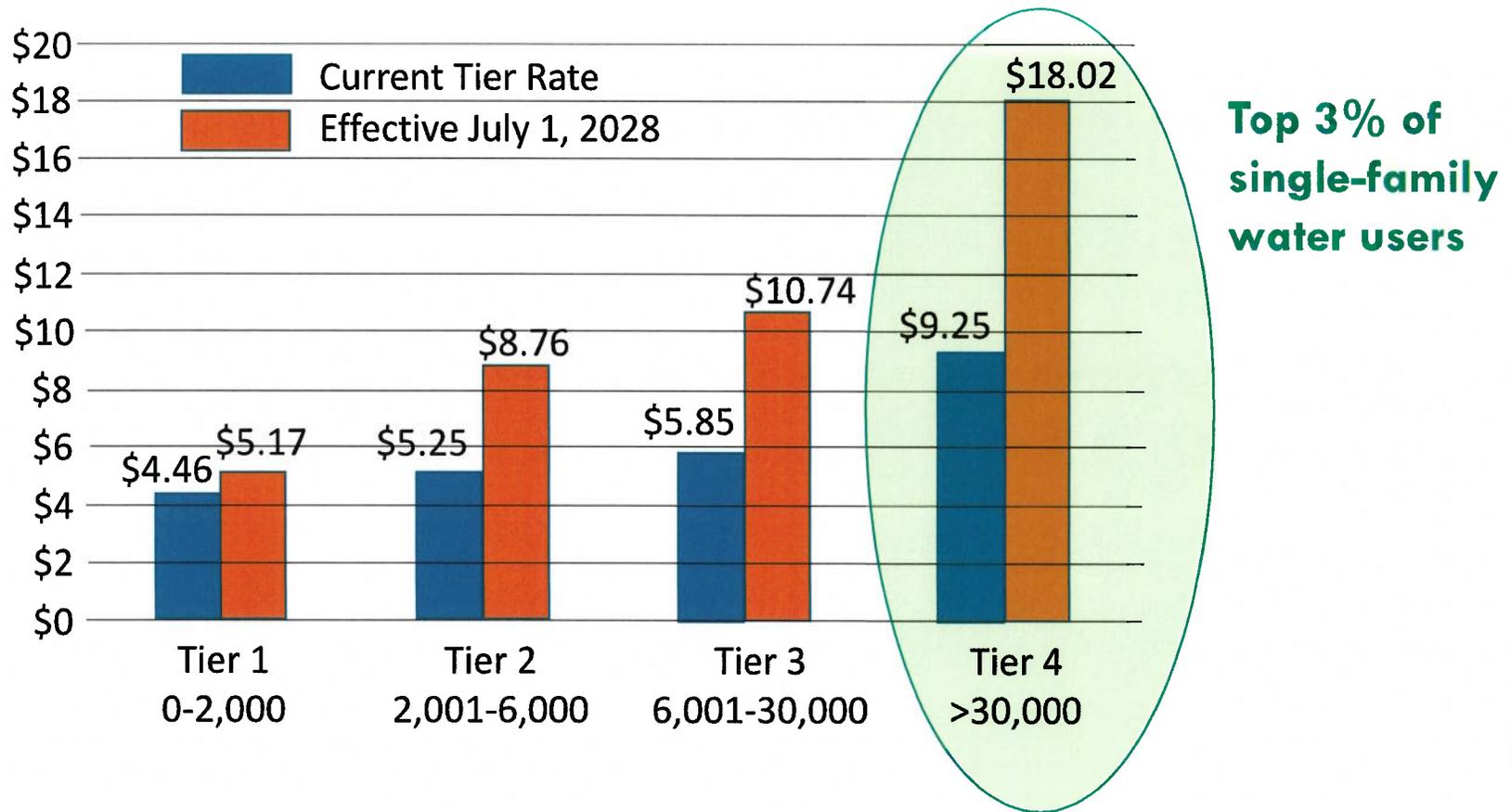
**Below-cost rate for first
2,000 gallons per month**

**All residential customers
get this rate**

**10% of BWS residential
customers use 2,000
gallons or less**



RATES DESIGNED TO ENCOURAGE CONSERVATION BY HIGHEST WATER USERS



SINGLE-FAMILY RESIDENTIAL WATER RATES 2024 - 2029



Tier	Gallons/ du/month	Current	Proposed Rates, Effective Dates					
			Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
EssN: 1	0 to 2,000	\$4.46	\$4.57	\$4.69	\$4.80	\$4.92	\$5.05	\$5.17
2	2,001 to 6,000	\$5.25	\$5.78	\$6.35	\$6.92	\$7.51	\$8.11	\$8.76
3	6,001 to 30,000	\$5.85	\$6.53	\$7.34	\$8.15	\$8.98	\$9.82	\$10.74
4	More than 30,000	\$9.25	\$10.95	\$12.32	\$13.67	\$15.06	\$16.48	\$18.02

EssN – Essential needs

Rates are in \$ per thousand gallons

du – dwelling unit

PROPOSED: For Discussion Only



HOW TO CALCULATE YOUR WATER BILL



Tier	Gallons/du/month	Current Water Rate	Thousands of Gallons of Usage (k-gal)	Extended Amount \$
EssN: 1	0 to 2,000	\$4.46	X 2	= \$8.92
2	2,001 to 6,000	\$5.25	X 4	= \$21.00
3	6,001 to 30,000	\$5.85	X 2	= \$11.70
4	More than 30,000	\$9.25	X 0	= \$0
Monthly Customer Charge (5/8 and 3/4-inch Meter)		\$12.09		+ \$12.09
Total Bill Amount				\$53.71

Example:
 Single-family residence
 3/4-inch meter
 Usage amount 8,510 gallons
 Usage is rounded down to the nearest 1,000 gallons (k-gal)
 = 8 k-gals



PROPOSED: For Discussion Only

MONTHLY CUSTOMER CHARGE BASED ON WATER METER SIZE



Meter Size	Current	Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
5/8"	12.09	13.30	14.63	15.95	17.30	18.68	20.18
3/4"	12.09	13.30	14.63	15.95	17.30	18.68	20.18
1"	15.28	16.81	18.49	20.15	21.87	23.62	25.50
1.5"	17.41	19.15	21.07	22.96	24.91	26.91	29.06
2"	43.45	47.80	52.57	57.31	62.18	67.15	72.52
3"	53.55	58.91	64.80	70.63	76.63	82.76	89.38
4"	101.92	112.11	123.32	134.42	145.85	157.52	170.12
6"	181.64	199.80	219.78	239.56	259.93	280.72	303.18
8"	276.78	304.46	334.90	365.05	396.07	427.76	461.98
12"	598.53	658.38	724.22	789.40	856.50	925.02	999.02



PROPOSED: For Discussion Only

COMPARING WATER BILLS – **ESSENTIAL NEEDS TIER – 10% OF SINGLE-FAMILY RESIDENTIAL**

The Low Water User (2,000 gallons per month)

Current Bill	Future Bill at Proposed Rates					
	Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
\$21.01	\$22.44	\$24.00	\$25.55	\$27.15	\$28.78	\$30.52
\$ Change	\$1.43	\$1.56	\$1.55	\$1.60	\$1.63	\$1.75
% Change	6.8%	6.9%	6.5%	6.2%	6.0%	6.1%



PROPOSED: For Discussion Only

COMPARING WATER BILLS – AVERAGE WATER USER SINGLE-FAMILY RESIDENTIAL

The Average Water User
(9,000 gallons per month)

Current Bill	Future Bill at Proposed Rates					
	Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
\$59.56	\$65.12	\$71.44	\$77.69	\$84.13	\$90.70	\$97.80
\$ Change	\$5.56	\$6.32	\$6.25	\$6.44	\$6.57	\$7.10
% Change	9.3%	9.7%	8.8%	8.3%	7.8%	7.8%



PROPOSED: For Discussion Only

COMPARING WATER BILLS – HIGH WATER USER – TOP 3% OF SINGLE-FAMILY RESIDENTIAL

The High Water User
(35,000 gallons per month)

Current Bill	Future Bill at Proposed Rates					
	Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
\$228.66	\$256.94	\$287.22	\$317.15	\$347.96	\$379.42	\$413.49
\$ Change	\$28.28	\$30.28	\$29.93	\$30.81	\$31.46	\$34.07
% Change	12.4%	11.8%	10.4%	9.7%	9.0%	9.0%



PROPOSED: For Discussion Only

MULTI-UNIT RESIDENTIAL WATER RATES 2024 - 2029



Tier	Gallons/ du/month	Current	Proposed Rates, Effective Dates					
			Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
EssN: 1	0 to 2,000	\$3.77	\$3.86	\$3.96	\$4.06	\$4.16	\$4.27	\$4.37
2	2,001 to 4,000	\$4.43	\$4.87	\$5.36	\$5.84	\$6.34	\$6.85	\$7.39
3	4,001 to 10,000	\$5.03	\$5.70	\$6.52	\$7.33	\$8.16	\$9.01	\$9.93
4	More than 10,000	\$5.98	\$7.21	\$8.25	\$9.27	\$10.33	\$11.40	\$12.57

EssN – Essential needs

Rates are in \$ per thousand gallons

du – dwelling unit



PROPOSED: For Discussion Only

MULTI-UNIT RESIDENTIAL SAMPLE WATER BILLS



Dwelling Units (du)	Meter Size	Monthly Usage k-gals/du	Current	Proposed Rates, Effective Dates					
				Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
272	3"	7	\$8,619	\$9,462	\$10,454	\$11,436	\$12,446	\$13,478	\$14,593
144	8"	9	\$6,260	\$6,924	\$7,712	\$8,492	\$9,294	\$10,113	\$11,000
277	8"	14	\$19,805	\$22,610	\$25,474	\$28,303	\$31,216	\$34,189	\$37,413

PROPOSED: For Discussion Only
Bill amounts rounded to nearest \$1
Excludes Fire Meter Standby Charge

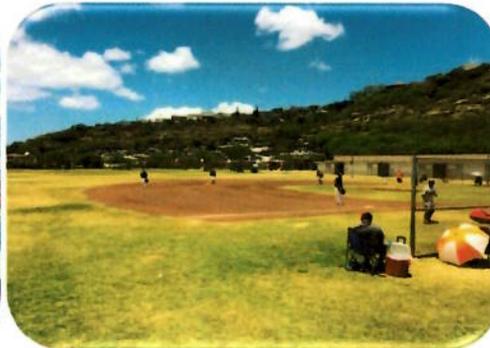


NON-RESIDENTIAL CUSTOMERS DRIVE OUR ISLAND'S ECONOMY – CURRENT RATES



Non-residential customers pay 117% of their cost of service

\$5.27 per 1,000 gallons



NON-RESIDENTIAL WATER RATES 2024 - 2029



Current	Proposed Rates, Effective Dates					
	Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
\$5.27	\$5.80	\$6.38	\$6.95	\$7.54	\$8.14	\$8.80
% Change	10.0%	10.0%	9.0%	8.5%	8.0%	8.0%

Rates are in \$ per thousand gallons

Examples: hotels, restaurants, government, shopping centers, hospitals, retail



PROPOSED: For Discussion Only

NON-RESIDENTIAL SAMPLE WATER BILLS

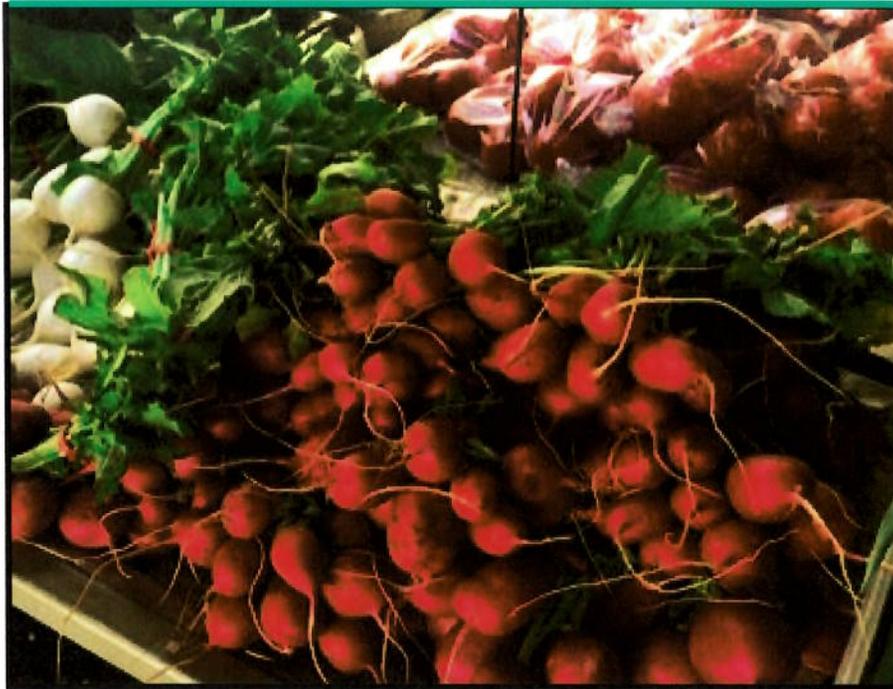
PROPOSED: For Discussion Only
Bill amounts rounded to nearest \$1



Business Type	Meter Size	Monthly Usage k-gals	Current	Proposed Rates, Effective Dates					
				Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
Restaurant	1.5"	230	\$1,230	\$1,352	\$1,488	\$1,622	\$1,759	\$1,900	\$2,052
Hotel	6"	1,526	\$8,224	\$9,046	\$9,951	\$10,846	\$11,768	\$12,710	\$13,726
Church	2"	233	\$1,271	\$1,399	\$1,538	\$1,677	\$1,819	\$1,965	\$2,122
Office Building	3"	458	\$2,467	\$2,714	\$2,985	\$3,254	\$3,531	\$3,813	\$4,118
Large Industrial User	8"	31,233	\$164,780	\$181,258	\$199,383	\$217,328	\$235,801	\$254,665	\$275,038
Large Shopping Center	3"	4,907	\$25,913	\$28,505	\$31,355	\$34,177	\$37,082	\$40,049	\$43,253



CURRENT REDUCED RATES WILL BE CONTINUED



Lower rates for
local agriculture

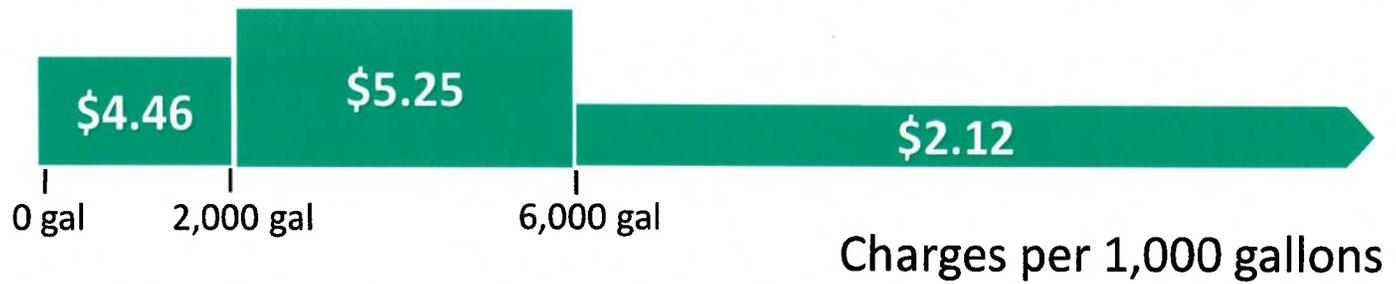
**and recycled
water**



AGRICULTURAL CUSTOMERS PAY A LOWER RATE – CURRENT RATES



<1% of BWS's total customers



Reduced rates encourage local farming of fresh, healthy produce.
Rate participation requires application and approval.



AGRICULTURAL WATER RATES

2024 - 2029



Tier	Gallons/ du/month	Current	Proposed Rates, Effective Dates					
			Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
EssN: 1	0 to 2,000	\$4.46	\$4.57	\$4.69	\$4.80	\$4.92	\$5.05	\$5.17
2	2,001 to 6,000	\$5.25	\$5.78	\$6.35	\$6.92	\$7.51	\$8.11	\$8.76
3	Over 6,000	\$2.12	\$2.33	\$2.57	\$2.81	\$3.05	\$3.29	\$3.56

EssN – Essential needs
 Rates are in \$ per thousand gallons
 du – dwelling unit



PROPOSED: For Discussion Only



COMPARING BILLS – AGRICULTURAL CUSTOMER

1-Inch Meter

98,000 gallons per month

Current Bill	Future Bill at Proposed Rates						Cumulative Change
	Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028	
\$240.24	\$263.86	\$289.84	\$315.56	\$342.04	\$369.08	\$398.27	\$158.03
% Change	9.8%	9.8%	8.9%	8.4%	7.9%	7.9%	65.8%



PROPOSED: For Discussion Only

NON-POTABLE AND RECYCLED WATER RATES 2024 - 2029

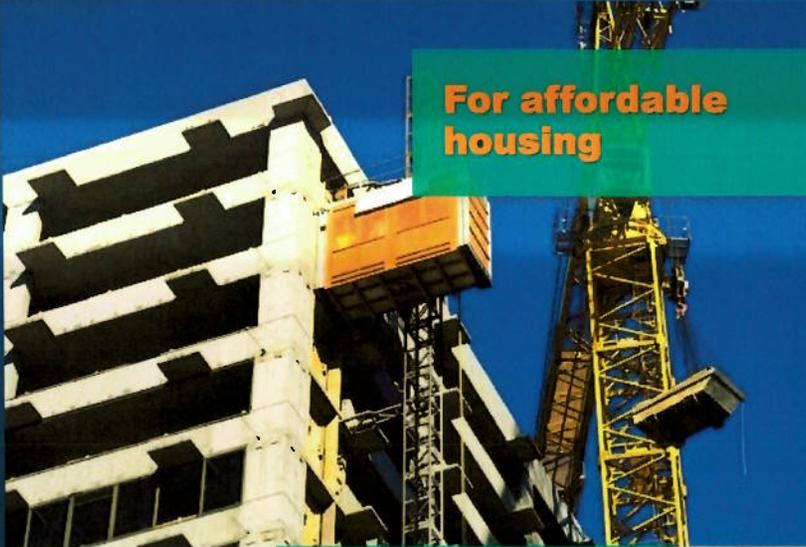


Type	Current	Proposed Rates, Effective Dates					
		Feb 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
Non-Potable	\$2.90	\$3.19	\$3.51	\$3.82	\$4.15	\$4.48	\$4.84
R-1 Golf	\$0.65	\$0.72	\$0.79	\$0.86	\$0.93	\$1.00	\$1.08
R-1 Other	\$1.96	\$2.16	\$2.37	\$2.59	\$2.80	\$3.03	\$3.27
RO	\$6.36	\$7.00	\$7.70	\$8.39	\$9.10	\$9.83	\$10.62

Rates are in \$ per thousand gallons



PROPOSED: For Discussion Only

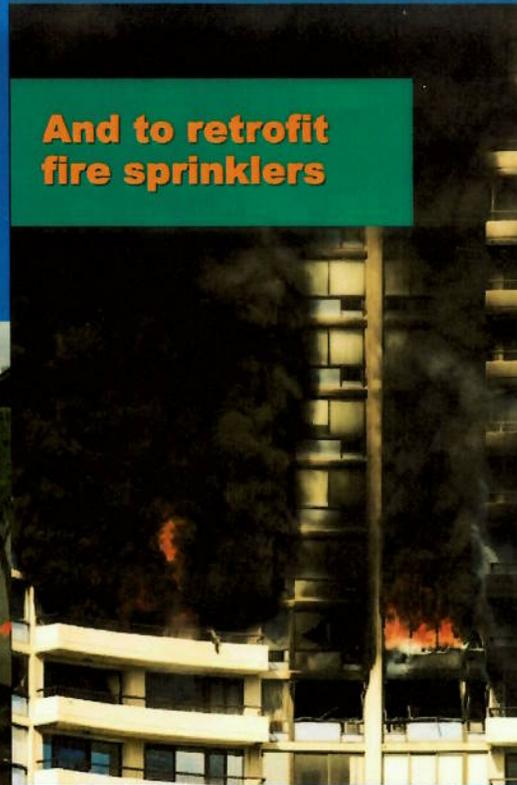


For affordable housing

CONTINUING
EXISTING FEE
WAIVERS TOO!



For homeless housing



And to retrofit fire sprinklers



EXTENSION OF EXISTING FEE WAIVERS

Waiver of Water System Facilities Charge for Qualified Affordable and Homeless Dwelling Units

The Board of Water Supply may waive the Water Systems Facilities Charges and new meter cost for qualified on-site affordable and homeless dwelling units, up to 500 dwelling units per year. The waivers will be granted when the building permit is submitted for approval. To qualify, the dwelling units must be certified as either affordable or homeless dwelling units by the appropriate agency of the City and County of Honolulu. Waiver of the Water System Facilities Charge will apply only to fixture units associated with the certified dwelling units. The amount of the meter waiver shall be calculated as a percentage of the number of certified dwelling units to the total number of dwelling units in the project. If the annual cap of 500 dwelling units has not been reached and a project is proposed that would qualify for more than the remaining number of dwelling units in that year, the Manager and Chief Engineer has the discretion to increase that year's limit.

Waiver of Meter Charges for Residential Fire Sprinkler Retrofits

The Board of Water Supply may waive the new meter charges for high rise multi-unit residential fire sprinkler retrofits.



BWS IS CONSIDERING WAIVERS FOR NEW FARMERS

Waiver of Water System Facilities Charge for New Farmers

The Board of Water Supply may waive the Water Systems Facilities Charges and new meter cost for qualified new farmers needing a ¾- or 1-inch water meter and connecting to the BWS system for the first time. A new farmer is defined as any entity starting up a new agricultural enterprise that will be actively growing crops and/or raising livestock for food purposes, or dairy farming on a commercial basis, that does not already have a meter on the BWS system for the purpose of farming. Existing farming operations and expansion of existing operations do not qualify. The BWS will have full discretion whether what is being grown or raised is for food or other purposes. The new water meter serving the agricultural operation shall only serve the farm and up to one residence / dwelling. The entity must be a registered Hawai'i farm business and have GET license. The entity must provide a written farm irrigation plan and install a BWS-approved backflow preventer at its own cost. This program will expire when the waivers granted by BWS have reached \$1 million, unless otherwise extended prior to that time. The waiver will be revoked and the installation fee and Water System Facilities Charge will become immediately due and payable if: (a) commercial agricultural operations are not maintained for at least 5 years, or (b) other violations are identified and not rectified within a specified timeline mandated by the BWS.



FIRE METER STANDBY CHARGE

Meter Size	Current	Feb 1 FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
2" and smaller	\$7.99	\$8.79	\$9.67	\$10.54	\$11.43	\$12.35	\$13.34
3"	\$10.29	\$11.32	\$12.45	\$13.57	\$14.73	\$15.90	\$17.18
4"	\$14.23	\$15.65	\$17.22	\$18.77	\$20.36	\$21.99	\$23.75
6"	\$28.44	\$31.28	\$34.41	\$37.51	\$40.70	\$43.95	\$47.47
8"	\$52.94	\$58.23	\$64.06	\$69.82	\$75.76	\$81.82	\$88.36

- For READINESS TO SERVE, applies exclusively to services for private fire protection including automatic fire sprinklers connected to alarms, fire hydrants, and wet stand pipes



NO CHANGES TO STANDBY CHARGE FOR EMERGENCY INTERCONNECTIONS

- For **EMERGENCY** interconnections or **TEMPORARY** service outages for private water systems
- Charged at the applicable quantity rate for each 1,000 gallons
- **CONTINGENT UPON IMPACTS TO BWS CUSTOMERS'** level of service and BWS's ability to meet Water System Standards requirements



NO CHANGES TO WATER SYSTEM FACILITIES CHARGE

- A **ONE-TIME CHARGE** based on water use
- Applies to :
 - All **NEW DEVELOPMENT** requiring water from the BWS's system
 - **ADDITIONAL CAPACITY** needed for an existing water service
- **EXCLUDES:**
- **DEVELOPMENTS THAT HAVE PAID** for and installed all of a water system
- Portion of the system **INSTALLED BY DEVELOPERS**, e.g. source, transmission and/or storage



NO CHANGES TO COST ADJUSTMENT FEES

- **POWER COST ADJUSTMENT:** When total power, or electricity, costs exceed the amount used in calculating rates, the Quantity Charge may be increased \$0.01 per 1,000 gallons for every \$500,000 incremental power cost overage in the following fiscal year
- **ENVIRONMENTAL REGULATIONS COMPLIANCE FEE:** The quantity charge may be increased \$0.01 per 1,000 gallons for each \$500,000 of additional costs required to incur in order to comply with any Federal or State environmental law or regulation



BWS OFFERS WATER CONSERVATION DEVICE REBATES



AND IMPLEMENTING NEW WATER CONSERVATION PROGRAMS

Top water user outreach

- Hotels, other businesses, condos and townhomes

Direct install for Kupuna living on their own

- Free low flow showerheads and faucet aerators
- Water audits of homes
- Ensure Kupuna are getting appropriate rebates

For more information go to the conservation menu tab at boardofwatersupply.com

4 COMMUNITY INFORMATION MEETINGS

25 ATTENDEES

All Meetings: 6:00 – 8:30 PM	
Kaneohe	Monday, August 14 <i>Benjamin Parker Elementary School Cafeteria</i> 45-259 Waikalua Road, Kaneohe 96744
Honolulu	Tuesday, August 15 <i>Japanese Cultural Center of Hawaii</i> 2454 S Beretania St., Honolulu 96826
Kapolei	Wednesday, August 16 <i>Kapolei Hale, Conference Rooms A/B/C</i> 1000 Uluohia Street, Kapolei 96707
Mililani	Wednesday, August 23 <i>Mililani High School</i> 95-1200 Meheula Parkway, Mililani 96789



VIDEOS OF COMMUNITY INFORMATION MEETINGS

- 92 Views on BWS Website
- All 4 meetings aired on Olelo TV at least 4 times each through late September
- All 4 meetings available on Olelo Video on Demand



GIVE YOUR INPUT ON PROPOSED RATES

Send a letter or an email to:

Board of Water Supply

Attn: Proposed Water Rates
630 South Beretania, Honolulu 96843
Email: bwsrates@hbws.org

Oct. 15, 2023



For more information, visit our website or scan this QR code with your mobile device.

Questions?

Call: (808) 748-5041

BWS Website: www.boardofwatersupply.com

Twitter: [@BWSHonolulu](https://twitter.com/BWSHonolulu)

Facebook: <http://www.facebook.com/BWSHonolulu>



21 NEIGHBORHOOD BOARD PRESENTATIONS ABOUT 420 ATTENDEES

North Shore #27	Waimanalo #32
Kuliouou-Kalani Iki #2	Wahiawa #26
Kahaluu #29	Kaimuiki #4
Diamond Head-Kapahulu- St. Louis Hts #5	Liliha / Puunui / Alewa / Kamehameha Heights #14
Mililani-Waipio #25	Makakilo-Kapolei #34
Waipahu #22	Kailua #31
Pearl City #21	Nuuanu / Punchbowl #12
Liliha-Kapalama #14	McCully #8



7 INTEREST GROUP PRESENTATIONS ABOUT 150 ATTENDEES

- Stakeholder Advisory Group
- Commercial Stakeholder Advisory Group
- Chamber of Commerce Hawaii: Government Relations
- House District 44 – Representative Darius Kila
- Kukui Plaza
- Green Business Conference
- Stormwater Stakeholder Advisory Group



SPECIAL EDITION OF WATER MATTERS MAILED TO 170,000 ACCOUNT HOLDERS



WATER MATTERS

Safe, dependable, and affordable water, now and into the future.

Vol. 10 – Issue 3

Special Water Rates Issue

Fall 2023

BWS Seeks Comments on Proposed Water Rate Hikes

The Honolulu Board of Water Supply (BWS) is proposing rate adjustments so we can continue to provide safe and dependable water to the one million people we serve on Oahu, now and in the future.

As a semi-autonomous City agency, the BWS is financially self-sufficient; no tax revenues are used to finance BWS operations. Infrastructure improvements and operations are funded mostly by rate revenues.

Since 2020, we have all been impacted by the global pandemic and the many associated stressors, financial and otherwise, that have come from it. During this time, the BWS has gone to great lengths to minimize the impacts to our customers. In addition to our extensive customer assistance programs, we will have a "flat" Operations and Maintenance budget for 2024, and are deferring purchases of replacement vehicles and other equipment, deferring less-critical capital projects, and not passing on energy cost increases to our customers. Unfortunately, our water supply is under unprecedented threat from the Red Hill fuel crisis. The as-yet undetermined risk of Per- and Polyfluoroalkyl Substances (PFAS), also known as "forever chemicals," in widespread use in common household products since the 1940s and 1950s, poses uncertainty about what will be our highest project priorities in the future. What we do know with certainty is that over the next few years the BWS will continue to invest in infrastructure projects to replace pipelines, pumps, and reservoirs; sustain our water supply by establishing new wells to replace those impacted by Red Hill and building our first desalination plant in Kaleloa; and expand our water conservation programs while continuing to invest in watershed protection.



BWS's revenues will need to increase to meet anticipated operating and infrastructure improvement expenses.

The proposed draft rate adjustments shown on the following pages are needed to accomplish the following objectives:

- Focus on water quality, source protection, and replacement and/or treatment of impacted sources
- Focus on maintaining and replacing our most critical infrastructure
- Begin update of the Water Master Plan in 2024
- Adjust the number of days of working capital to address trends and risks

Proposed draft rate adjustments may be implemented starting January 1, 2024. Please note: these are proposed WATER rates, NOT sewer rates.





HONOLULU CITY COUNCIL

Ke Kanihela o ke Kalana o Honolulu

- 7 City Council Member Briefings
- Briefing to Managing Director on July 25, 2023



BWS WEBSITE VISITS

Over 1,759 views of rates
Over 745 unique users



SEARCH...

ABOUT US

CONTACT

MY ACCOUNT

PERMITS

CUSTOMER SERVICE

WATER QUALITY

CONSERVATION

WATER RESOURCES

NEWS & EVENTS



VIEW OR PAY
BILLS ONLINE

VIEW NOW



DRAFT PROPOSED
WATER RATES

VIEW NOW



RED HILL
UPDATES

PROTECT OAHU WATER



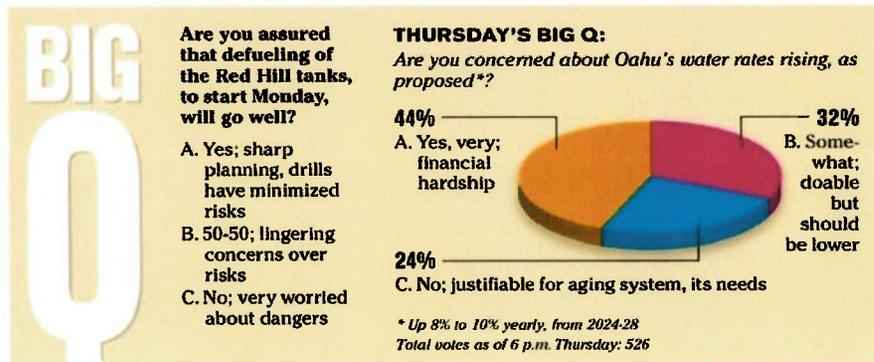
EMERGENCY
PREPAREDNESS

GET INFO



MEDIA

- Interview with Catherine Cruz, HPR
- Answered questions for Kokua Line in the Star Advertiser
- The Big Q in the Star Advertiser
- Civil Beat article September 18, 2023



Vote by 6 p.m. today on our website at staradvertiser.com. Results will run in tomorrow's edition and online. This is not a scientific poll; results reflect the opinions of only those voting.

Struggling To Get By

Oahu Homeowners And Businesses May Soon See Higher Water Bills

BWS says additional spending required because of Red Hill-related problems and inflation is forcing it to charge higher rates



By Ben Angarone / September 18, 2023
Reading time: 6 minutes.



Water prices may be increasing more than 50% over the next five years for most Oahu customers, if new rates proposed by the Honolulu Board of Water Supply are approved this fall.

BWS blamed inflation, the need to invest in new facilities because of fallout from the Navy's Red Hill water crisis, rising electricity costs and pandemic effects for the new rate proposals.

The proposed increases for water rates and water meter charges are 10% on Jan. 1, 2024; 10% on July 1, 2024; 9% on July 1, 2025; 8.5% on July 1, 2026; 8% on July 1, 2027, and 8% on July 1, 2028.

Some variation exists for single family residential customers, who are priced based on tier of water usage in order to encourage conservation. Residents who use less water would see a smaller rate increase.





DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM SMALL BUSINESS REGULATORY REVIEW BOARD

- Prepared Small Business Impact Statement and submitted to SBRRB (required prior to public hearing)
- SBRRB Review (August 17, 2023)
- Next Steps
 - Provide at least 30-days notice of public hearing
 - Public hearing with full consideration of all written and oral submissions (Tentative: November 27, 2023)
 - Submit post-hearing Small Business Impact Statement
 - Becomes effective 10 days after filing with City Clerk, or later as specified

**SBRRB made
unanimous
recommendation to
proceed to public
hearing**

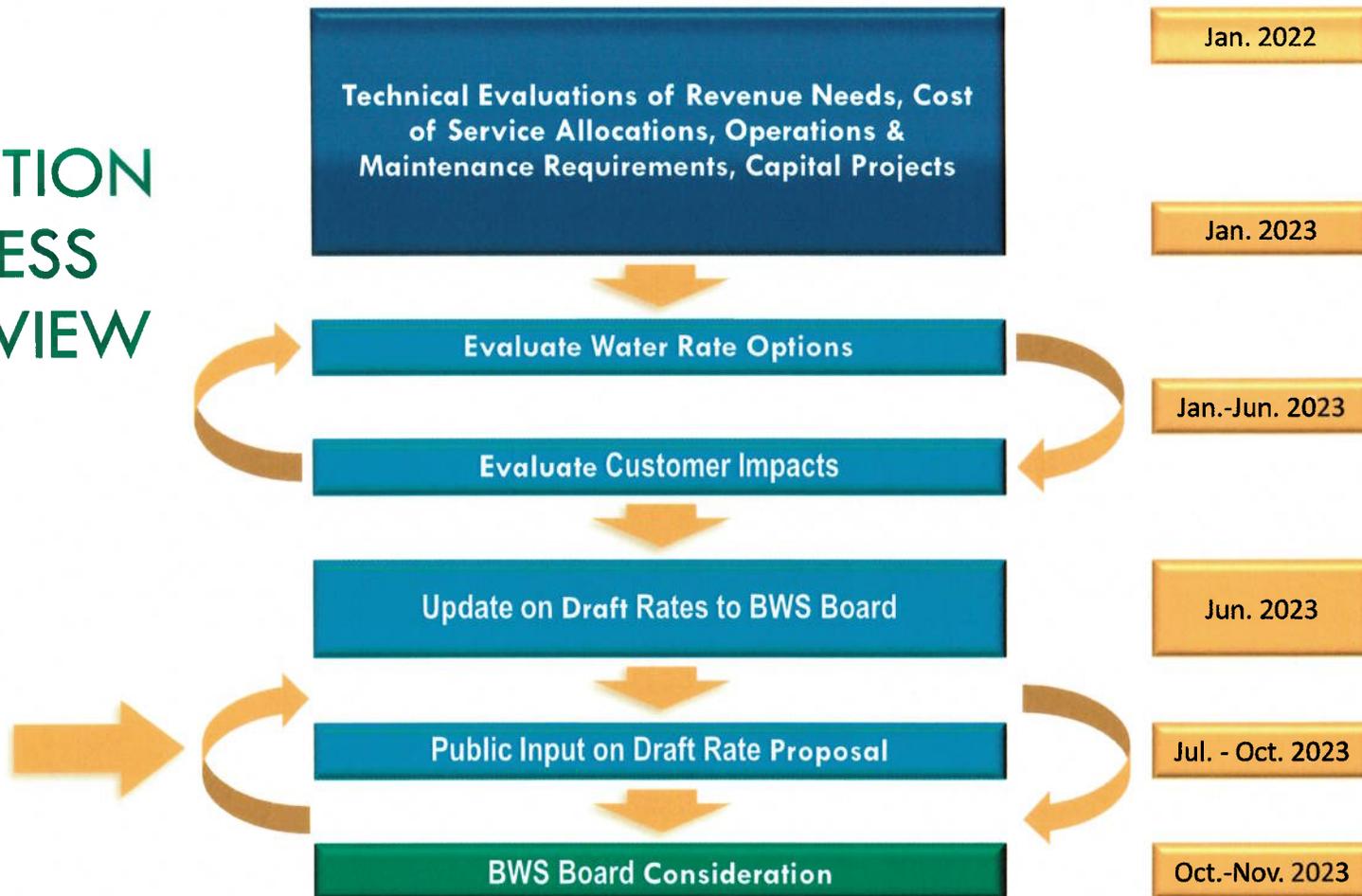
[HRS 91 and 201M]



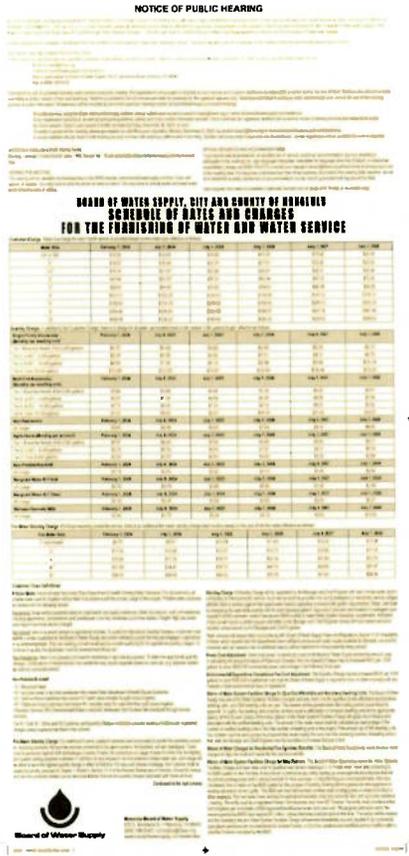
47 STAKEHOLDER ADVISORY GROUP MEETINGS SINCE MAY 2015



RATE ADOPTION PROCESS OVERVIEW



PROPOSED NOTICE OF PUBLIC HEARING



NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the BOARD OF WATER SUPPLY, CITY AND COUNTY OF HONOLULU, will hold a PUBLIC HEARING in the Board Room, Public Service Building, 630 South Beretania Street, Honolulu, HI 96843, on MONDAY, NOVEMBER 27, 2023, at 2:00 p.m., or soon thereafter, where all interested persons shall be afforded the opportunity of being heard on the adoption of the Proposed Amendment to the Schedule of Rates and Charges of the Board of Water Supply for Fiscal Years (FY) 2024 through 2029, Effective February 1, 2024 through June 30, 2029 to Remain in Effect Until Superseded by a Revision to the Schedule of Rates and Charges.

Limited seating will be available in the Board Room for testifiers or those wishing to attend the meeting in person. The public may also view the livestream of the meeting online at www.boardofwatersupply.com/live.

TESTIMONY MAY BE SUBMITTED AS FOLLOWS:

Written testimony should include the submitter's address, email address, and phone number. Testimony must be received by Monday, November 27, 2023, at noon. Submit written testimony by:

- Email to board@hbws.org
- Online at boardofwatersupply.com/testimony
- Mail or hand deliver to Board of Water Supply, 630 S. Beretania Street, Honolulu, HI 96843
- Fax to (808) 748-5079

Oral testimony will be accepted remotely and in person during the meeting. Pre-registration is encouraged to facilitate as much remote and in-person testimony as reasonably possible during the time allotted. Testifiers also should consider submitting a written version of their oral testimony. Testimony is limited to two (2) minutes and shall be presented by the registered speaker only. Testimony submitted in writing or orally, electronically or in person, for use in the meeting process is public information. All testimony will be included as part of the approved meeting minutes at boardofwatersupply.com/boardmeetings.

- To testify remotely using the Zoom videoconferencing platform, please submit your request by email to board@hbws.org or online at boardofwatersupply.com/testimony. Zoom registration instructions, as well as participant guidelines, will be sent to the contact information provided. Once confirmed as registered, testifiers will receive an email containing the links and instructions to join the Zoom session. Submit your request to testify remotely by Friday, November 24, 2023, at noon.
- To testify in person at the meeting, please pre-register by submitting your request by Monday, November 27, 2023, by email to board@hbws.org or online at boardofwatersupply.com/testimony. In-person testifiers should check in with building security and then with testimony staff located in the lobby. Testifiers will be escorted to and from the Board Room. On-site registration will be available for walk-in requests.

MATERIALS AVAILABLE FOR INSPECTION

Meeting materials ("board packet" under HRS Section 92-7.5) are accessible at boardofwatersupply.com/boardmeetings.

VIEWING THE MEETING

The meeting will be viewable via livestreaming on the BWS website, www.boardofwatersupply.com/live. Video will appear on screen. You may have to click the arrow on video to start it. You may have to unmute audio as muted audio tends to be the default setting.

SPECIAL REQUESTS AND ACCOMMODATIONS

If you require special assistance, an auxiliary aid or service, and/or an accommodation due to a disability to participate in this meeting (i.e., sign language interpreter, interpreter for language other than English, or wheelchair accessibility), please call (808) 748-5172 or email your request to board@hbws.org at least three business days prior to the meeting date. If a response is received less than three business days before the meeting date deadline, we will try to obtain the auxiliary aid/service or accommodation, but we cannot guarantee that request will be filled.

Upon request, this notice is available in alternate formats such as large print, Braille, or electronic copy.



BOARD OF WATER SUPPLY, CITY AND COUNTY OF HONOLULU SCHEDULE OF RATES AND CHARGES FOR THE FURNISHING OF WATER AND WATER SERVICE

Customer Charge: There is a charge for each month service is provided based on the meter size, effective as follows:

Meter Size	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
5/8" or 3/4"	\$13.30	\$14.63	\$15.95	\$17.30	\$18.68	\$20.08
1"	\$16.81	\$18.49	\$20.15	\$21.87	\$23.62	\$25.50
1 1/2"	\$19.15	\$21.07	\$22.96	\$24.91	\$26.91	\$29.05
2"	\$47.80	\$52.57	\$57.31	\$62.18	\$67.15	\$72.52
3"	\$58.91	\$64.80	\$70.63	\$76.63	\$82.76	\$89.38
4"	\$112.11	\$123.32	\$134.42	\$145.85	\$157.52	\$170.12
6"	\$199.80	\$219.78	\$239.56	\$259.93	\$280.72	\$303.18
8"	\$304.46	\$334.90	\$365.05	\$396.07	\$427.76	\$461.98
12"	\$658.38	\$724.22	\$789.40	\$856.50	\$925.02	\$999.02

Quantity Charge: In addition to the Customer Charge, there is a charge for all water use rounded down to the nearest 1,000 gallons (k-gal), effective as follows:

Single-Family Residential (Monthly per dwelling unit)	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
Tier 1 Essential Needs: First 2,000 gallons	\$4.57	\$4.89	\$4.80	\$4.92	\$5.05	\$5.17
Tier 2: 2,001 – 6,000 gallons	\$5.78	\$6.35	\$6.92	\$7.51	\$8.11	\$8.76
Tier 3: 6,001 – 30,000 gallons	\$6.53	\$7.34	\$8.15	\$8.98	\$9.82	\$10.74
Tier 4: Over 30,000 gallons	\$10.85	\$12.32	\$13.67	\$15.06	\$16.48	\$18.02
Multi-Unit Residential (Monthly per dwelling unit)	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
Tier 1 Essential Needs: First 2,000 gallons	\$3.86	\$3.96	\$4.06	\$4.16	\$4.27	\$4.37
Tier 2: 2,001 – 4,000 gallons	\$4.87	\$5.36	\$5.84	\$6.34	\$6.85	\$7.39
Tier 3: 4,001 – 10,000 gallons	\$5.70	\$6.52	\$7.33	\$8.16	\$9.01	\$9.93
Tier 4: Over 10,000 gallons	\$7.21	\$8.25	\$9.27	\$10.33	\$11.40	\$12.57
Non-Residential	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
All Usage	\$5.80	\$6.38	\$6.95	\$7.54	\$8.14	\$8.80
Agricultural (Monthly per account)	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
Tier 1 Essential Needs: First 2,000 gallons	\$4.57	\$4.89	\$4.80	\$4.92	\$5.05	\$5.17
Tier 2: 2,001 – 6,000 gallons	\$5.78	\$6.35	\$6.92	\$7.51	\$8.11	\$8.76
Tier 3: Over 6,000 gallons	\$2.33	\$2.57	\$2.81	\$3.05	\$3.29	\$3.56
Non-Potable/Brackish	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
All Usage	\$3.19	\$3.51	\$3.82	\$4.15	\$4.48	\$4.84
Recycled Water R-1 Golf	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
All Usage	\$0.72	\$0.79	\$0.86	\$0.93	\$1.00	\$1.08
Recycled Water R-1 Other	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
All Usage	\$2.16	\$2.37	\$2.59	\$2.80	\$3.03	\$3.27
Reverse Osmosis (RO)	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
All Usage	\$7.00	\$7.70	\$8.39	\$9.10	\$9.83	\$10.82

Fire Meter Standby Charge: For those receiving private fire service, there is an additional fire meter standby charge billed monthly based on the size of the fire meter effective as follows:

Fire Meter Size	February 1, 2024	July 1, 2024	July 1, 2025	July 1, 2026	July 1, 2027	July 1, 2028
2" and smaller	\$8.79	\$9.67	\$10.54	\$11.43	\$12.35	\$13.34
3"	\$11.32	\$12.45	\$13.57	\$14.73	\$15.90	\$17.18
4"	\$15.85	\$17.22	\$18.77	\$20.36	\$21.99	\$23.75
6"	\$31.28	\$34.41	\$37.51	\$40.70	\$43.95	\$47.47
8"	\$58.23	\$64.06	\$69.82	\$75.76	\$81.82	\$88.36



Customer Class Definitions

Potable Water means all water that meets State Department of Health Drinking Water Standards. For all customers, all potable water used for irrigation will be billed in accordance with the primary usage of the property. Potable water customers are divided into the following classes:

Residential: Single-family residential refers to single-family and duplex residences. Multi-Unit refers to multi-unit residences including apartments, condominiums and townhouses. Low-rise constitutes up to three stories in height. High-rise constitutes higher than three stories in height.

Agricultural: refers to a parcel devoted to agricultural activities. To qualify for Agricultural Quantity Charges, a customer must submit a written application to the Board of Water Supply and furnish satisfactory proof that they are engaged in agriculture on a commercial basis. Only one dwelling unit will be allowed on a meter qualifying for the agricultural quantity charges. To continue to qualify, the application must be renewed each fiscal year.

Non-Residential refers to any property not used for residential or agricultural purposes. To determine appropriate quantity charges, combinations of residential and non-residential may require separate meters for each use; e.g. separate residential and non-residential meters.

Non-Potable/Brackish

- R-1 Recycled Water
- R-1 recycled water is recycled wastewater that meets State Department of Health Reuse Guidelines.
- R-1 Golf are those customers that receive R-1 water used primarily for golf course irrigation.
- R-1 Other are those customers that receive R-1 recycled water for uses other than golf course irrigation.
- Reverse Osmosis (RO) Demineralized Water is recycled wastewater that has been demineralized through reverse osmosis.

The R-1 Golf, R-1 Other and RO Customer and Quantity Charges shall not supersede existing or individually negotiated charges unless expressly identified in the contract.

Fire Meter Standby Charge: For readiness to serve, applies to services used exclusively for private fire protection purposes, including automatic fire sprinkler services connected to the alarm systems, fire hydrants, and wet standpipes. These must be protected against theft and leakage or waste of water. No connections or usage of water for other than fire-fighting and system testing purposes is allowed. In addition, for any misuse or non-fire protection related water use, such usage will be billed at twice the highest quantity charge in effect at that time. For any such misuse or leakage, the Customer shall be subject to penalty pursuant to Chapter 1, Article 3, Section 1-3.1 of the Revised Ordinances of Honolulu. Except for misuse and non-fire protection related use as described above, there are no quantity charges associated with these services.

Continued in the next column



Board of Water Supply

Honolulu Board of Water Supply
 630 S Beretania St. • Honolulu, HI 96843
 (808) 748-5041 • contactus@hbws.org
www.boardofwatersupply.com/waterrates



Standby Charge: A Standby Charge will be negotiated by the Manager and Chief Engineer with each private water system contracting for inter-connection service. Such service shall be provided only during emergency or temporary service outages with the intent to protect against interrupted water service supporting normal private system requirements. Water used shall be charged at the applicable quantity rate for each thousand gallons. Approval of activation and duration is contingent upon impacts to BWS customers' level of service and BWS's ability to meet Water System Standards requirements. Activation of service will require a written request submitted to the Manager and Chief Engineer at least 48 hours before service is required, unless waived by the Manager and Chief Engineer.

Water service shall be provided in accordance with Board of Water Supply Rules and Regulations Section 1-101 Availability of Water which requires that the Department have sufficient pressure and water supply available for domestic use and fire protection and can assume new or additional service without detriment to those presently being served.

Power Cost Adjustment: When total power or electricity costs to the Board of Water Supply exceed the amount used in calculating the annual Schedule of Rates and Charges, then the Quantity Charge may be increased \$0.01 per 1,000 gallons for every \$500,000 incremental power cost coverage in the following fiscal year.

Environmental Regulations Compliance Fee Cost Adjustment: The Quantity Charge may be increased \$0.01 per 1,000 gallons for each \$500,000 of additional costs that the Board of Water Supply is required to incur in order to comply with any Federal or State environmental laws or regulations.

Waiver of Water System Facilities Charge for Qualified Affordable and Homeless Dwelling Units: The Board of Water Supply may waive the Water Systems Facilities Charges and new meter cost for qualified on-site affordable and homeless dwelling units, up to 500 dwelling units per year. The waivers will be granted when the building permit is submitted for approval. To qualify, the dwelling units must be certified as either affordable or homeless dwelling units by the appropriate agency of the City and County of Honolulu. Waiver of the Water System Facilities Charge will apply only to future units associated with the certified dwelling units. The amount of the meter waiver shall be calculated as a percentage of the number of certified dwelling units to the total number of dwelling units in the project. If the annual cap of 500 dwelling units has not been reached and a project is proposed that would qualify for more than the remaining number of dwelling units in that year, the Manager and Chief Engineer has the discretion to increase that year's limit.

Waiver of Meter Charges for Residential Fire Sprinkler Retrofits: The Board of Water Supply may waive the new meter charges for high rise multi-unit residential fire sprinkler retrofits.

Waiver of Water System Facilities Charge for New Farmers: The Board of Water Supply may waive the Water Systems Facilities Charges and new meter cost for qualified new farmers needing a 3/4- or 1-inch water meter and connecting to the BWS system for the first time. A new farmer is defined as any entity starting up a new agricultural enterprise that will be actively growing crops and/or raising livestock for food purposes, or dairy farming on a commercial basis, that does not already have a meter on the BWS system for the purpose of farming. Existing farming operations and expansion of existing operations do not qualify. The BWS will have full discretion whether what is being grown or raised is for food or other purposes. The new water meter serving the agricultural operation shall only serve the farm and up to one residence / dwelling. The entity must be a registered Hawaii farm business and have GET license. The entity must provide a written farm irrigation plan and install a BWS-approved backflow preventer at its own cost. This program will expire when the waivers granted by BWS have reached \$1 million, unless otherwise extended prior to that time. The waiver will be revoked and the installation fee and Water System Facilities Charge will become immediately due and payable if: (a) commercial agricultural operations are not maintained for at least 5 years, or (b) other violations are identified and not rectified within a specified timeline mandated by the BWS.





MAHALO!

THERE IS NO
SUBSTITUTE FOR PURE
WATER!

boardofwatersupply.com

ITEM FOR INFORMATION NO. 4

“October 23, 2023

RECRUITMENT
STATUS

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843
Chair and Members:

Subject: Recruitment Status

Michele L. Thomas, Executive Assistant, Human Resources Office, will be presenting an update on the Recruitment Status for the period of July 2023 to September 2023.

Respectfully Submitted,

/s/ ERNEST Y. W. LAU, P.E
Manager and Chief Engineer

Attachment”

The foregoing was for information only.

DISCUSSION:

Michele Thomas, Executive Assistant I, Human Resource Office, gave the report.

Manager Lau invites all the Board Members to join him at the Hawaii Chamber of Commerce Job Fair at the Neal Blaisdell Center in November.

Positions Filled September 1, 2022 through September 30, 2023



For the Period Jul23 - Sep23 Actions: 10 New Hires, 2 Promotions, 2 Transfers, 18 Separations

BOARD OF WATER SUPPLY

City and County of Honolulu

RECRUITMENT AND SEPARATION STATUS For Period July 1, 2023 to September 30, 2023

Status of Positions Under Recruitment

	as of		
	7/31/2023	8/31/2023	9/30/2023
Pending DHR Open List (external recruitment)	24	22	21
Pending Internal recruitments	0	2	8
Pending Final Interview Questions	32	35	18
Pending Interviews with Division	33	30	54
Anticipated Starts (pre-employment clearances)	8	15	9
Cancelled Requests	1	2	0
Total Positions Under Recruitment	98	106	110

Filled Positions

Month	Jul-23	Aug-23	Sep-23
Open list	5	1	5
Internal Promotions	1	0	1
Internal Demotions/Transfers	0	1	1
Reallocations	5	6	10

Separations

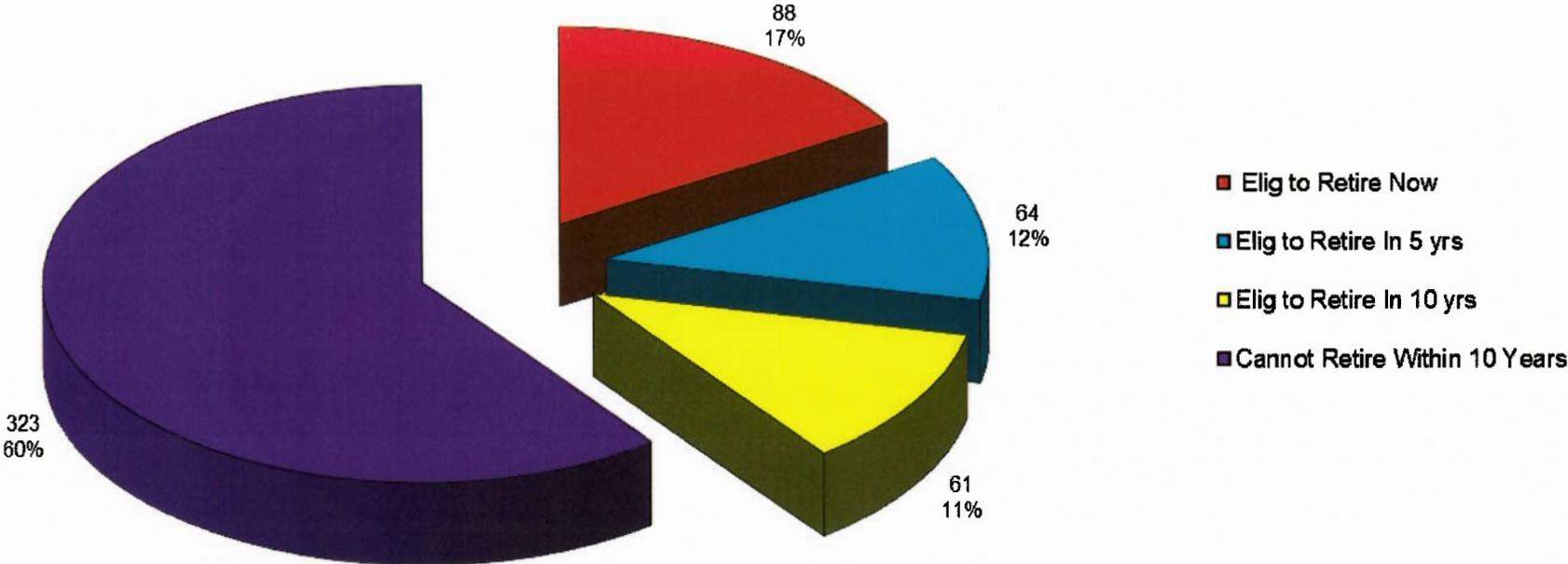
Month	Jul-23	Aug-23	Sep-23
Retire	0	0	2
Resign/Termination/Other	7	3	6

Legend:

DHR = Department of Human Resources City and County of Honolulu

Reallocation = Employee has demonstrated competency in higher level position and position was adjusted

BWS Retirement Projections As of September 30, 2023



ITEM FOR INFORMATION NO. 5

“October 23, 2023

STATUS
UPDATE OF
GROUNDWATER
LEVELS AT ALL
INDEX STATIONS

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843

Chair and Members:

Subject: Status Update of Groundwater Levels at All Index Stations

Nine aquifer index stations were in low groundwater condition for the production month of September 2023. Beretania, Kalihi, Moanalua, Pearl City, Waipahu, Kaluanui and Waialua are in Caution Status. Punaluu is in Alert Status. Kaimuki dipped into Critical Status, but chlorides are stable. The monthly production average for September 2023 was 147.32 million gallons per day.

The Board of Water Supply rainfall index for the month of September 2023 was 62 percent of normal, with a 5-month moving average of 74 percent. As of October 3, 2023, the Hawaii Drought Monitor shows abnormally dry conditions along the uppermost elevations of the Koolau Range, and moderate to severe drought conditions throughout the rest of Oahu. The National Weather Service is forecasting below-normal precipitation through at least March 2024.

Most monitoring wells exhibited decreasing head levels for the month of September 2023, reflecting the typical increase in summer production combined with the consecutive months of lower-than-average rainfall. Average monthly production for September 2023 decreased from the August production and was similar to September 2022 and the 5-year monthly average. Increased conservation messaging is recommended for the remainder of 2023, possibly into early 2024.

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E
Manager and Chief Engineer

Attachment”

The foregoing was for information only.

DISCUSSION:

Barry Usagawa, Program Administrator, Water Resources Division, gave the report. There were no comments or discussion.

Chair Anthony announced that he would be deferring Executive Session to the next Board meeting.

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF SEPTEMBER 2023**

POTABLE

STATION	MGD
HONOLULU (1)	
KULIOUOU	0.06
WAILUPE	0.14
AINA KOA	0.00
AINA KOA II	0.76
MANOA II	0.86
PALOLO	0.98
KAIMUKI HIGH	2.14
KAIMUKI LOW	2.42
WILDER	8.31
BERETANIA HIGH	2.62
BERETANIA LOW	2.58
KALIH I HIGH	3.55
KALIH I LOW	4.97
KAPALAMA	0.30
KALIH I SHAFT	8.07
MOANALUA	2.59
HALAWA SHAFT	0.00
KAAMILO	0.97
KALAUAO	8.89
PUNANANI	8.97
KAAHUMANU	0.27
HECO WAI AU	2.74
MANANA	0.24
WAI ALAE IKI	0.56
WELLS SUBTOTAL:	62.97
MANOA TUNNEL	0.17
PALOLO TUNNEL	0.00
GRAVITY SUBTTL:	0.17
HONOLULU SUBTTL:	63.14

STATION	MGD
WINDWARD (2)	
WAIMANALO II	0.89
WAIMANALO III	0.00
KUOU I	0.00
KUOU II	0.76
KUOU III	0.77
LULUKU	0.84
HAIKU	0.35
IOLEKAA	0.00
KAHALUU	0.67
KAHANA	0.62
PUNALUU I	0.00
PUNALUU II	4.72
PUNALUU III	0.00
KALUANUI	2.00
MAAKUA	0.30
HAUULA	0.25
WELLS SUBTOTAL:	12.16
WAIM. TUNNELS I & II	0.00
WAIM. TUNNELS III&IV	0.19
WAIHEE INCL. WELLS	0.27
WAIHEE TUNNEL	4.27
LULUKU TUNNEL	0.17
HAIKU TUNNEL	0.33
KAHALUU TUNNEL	1.35
GRAVITY SUBTOTAL:	6.58
WIND. SUBTOTAL:	18.74

STATION	MGD
NORTH SHORE (3)	
KAHUKU	0.45
OPANA	0.99
WAI ALEE I	0.08
WAI ALEE II	0.67
HALEIWA	0.00
WAI ALUA	1.98
N.SHORE SUBTOTAL:	4.17

STATION	MGD
MILILANI (4)	
MILILANI I	2.87
MILILANI II	0.00
MILILANI III	0.80
MILILANI IV	1.17
MILILANI SUBTOTAL:	4.84

STATION	MGD
WAHIAWA (5)	
WAHIAWA	1.66
WAHIAWA II	1.26
WAHIAWA SUBTOTAL:	2.92

STATION	MGD
PEARL CITY-HALAWA (6)	
HALAWA 277	0.00
HALAWA 550	0.00
AIEA	0.00
AIEA GULCH 497	0.00
AIEA GULCH 550	0.22
KAONOHI I	1.69
WAIMALU I	0.00
NEWTOWN	1.95
WAI AU	1.90
PEARL CITY I	0.84
PEARL CITY II	1.15
PEARL CITY III	0.16
PEARL CITY SHAFT	0.92
PEARL CITY-HALAWA SUBTOTAL:	8.83

STATION	MGD
WAIPAHU-EWA (7)	
WAIPIO HTS.	1.66
WAIPIO HTS. I	0.00
WAIPIO HTS. II	0.42
WAIPIO HTS. III	1.43
WAIPAHU	6.73
WAIPAHU II	2.10
WAIPAHU III	4.35
WAIPAHU IV	2.93
KUNIA I	6.56
KUNIA II	2.02
KUNIA III	1.37
HOAEAE	7.28
HONOULIULI I	0.77
HONOULIULI II	2.86
MAKAKILO	0.16
WAIPAHU-EWA SUBTOTAL:	40.64

STATION	MGD
WAIANAE (8)	
MAKAHA I	0.52
MAKAHA II	0.00
MAKAHA III	0.23
MAKAHA V	0.28
MAKAHA VI	0.00
MAKAHA SHAFT	0.00
KAMAILE	0.05
WAIANAE I	0.29
WAIANAE II	0.35
WAIANAE III	0.77
WELLS SUBTOTAL:	2.49
WAI A. C&C TUNNEL	1.40
WAI A. PLANT. TUNNELS	0.14
GRAVITY SUBTOTAL:	1.54
WAIANAE SUBTOTAL:	4.03

NONPOTABLE

NONPOTABLE	MGD
KALAUAO SPRINGS	0.48
BARBERS POINT WELL	1.45
GLOVER TUNNEL NP	0.31
NONPOTABLE TOTAL:	2.23

RECYCLED WATER (AUGUST 2023)

RECYCLED WATER	MGD
HONOULIULI WRF R-1	6.69
HONOULIULI WRF RO	1.52
RECYCLED TOTAL:	8.21

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF SEPTEMBER 2023**

PRODUCTION SUMMARIES

TOTAL WATER	MGD
PUMPAGE	139.02
GRAVITY	8.29
POTABLE TOTAL:	147.32
NONPOTABLE	2.23
RECYCLED WATER	8.21
TOTAL WATER:	157.76

CWRM PERMITTED USE AND BWS ASSESSED YIELDS FOR BWS POTABLE SOURCES				
WATER USE DISTRICTS		A	B	C
		PERMITTED USE/ BWS YLDS	SEP 2022	DIFF. A-B
1	HONOLULU	83.32	62.97	20.35
2	WINDWARD	25.02	18.74	6.28
3	NORTH SHORE	4.70	4.17	0.53
4	MILILANI	7.53	4.84	2.69
5	WAHIAWA	4.27	2.92	1.35
6	PEARL CITY-HALAWA	12.25	8.83	3.42
7	WAIPAHAU-EWA	50.63	40.64	9.99
8	WAIANAEE	4.34	4.03	0.31
TOTAL:		192.06	147.15	44.91

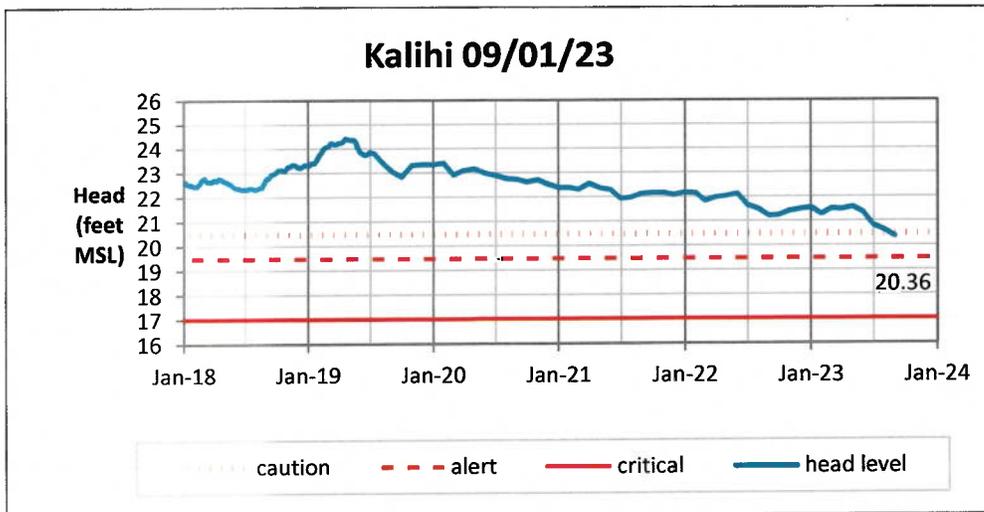
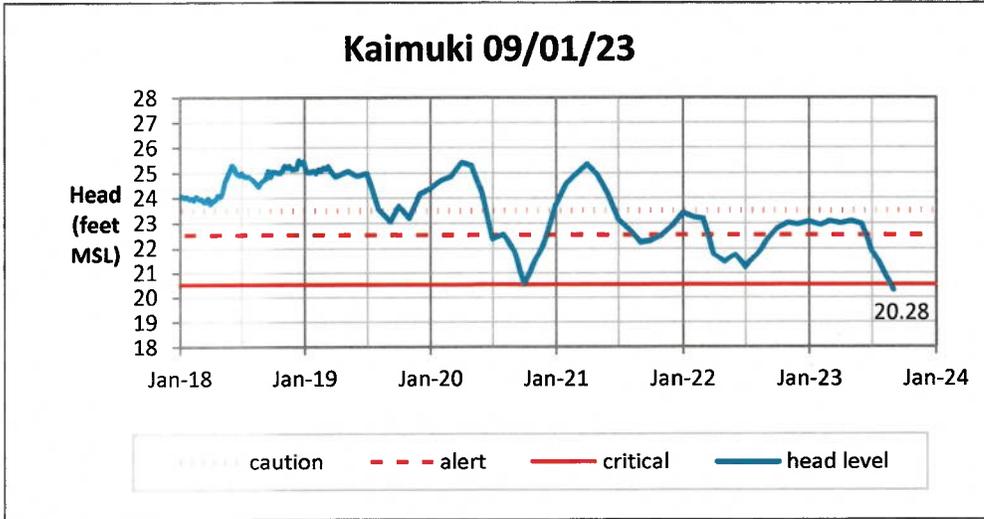
CWRM PERMITTED USE FOR BWS NONPOTABLE SOURCES				
WATER USE DISTRICTS		A	B	C
		PERMITTED USE	SEP 2022	DIFF. A-B
7	WAIPAHAU-EWA (BARBERS POINT WELL)	1.00	1.45	-0.45
TOTAL:		1.00	1.45	-0.45

EFFECTIVE WATER DEMAND PER DISTRICT

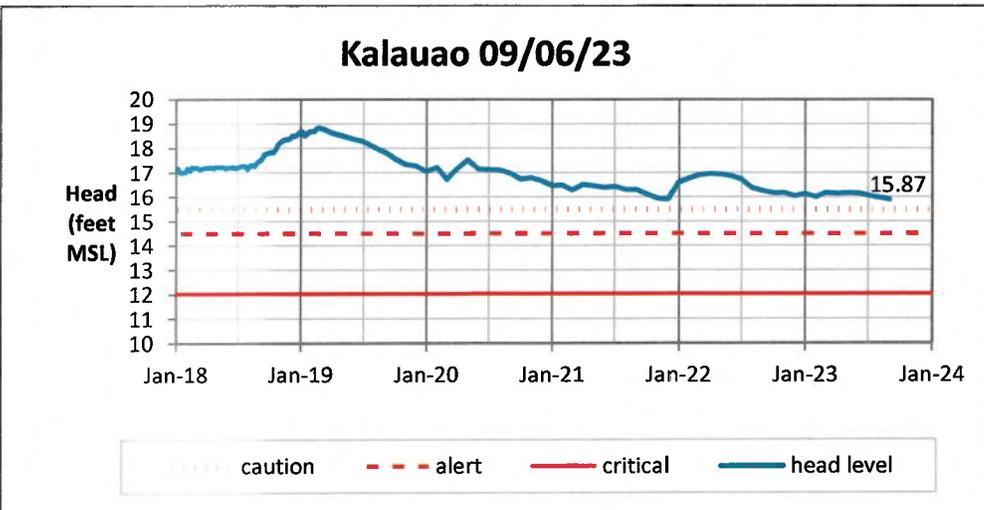
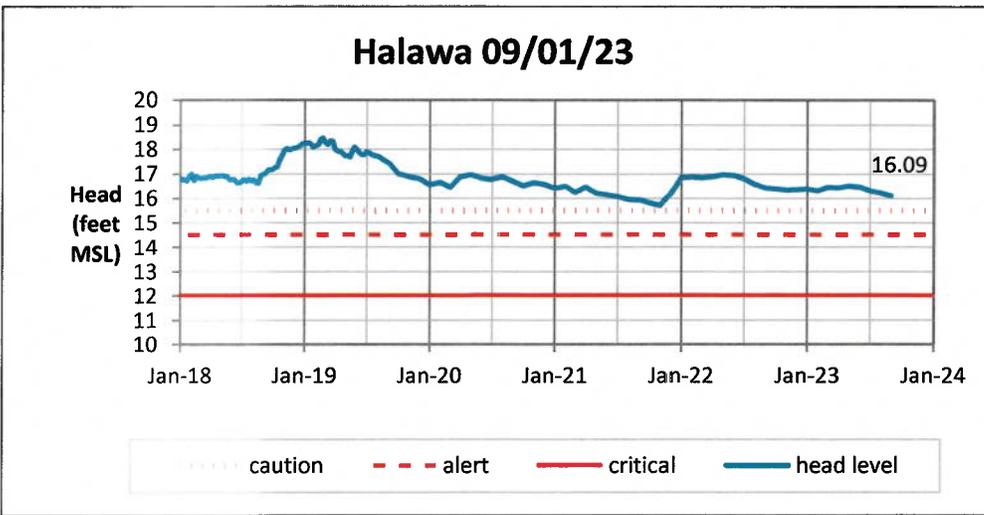
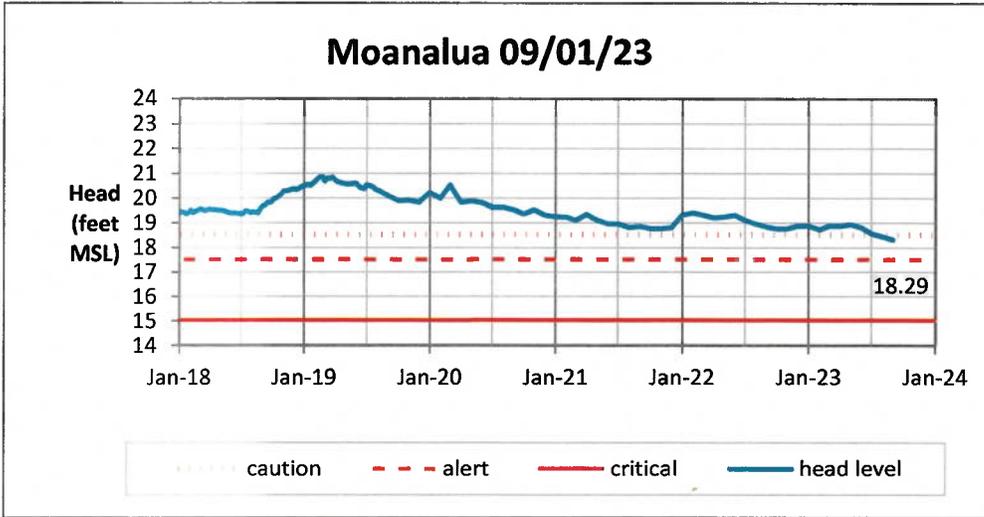
IMPORT/EXPORT BETWEEN WATER USE DISTRICTS			
FROM	TO		MGD
2	1	WINDWARD EXPORT	0.01
7	8	BARBERS PT LB	6.46

WATER USE DISTRICTS		SUBTOTAL	IMPORT	EXPORT	EFFECTIVE WATER DEMAND
1	HONOLULU	63.14	0.01	-	63.15
2	WINDWARD	18.74	-	0.01	18.73
3	NORTH SHORE	4.17	-	-	4.17
4	MILILANI	4.84	-	-	4.84
5	WAHIAWA	2.92	-	-	2.92
6	PEARL CITY-HALAWA	8.83	-	-	8.83
7	WAIPAHAU-EWA	40.64	-	6.46	34.18
8	WAIANAEE	4.03	6.46	-	10.49
TOTAL:		147.32	6.47	6.47	147.32

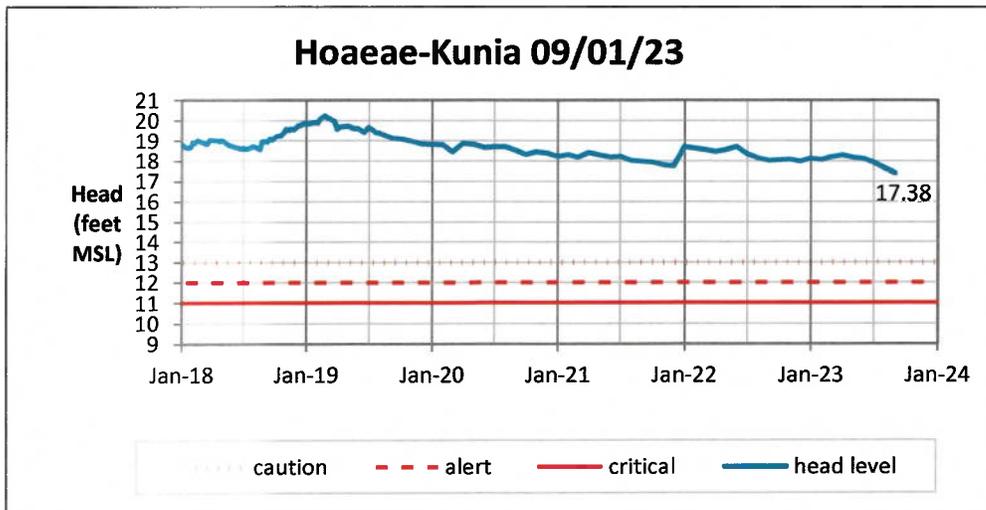
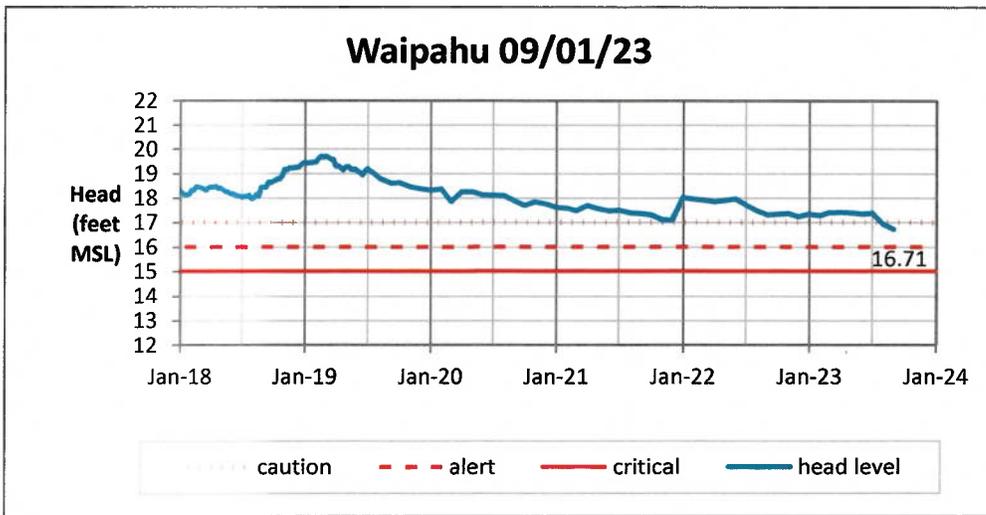
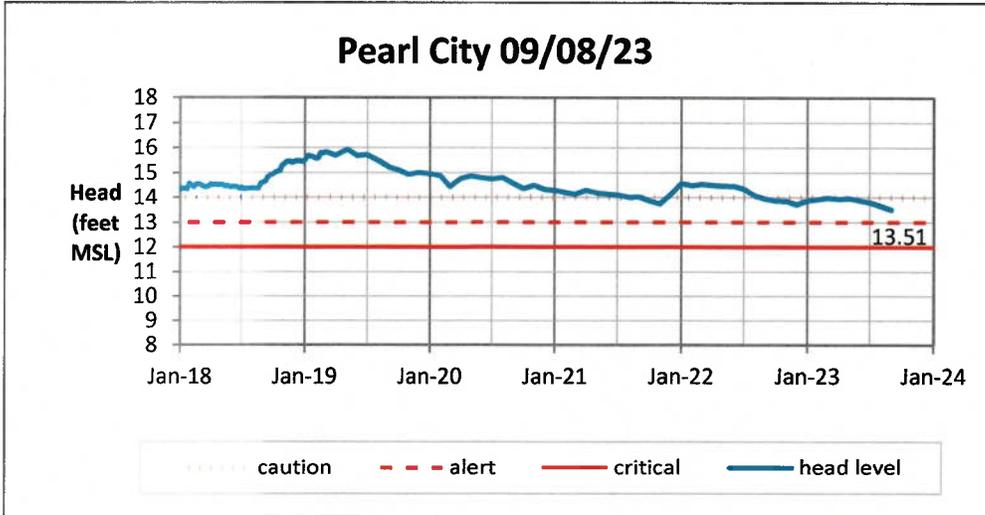
Head Report



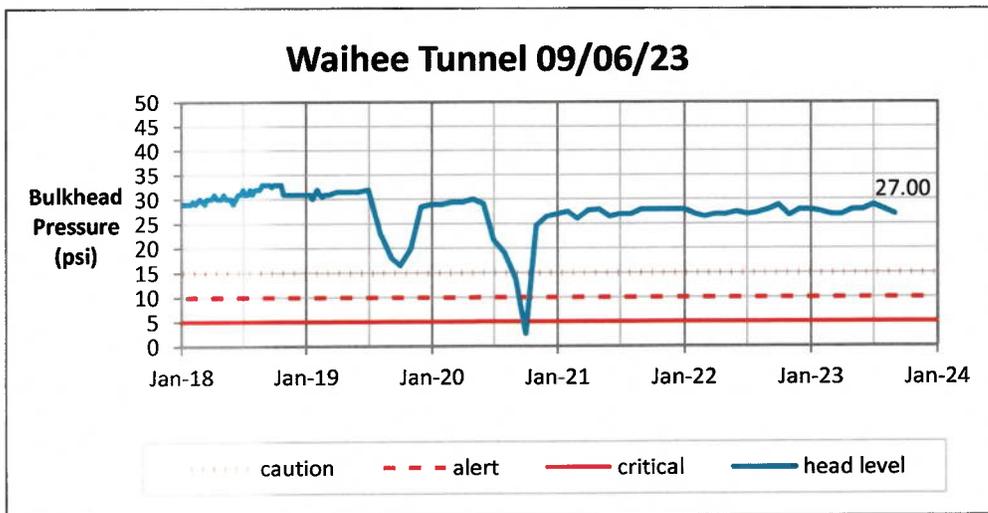
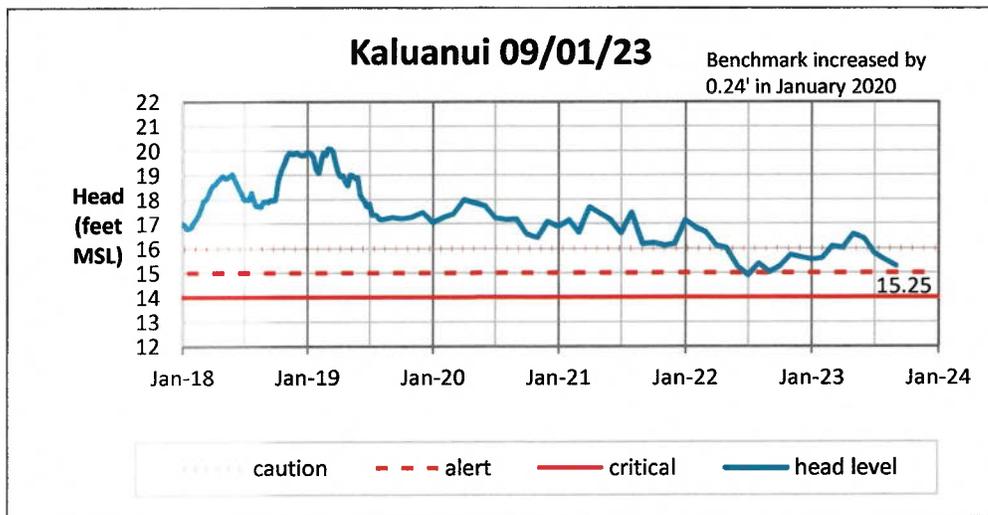
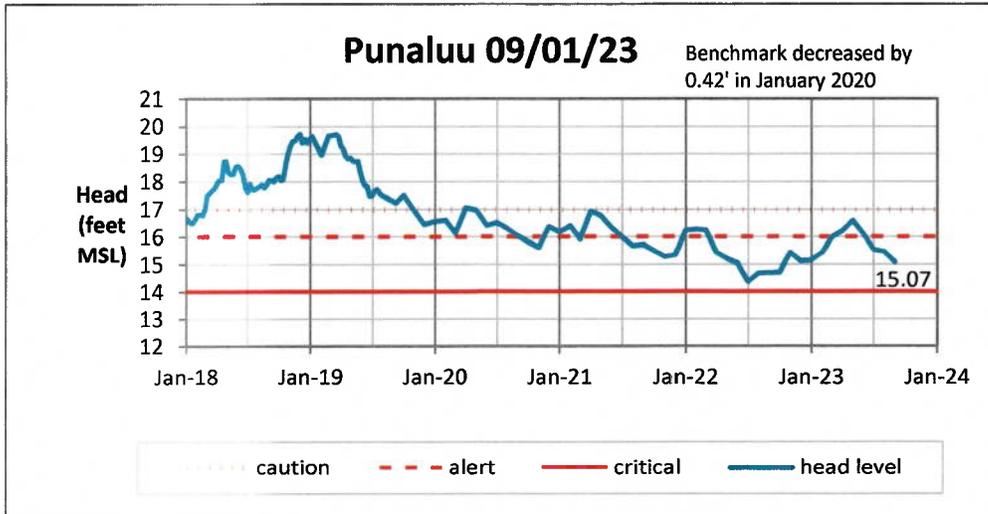
Head Report



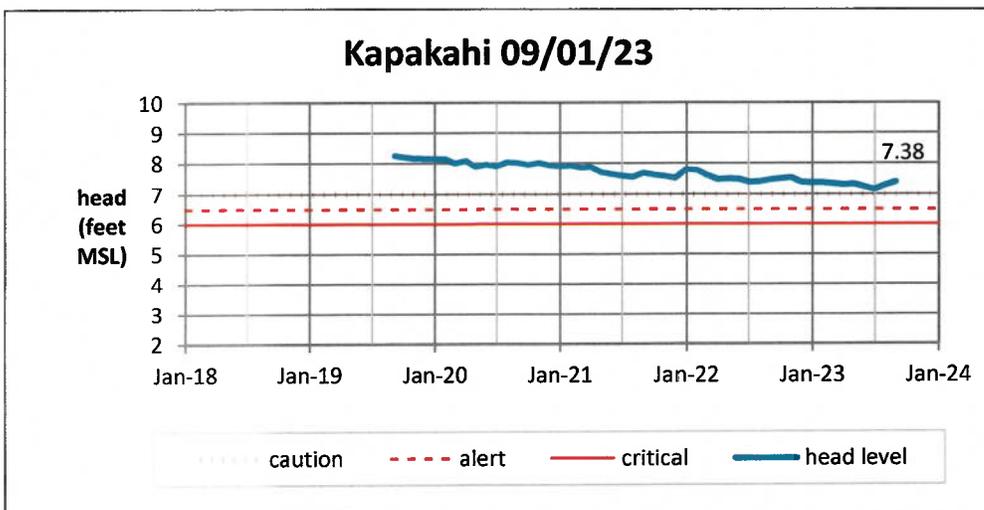
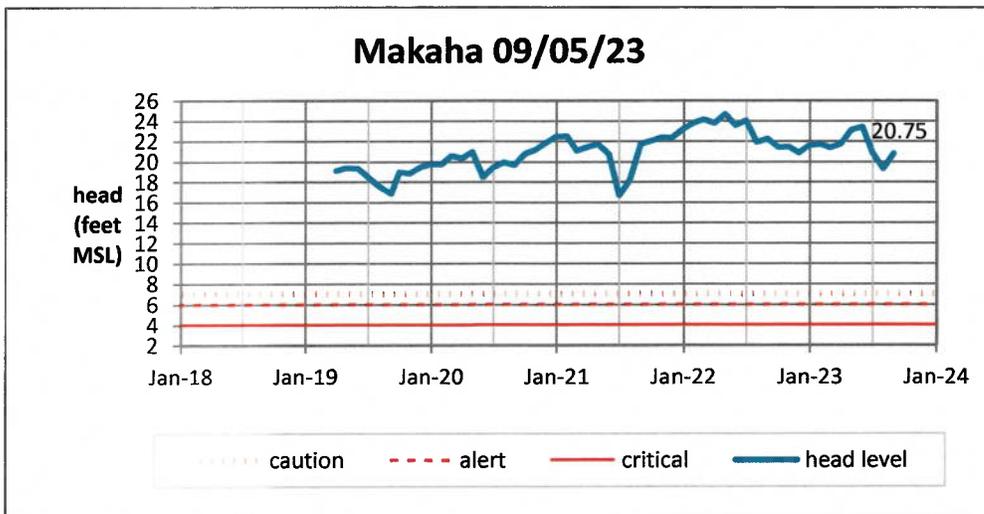
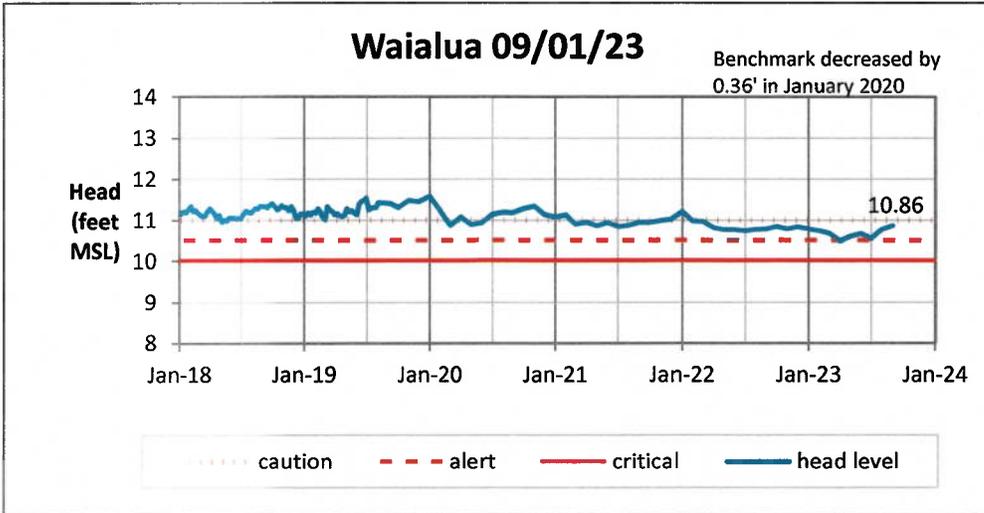
Head Report

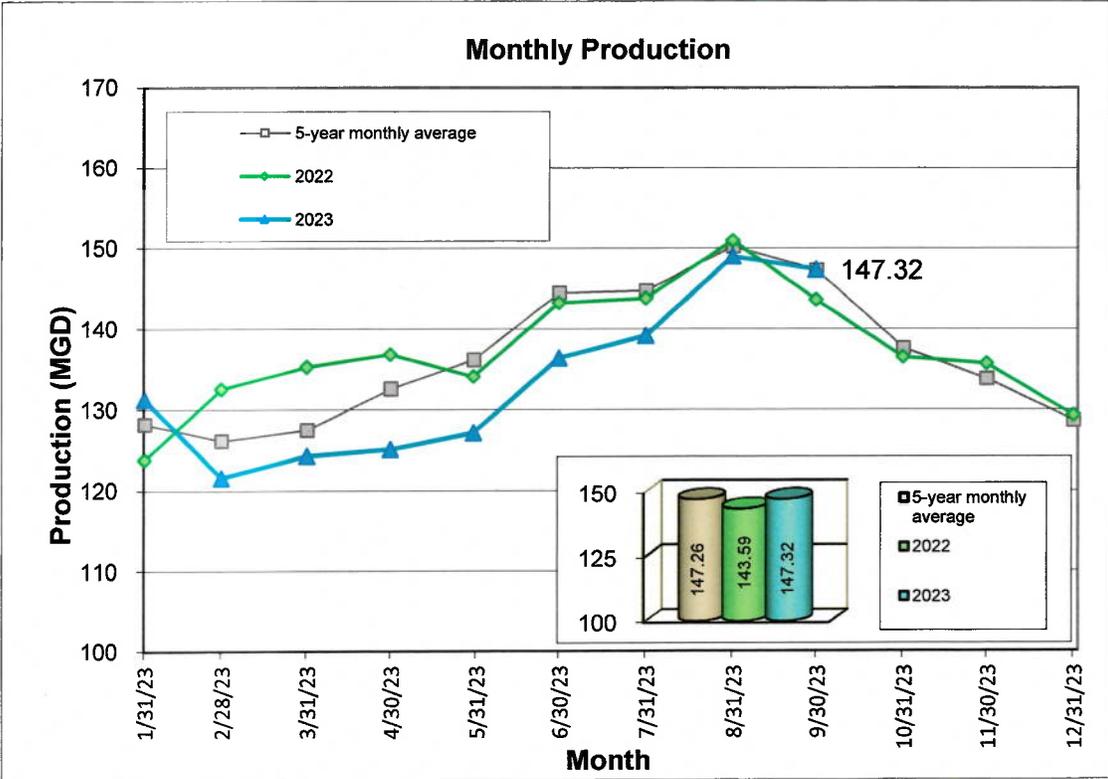
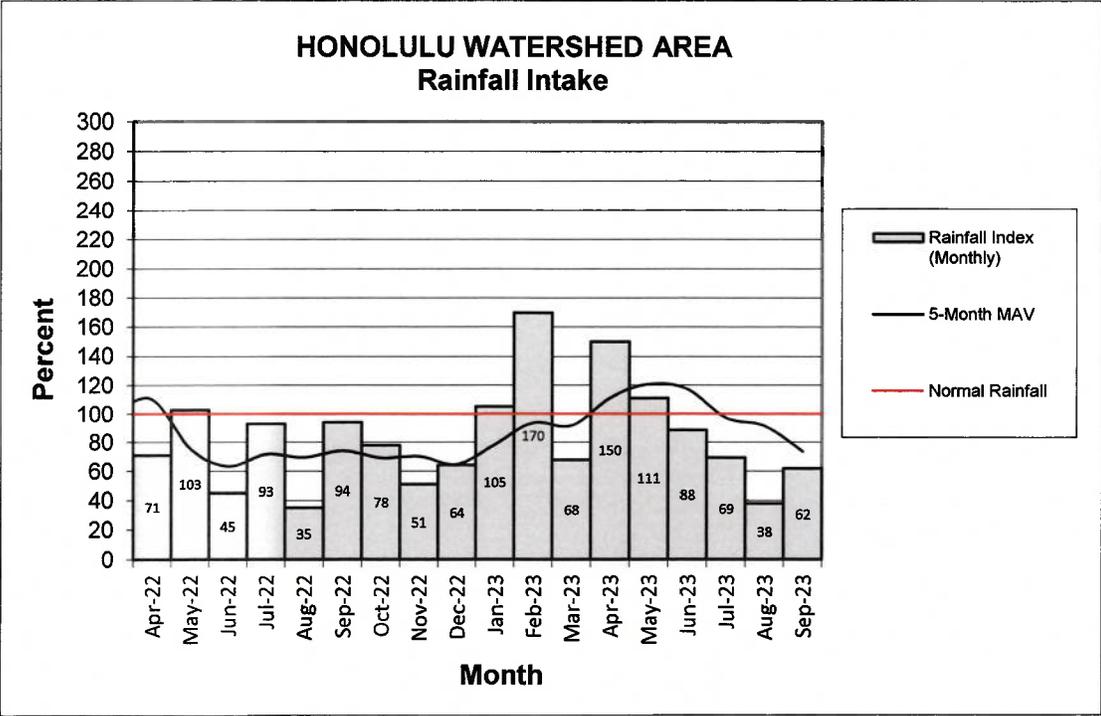


Head Report



Head Report





ITEM FOR INFORMATION NO. 6

“October 23, 2023

WATER MAIN
REPAIR
REPORT FOR
SEPTEMBER 2023

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii 96843

Chair and Members:

Subject: Water Main Repair Report for September 2023

Jason Nikaido, Program Administrator, Field Operations Division, will report on water main repair work for the month of September 2023.

Respectfully submitted,

/s/ ERNEST Y. W. LAU, P.E
Manager and Chief Engineer

Attachment”

The foregoing was for information only.

DISCUSSION: Jason Nikaido, Program Administrator, Field Operations Division, gave the report. There were no comments or discussions.

There was 1 in person testimony:

David Tupper	<i>He shared the challenges he faces while living in a community of unattached two-story homes that measure water usage by one single master meter at the beginning of their community.</i>
---------------------	---

Vice Chair Sproat encouraged Mr. Tupper to follow up with his association's developer. She also urges Mr. Tupper to review all past correspondence from the BWS, showing that the BWS tried to contact the association on multiple occasions to remedy the issue. She offered for Chair Anthony and herself to meet with Mr. Tupper.

Mr. Tupper expressed his appreciation to the BWS. He explained that as a resident before he became a board member for the association he lives in, he tried to reach out and get involved but feels that they've reached a dead end due to the laws and statute of limitations that protect the developer.

Chair Anthony agreed that a meeting with Mr. Tupper to discuss the different ways to move forward. He requested that the BWS pull a water usage report for the association to help identify and understand when water is most used before meeting with Mr. Tupper. Chair Anthony

Mr. Tupper commented that he didn't come to the BWS Board meeting to litigate the past but hoped to find a different approach. He shared an idea of possibly putting individual water meters on every home. Mr. Tupper asked if there would be a way to transition the management of the water delivery system to each house versus the community as a whole.

Chair Anthony shared that sub-water meters that don't belong to the BWS are available and can be installed to help understand how much water each home uses.

Mr. Tupper commented that if the sub-water meter doesn't reach the BWS meter, it would be hard to identify where the issue is located.

Board Member Edwin Sniffen commented that from what he gathered from the discussion, a private entity wants the BWS to take over its infrastructure. He stated that taking on an infrastructure that the BWS does not know of would be a risk and unfair to current ratepayers.

Manager Lau thanked Mr. Tupper for attending the Board meeting and being patient. He stated that there are various new technologies that the BWS is monitoring. Manager Lau commented that although new technology accuracy is still questionable, it could be helpful to identify where there may be a leak within the community's water system. He offered to meet to discuss different opportunities and mentioned the BWS offers an expanded rebate program for smart water monitoring systems.

Vice Chair Sproat added that Mr. Tupper also follow up with the appropriate department regarding sew charges.

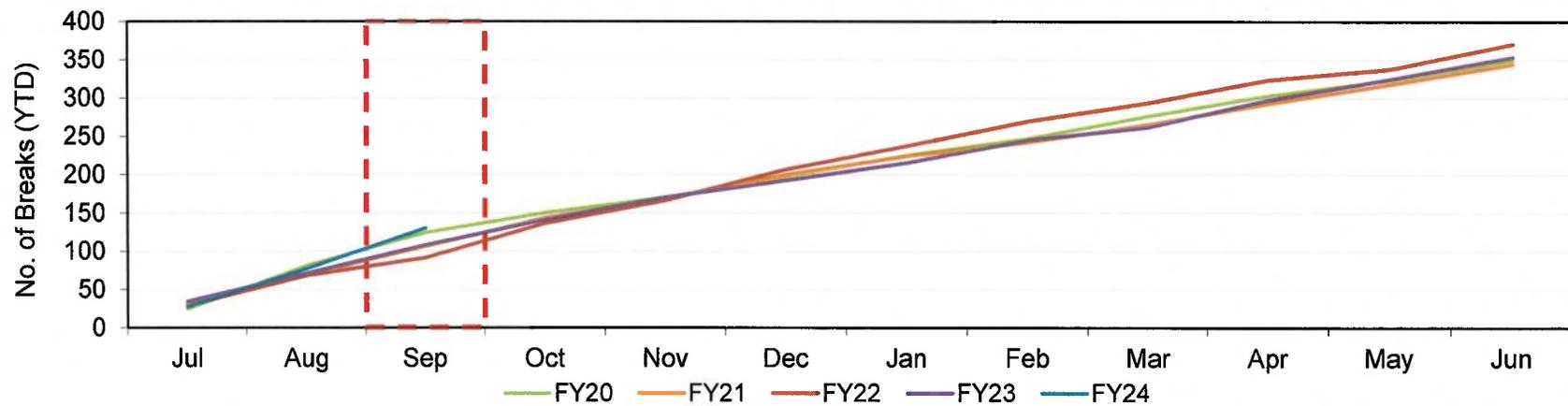
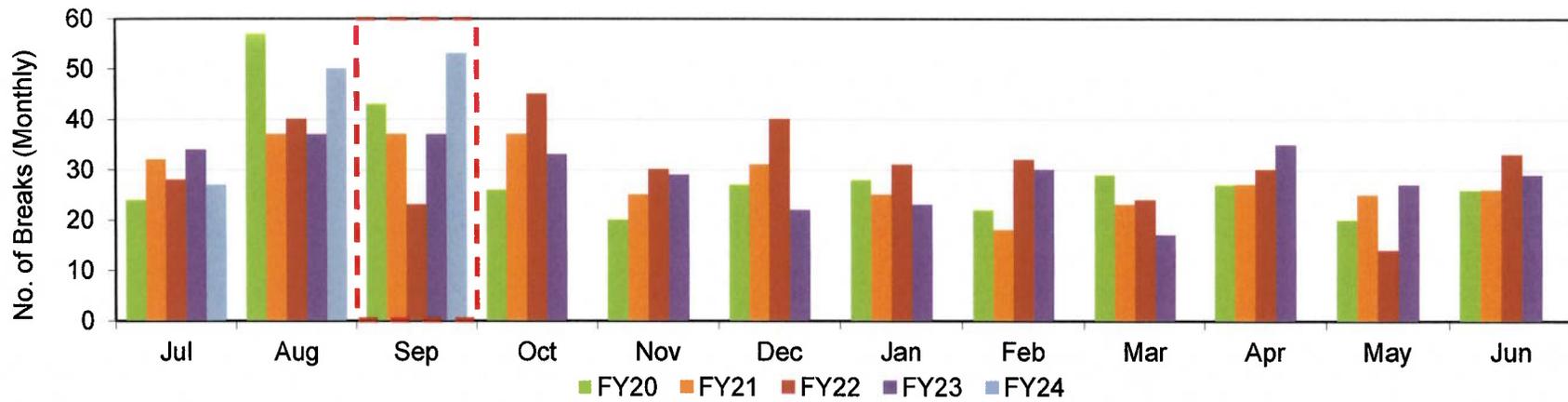
At 5:55 PM, Board Member Bryan Andaya rejoined the Board meeting via Zoom.

At 6:02 PM, Board Member Bryan Andaya disconnected from Zoom and left the Board meeting.

**WATER MAIN REPAIR REPORT
for September 2023**

Monthly Main Breaks

FY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2024	27	50	53										130
2023	34	37	37	33	29	22	23	30	17	35	27	29	353
2022	28	40	23	45	30	40	31	32	24	30	14	33	370
2021	32	37	37	37	25	31	25	18	23	27	25	26	343
2020	24	57	43	26	20	27	28	22	29	27	20	26	349

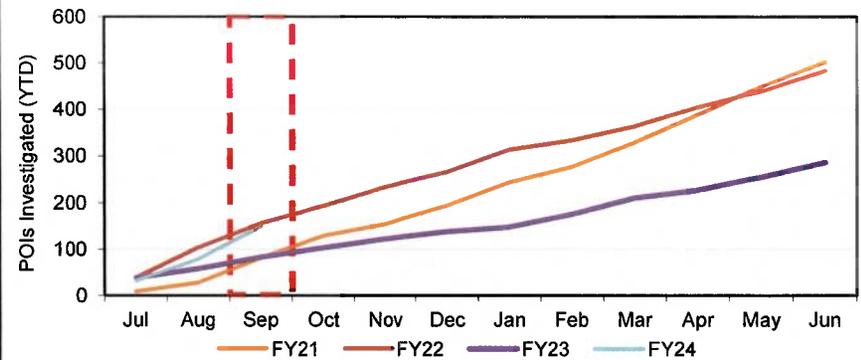
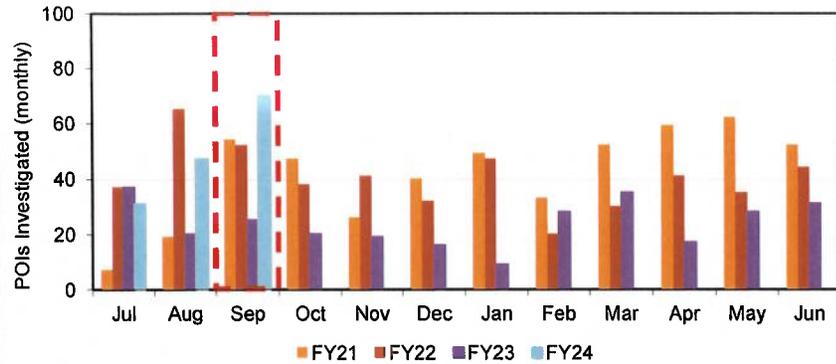


Date	Address	Size (In)	Pipe Type	Date	Address	Size (In)	Pipe Type
9/1/2023	2239 Lokelani St, Honolulu	6	CI	9/13/2023	2345 Maunalaha Rd, Honolulu	4	GALV
9/1/2023	2038 Kamehameha IV Rd, Honolulu	8	CI	9/17/2023	7146 Makaa St, Honolulu	8	DI
9/2/2023	98-2057 Kikala St, Aiea	16	CI	9/17/2023	87-912 Hakimo Rd, Waianae	8	DI
9/2/2023	86-193 Kawili St, Waianae	8	PVC	9/18/2023	805 Alewa Dr, Honolulu	8	CI
9/2/2023	800 Nimitz Hwy, Honolulu	16	CI	9/18/2023	905 Kahuwai Pl, Honolulu	4	CI
9/2/2023	2665 Peter St, Honolulu	8	CI	9/20/2023	99-1266 Aiea Heights Dr, Aiea	8	CI
9/2/2023	94-512 Anakahi Pl, Waipahu	4	CI	9/20/2023	170 Makaweo Ave, Wahiawa	6	CI
9/2/2023	1637 Owawa St, Honolulu	12	CI	9/20/2023	1017 Mikole St, Honolulu	12	PVC
9/3/2023	98-1750 Nahele St, Aiea	12	CI	9/22/2023	1290 Hoochiki Pl, Pearl City	8	CI
9/5/2023	41-1624 Humupaa St, Waimanalo	8	CI	9/22/2023	94-1091 Nalii St, Waipahu	8	CI
9/5/2023	828 Neal Ave, Wahiawa	8	CI	9/23/2023	3534 Kaau St, Honolulu	8	PVC
9/5/2023	851 Auloa Rd, Kailua	12	CI	9/23/2023	871 Auahi St, Honolulu	12	CI
9/5/2023	94-519 Anakahi Pl, Waipahu	4	CI	9/24/2023	1538 Nanakai St, Pearl City	8	PVC
9/6/2023	828 Neal Ave, Wahiawa	8	CI	9/24/2023	41-215 Kauholokahiki St, Waimanalo	8	DI
9/7/2023	67-402 Aikaula St, Waialua	8	CI	9/25/2023	67-360 Kukea Circle, Waialua	8	CI
9/8/2023	2028 Mohala Wy, Honolulu	4	CI	9/25/2023	937 Peach St., Wahiawa	6	CI
9/8/2023	2209 Aha Niu Pl, Honolulu	8	DI	9/25/2023	1423 Ala Iolani St, Honolulu	8	PVC
9/9/2023	2265 N School St, Honolulu	16	CI	9/27/2023	3615 Woodlawn Terrace Pl., Honolulu	8	CI
9/9/2023	2401 Rooke Ave, Honolulu	6	CI	9/27/2023	41-462 Hihimanu St., Waimanalo	20	CC
9/9/2023	2345 Maunalaha Rd, Honolulu	4	GALV	9/27/2023	316 Cooke St., Honolulu	12	DI
9/10/2023	47-096 Kamehameha Hwy, Kaneohe	6	CI	9/28/2023	86-352 Kauaopuu St, Waianae	8	CI
9/10/2023	2345 Maunalaha Rd, Honolulu	4	GALV	9/29/2023	595 Pepeekeo Pl, Honolulu	4	CI
9/10/2023	47-116 Kamehameha Hwy, Kaneohe	6	CI	9/29/2023	67-07 Kaimanu Pl, Waialua	4	CI
9/12/2023	3472 Hinahina St, Honolulu	8	PVC	9/30/2023	59-518 Alapio Rd, Haleiwa	8	CI
9/12/2023	1948 Kamehameha IV Rd, Honolulu	8	CI				
9/12/2023	46-220 Ohala St, Kaneohe	8	CI				
9/13/2023	3751 Waaloa Way, Honolulu	8	CI				
9/13/2023	91-524 Huleia Pl, Ewa Beach	6	CI				
9/13/2023	515 Iliaina St, Kailua	8	AC				

LEAK DETECTION for September 2023

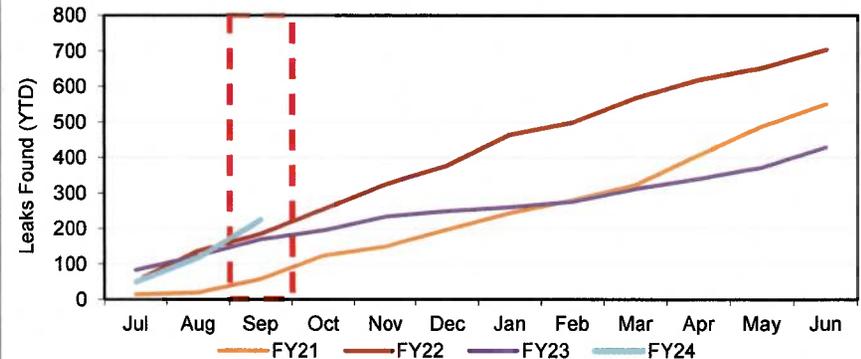
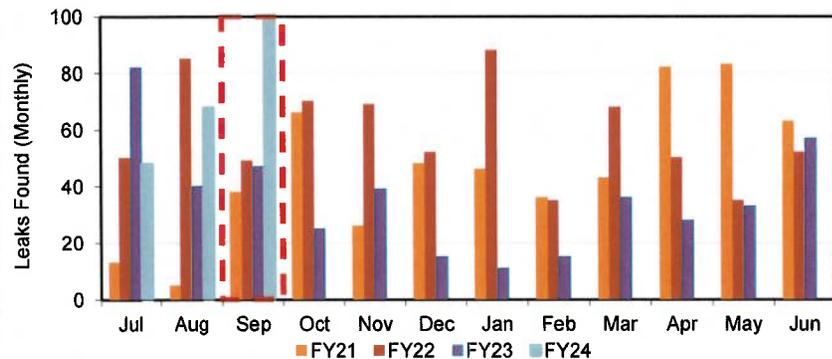
POIs Investigated

FY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2024	31	47	70										148
2023	37	20	25	20	19	16	9	28	35	17	28	31	285
2022	37	65	52	38	41	32	47	20	30	41	35	44	482
2021	7	19	54	47	26	40	49	33	52	59	62	52	500



Leaks Found

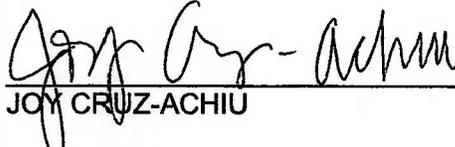
FY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2024	48	68	108										224
2023	82	40	47	25	39	15	11	15	36	28	33	57	428
2022	50	85	49	70	69	52	88	35	68	50	35	52	703
2021	13	5	38	66	26	48	46	36	43	82	83	63	549



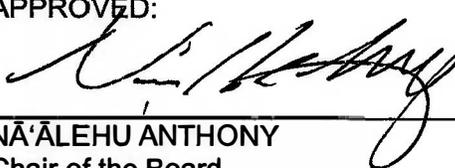
**MOTION TO
ADJOURN**

There being no further business, Chair Anthony, at 6:18 PM, called for a motion to adjourn the Regular Session. Jonathan Kaneshiro so moved, seconded by Edwin Sniffen, and unanimously carried.

The minutes of the Regular Meeting held on October 23, 2023, are respectfully submitted,



 JOY CRUZ-ACHIU

APPROVED:


 NA'ALEHU ANTHONY
 Chair of the Board
 NOV 27 2023

 Date

THE MINUTES OF THE REGULAR MEETING HELD ON OCTOBER 23, 2023, WERE APPROVED AT THE NOVEMBER 27, 2023, BOARD MEETING			
	AYE	NO	COMMENT
NA'ALEHU ANTHONY	X		
KAPUA SPROAT	X		
BRYAN P. ANDAYA	X		
JONATHAN KANESHIRO	X		
EDWIN H. SNIFFEN	X		
GENE C. ALBANO			ABSTAIN