

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

630 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96843
Phone: (808) 748-5000 • www.boardofwatersupply.com

RICK BLANGIARDI
MAYOR
MEIA

ERNEST Y. W. LAU, P.E.
MANAGER AND CHIEF ENGINEER
MANAKIA A ME KAHU WILIKI

ERWIN KAWATA
DEPUTY MANAGER
HOPE MANAKIA



NĀ'ĀLEHU ANTHONY, Chair
JONATHAN KANESHIRO, Vice Chair
BRYAN P. ANDAYA
KAPUA SPROAT
LANCE WILHELM
EDWIN H. SNIFFEN, Ex-Officio
GENE C. ALBANO, P.E., Ex-Officio

July 16, 2024

NOTICE

The Board of Water Supply, City and County of Honolulu, Regular Meeting will be held on Monday, July 22, 2024, 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 South Beretania Street, Honolulu, HI 96843.

Public parking for this meeting is available in the Public Service Building customer parking lot.

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, July 22, 2024, at noon. Submit written testimony by:
 - Email to board@hbws.org
 - Online at boardofwatersupply.com/testimony
 - Mail to Board of Water Supply, 630 South 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 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/testimonyZoom 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, July 19, 2024, at noon.
 - To testify in person at the Board of Water Supply, Public Service Building, 630 South Beretania Street, Honolulu, HI 96843, please pre-register by submitting your request by Monday, July 22, 2024:
 - 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 July 22, 2024, 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 June 24, 2024
2. Adoption of Resolution No.989, 2024, Authorizing the Manager and Chief Engineer, Board of Water Supply, to Act on the Board's Behalf in All Matters Related to the Abrogation of Quitclaim Deed, Dated April 5, 2001, Contract No. 09-HI-2223, Relating to the Kalaeloa Seawater Desalination Facility Property Situate at Honouliuli, 'Ewa, O'ahu, Hawai'i, TMK: 9-1-31:028
3. Approval to Accept Designation of the Board of Water Supply (BWS) as the Permitting City Agency Under City Ordinance 22-1

ITEMS FOR INFORMATION

1. Update on the Board of Water Supply's Response to the Potential Impacts of the Red Hill Fuel Contamination
2. Recruitment Status
3. Status Update of Groundwater Levels at All Index Stations
4. Water Main Repair Report for June 2024

EXECUTIVE SESSION

1. Approval of the Minutes of the Executive Session Held on May 28, 2024
2. To Consult with the Board's Attorney on Questions and Issues Pertaining to the Board of Water Supply's Proposed Settlement of 1CCV-22-0001158 Hawaiian Insurance and Guaranty Company, Limited and Roseline Whitelock vs. Board of Water Supply [HRS §92-5(a)(4)]
3. To Consult with the Board's Attorney on Questions and Issues Pertaining to the Board's Powers, Duties, Privileges, Immunities, and Liabilities Pertaining to Matters Concerning the Red Hill Bulk Fuel Storage Facility [HRS §92-5(a)(4)]
4. To Consult with the Board's Attorney on Questions and Issues Pertaining to the Board's Powers, Duties, Privileges, Immunities, and Liabilities Pertaining to Matters Concerning City Ordinance 22-1 [HRS §92-5(a)(4)]

MINUTES

To watch the recording of this meeting, please click on the following link:
<https://vimeo.com/bwshonolulu/july-22-2024>. Closed captioning is available.

THE REGULAR MEETING OF THE BOARD OF WATER SUPPLY

July 22, 2024

At 2:00 PM on July 22, 2024, in the Public Service Building Board Room at 630 South Beretania Street, Honolulu, Hawai'i, Board Chair Nā'ālehu Anthony called to order the Regular Meeting.

Present: Nā'ālehu Anthony, Chair, via Zoom
Jonathan Kaneshiro, Vice Chair
Lance Wilhelm, Board Member
Gene C. Albano, Ex-Officio

Also Present: Ernest Lau, Manager and Chief Engineer
Erwin Kawata, Deputy Manager
Patrick Chun, Acting Program Administrator,
Capital Projects Division
Jewel Pharm, Assistant Program Administrator,
Customer Care Division
Kathleen Elliott-Pahinui, Information Officer,
Communications Office
Raelynn Nakabayashi, Executive Assistant I,
Executive Support Office
Wayne Tello, Acting Program Administrator,
Field Operations Division
Glenn Ah Yat, Acting Assistant Program
Administrator,
Field Operations Division
Kaliko Lum Kee, Acting Waterworks Controller,
Finance Division
Michele Thomas, Executive Assistant I,
Human Resources Office via Zoom
Henderson Nuuhiwa, Program Administrator,
Information Technology Division
Michael Matsuo, Land Administrator, Land Division
Roland Fenstermacher,
Water Quality Laboratory Director,
Water Quality Division
Barry Usagawa, Program Administrator,
Water Resources Division
Kevin Ihu, Program Administrator,
Water System Operations Division
Joyce Lin, Civil Engineer IV, Office of the Manager
and Chief Engineer
Kimberly Kuwaye, Manager Secretary

Joy Cruz-Achiu, Board Secretary
Kathy Mitchell, Administrative Services Officer
via Vimeo
Stella Bernardo, Information Specialist II,
Communications Office via Zoom
Michele Harman, Community Relations Specialist I,
Communications Office via Zoom
Keoni Mattos, Information Specialist II,
Communications Office
Ronald Wada, Assistant Program Administrator,
Information Technology Division
Kenrick Wong, Data Processing Systems Analyst V,
Information Technology Division
Sandra Moriki, Data Processing Systems Analyst V,
Information Technology Division
Jesse Kanda, Data Processing Systems Analyst IV,
Information Technology Division
Lyann Okada, Civil Engineer VI,
Information Technology Division
Chesley Calma, Data Processing Systems
Analyst III,
Information Technology Division
Genna Kaneshiro, Student Intern,
Communications Office
Ella Foley Gannon, Morgan,
Lewis, and Bockius, LLP
David Brown, Morgan, Lewis, and Bockius, LLP

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

Absent: Bryan P. Andaya, Board Member
Kapua Sproat, Board Member
Edwin H. Sniffen, Ex-Officio

Chair Nā'ālehu Anthony opened the Board meeting with an 'olelo 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: Aloha from the rising to the setting sun. Thank you all for coming together today for the people, the land, and the water. Today's Hawaiian Proverb helps us remember the importance of fresh water and land.

'Ōlelo 2482: **Ola i ka wai a ka 'ōpua.**

Chair Anthony translated 'ōlelo 2482: There is life in the water from the clouds.

Chair Anthony welcomed everyone to the July 22, 2024, 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.

Chair Anthony stated that providing safe, dependable, and affordable water requires the whole BWS team's efforts and may require staff to work during late hours and into the weekend. He recognized the Information Technology (IT) Division and a few team members for their performance in dealing with the challenges CrowdStrike brought on July 19 – 20, 2024.

Manager Ernest Lau shared that he was made aware of the CrowdStrike on the evening of Thursday, July 18, 2024, by Raelynn Nakabayashi, Executive Assistant I, Executive Support Office, which began affecting the BWS personal computers (PC). Kenrick Wong, Data Processing System Analyst V, IT Division, explained to Manager Lau the effect of CrowdStrike and got his team working to protect the BWS's water data system. Manager Lau recognized the IT team members who assisted with CrowdStrike.

Mr. Kenrick Wong shared that although CrowdStrike was not a cybersecurity issue, he expected it would be a long recovery process. He stated with dedicated team members and their efforts, the BWS was able to recover more quickly than expected from the CrowdStrike issue.

Manager Lau inquired how many computers were affected.

Mr. Wong replied that up to 300 servers plus personal computers (PCs) were affected. Approximately 1,000 total computers were affected, and the IT team was required to work on each affected computer individually.

Henderson Nuuhiwa, Program Administrator, Information Technology Division, shared that he was on vacation when the CrowdStrike issue occurred. He explained that Mr. Wong, who was in charge of the division while on vacation, contacted him about the situation and shared his plan to address the issue. He was comfortable with Mr. Wong's plan and supported his actions to take charge of the situation. Mr. Nuuhiwa expressed his appreciation for his team's immediate response to the CrowdStrike issue and his confidence in the division's performance.

Manager Lau and Chair Anthony expressed their gratitude for the IT Division's diligence.

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

The recording played: Goals for this meeting under Hawai'i Revised Statutes, 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 up responding.

Vice Chair Jonathan Kaneshiro responded, aye, and was present in the Board room, and Board Member Gene Albano responded, aye, and was present in the Board room. He welcomed the BWS's newest Board Member, Board Member Lance Wilhem, who responded, aye, and was present in the Board room. Chair Anthony disclosed that he was joining Zoom and was alone at his location. Board Members Bryan Andaya, Kapua Sproat, and Edwin Sniffen 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, and Information Specialist II Keoni Mattos. Deputy Jeff Lau and Deputy Jessica Wong joined via Zoom from the City and County Corporation Counsel.

REGULAR MEETING

APPROVAL OF
MINUTES

Approval of the Minutes of the Regular Meeting Held on June 24, 2024.

MOTION
TO APPROVE

Jonathan Kaneshiro and Gene Albano motioned and seconded, respectively, to approve the Minutes of the Regular Meeting Held on June 24, 2024.

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

Due to the lack of aye votes, the Approval of the Minutes of the Regular Meeting Held on June 24, 2024, was deferred to the August 26, 2024 Board meeting.

“July 22, 2024

ADOPTION OF
RESOLUTION NO.
989, 2024,
AUTHORIZING THE
MANAGER AND
CHIEF ENGINEER,
BOARD OF WATER
SUPPLY, TO ACT
ON THE BOARD'S
BEHALF IN ALL
MATTERS
RELATED TO THE
ABROGATION OF
QUITCLAIM DEED,
DATED APRIL 5,
2001, CONTRACT
No. 09-HI-2223,
RELATING TO
THE KALAELOA
SEAWATER
DESALINATION
FACILITY
PROPERTY
SITUATE AT
HONOULIULI,
'EWA, O'AHU,
HAWAII, TMK:
9-1-31:028

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawai'i 96843

Chair and Members:

Subject: Adoption of Resolution No.989, 2024, Authorizing the Manager and Chief Engineer, Board of Water Supply to Act on the Board's Behalf in All Matters Related to the Abrogation of Quitclaim Deed, Dated April 5, 2001, Contract No. 09-HI-2223, Relating to the Kalaeloa Seawater Desalination Facility Property Situate at Honouliuli, 'Ewa, O'ahu, Hawai'i, TMK: 9-1-31:028

We recommend approval of Resolution No. 989, 2024, authorizing the Manager and Chief Engineer, Board of Water Supply (BWS), to act on the Board's behalf in all matters related to the abrogation of Quitclaim Deed, Contract No. 09-HI-2223, relating to the Kalaeloa Seawater Desalination Facility site.

The U.S. Department of Health and Human Services (DHHS) is requiring a Board resolution to pursue abrogation of the deed requirements and possible payments and credits, as determined in subsequent abrogation discussions. Abrogation is a release or buyout from the restrictions contained in the Deed used to transfer the property to the Grantee pursuant to 40 U.S.C. §550(d), specifically the time period in which the desalination facility would need to be constructed and placed in use. BWS met with DHHS on July 11, 2024, to discuss the abrogation process and was informed that any costs BWS has expended for improvements to the site, design and due diligence work, procurement of the design operate-build-maintain service agreement, etc., could be credited against the fair market value of the site. Fair market value would be based on an appraisal that we are in the process of conducting.

BWS acquired the 20.029-acre parcel for a seawater desalination facility through a public benefit conveyance as part of the Base Realignment and Closure process for Naval Air Station Barbers Point. The quitclaim deed requires the desalination facility be built and placed in operation within three (3) years. We were unable to meet this deadline and received approval to extend the deed requirements to have the desalination plant built and in operation by May 2024. Project and procurement complexity, inflationary pressures, and delays and supply chain issues resulting from the COVID-19 pandemic, however, affected the project schedule. Our request for another deed extension, dated April 2, 2024, was denied by DHHS in June 2024, despite the fact that BWS had entered into a long-

term design, build, operate, and maintain service agreement with Kalaeloa Desalco, LLC in June 2023.

The Kalaeloa seawater reverse osmosis desalination facility in James Campbell Industrial Park will provide high-quality potable water to meet the growing water needs of the 'Ewa District, the secondary urban center. In addition, seawater desalination will supplement existing groundwater supplies and increase system resilience during periods of intense drought from climate change.

Respectfully Submitted,

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

Attachment”

DISCUSSION: Michael Matsuo, Land Administrator, Land Division, and Barry Usagawa, Program Administrator, Water Resources Division, gave the report.

Board Member Gene Albano inquired if the BWS anticipates any issues with the government regarding the abrogation of the Quitclaim Deed.

Mr. Michael Matsuo responded that once the abrogation is approved, the BWS is considered to have bought the property from the government; therefore, all restrictions will be lifted.

Manager Lau shared that the Department of Health and Human Services (DHHS) recognizes the BWS's efforts and its investments in the property; therefore, it will work with the BWS. He stated that the DHHS will no longer be involved once the BWS purchases the property.

Mr. Barry Usagawa commented that the credits for project infrastructure costs should minimize the BWS payments for the abrogation to the DHHS.

Manager Lau asked for the Board's support in adopting resolution no. 989, 2024, so the BWS can move forward with the purchase of the property with the credits and conditions that the DHHS has on the property.

Vice Chair Jonathan Kaneshiro asked if the Board approves the abrogation, would the BWS own the parcel in terms of fees.

Manager Lau replied no, there will be a quitclaim deed.

Mr. Matsuo added that the abrogation will allow the BWS to move forward with its plan to complete the Kalaeloa Seawater Desalination Facility without the time constraints imposed by the quitclaim deed.

Vice Chair Kaneshiro asked when the groundbreaking for the Kalaeloa Seawater Desalination Facility will begin.

Mr. Barry Usagawa stated that the project permitting and design are very complex. The BWS is currently in the design phase. Construction is currently scheduled to start by Fall 2025 and be completed in late 2027 or early 2028. Mr. Usagawa shared that the Design-Build-Operate-Maintenance (DBOM) contracts were awarded to Kalaeloa Desalco, LLC.

Manager Lau added that Nordic PCL Construction is the local contractor.

Mr. Usagawa shared that Kalaeloa Desalco, LLC., is a limited liability company that includes Perc Water, which owns and operates seawater desalination facilities based on the West Coast, and Consolidated Water, owns and operates desalination facilities in Florida and the Caribbean.

Vice Chair Kaneshiro inquired how technology has changed since venturing into desalination 20 years ago.

Mr. Usagawa stated that technology has improved significantly since 20 years ago. The reverse osmosis membrane and energy recovery technology are more efficient, and control systems have improved. He mentioned that the BWS's conservation and recycled water program helped defer the need for the project for two decades.

Chair Anthony shared that as an intern at the BWS many years ago, he heard that seawater desalination one day would come to fruition. Now, as part of the Board, he is glad to know of technology's progress over the years. He expressed his gratitude for the BWS's continued efforts.

MOTION
TO APPROVE

Gene Albano and Jonathan Kaneshiro motioned and seconded, respectively, to approve the Adoption of Resolution No. 989, 2024, Authorizing the manager and Chief Engineer, Board of Water Supply, to Act on the Board's Behalf in All Matters Related to the Abrogation of Quitclaim Deed, Contract No. 09-HI-2223, Dated April 5, 2001, Relating to the Kalaeloa Seawater Desalination Facility Property Situate at Honouliuli, 'Ewa, O'ahu, Hawai'i, TMK: 9-1-031:028.

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

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

ADOPTION OF RESOLUTION NO. 989, 2024,
 AUTHORIZING THE MANAGER AND CHIEF ENGINEER,
 BOARD OF WATER SUPPLY, TO ACT ON THE BOARD'S
 BEHALF IN ALL MATTERS RELATED TO THE
 ABROGATION OF QUITCLAIM DEED, DATED APRIL 5,
 2001, CONTRACT NO. 09-HI-2223, RELATING TO THE
 KALAELOA SEAWATER DESALINATION FACILITY
 PROPERTY SITUATE AT HONOULIULI, 'EWA, O'AHU,
 HAWAII, TMK: 9-1-31:028 WAS ADOPTED ON JULY 22,
 2024

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

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

RESOLUTION NO. 989, 2024

AUTHORIZING THE MANAGER AND CHIEF ENGINEER, BOARD OF WATER SUPPLY, TO ACT ON THE BOARD'S BEHALF IN ALL MATTERS RELATED TO THE ABROGATION OF QUITCLAIM DEED, DATED APRIL 5, 2001, CONTRACT NO. 09-HI-2223, RELATING TO THE KALAELOA SEAWATER DESALINATION FACILITY PROPERTY SITUATE AT HONOULIULI, 'EWA, O'AHU, HAWAI'I, TAX MAP KEY: 9-1-031: 028

WHEREAS, the Board of Water Supply, City and County of Honolulu ("BWS"), desires to construct the Kalaeloa Seawater Desalination Facility in James Campbell Industrial Park to supplement 'Ewa's potable groundwater supply (the "Project"); and

WHEREAS, seawater desalination will provide a resilient fresh water supply to mitigate more intense drought from climate change; and

WHEREAS, BWS acquired the 20.029-acre parcel ("Property") for the Project from the United States of America ("Government") by Quitclaim Deed, dated April 5, 2001, and recorded at the State of Hawai'i Bureau of Conveyances ("Bureau") as Document No. 2700717, that included, among other conditions, that BWS place the Project in service within thirty-six (36) months of the date of the Quitclaim Deed; and

WHEREAS, due to water conservation savings in 'Ewa, the Project was deferred until water demand increased; and

WHEREAS, the Quitclaim Deed was amended by Deed Amendment, executed on June 17, 2020, and recorded at the Bureau as Document No, T-11155389, to allow BWS an additional four (4) years from the date of the revised Quitclaim Deed to place the Project in service; and

WHEREAS, due to complex procurement issues that resulted in the delay of executing a Design-Build-Operate-Maintain contract for the Project and delays and supply chain issues related to the COVID-19 pandemic, BWS was unable to meet the deed restriction period in the Deed Amendment and requested another time extension of four and half years; and

WHEREAS, by letter dated June 13, 2024, the Government denied BWS' request and required that BWS either voluntarily surrender the Property or request abrogation of the deed restrictions; and

WHEREAS, the Board has determined that, due to the Project's critical importance in developing community resilience to drought and climate change, BWS will pursue abrogation rather than voluntarily surrender the Property; and

WHEREAS, the Government requires a resolution from the Board that names an official to act on the Board's behalf in all matters relating to the abrogation and authorizes the expenditure of funds, as appropriate, to be paid to the Government for the abrogation.

NOW, THEREFORE, BE IT RESOLVED by the Members of the Board of Water Supply, City and County of Honolulu, in accordance with the Hawai'i Revised Statutes and Revised Charter of the City and County of Honolulu, 1973, Amended 2017 Edition, that Ernest Y. W. Lau, P.E., Manager and Chief Engineer is authorized to act on the Board's behalf in all matters related to the abrogation of the Quitclaim Deed, Contract No. 09-HI-2223, relating to the Kalaeloa Seawater Desalination Facility.

ADOPTED:



NĀ'ĀLEHU ANTHONY
 Chair
 Honolulu, Hawai'i
 July 22, 2024

ADOPTION OF RESOLUTION NO. 989, 2024, AUTHORIZING THE MANAGER AND CHIEF ENGINEER, BOARD OF WATER SUPPLY, TO ACT ON THE BOARD'S BEHALF IN ALL MATTERS RELATED TO THE ABROGATION OF QUITCLAIM DEED, DATED APRIL 5, 2001, CONTRACT NO. 09-HI-2223, RELATING TO THE KALAELOA SEAWATER DESALINATION FACILITY PROPERTY SITUATE AT HONOULIULI, 'EWA, O'AHU, HAWAI'I, TMK: 9-1-31:028 WAS ADOPTED ON JULY 22, 2024			
	AYE	NO	COMMENT
NĀ'ĀLEHU ANTHONY	X		
JONATHAN KANESHIRO	X		
BRYAN P. ANDAYA			ABSENT
KAPUA SPROAT			ABSENT
LANCE WILHELM	X		
EDWIN H. SNIFFEN			ABSENT
GENE C. ALBANO	X		

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July 22, 2024

**BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU**

RESOLUTION NO. 989, 2024

AUTHORIZING THE MANAGER AND CHIEF ENGINEER, BOARD OF WATER SUPPLY, TO ACT ON THE BOARD'S BEHALF IN ALL MATTERS RELATED TO THE ABROGATION OF QUITCLAIM DEED, DATED APRIL 5, 2001, CONTRACT NO. 09-HI-2223, RELATING TO THE KALAELOA SEAWATER DESALINATION FACILITY PROPERTY SITUATE AT HONOULIULI, 'EWA, O'AHU, HAWAII', TAX MAP KEY: 9-1-031: 028

WHEREAS, the Members of the Board of Water Supply voted to adopt Resolution No. 989, 2024, to approve the abrogation of the Quitclaim Deed for the subject property.

THEREFORE, BE IT RESOLVED that:

- 1. The abrogation action is authorized;**
- 2. ERNEST Y. W. LAU, P.E., Manager and Chief Engineer, is authorized to act on behalf of the Board of Water Supply; and**
- 3. Expenditure of funds determined by the U.S. Department of Health and Human Services is authorized.**



NĀ'ĀLEHU ANTHONY
Chair



JOY L. CRUZ-ACHIU
Board Secretary

JUL 22 2024

Date

JUL 22 2024

Date

"July 22, 2024

APPROVAL TO
ACCEPT
DESIGNATION
OF THE
BOARD OF
WATER SUPPLY
(BWS) AS THE
PERMITTING
CITY AGENCY
UNDER CITY
ORDINANCE
22-1

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawai'i 96843

Chair and Members:

Subject: Approval to Accept Designation of the Board of Water
Supply (BWS) as the Permitting City Agency Under
City Ordinance 22-1

City Ordinance 22-1 creates a requirement to obtain a permit from the City to operate an underground storage tank or tank system that has a capacity to store more than 100,000 gallons of any regulated substance. The ordinance further requires the mayor to designate the department or agency responsible to issue and enforce the permit. The purpose of the ordinance is to protect the purity of Oahu's limited groundwater resources, given the past fuel releases and the detection of petroleum contaminants in groundwater from the Red Hill Bulk Fuel Storage Facility.

Mayor Rick Blangiardi, in the attached letter, has selected the Board of Water Supply (BWS) as the permitting agency pursuant to Ordinance 22-1. We support this selection and request Board approval to accept such designation of BWS as the responsible city agency under Ordinance 22-1.

Respectfully Submitted,

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

Attachment"

DISCUSSION: Erwin Kawata, Deputy Manager, gave the report.

Board Member Lance Wilhelm inquired if the BWS had a sense of how many permit applications the BWS would be responsible for annually.

Manager Lau responded that the BWS does not anticipate many permit applications since O'ahu does not have a lot of tank facilities with a capacity of over 100,000 gallons. The City Council passed Ordinance 22-1 in February 2022, after the November 2021 Red Hill contamination spill. The Ordinance 22-1 allows the City to regulate facilities storing regulated substances. It is important that the City have a role in regulating such facilities. He shared that, for example, if the Navy decided to reuse the Red Hill Bulk Fuel Storage Tank Facility after the tanks had been emptied, it would be required to apply for a permit with the BWS.

Vice Chair Kaneshiro asked if the purpose of the permit is to provide safety or limit regulated substances that could cause danger to water resources.

Deputy Manager Kawata replied that the permit regulates storage facilities storing regulated substances of over 100,000 gallons, including hazardous materials such as various oils or diesel.

Vice Chair Kaneshiro inquired if the permit would apply to private water well systems.

Manager Lau responded that the permit would not apply to private water well systems managed by the Commission on Water Resources (CWRM) under the Hawai'i State Water Code, Chapter 174C. He explained that Ordinance 22-1 would allow the BWS to assist the Hawai'i State and the Department of Health (DOH) in regulating storage facilities containing regulated substances.

Board Member Wilhelm inquired if the application for a permit includes the installation of a tank and is not necessarily for ongoing operation and whether the permit needs to be renewed over time.

Deputy Manager Kawata stated that the permit would be for storage and operation of the storage facility.

Manager Lau added that before a permit is granted, the applicant would be subject to various requirements, such as leak maintenance, monitoring, and inspections, similar to the existing DOH regulations. The BWS would assist with managing and overseeing the operations of an underground storage facility.

Board Member Wilhelm inquired if ongoing reports would be shared with the BWS.

Deputy Manager Kawata responded yes.

Manager Lau stated that the DOH currently regulates underground storage tanks under the Environmental Protection Agency (EPA). Ordinance 22-1 authorizes the BWS as an additional regulator and requires a permit that meets state statutory requirements.

Chair Anthony asked how the DOH's authority is affected by Ordinance 22-1.

Manager Lau replied that Ordinance 22-1 enables the BWS to complement the DOH's authority.

Chair Anthony agreed that the DOH and the BWS working together to review and oversee is complementary.

Manager Lau shared that Ordinance 22-1 gives the BWS a new role as a regulator and a major stakeholder in the use and preservation of water.

Deputy Manager Kawata further added that as a regulator, the role complements the BWS source water protection program and its development in providing additional oversight and management.

Board Member Wilhelm inquired if the BWS will require additional staffing to fulfill the responsibility of a regulator.

Manager Lau replied that the new role as a regulator may require additional staffing to implement the program. The BWS will study and build its staffing as necessary to perform its duties according to Ordinance 22-1.

Chair Anthony shared that the BWS was once a water regulator. He commented that the BWS has worked hard to ensure that the regulations regarding Red Hill are upheld to the law and meet the charter. Chair Anthony asked Deputy Manager Kawata if the BWS would be able to up perform its duty as a regulator.

Deputy Manager Kawata replied yes; from inception, the BWS has managed, oversaw, and protected our island's water resources. The regulatory role this ordinance brings is somewhat new, but the BWS has always historically adapted to the challenges that have come up and has always been able to find a way to adapt and meet those challenges. He stated, from that standpoint, this is nothing new.

Chair Anthony thanked Manager Lau and Deputy Manager Kawata for their leadership at the BWS.

**MOTION
TO APPROVE**

Jonathan Kaneshiro and Gene Albano motioned and seconded, respectively the Approval to Accept Designation of the Board of Water Supply (BWS) as the Permitting City Agency Under City Ordinance 22-1 and to Authorize the Manager and Chief Engineer to take all actions, reasonable, necessary, and appropriate to develop and implement a regulatory program under the City Ordinance 22-1

Ms. Cruz-Achiu conducted a roll call vote: Vice Chair Jonathan Kaneshiro, aye; Board Member Lance Wilhelm, aye; Board Member Gene Albano, aye; and Chair Nā'ālehu Anthony, aye. Board Member Bryan Andaya, Board Member Kapua Sproat, and Board Member Edwin Sniffen were absent.

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

APPROVAL TO ACCEPT DESIGNATION OF THE BOARD OF WATER SUPPLY (BWS) AS THE PERMITTING CITY AGENCY UNDER CITY ORDINANCE 22-1 WAS APPROVED ON JULY 22, 2024			
	AYE	NO	COMMENT
NĀ'ĀLEHU ANTHONY	X		
JONATHAN KANESHIRO	X		
BRYAN P. ANDAYA			ABSENT
KAPUA SPROAT			ABSENT
LANCE WILHELM	X		
EDWIN H. SNIFFEN			ABSENT
GENE C. ALBANO	X		



ORDINANCE 22-1,
DESIGNATION OF THE
BOARD OF WATER
SUPPLY AS THE
PERMITTING AGENCY

July 22, 2024

boardofwatersupply.com

OFFICE OF THE MAYOR
KE KE'ENA O KA MEIA
CITY AND COUNTY OF HONOLULU
1500 ALI'I DR. SUITE 200 • HONOLULU, HI 96813 • TEL: 808-525-4000 • FAX: 808-525-4001



July 11, 2024

Mr. Nā'ālehu Anthony, Chairperson
Board of Directors
Honolulu Board of Water Supply
630 S. Beretania Street
Honolulu, Hawaii 96813

Dear Chairperson Anthony:

Ordinance 22-1 created a permit requirement for underground storage tanks or tank systems with a capacity to store more than 100,000 gallons of any regulated substances. In its purpose section, the ordinance cited the importance of protecting our groundwater.

The ordinance further provided that, as Mayor, I designate the department or agency that will be responsible for the permit issuance. I believe the Honolulu Board of Water Supply (BWS) is best positioned to undertake this role given its subject matter expertise in protecting our island's groundwater from leaks of regulated substances. However, given BWS's semi-autonomous status, I hereby request the Board of Directors of BWS take official action to approve my designation of BWS as the responsible city entity for purposes of Ordinance 22-1.

For your reference, I attach to this letter a copy of Ordinance 22-1 and if you have any questions please contact Deputy Managing Director Krishna Jayaram at 808-768-4811.

Sincerely,


Rick Blangiardi
Mayor

Attachment

cc: Ernest Lau, Manager & Chief Engineer, Honolulu Board of Water Supply

Mayor Rick Blangiardi has selected the Board of Water Supply (BWS) as the permitting agency for underground storage tanks (USTs) or tank systems with a capacity to store more than 100,000 gallons of any regulated substances under Ordinance 22-1.

The BWS recommends the Board's approval on the designation.



Ordinance 22-1 recognizes the importance of protecting the purity of O‘ahu’s sole source drinking water aquifer, and the risk of large USTs that have the potential to contaminate our groundwater and create a significant hazard to public health should there be a release. The Ordinance was introduced in December 2021 and was adopted by the City Council in 2022.

United States Code Title 42, Section 6991f(a), gives the City the legal authority to enact underground storage tank requirements with which all federal agencies must comply.

Pursuant to Section 342L-20, Hawaii Revised Statutes (HRS), the City may adopt ordinances and rules governing any matter relating to underground storage tanks, provided they are not inconsistent with the Hawaii State Department of Health underground storage tank rules.



CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

ORDINANCE **22-1**

BILL **48 (2021), GD2**

A BILL FOR AN ORDINANCE

RELATING TO UNDERGROUND STORAGE TANKS.

BE IT ORDAINED by the People of the City and County of Honolulu:

SECTION 1. Purpose. The City and County of Honolulu ("City") has a public trust duty to protect the purity of O‘ahu’s groundwater. The U.S. Environmental Protection Agency has designated the Southern O‘ahu Basal Aquifer, stretching from Schofield Barracks through urban Honolulu, as the "principal source of drinking water" for O‘ahu that "if contaminated, would create a significant hazard to public health." Underground storage tanks containing petroleum products are a threat to O‘ahu’s groundwater. The State of Hawaii’s, Department of Health ("DOH"), has determined that no underground storage tank or underground storage tank system in Hawaii poses as great a threat to groundwater as the underground storage tanks at the Red Hill Bulk Fuel Storage Facility ("Facility"). The DOH has concluded that the storage of up to 187 million gallons of fuel, 100 feet above a drinking water resource, is inherently dangerous.

The U.S. Department of the Navy ("Navy") underground storage tanks at the Facility have a long history of leaking. Navy reports reveal that the tanks have contaminated groundwater beneath the Facility. A Quantitative Risk and Vulnerability Assessment of the Facility prepared for the Navy in 2018 concluded that the probability of an acute leak of between 1,000 and 30,000 gallons (independent of any earthquake risk) over the next year is 27.6 percent, over the next five years, the risk is 80.1 percent, and over the next ten years, the risk is 98.0 percent. Eight of the currently operating tanks at the Facility have not been inspected pursuant to modern standards in more than two decades and are overdue for inspection. Corrosion from the back of the Facility’s tanks, at times creating through-holes, is a significant problem. Other large capacity underground storage tank systems at the Facility also pose a risk to groundwater.

United States Code Title 42, Section 6991f(a), gives the City the legal authority to enact underground storage tank requirements with which all federal agencies must comply. Section 342L-20, Hawaii Revised Statutes ("HRS"), allows the City to adopt ordinances and rules governing any matter relating to underground storage tanks, provided they are not inconsistent with the DOH’s underground storage tank rules.

The City Council finds that no underground storage tank or tank system that contains a large volume of petroleum product should be allowed to operate above a sole source aquifer on O‘ahu unless it can be established that the tank will not release any regulated substance during its operating life. Such a requirement is consistent with HRS Section 342L-32 and the public trust doctrine.

OCS2022-0084/2/1/2022 1:43 PM 1

22-1



CITY CHARTER ARTICLE VII –BOARD OF WATER SUPPLY

Section 7-105. Powers, Duties and Functions of the Board of Water Supply

The board of water supply shall:

“(j)

Prescribe and enforce rules and regulations having the force and effect of law to carry out the provisions of this article of the charter, including (1) the regulation of water systems and necessary appurtenances for subdivisions and other properties and requirements for adequate water supply and storage facilities for domestic use and fire protection, (2) the prevention of waste and pollution of water, (3) the manner in which new wells or shafts may be bored, drilled or excavated, cased and capped or recased, (4) the manner in which wells or shafts shall be maintained, controlled and operated to prevent waste of water or the impairment of potability, (5) the limitation to beneficial uses of all water, (6) in times of shortage or threatened shortage of water or of danger to potability of the water of any ground water basin or area by overdraft on such basin, the restriction of the drawing of water in all wells supplied from such basin on a basis proportionate to the proper and beneficial uses served by them respectively, and (7) other matters having for their object the proper conservation and beneficial use of the water resources available for the city.”



ORDINANCE 22-1

RELATING TO UNDERGROUND STORAGE TANKS

Pursuant to Ordinance 22-1, Chapter 41, Revised Ordinances of Honolulu 1990, is amended by adding Article 45 – Underground Storage Tanks.

“**Department**” means the city department or agency designated by the mayor.

Underground storage tanks (UST) permit requirements includes, but not limited to:

- a) No person shall operate an underground storage tank or tank system that has a capacity to store more than 100,000 gallons of any regulated substance without first obtaining a permit from the department.
- b) The department shall not issue a permit unless the applicant demonstrates that the tank or tank system will not leak any regulated substance into the environment during its operating life.
- c) The department, upon its own motion or upon the application of any person, may modify, suspend, or revoke any permit if, after affording the permittee an opportunity for a hearing in accordance with HRS Chapter 91, the department determines that:
 - 1) There is a violation of any condition of the permit;
 - 2) The permit was obtained by misrepresentation, or failure to disclose fully all relevant facts; or
 - 3) There is a release or threatened release of regulated substances.



ORDINANCE 22-1 OVERVIEW

UST Procedures

- a) Upon filing an application for a permit under HRS Section 342L-4, a person seeking a permit under this article must submit an identical filing to the department within 30 days of filing the application with the Director of the Department of Health.
- b) A permit application review fee of \$15,000 shall accompany a permit application and each subsequent permit renewal application.

UST Inspections

For the purposes of conducting any study, investigating any actual or suspected release; monitoring for compliance or noncompliance, any rule or standard adopted pursuant to this article, or any permit or variance issued pursuant to this article; taking release response action; or enforcing this chapter, any fully authorized representative of the department may:

- 1) Enter at reasonable times any establishment or place;
- 2) Inspect and obtain samples from any person of any regulated substances contained in any underground storage tank or tank system; and
- 3) Conduct monitoring or testing of the tanks or tank systems, associated equipment, contents, or soils, air, surface water or groundwater.



ORDINANCE 22-1 OVERVIEW CONTINUED...

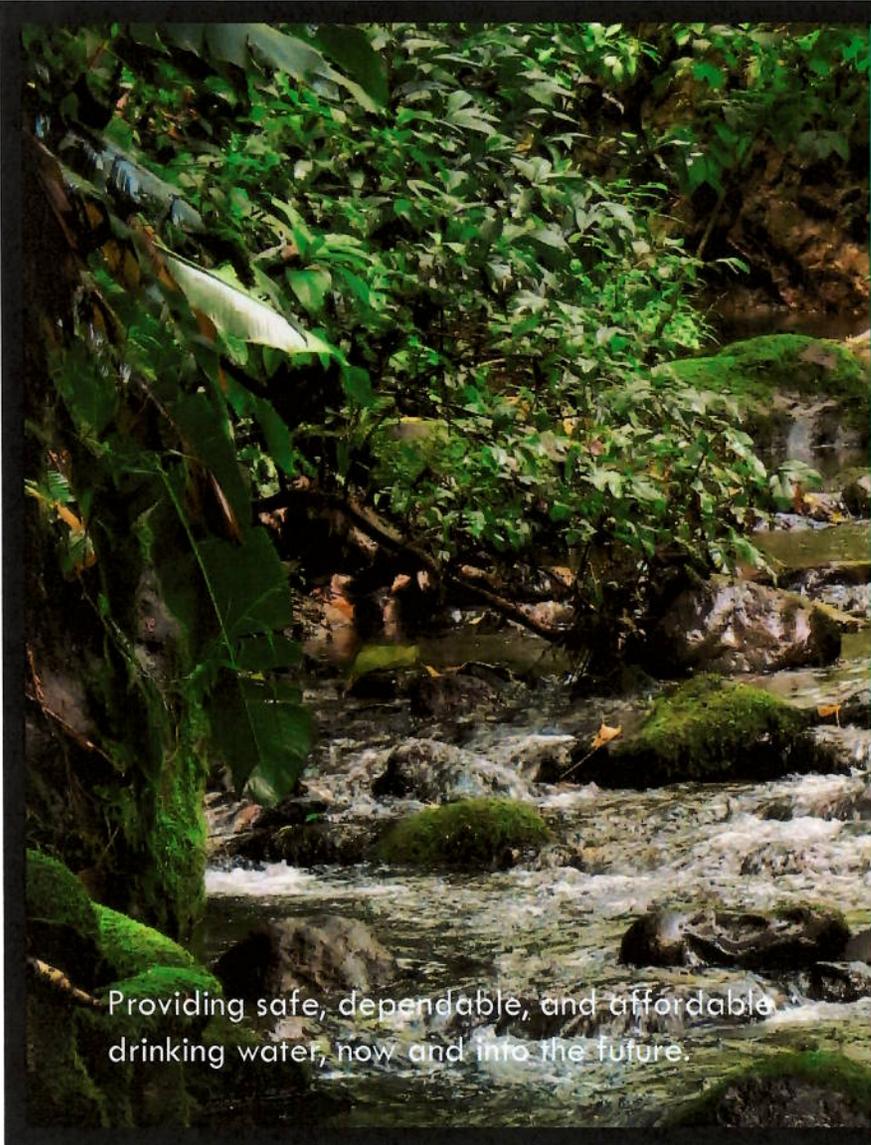
UST Notification and Reporting

Permittee shall report to the department within 24 hours when evidence is discovered by any person of a release of a regulated substance from the underground storage tank or tank system.

UST Administration and Enforcement

- a) Any person that violates this article, or any condition of the permit, shall be fined by the department not more than \$25,000 for each individual tank that is in violation for each day of each violation.
- b) Any person who denies, obstructs, or hampers the entrance, inspection, or conduct of release response activities by any duly authorized representative of the department; or fails to provide information requested by the representative shall be fined by the department not more than \$500 per day of denial, obstruction, hindrance, or failure.
- c) All fines collected under this article shall be considered special deposits pursuant to Revised Charter Section 7-114.
- d) The director may adopt rules in accordance with HRS Chapter 91 to aid in the implementation and enforcement of this article.





Providing safe, dependable, and affordable drinking water, now and into the future.



MAHALO!

July 2024, Ordinance 22-1



**OFFICE OF THE MAYOR
KE KE'ENA O KA MEIA
CITY AND COUNTY OF HONOLULU**

530 SOUTH KING STREET, ROOM 300 • HONOLULU, HAWAII 96813
PHONE: (808) 768-4141 • FAX: (808) 768-4242 • WEBSITE: honolulu.gov

RICK BLANGIARDI
MAYOR
MEIA



MICHAEL D. FORMBY
MANAGING DIRECTOR
PO'O HO'OKELE

KRISHNA F. JAYARAM
DEPUTY MANAGING DIRECTOR
HOPE PO'O HO'OKELE

July 11, 2024

Mr. Nā'ālehu Anthony, Chairperson
Board of Directors
Honolulu Board of Water Supply
630 S. Beretania Street
Honolulu, Hawai'i 96843

Dear Chairperson Anthony:

Ordinance 22-1 created a permit requirement for underground storage tanks or tank systems with a capacity to store more than 100,000 gallons of any regulated substance. In its purpose section, the ordinance cited the importance of protecting our groundwater.

The ordinance further provided that, as Mayor, I designate the department or agency that will be responsible for the permit issuance. I believe the Honolulu Board of Water Supply (BWS) is best positioned to undertake this role given its subject matter expertise in protecting our island's groundwater from leaks of regulated substances. However, given BWS's semi-autonomous status, I hereby request the Board of Directors of BWS take official action to approve my designation of BWS as the responsible city entity for purposes of Ordinance 22-1.

For your reference, I attach to this letter a copy of Ordinance 22-1 and if you have any questions please contact Deputy Managing Director Krishna Jayaram at 808-768-4811.

Sincerely,


Rick Blangiardi
Mayor

Attachment

cc: Ernest Lau, Manager & Chief Engineer, Honolulu Board of Water Supply



A BILL FOR AN ORDINANCE

RELATING TO UNDERGROUND STORAGE TANKS.

BE IT ORDAINED by the People of the City and County of Honolulu:

SECTION 1. Purpose. The City and County of Honolulu ("City") has a public trust duty to protect the purity of O'ahu's groundwater. The U.S. Environmental Protection Agency has designated the Southern O'ahu Basal Aquifer, stretching from Schofield Barracks through urban Honolulu, as the "principal source of drinking water" for O'ahu that "if contaminated, would create a significant hazard to public health." Underground storage tanks containing petroleum products are a threat to O'ahu's groundwater. The State of Hawai'i, Department of Health ("DOH"), has determined that no underground storage tank or underground storage tank system in Hawai'i poses as great a threat to groundwater as the underground storage tanks at the Red Hill Bulk Fuel Storage Facility ("Facility"). The DOH has concluded that the storage of up to 187 million gallons of fuel, 100 feet above a drinking water resource, is inherently dangerous.

The U.S. Department of the Navy ("Navy") underground storage tanks at the Facility have a long history of leaking. Navy reports reveal that the tanks have contaminated groundwater beneath the Facility. A Quantitative Risk and Vulnerability Assessment of the Facility prepared for the Navy in 2018 concluded that the probability of an acute leak of between 1,000 and 30,000 gallons (independent of any earthquake risk) over the next year is 27.6 percent; over the next five years, the risk is 80.1 percent; and over the next ten years, the risk is 96.0 percent. Eight of the currently operating tanks at the Facility have not been inspected pursuant to modern standards in more than two decades and are overdue for inspection. Corrosion from the back of the Facility's tanks, at times creating through-holes, is a significant problem. Other large capacity underground storage tank systems at the Facility also pose a risk to groundwater.

United States Code Title 42, Section 6991f(a), gives the City the legal authority to enact underground storage tank requirements with which all federal agencies must comply. Section 342L-20, Hawaii Revised Statutes ("HRS"), allows the City to adopt ordinances and rules governing any matter relating to underground storage tanks, provided they are not inconsistent with the DOH's underground storage tank rules.

The City Council finds that no underground storage tank or tank system that contains a large volume of petroleum product should be allowed to operate above a sole source aquifer on O'ahu unless it can be established that the tank will not release any regulated substance during its operating life. Such a requirement is consistent with HRS Section 342L-32 and the public trust doctrine.



A BILL FOR AN ORDINANCE

SECTION 2. Chapter 41, Revised Ordinances of Honolulu 1990, is amended by adding a new article to read as follows:

"Article 45. Underground Storage Tanks

Sec. 41-45.1 Definitions.

All terms used in this article are to be interpreted in a manner consistent with Section 342L-1, Hawaii Revised Statutes ("HRS"), and Section 11-280.1-12, Hawaii Administrative Rules ("HAR"), and:

"Department" means the city department or agency designated by the mayor.

~~"Director of Health" means the Director of the State Department of Health.~~

Sec. 41-45.2 Underground storage tank permit required.

- (a) No person shall operate an underground storage tank or tank system that has a capacity to store more than 100,000 gallons of any regulated substance without first obtaining a permit from the department. The owner or operator of such an underground storage tank or tank system that is operating upon the effective date of this ordinance shall, if it desires to continue the operation of the tank or tank system, apply for a permit within 60 days of the effective date of this ordinance, and may continue to operate until a decision on the application is made. If the permit is denied and the applicant requests a contested case hearing, the underground storage tank or tank system shall cease to operate unless and until that decision is reversed.
- (b) The department shall not issue a permit unless the applicant demonstrates that the tank or tank system will not leak any regulated substance into the environment during its operating life.

A permit shall specify its duration, but in no case shall a permit remain in effect for more than five years. The permit may be subject to conditions established by the department. The department shall not deny an application for the issuance or renewal of a permit without affording the applicant an opportunity for a hearing in accordance with HRS Chapter 91.



A BILL FOR AN ORDINANCE

- (c) The department, upon its own motion or upon the application of any person, may modify, suspend, or revoke any permit if, after affording the permittee an opportunity for a hearing in accordance with HRS Chapter 91, the department determines that:
- (1) There is a violation of any condition of the permit;
 - (2) The permit was obtained by misrepresentation, or failure to disclose fully all relevant facts; or
 - (3) There is a release or threatened release of regulated substances.

Sec. 41-45.3 Underground storage tank permit procedures.

- (a) Upon filing an application for a permit under HRS Section 342L-4, a person seeking a permit under this article must submit an identical filing to the department within 30 days of filing the application with the Director of Health. The application shall be accompanied by all plans, specifications, and such other information as required by the department or the Director of Health. If a permit has been issued by the Director of Health pursuant to HRS Section 342L-4 prior to the effective date of this ordinance, and the permit is active as of the effective date of this ordinance, the permittee shall submit the application to the department within 30 days of the effective date of this ordinance, and the department shall grant a permit for the remaining term of the State permit according to the standards set forth in Section 41-45.2(b).
- (b) A permit application review fee of \$15,000 shall accompany a permit application and each subsequent permit renewal application.



A BILL FOR AN ORDINANCE

Sec. 41-45.4 Inspections.

For purposes of conducting any study; investigating any actual or suspected release; monitoring for compliance or noncompliance with this article, any rule or standard adopted pursuant to this article, or any permit or variance issued pursuant to this article; taking release response action; or enforcing this chapter, any duly authorized representative of the department may:

- (1) Enter at reasonable times any establishment or place;
- (2) Inspect and obtain samples from any person of any regulated substances contained in any underground storage tank or tank system; and
- (3) Conduct monitoring or testing of the tanks or tank systems, associated equipment, contents, or soils, air, surface water, or groundwater.

A permittee shall allow the department or an authorized representative of the department access to the underground storage tank or tank system within a reasonable amount of time.

Sec. 41-45.5 Notification and reporting.

A permittee under this article shall report to the department within 24 hours when evidence is discovered by any person of a release of a regulated substance from the underground storage tank or tank system.



A BILL FOR AN ORDINANCE

Sec. 41-45.6 Administration and enforcement.

- (a) Any person who violates this article, any rule adopted pursuant to this article, or any condition of a permit issued pursuant to this article shall be fined by the department not more than \$25,000 for each individual tank that is in violation for each day of each violation. Each day of each violation shall constitute a separate offense. In addition, any person who fails to comply with an order issued under this article or under any rule adopted pursuant to this article, within the time specified in the order or rule, shall be fined not more than \$25,000 for each day of noncompliance with the order.
- (b) Any person who:
- (1) Denies, obstructs, or hampers the entrance, inspection, or conduct of release response activities by any duly authorized representative of the department at any building, place, site, facility, vehicle, or structure that the representative is authorized to enter or inspect, or at which the representative is authorized to conduct release response activities; or
 - (2) Fails to provide information requested by the representative as required under section 41-45.3;
- shall be fined by the department not more than \$500 per day of denial, obstruction, hindrance, or failure.
- (c) All fines collected under this article shall be considered special deposits pursuant to Revised Charter Section 7-114.
- (d) The director may adopt rules in accordance with Chapter 91 to aid in the implementation and enforcement of this article."

SECTION 3. If any provision of this ordinance, or the application thereof to any person or circumstance, is held invalid, the invalidity does not affect other provisions or applications of the ordinance that can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are severable.

SECTION 4. When revising, compiling, or printing SECTION 2 of this ordinance in the Revised Ordinances of Honolulu, the Revisor of Ordinances shall substitute for the phrase "the effective date of this ordinance," the actual date upon which this ordinance takes effect.



CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

ORDINANCE 22-1

BILL 48 (2021), CD2

A BILL FOR AN ORDINANCE

SECTION 5. This ordinance takes effect upon approval.

INTRODUCED BY:

Radiant Cordero

Tommy Waters

DATE OF INTRODUCTION:

December 1, 2021

Honolulu, Hawai'i

Councilmembers

APPROVED AS TO FORM AND LEGALITY:

Deputy Corporation Counsel

APPROVED this 1st day of March, 20 22.

Rick Blangiardi

RICK BLANGIARDI, Mayor
City and County of Honolulu

22-1
CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII
CERTIFICATE

BILL 48 (2021), CD2

Introduced: 12/01/21 By: RADIANT CORDERO
TOMMY WATERS

Committee: TRANSPORTATION.
SUSTAINABILITY AND HEALTH
(TSH)

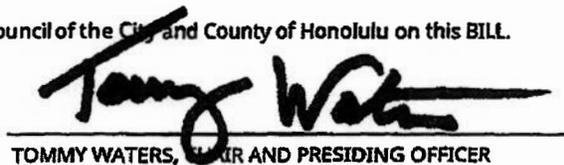
Title: RELATING TO UNDERGROUND STORAGE TANKS.

Voting Legend: * = Aye w/Reservations

12/01/21	INTRO	Introduced.
12/15/21	CCL	Passed first reading. 8 AYES: CORDERO, ELEFANTE, FUKUNAGA, KIA'ĀINA, SAY, TSUNEYOSHI, TUPOLA, WATERS 1 ABSENT: TULBA
01/11/22	TSH	Reported out for passage on second reading and scheduling of a public hearing as amended in CD1 form. CR-001(22) 4 AYES: CORDERO, ELEFANTE, KIA'ĀINA, TULBA
01/14/22	PUBLISH	Public hearing notice published in the Honolulu Star-Advertiser.
01/26/22	CCL/PH	Committee report adopted. Bill passed second reading as amended, public hearing closed and referred to committee. 9 AYES: CORDERO, ELEFANTE, FUKUNAGA, KIA'ĀINA, SAY, TSUNEYOSHI, TULBA, TUPOLA, WATERS
02/02/22	PUBLISH	Second reading notice published in the Honolulu Star-Advertiser.
02/08/22	TSH	Reported out for passage on third reading as amended in CD2 form. CR-11(22) 3 AYES: CORDERO, ELEFANTE, TULBA 1 EXCUSED: KIA'ĀINA
02/23/22	CCL	Committee report adopted and Bill passed third reading as amended. 9 AYES: CORDERO, ELEFANTE, FUKUNAGA, KIA'ĀINA, SAY, TSUNEYOSHI, TULBA, TUPOLA, WATERS

I hereby certify that the above is a true record of action by the Council of the City and County of Honolulu on this BILL.


GLEN I. TAKAHASHI, CITY CLERK


TOMMY WATERS, CHAIR AND PRESIDING OFFICER

ITEM FOR INFORMATION NO. 1

“July 22, 2024

UPDATE ON
THE BOARD OF
WATER SUPPLY'S
RESPONSE TO
THE POTENTIAL
IMPACTS OF
RED HILL FUEL
CONTAMINATION

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawai'i 96843

Chair and Members:

Subject: Update on the Board of Water Supply's Response to the
Potential Impacts of the Red Hill Fuel Contamination

Joyce Lin, Civil Engineer IV, Office of the Manager and Chief Engineer,
will give an Update on the Board of Water Supply's Response to the
Potential Impacts of the Red Hill Fuel Contamination.

Respectfully Submitted,

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

Attachment”

The foregoing was for information only.

DISCUSSION:

Joyce Lin, Civil Engineer IV, Office of the Manager and Chief Engineer,
gave the report.

Manager Lau asked Ms. Joyce Lin, who ordered the report from the Rand
Corporation.

Ms. Lin replied that the Navy ordered the report because Congress
required the Navy to submit a report.

Manager Lau inquired if Congress had responded to the report.

Ms. Lin shared that Congress is still reviewing the report submitted by the
Navy; therefore, no response has been released.

Vice Chair Kaneshiro asked if Congress reviews all available documents
and information before making any recommendations and deciding what
is to happen with Red Hill.

Manager Lau replied that he was unsure who would make the final
decision on the closure method of the Red Hill fuel tanks. He shared that
Congress controls the budget; however, the National Defense
Authorization Act (NDAA) states Congress's intent and direction but not
the funding source.

Chair Anthony referred to the PowerPoint (PPT), slide seven, titled PFAS
Detection in Soil. He asked for clarification; the report states that 4700

environment and does not degrade very easily. He is interested to see how PFAS is detected in the future.

Chair Anthony commented that he hopes the Navy consistently tests the affected area. He understands that soil was removed from the area, but the question still remains: Was all the soil removed or in time? If not, where is the contamination moving to? Chair Anthony would like to know more about how it affects the land before it reaches the water and monitoring wells.

Manager Lau shared that the Navy shared their PFAS and remedial investigation work plans at the Restoration Advisory Board (RAB) meeting.

Manager Lau shared some of his frustrations, referring to slide 5 of the PowerPoint (PPT), and shared that after the November 2022 spill, he asked the Navy if PFAS was used at Red Hill. The Navy responded that PFAS was not used at Red Hill. However, the Navy's report included the photo below, indicating that between the 1960s and 2018, a 200-gallon aqueous-film-forming foam (AFFF) above-ground tank (AST) was installed and used at the Red Hill facility. Manager Lau stated that 1,300 gallons of concentrated liquid spilled into the environment in November 2022 due to human error. The lack of transparency continues – how can one rebuild public trust without being transparent?

Known AFFF Sources within Red Hill Facility

- **1960s:** 200-gallon aqueous film-forming foam (AFFF) aboveground storage tank (AST) installed
- **2008:** AFFF AST removed
- **2018:** New AFFF system installation complete
- **November 29, 2022:** AFFF Accidental Spill at Adit 6
– 1,100 gallons of AFFF concentrate were spilled from the fire suppression system

May 2024: All AFFF removed from Red Hill Facility

June 2024 AFFF = aqueous film-forming foam AST = aboveground storage tank 44

The slide features a photograph of a large, cylindrical, above-ground storage tank (AST) with a white metal frame and a small vent pipe on top, situated outdoors in a grassy area with trees in the background.

Chair Anthony agreed with Manager Lau that it is difficult to move forward without all the information and data shared.



JULY 2024 RED HILL UPDATES

July 22, 2024

boardofwatersupply.com

RECENT EVENTS



Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board Meeting

26 June 2024

6/13

- Subject Matter Expert Meeting

6/26

- Pearl Harbor –Hickam –Kalaeloa Restoration Advisory Board (RAB) Meeting

6/28

- Sludge removal began in Tank 8
- Closure Plan Supplement #3

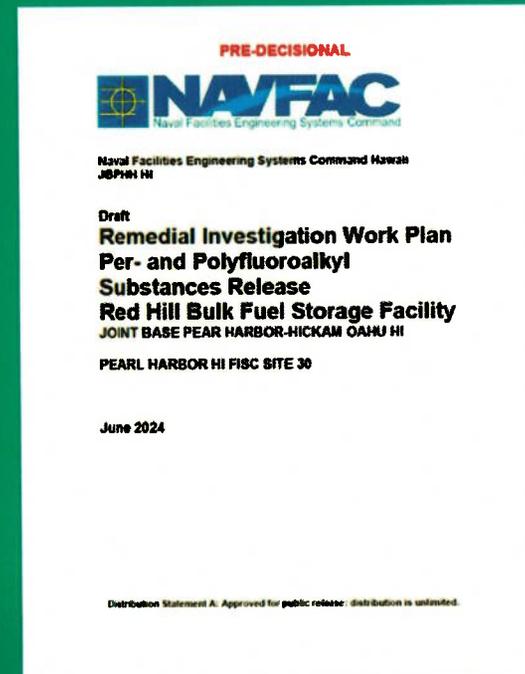
7/11

- Red Hill Remediation Roundtable

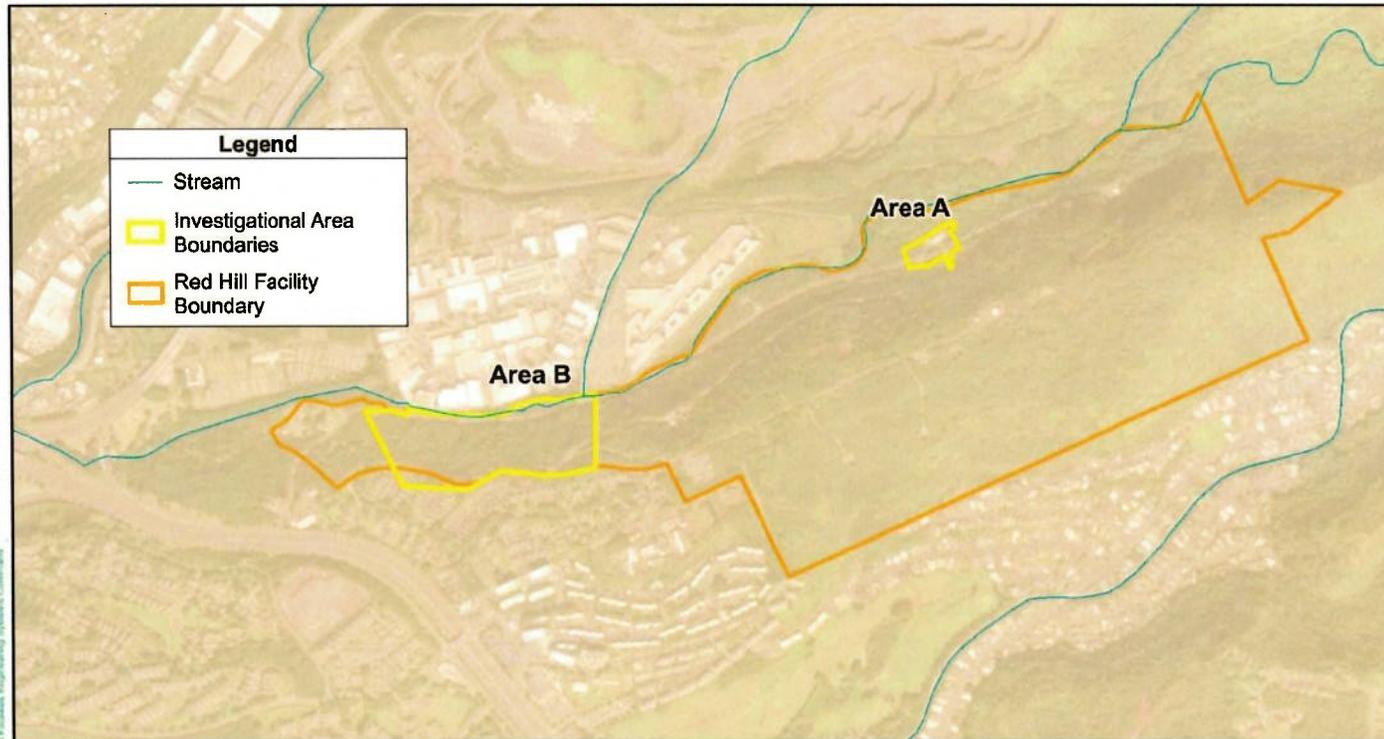


REMEDIAL INVESTIGATION AT RED HILL

- 1,300 gallons of Aqueous Film Forming Foam (AFFF) concentrate was released within the Red Hill Bulk Fuel Storage Facility's Adit 6.
- Evaluates the nature and extent of potential per- and polyfluoroalkyl substances (PFAS) impacts, and to characterize potential risks to environment and human health.



Investigation Areas for the PFAS RI



Known AFFF Sources within Red Hill Facility

- **1960s:** 200-gallon aqueous film-forming foam (AFFF) aboveground storage tank (AST) installed
- **2008:** AFFF AST removed
- **2018:** New AFFF system installation complete
- **November 29, 2022: AFFF Accidental Spill at Adit 6**
 - 1,100 gallons of AFFF concentrate were spilled from the fire suppression system



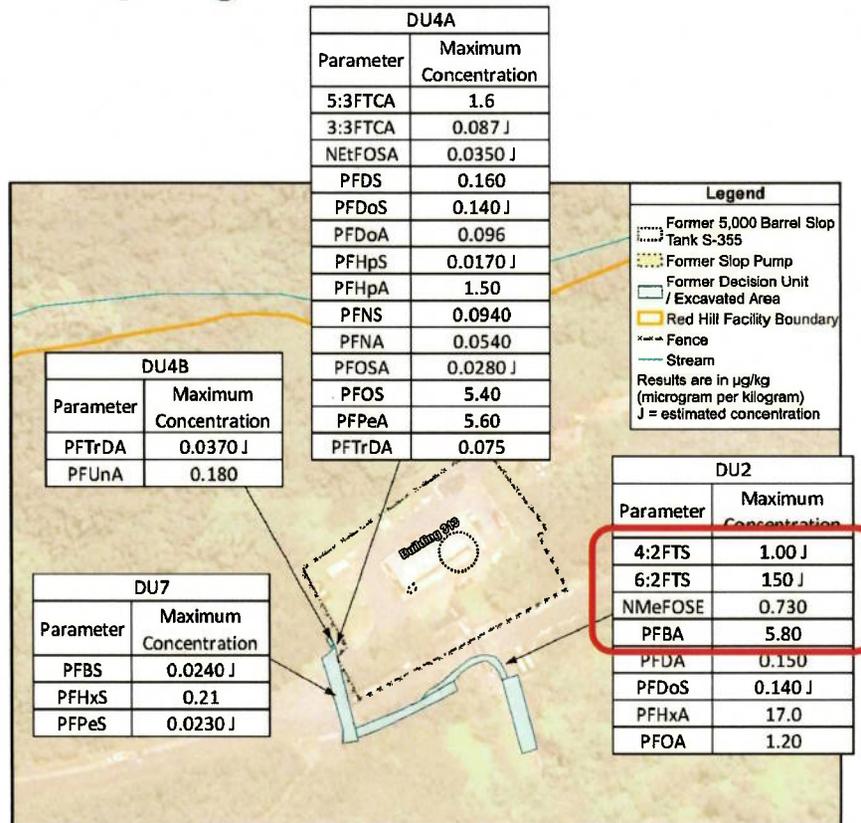
May 2024: All AFFF removed from Red Hill Facility



Soil Excavation and Sampling Results

- PFAS detections in soil collected during confirmation sampling after excavation
- Regulatory agencies allowed backfilling of excavated areas after confirmation soil sampling

No EPA November 2023 regional screening level (RSL) exceedances observed



PFAS DETECTIONS IN SOIL

Table of Contents

APPL, LLC - 908 N. Temperance Ave., Oloia, CA 93611

AECOM Honolulu 1001 Bishop Street, Suite 1600 Honolulu, HI 96813	Project: Red Hill AFFF Assessment Sampling Project Number: Red Hill AFFF Assessment Sampling Project Manager: Watson Tanji	Reported: 12/27/2022 17:11
--	--	----------------------------

Samples in this Report
(Continued)

Lab ID	Sample	Matrix	Date Sampled	Date Received
22L0057-01	ADIT6-DU03-SON01MI-22DEC	Solid	12/07/2022 13:50	12/08/2022
22L0057-02	ADIT6-DU03-WQFB01-22DEC	Water	12/07/2022 15:05	12/08/2022
22L0057-03	AF-RHW17-WGN01UF-2212W1	Water	12/07/2022 13:25	12/08/2022

Preliminary review of PFAS data from the JBPHH's Safe Water website showed elevated **6:2FTS** detections at **4700 ng/L or ppt** from soil sampling following the AFFF release at Adit 6 on November 29, 2022.

Further evaluation of PFAS trend data may be required.

Table of Contents

APPL, LLC - 908 N. Temperance Ave., Oloia, CA 93611

AECOM Honolulu 1001 Bishop Street, Suite 1600 Honolulu, HI 96813	Project: Red Hill AFFF Assessment Sampling Project Number: Red Hill AFFF Assessment Sampling Project Manager: Watson Tanji	Reported: 12/27/2022 17:11
--	--	----------------------------

Sample Results (Continued)

Sample: ADIT6-DU03-SON01MI-22DEC (Continued)
22L0057-01 (Solid)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
Surrogate: 13C1-PFVA	102%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C1-PFDA	123%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C7-PFLHA	106%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C7-PFDDA	106%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C2-PFEDA	98.9%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C3-PFBS	124%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C3-PFOS	122%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C8-PFOS	119%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C2-4:2FTS	130%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C2-6:2FTS	93.7%		20-150			12/22/22	1	EPA 1633	06L0400
Surrogate: 13C2-8:2FTS	117%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 13C9-PFOSA	76.5%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 03-NMFOA	66.5%		20-150			12/22/22	1	EPA 1633	06L0400
Surrogate: 03-NMFOA	62.3%		20-150			12/22/22	1	EPA 1633	06L0400
Surrogate: 03-NMFOA	128%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 03-NMFOA	159%		20-150			12/15/22	1	EPA 1633	06L0206
Surrogate: 03-NMFOSE	63.5%		20-150			12/22/22	1	EPA 1633	06L0400
Surrogate: 03-NMFOSE	67.4%		20-150			12/22/22	1	EPA 1633	06L0400
Surrogate: 13C1-HFPD-OA	106%		20-150			12/15/22	1	EPA 1633	06L0206
PFBA	190	7.5	3.7	0.98	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFPEA	65	3.7	3.7	0.30	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFHxA	410	1.9	1.9	0.26	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFHfA	13	1.9	0.93	0.19	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFOA	25	1.9	0.93	0.70	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFNA	0.93 U IR2	1.9	0.93	0.38	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFDA	3.8	1.9	0.93	0.47	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFUHA	0.93 U	1.9	0.93	0.75	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFDOA	0.93 U	1.9	0.93	0.51	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFTRDA	1.4 U	1.9	1.4	0.93	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFTRDA	0.93 U	1.9	0.93	0.93	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFBS	0.93 U	1.9	0.93	0.17	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFPEB	0.93 U	1.9	0.93	0.29	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFHfS	0.36 U	1.9	0.93	0.15	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFHfS	0.92 U	1.9	0.93	0.24	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFOS	2.9	1.9	0.93	0.30	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFNS	0.93 U	1.9	0.93	0.56	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFDS	0.93 U	1.9	0.93	0.70	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFDOB	0.93 U	1.9	0.93	0.56	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
4:2FTS	35	7.5	3.7	1.4	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
6:2FTS	4700	75	37	14	ng/L	12/22/22	10	EPA 1633 SPLP	06L0372
8:2FTS	3.7 U	7.5	3.7	0.38	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
PFOSA	0.93 U	1.9	0.93	0.47	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
NMFOA	3.7 U	7.5	3.7	2.2	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
NMFOA	3.7 U	7.5	3.7	1.9	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
NMFOA	0.93 U	1.9	0.93	0.51	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372
NMFOA	0.93 U	1.9	0.93	0.51	ng/L	12/22/22	1	EPA 1633 SPLP	06L0372

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document. No duplication of this report is allowed, except in its entirety.



RED HILL BULK FUEL STORAGE FACILITY CLOSURE PROGRESS



RED HILL BULK FUEL STORAGE FACILITY
Tank Closure Plan – Supplement 3

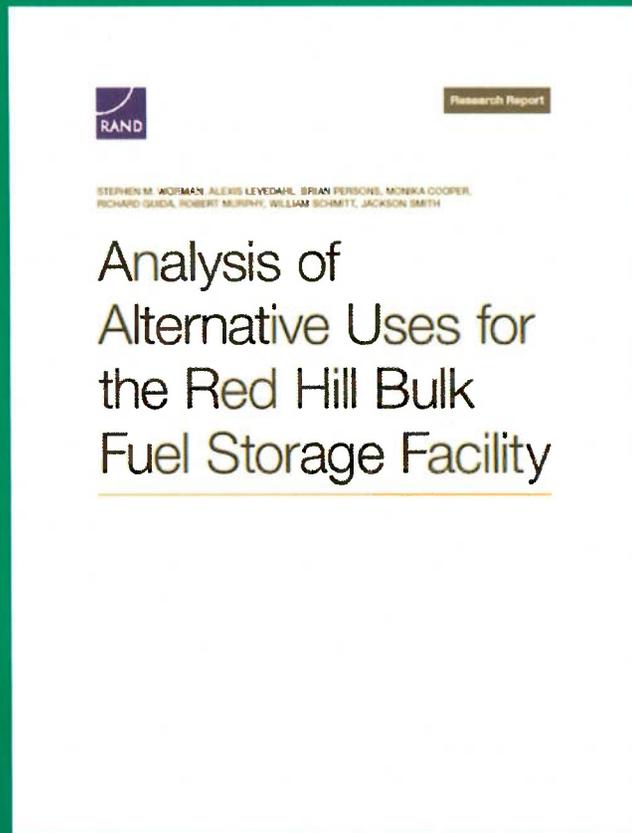
June 28, 2024
Office of the Secretary of the Navy

Enclosure (1)

- Ventilation of Tank 7 and 8 completed.
- Navy Closure Task Force to start sludge removal at the bottom of Tank 7 and 8 in the coming months.
- [Tank Closure Plan – Supplement 3](#)



ALTERNATIVE USES OF THE RED HILL TANKS



- Analysis of Alternative Uses of the Red Hill Bulk Fuel Storage Facility

5 Alternatives:

- No beneficial reuse,
- Energy storage using hydropower,
- Energy generation using renewable sources,
- Water storage, and
- A museum.

- “Best available data and evidence suggest that policymakers should delay any decision on alternative reuses of the Red Hill Bulk Fuel Storage Facility for the foreseeable future.”



UPCOMING EVENTS



Navy Closure Task Force –Red Hill
Open House: 8/21

- Moanalua Community Center

We continue to look forward to:

- Red Hill Fuel Tank Reuse Decision
By Congress
- Additional Closure Updates





MAHALO!

July 2024 Red Hill Updates

Providing safe, dependable, and affordable
drinking water, now and into the future.

ITEM FOR INFORMATION NO. 2

"July 22, 2024

RECRUITMENT
STATUS Chair and Members
 Board of Water Supply
 City and County of Honolulu
 Honolulu, Hawai'i 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 April 2024 to June 2024.

Respectfully Submitted,

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

Attachment"

The foregoing was for information only.

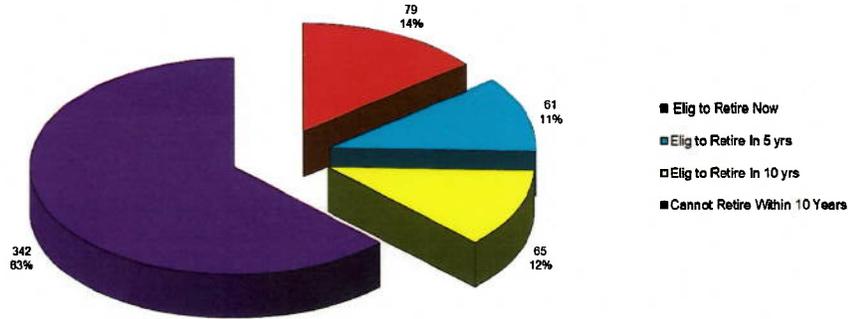
DISCUSSION: Michele Thomas, Executive Assistant I, Human Resources Office, gave the report.

Chair Anthony requested at the next Recruitment Status update that Ms. Michele Thomas provide how the different recruitment efforts are helping with filling vacant positions and the challenges the BWS face to fill positions. He suggested that the BWS form a permitted interaction group (PIG) to brainstorm and discuss different strategies and options to fill positions.

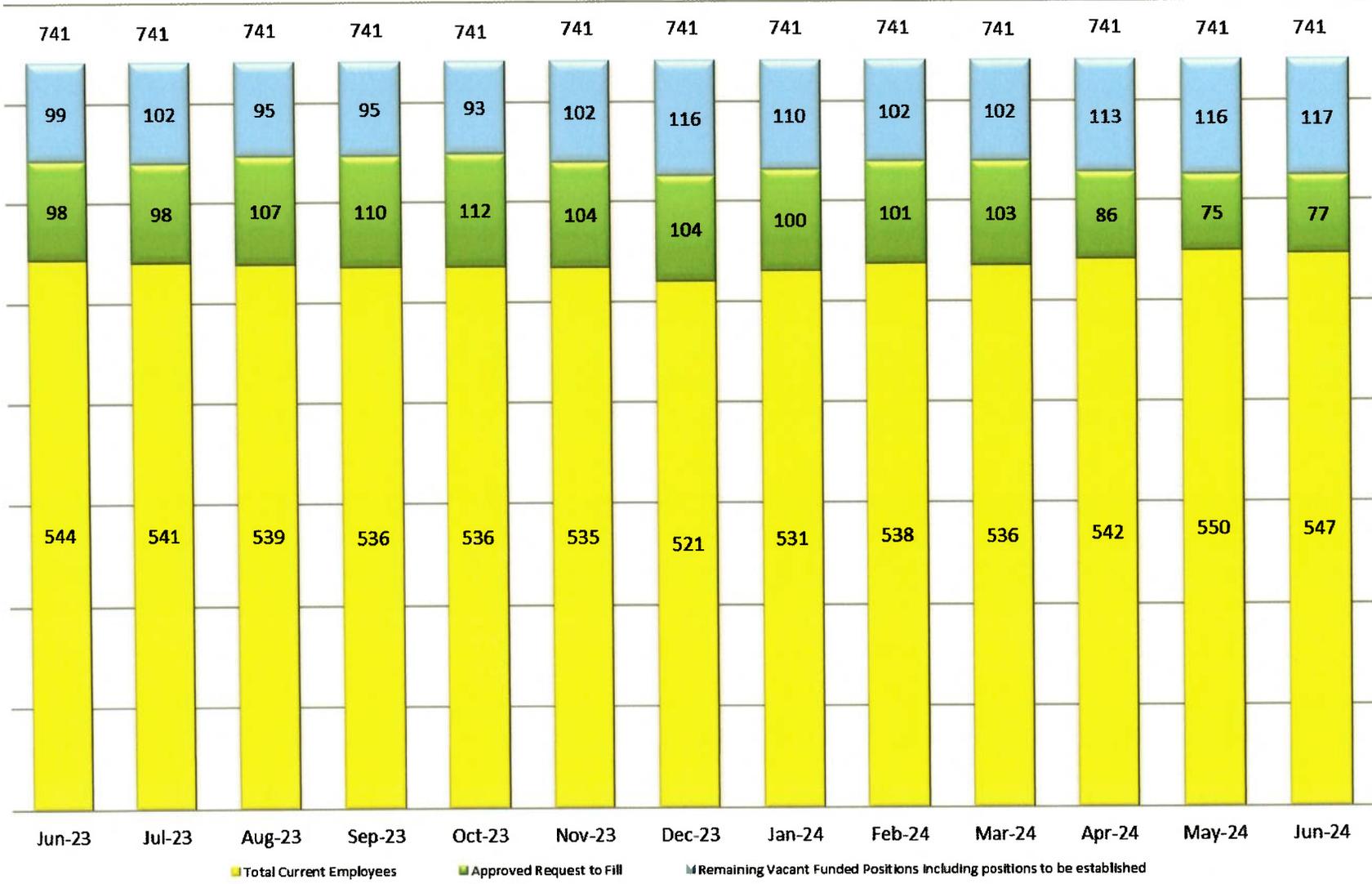
Ms. Michele Thomas replied that the BWS has an ongoing PIG to discuss recruitment strategies. The PIG has had one meeting and will be scheduled to meet again.

Chair Anthony commented that the retirement projections pie chart is very helpful. However, it would also be helpful to understand how many of those positions are technical or leadership positions so there would be a better understanding of the urgency of filling those positions.

**BWS Retirement Projections
As of June 30, 2024**



Positions Filled June 1, 2023 through June 30, 2024



For the period Apr24-Jun24 Actions: 26 New Hires, 11 Promotions, 1 Transfer, 15 Separations.

BOARD OF WATER SUPPLY

City and County of Honolulu

RECRUITMENT AND SEPARATION STATUS

For Period April 1, 2024 to June 30, 2024

Status of Positions Under Recruitment

	as of		
	4/30/2024	5/31/2024	6/30/2024
Pending DHR Open List (external recruitment)	30	31	27
Pending Internal recruitments	4	4	9
Pending Final Interview Questions	5	8	5
Pending Interviews with Division	24	23	26
Anticipated Starts (pre-employment clearances)	22	10	9
Cancelled Requests	2	1	1
Total Positions Under Recruitment	87	77	77

Filled Positions

Month	4/30/2024	5/31/2024	6/30/2024
Open list	8	14	5
Internal Promotions	5	2	3
Internal Demotions/Transfers	1	0	0
Reallocations	2	6	1

Separations

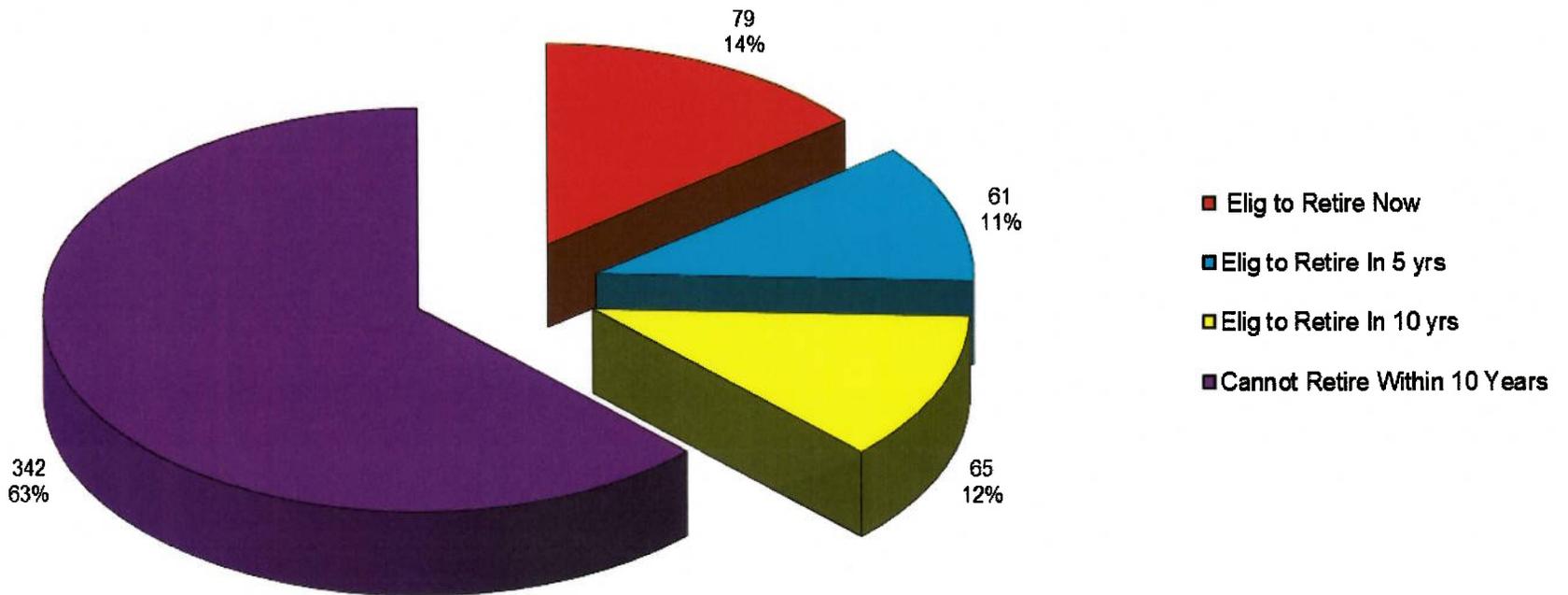
Month	Apr-24	May-24	Jun-24
Retire	0	2	0
Resign/Termination/Other	1	4	8

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 June 30, 2024



ITEM FOR INFORMATION NO. 3

“July 22, 2024

STATUS
UPDATE OF
GROUNDWATER
LEVELS AT
ALL INDEX
STATIONS

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawai'i 96843

Chair and Members:

Subject: Status Update of Groundwater Levels at All Index Stations

Four aquifer index stations were in low groundwater condition for the production month of June 2024. Kaimukī, Pearl City, Punalu'u, and Waialua are in Caution Status. The monthly production average for June 2024 was 138.70 million gallons per day.

The Board of Water Supply rainfall index for the month of June 2024 was 61 percent of normal, with a 5-month moving average of 133 percent. As of July 2, 2024, the Hawai'i Drought Monitor shows abnormally dry conditions across the entire island of O'ahu. The National Weather Service is forecasting below-normal precipitation through at least October 2024.

Most monitoring wells exhibited slightly increasing head levels for the month of June 2024, likely reflecting the relatively high rainfall in April and May. Average monthly production for June 2024 was slightly higher than for June 2023 but lower than the 5-year monthly average. Increased conservation messaging is recommended over the summer months.

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.

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF JUNE 2024**

POTABLE

STATION	MGD
HONOLULU (1)	
KULIOUOU	0.07
WAILUPE	0.00
AINA KOA	0.00
AINA KOA II	0.60
MANOA II	0.94
PALOLO	1.41
KAIMUKI HIGH	2.50
KAIMUKI LOW	2.15
WILDER	8.64
BERETANIA HIGH	1.00
BERETANIA LOW	2.05
KALIHI HIGH	3.50
KALIHI LOW	2.11
KAPALAMA	0.02
KALIHI SHAFT	8.29
MOANALUA	2.61
HALAWA SHAFT	0.00
KAAMILO	0.92
KALAUAO	9.07
PUNANANI	9.24
KAAHUMANU	0.39
HECO WAIU	2.65
MANANA	0.33
WAIALAE IKI	0.52
WELLS SUBTOTAL:	59.01
MANOA TUNNEL	0.17
PALOLO TUNNEL	0.00
GRAVITY SUBTTL:	0.17
HONOLULU SUBTTL:	59.18

STATION	MGD
WINDWARD (2)	
WAIMANALO II	0.86
WAIMANALO III	0.00
KUOU I	1.51
KUOU II	0.09
KUOU III	0.75
LULUKU	0.84
HAIKU	0.23
IOLEKAA	0.00
KAHALUU	0.57
KAHANA	1.03
PUNALUU I	0.00
PUNALUU II	1.94
PUNALUU III	1.14
KALUANUI	1.18
MAAKUA	0.29
HAUULA	0.26
WELLS SUBTOTAL:	10.71
WAIM. TUNNELS I & II	0.00
WAIM. TUNNELS III&IV	0.19
WAIHEE INCL. WELLS	0.30
WAIHEE TUNNEL	4.74
LULUKU TUNNEL	0.25
HAIKU TUNNEL	0.34
KAHALUU TUNNEL	1.61
GRAVITY SUBTOTAL:	7.42
WIND. SUBTOTAL:	18.13

STATION	MGD
NORTH SHORE (3)	
KAHUKU	0.39
OPANA	1.03
WAIALEE I	0.18
WAIALEE II	0.00
HALEIWA	0.00
WAIALUA	1.94
N.SHORE SUBTOTAL:	3.54

STATION	MGD
MILILANI (4)	
MILILANI I	3.46
MILILANI II	0.00
MILILANI III	0.69
MILILANI IV	0.00
MILILANI SUBTOTAL:	4.15

STATION	MGD
WAHIAWA (5)	
WAHIAWA	0.00
WAHIAWA II	3.15
WAHIAWA SUBTOTAL:	3.15

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	0.21
KAONOH I	1.54
WAIMALU I	0.00
NEWTOWN	1.86
WAIU	1.86
PEARL CITY I	0.78
PEARL CITY II	1.12
PEARL CITY III	0.21
PEARL CITY SHAFT	0.92
PEARL CITY-HALAWA SUBTOTAL:	8.50

STATION	MGD
WAIPAHU-EWA (7)	
WAIPIO HTS.	1.90
WAIPIO HTS. I	0.00
WAIPIO HTS. II	0.28
WAIPIO HTS. III	0.98
WAIPAHU	6.58
WAIPAHU II	2.23
WAIPAHU III	1.83
WAIPAHU IV	2.85
KUNIA I	6.15
KUNIA II	1.82
KUNIA III	1.24
HOAEAE	6.81
HONOULIULI I	0.00
HONOULIULI II	5.55
MAKAKILO	0.00
WAIPAHU-EWA SUBTOTAL:	38.21

STATION	MGD
WAIANAE (8)	
MAKAHA I	0.73
MAKAHA II	0.00
MAKAHA III	0.17
MAKAHA V	0.07
MAKAHA VI	0.00
MAKAHA SHAFT	0.00
KAMAILE	0.05
WAIANAE I	0.00
WAIANAE II	0.34
WAIANAE III	0.96
WELLS SUBTOTAL:	2.32
WAI. C&C TUNNEL	1.40
WAI. PLANT. TUNNELS	0.13
GRAVITY SUBTOTAL:	1.53
WAIANAE SUBTOTAL:	3.85

NONPOTABLE

NONPOTABLE	MGD
KALAUAO SPRINGS	0.52
BARBERS POINT WELL	1.40
GLOVER TUNNEL NP	0.30
NONPOTABLE TOTAL:	2.22

RECYCLED WATER (MAY 2024)

RECYCLED WATER	MGD
HONOULIULI WRF R-1	3.87
HONOULIULI WRF RO	1.60
RECYCLED TOTAL:	5.47

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF JUNE 2024**

PRODUCTION SUMMARIES

TOTAL WATER	MGD
PUMPAGE	129.58
GRAVITY	9.12
POTABLE TOTAL:	138.70
NONPOTABLE	2.22
RECYCLED WATER	5.47
TOTAL WATER:	146.39

CWRM PERMITTED USE AND BWS ASSESSED YIELDS FOR BWS POTABLE SOURCES				
WATER USE DISTRICTS		A	B	C
		PERMITTED USE/ BWS YLDS	JUN 2024	DIFF. A-B
1	HONOLULU	83.32	59.01	24.31
2	WINDWARD	25.02	18.13	6.89
3	NORTH SHORE	4.70	3.54	1.16
4	MILILANI	7.53	4.15	3.38
5	WAHIAWA	4.27	3.15	1.12
6	PEARL CITY-HALAWA	12.25	8.50	3.75
7	WAIPAHAU-EWA	50.63	38.21	12.42
8	WAIANAЕ	4.34	3.85	0.49
TOTAL:		192.06	138.53	53.53

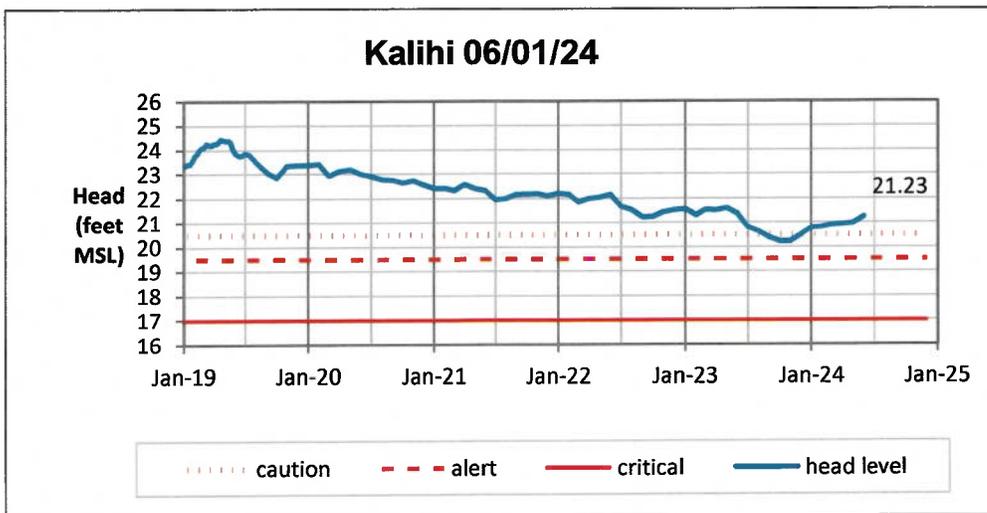
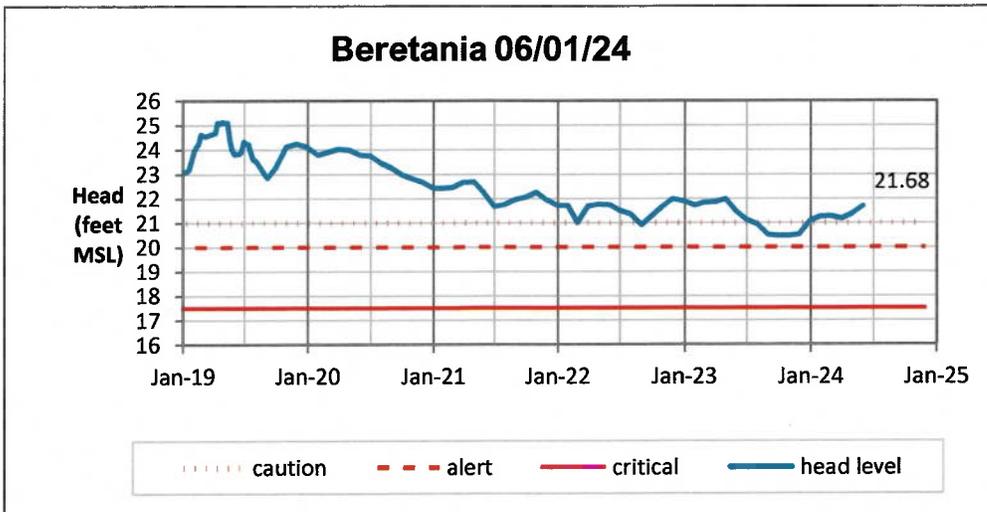
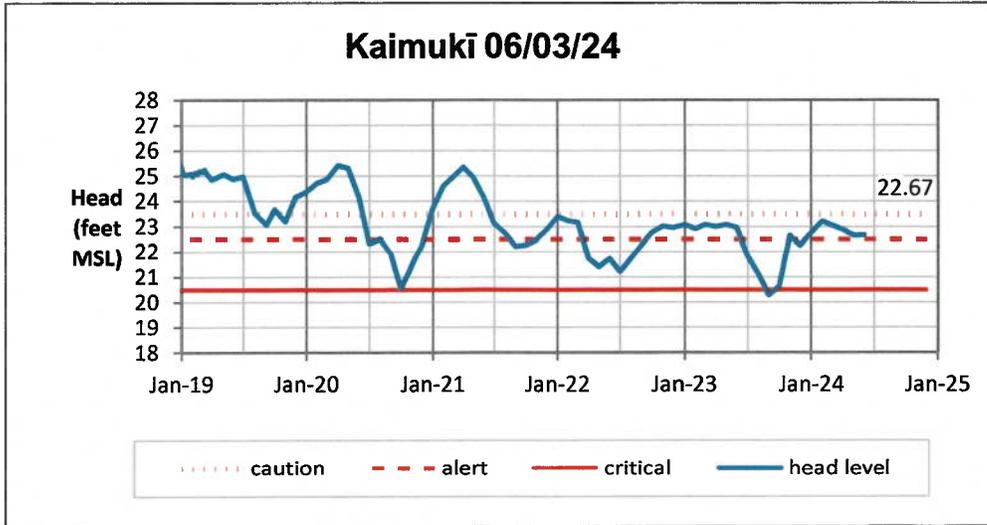
CWRM PERMITTED USE FOR BWS NONPOTABLE SOURCES				
WATER USE DISTRICTS		A	B	C
		PERMITTED USE	JUN 2024	DIFF. A-B
7	WAIPAHAU-EWA (BARBERS POINT WELL)	1.00	1.40	-0.40
TOTAL:		1.00	1.40	-0.40

EFFECTIVE WATER DEMAND PER DISTRICT

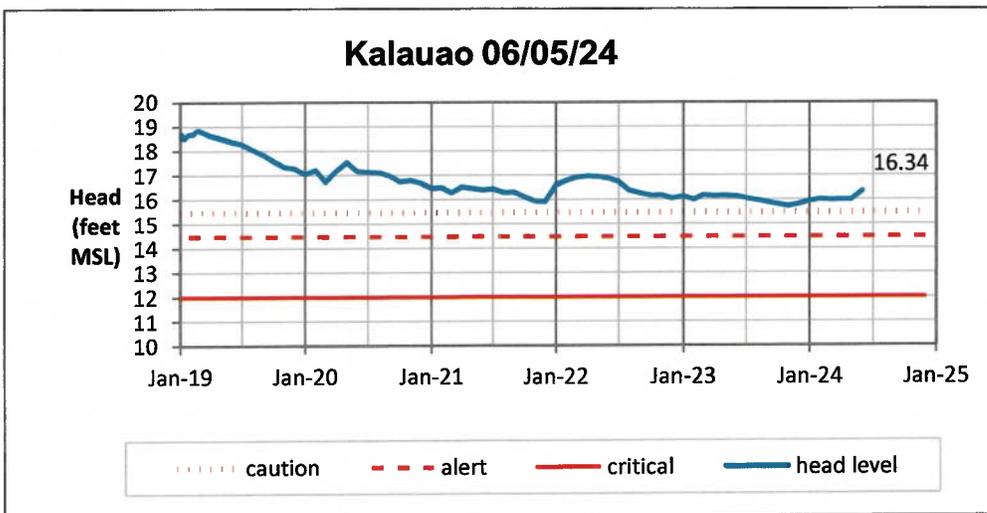
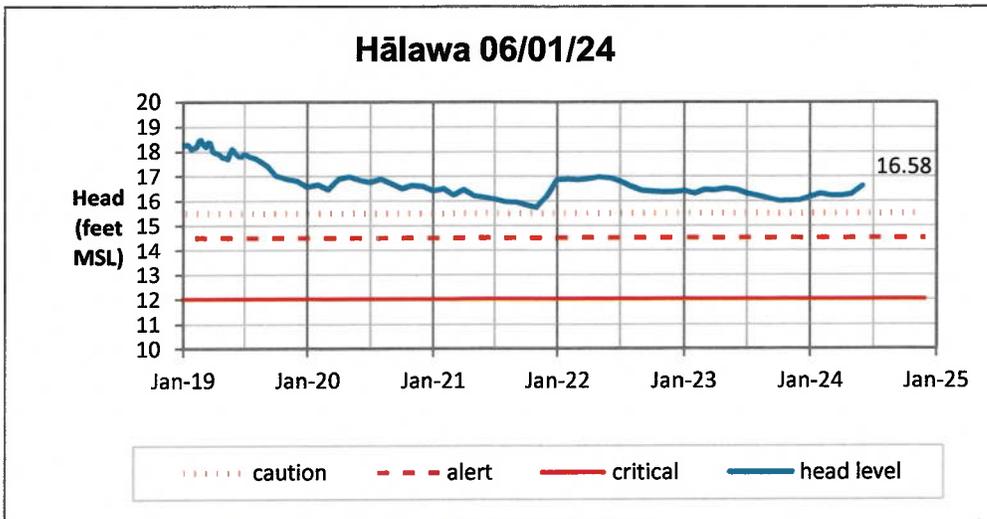
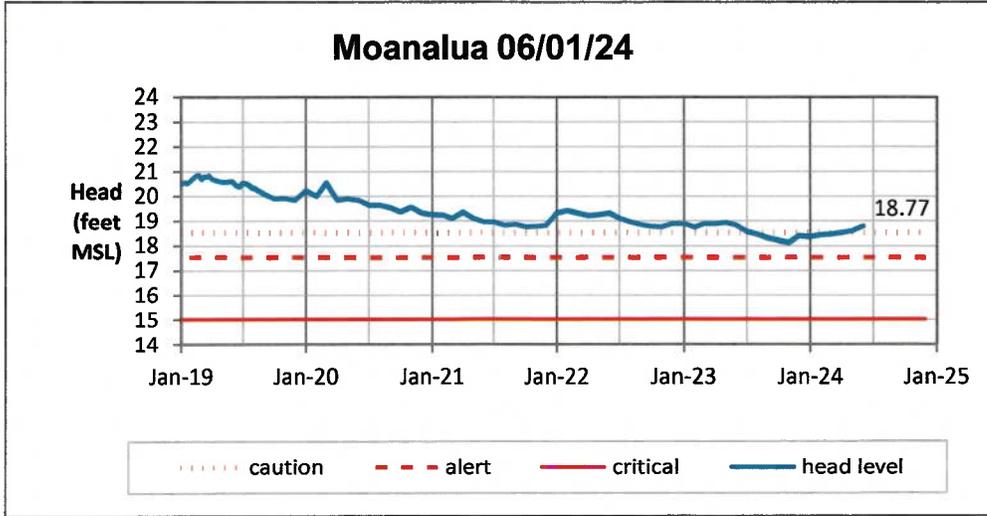
IMPORT/EXPORT BETWEEN WATER USE DISTRICTS			
FROM	TO		MGD
2	1	WINDWARD EXPORT	0.14
7	8	BARBERS PT LB	5.90

WATER USE DISTRICTS		SUBTOTAL	IMPORT	EXPORT	EFFECTIVE WATER DEMAND
1	HONOLULU	59.18	0.14	-	59.32
2	WINDWARD	18.13	-	0.14	17.99
3	NORTH SHORE	3.54	-	-	3.54
4	MILILANI	4.15	-	-	4.15
5	WAHIAWA	3.15	-	-	3.15
6	PEARL CITY-HALAWA	8.50	-	-	8.50
7	WAIPAHAU-EWA	38.21	-	5.90	32.31
8	WAIANAЕ	3.85	5.90	-	9.75
TOTAL:		138.70	6.04	6.04	138.70

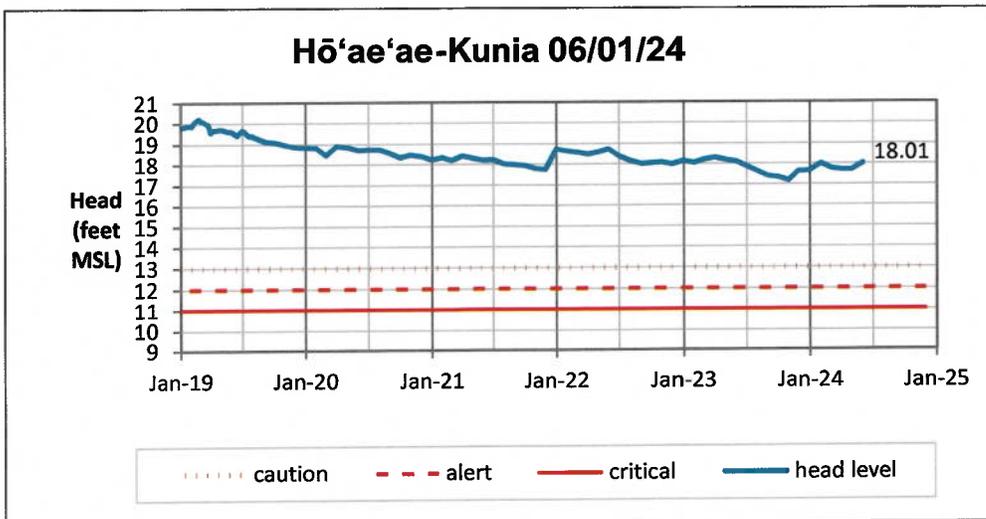
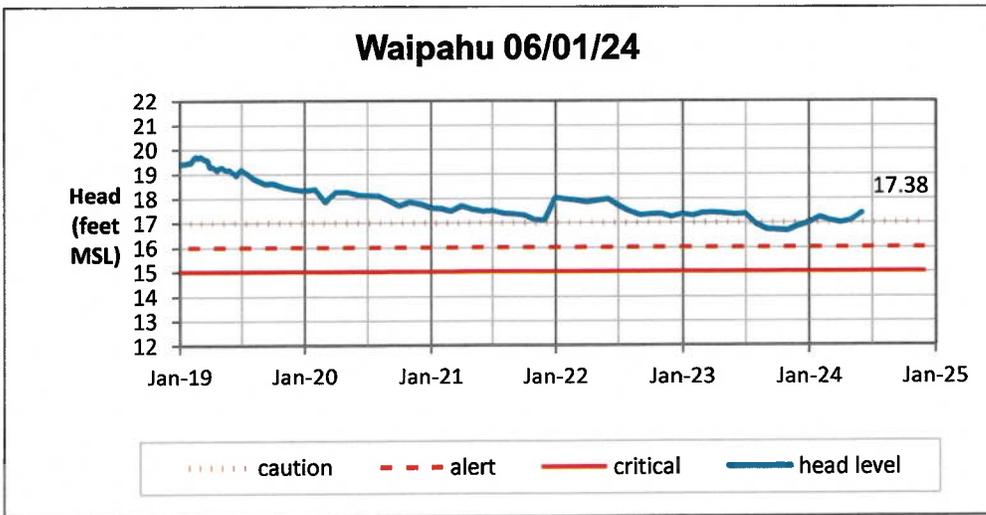
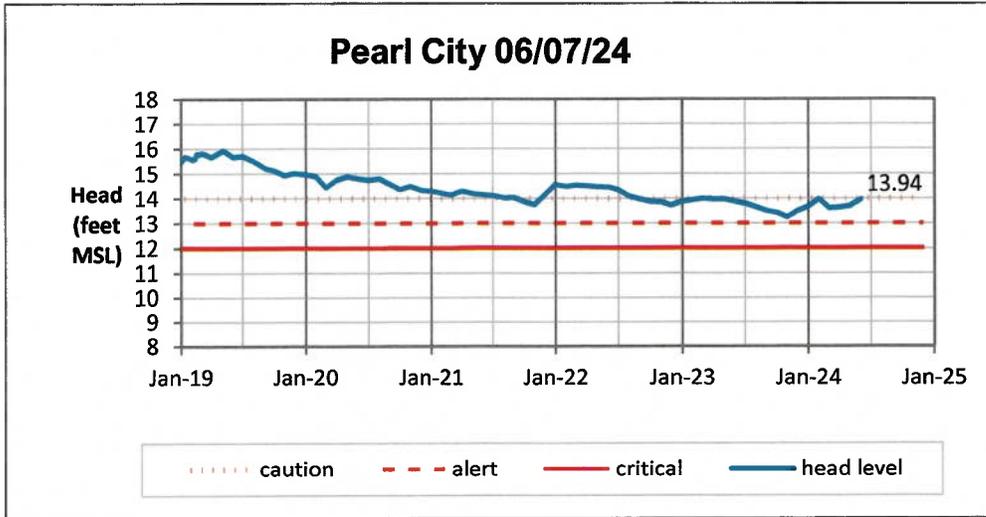
Head Report



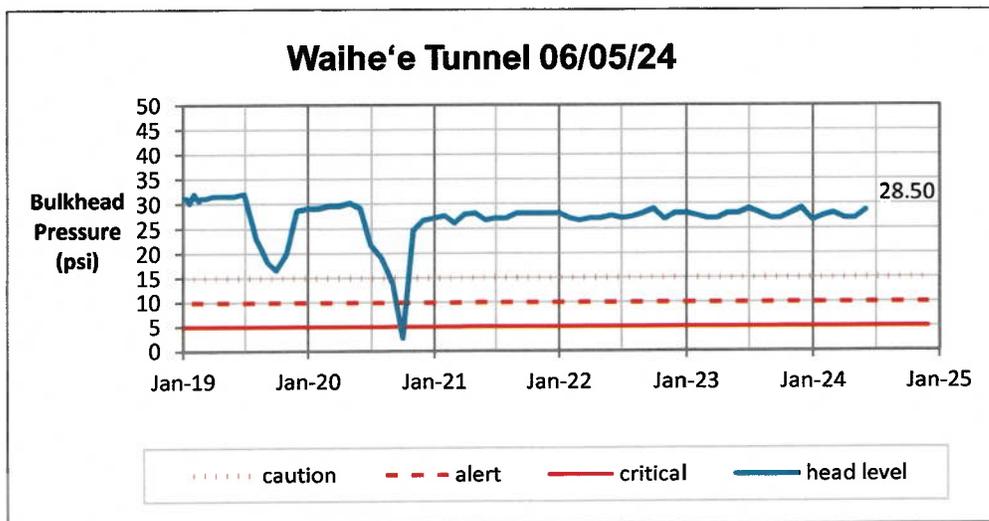
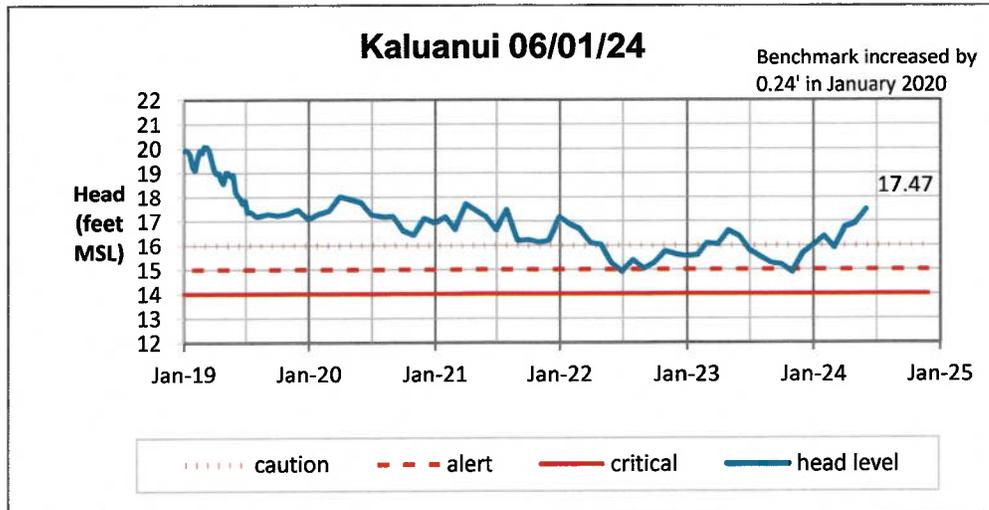
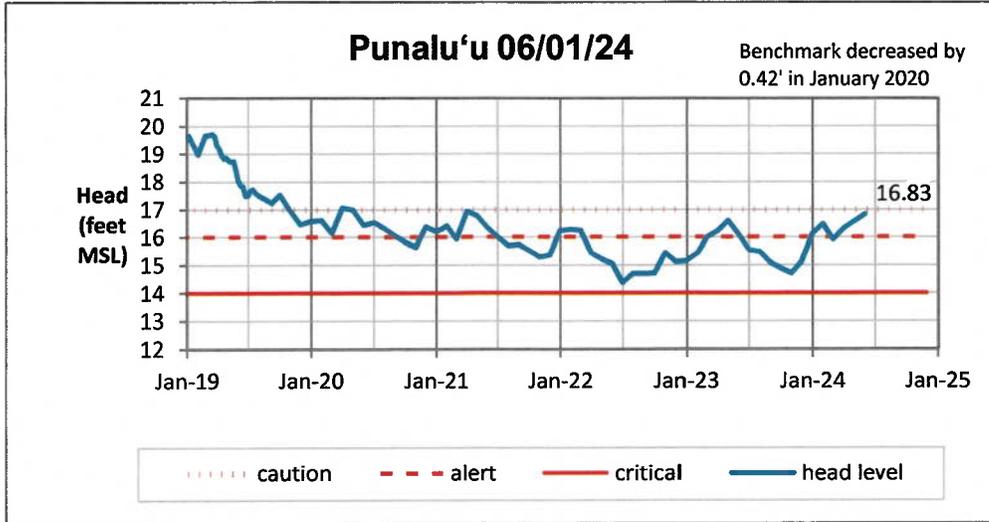
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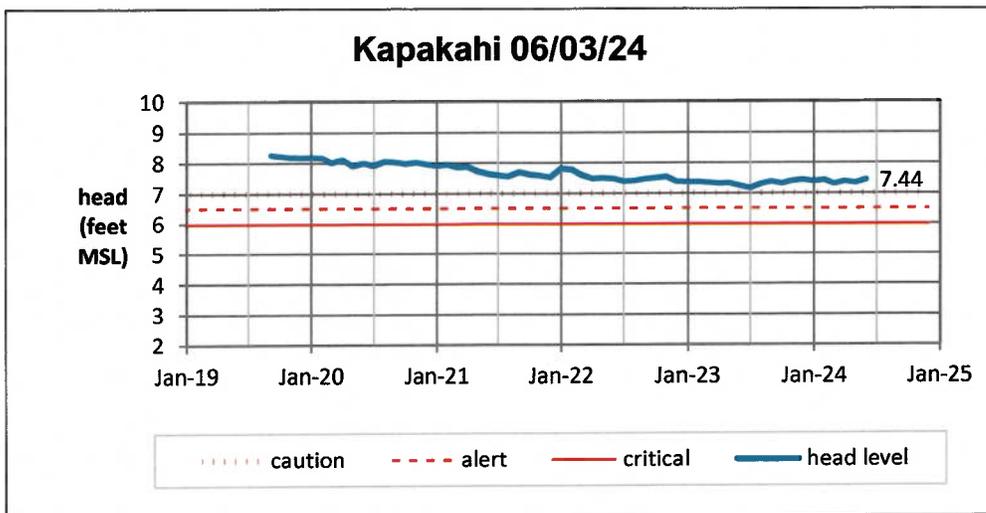
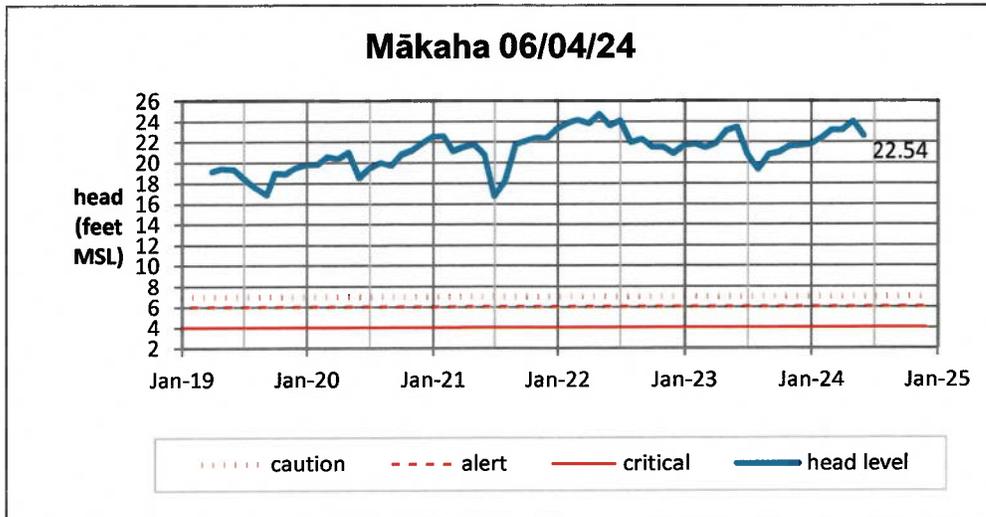
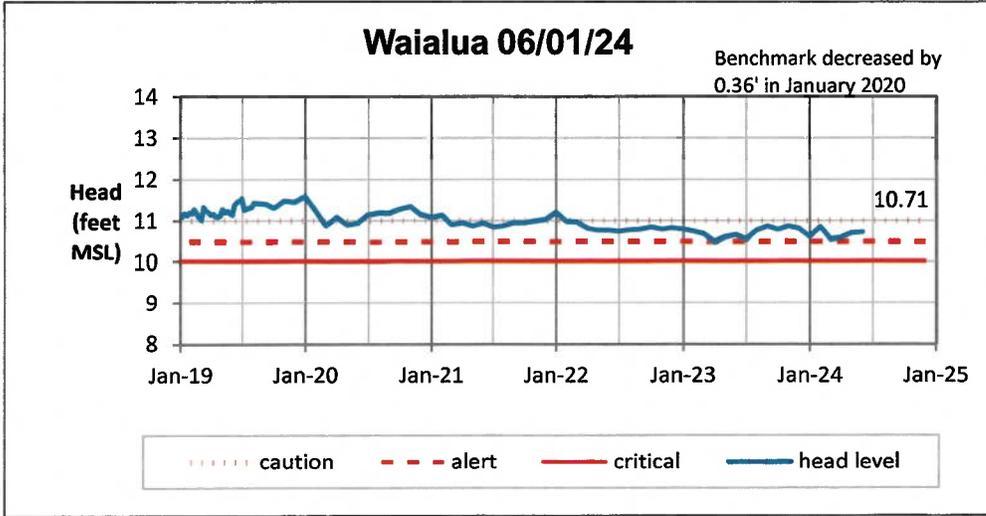
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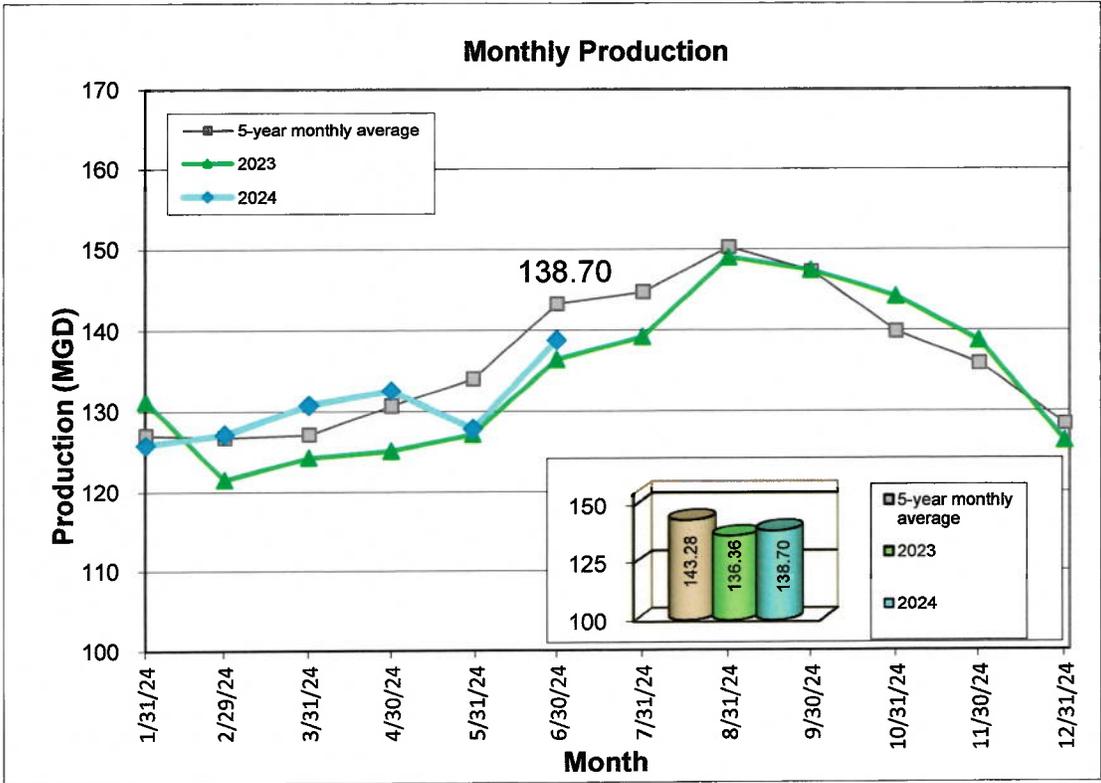
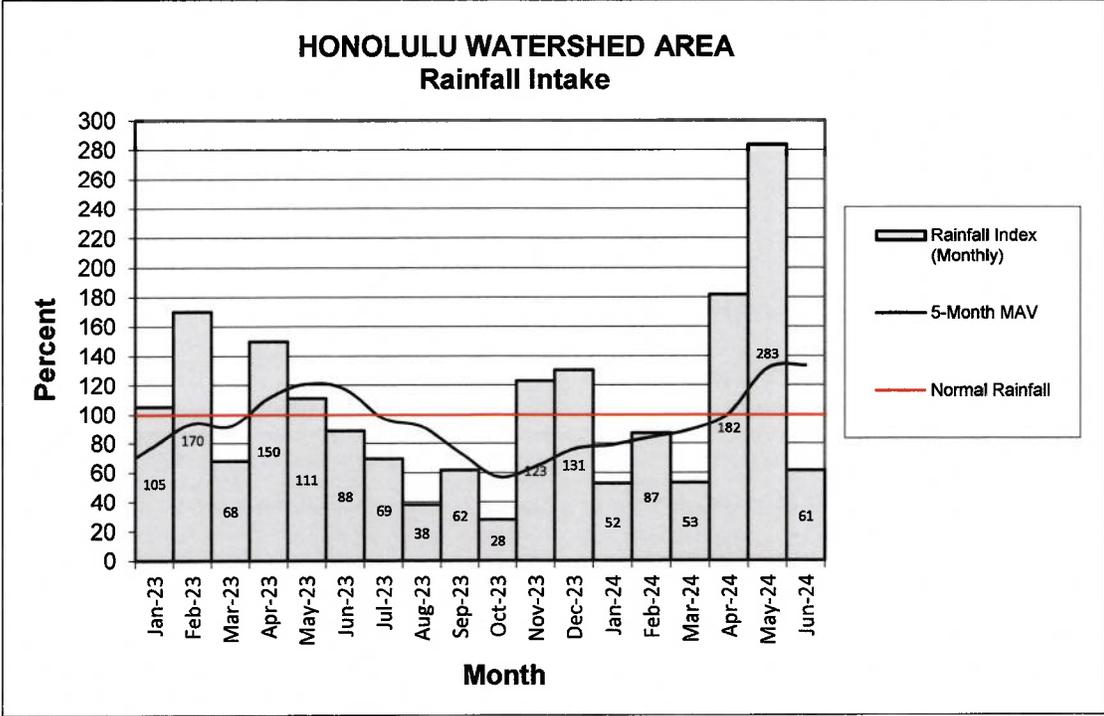


Head Report



Head Report





ITEM FOR INFORMATION NO. 4

“June 24, 2024

WATER MAIN
REPAIR
REPORT FOR
JUNE 2024

Chair and Members
Board of Water Supply
City and County of Honolulu
Honolulu, Hawai'i 96843

Chair and Members:

Subject: Water Main Repair Report for June 2024

Wayne Tello, Acting Program Administrator, Field Operations Division,
will report on water main repair work for the month of June 2024.

Respectfully submitted,

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

Attachment”

The foregoing was for information only.

DISCUSSION:

Wayne Tello, Acting Program Administrator, Field Operations Division,
gave the report.

Manager Lau asked Mr. Wayne Tello to explain the satellite leak
detection process since the BWS welcomed a new Board member.

Mr. Wayne Tello explained that the BWS uses a satellite program
(Asterra) to help detect leaks by sending a signal to the BWS Leak
Detection Team. Upon receiving a signal, the BWS investigative team
would check the area with pipe locators and sounding equipment to set
overnight, determine the type of leak, and fix the issue.

Manager Lau stated that the program began as a pilot program. The
satellite can take photos, detect chlorinated water at the surface or below
the ground, and identify points of interest. The efficiency of locating leaks
has improved by 50% due to the use of the satellite.

Mr. Tello added that the number of main breaks has increased since the
use of the satellite, which helps identify points of interest but also helps
prevent some of the possible catastrophic breaks. He shared that the
investigative crew is made up of four team members who travel island-
wide.

Board Member Wilhelm asked if the satellite had ever detected a false
leak.

Manager Lau replied that the leaks detected by satellite technology were 50% actual leaks and 50% no leaks. However, satellite technology has improved the BWS's efficiency in finding leaks. He shared that the BWS water system is 2,100 miles long. Before using the satellite technology, the BWS's goal was to survey up to 700 miles of the water system, which would take up to three years to investigate the whole water system. Since implementing the satellite, the BWS has become more efficient in locating and repairing leaks.

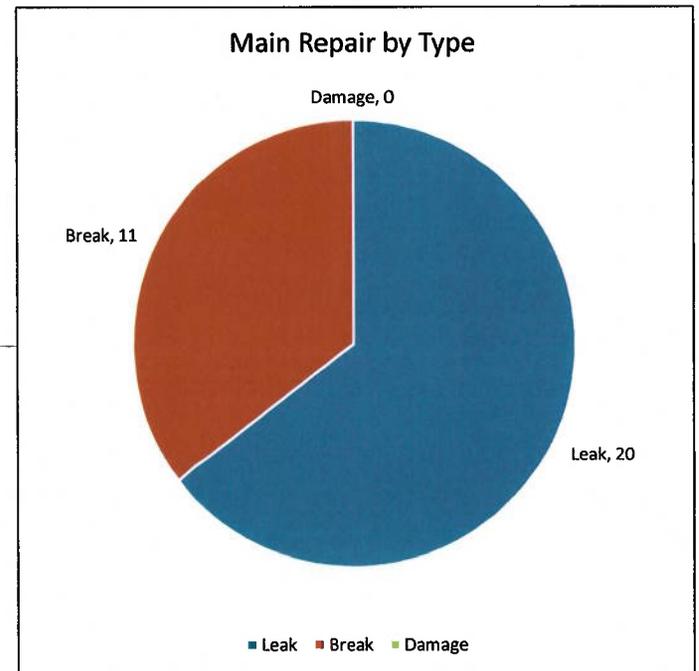
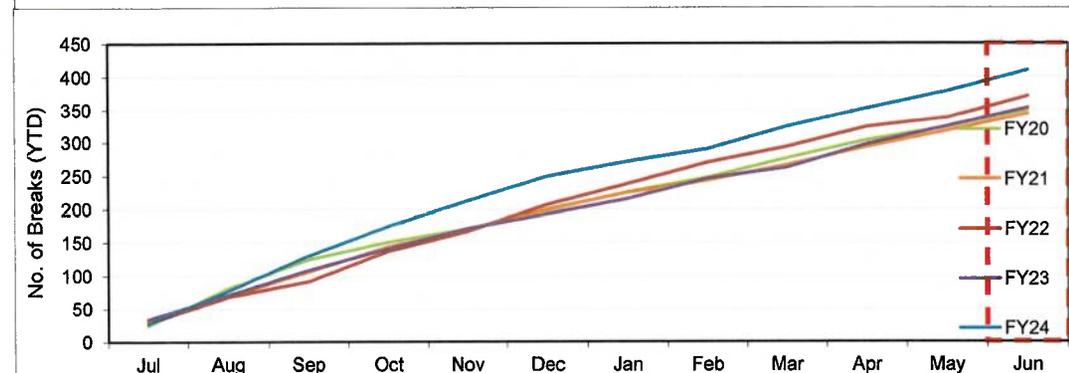
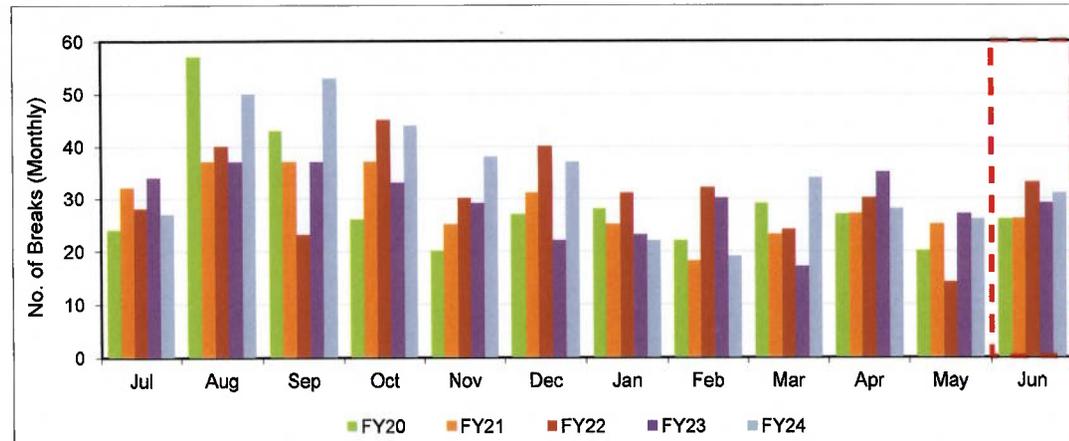
**WATER MAIN REPAIR REPORT
for June 2024**

Monthly Main Breaks

FY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2024	27	50	53	44	38	37	22	19	34	28	26	31	409
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

Main Repair by Type

Type	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
Leak	--	--	--	--	--	24	12	12	19	17	16	20	120
Break	--	--	--	--	--	13	10	7	14	11	10	11	76
Damage	--	--	--	--	--	0	0	0	1	0	0	0	1
Total	---	---	---	---	---	37	22	19	34	28	26	31	197



Date	Address	Size (In)	Pipe Type	Date	Address	Size (In)	Pipe Type
6/3/2024	801 Auloa Rd, Kailua	12	CI	6/24/2024	867 Hoomaemae St, Pearl City	8	AC
6/3/2024	98-2044 Kipikua St, Aiea	8	DI	6/24/2024	1414 Akialoa Pl, Kailua	8	CI
6/5/2024	Waimanalo Tunnel IV, Waimanalo	6	CI	6/26/2024	797 Auloa Rd, Kailua	12	CI
6/5/2024	421 Aiealani Pl, Aiea	8	CI	6/27/2024	3061 Woodlawn Dr, Honolulu	6	CI
6/6/2024	4391 Halupa St, Honolulu	12	PVC	6/28/2024	45-222 Hikiwale St, Kaneohe	8	CI
6/6/2024	3161 Woodlawn Dr, Honolulu	6	CI				
6/7/2024	3148 Alike Ave, Honolulu	8	PVC				
6/7/2024	2420 Rooke Ave, Honolulu	8	DI				
6/7/2024	2449 10th Ave, Honolulu	8	CI				
6/9/2024	20 Alakawa St, Honolulu	16	CI				
6/13/2024	1818 Eames St, Wahiawa	6	CI				
6/13/2024	945 Makaiwa St, Honolulu	8	CI				
6/13/2024	1610 N School St, Honolulu	8	CI				
6/13/2024	3728 Old Pali Rd, Honolulu	6	CI				
6/13/2024	4741 Kahala Ave, Honolulu	8	CI				
6/14/2024	3005 Kahawai St, Honolulu	8	PVC				
6/14/2024	H1 E (Waialae Ave), Honolulu	12	CI				
6/15/2024	578 Ulumu St, Kailua	8	CI				
6/18/2024	985 Moloalo St, Waipahu	8	CI				
6/18/2024	86-503 Kawili Pl, Waianae	4	CI				
6/19/2024	819 Kealahou St, Honolulu	8	DI				
6/19/2024	819 Kealahou St, Honolulu	8	DI				
6/20/2024	2161 Hoolaulea St, Pearl City	12	CI				
6/20/2024	2424 Notley St, Honolulu	8	PVC				
6/21/2024	1010 Hao St, Honolulu	8	CI				
6/23/2024	2695 Dole St, Honolulu	20	CI				

LEAK DETECTION for June 2024

POIs Investigated

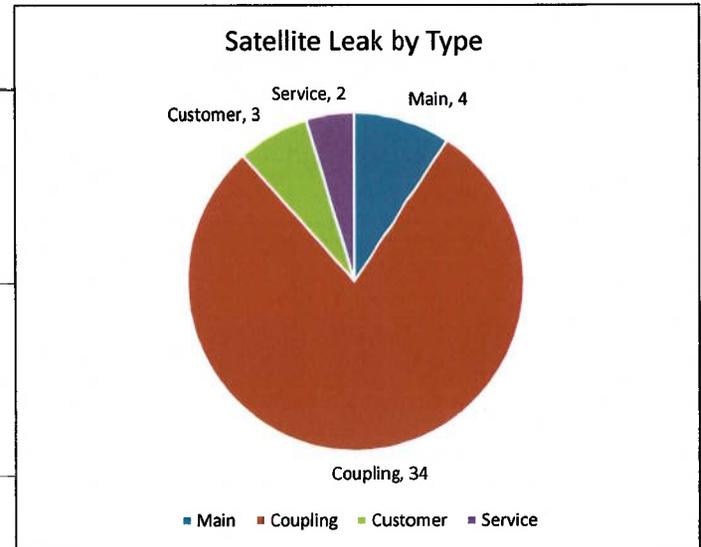
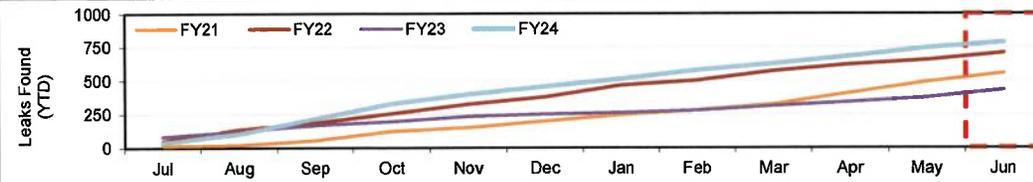
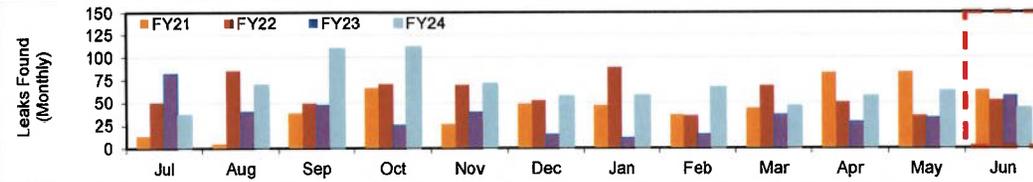
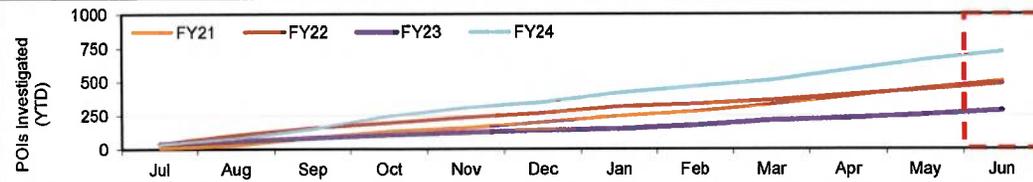
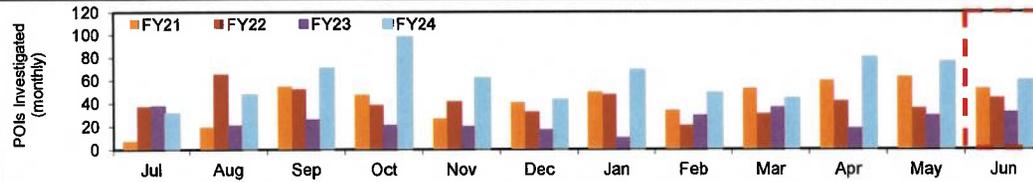
FY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2024	31	47	70	97	61	42	68	48	43	79	75	59	720
2023	37	20	25	20	19	16	9	28	35	17	28	31	285
2022	37	65	52	38	41	32	47	20	30	41	35	44	482
2021	7	19	54	47	26	40	49	33	52	59	62	52	500

Leaks Found

FY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2024	36	69	109	111	70	56	57	66	45	56	62	43	780
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

Satellite Leak by Type

Type	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
Main	6	14	13	6	5	4	3	5	5	2	7	4	74
Coupling	17	35	74	71	48	46	47	41	35	42	44	34	534
Customer	9	13	14	23	12	1	5	16	3	5	5	3	109
Service	4	7	8	11	5	5	2	4	2	7	6	2	63
Total	36	69	109	111	70	56	57	66	45	56	62	43	780



MOTION TO RECESS INTO EXECUTIVE SESSION

There being no further business, Chair Anthony, at 3:24 PM, called for a motion to adjourn the Open Session. Jonathan Kaneshiro so moved; seconded by Gene Albano and unanimously carried.

Upon unanimous approved motion, the Board recessed into Executive Session Pursuant to [HRS § 92-5 (a)(4)] at 3:25 PM to Consider Issues Pertaining to Matters Posted for Discussion at an Executive Session.

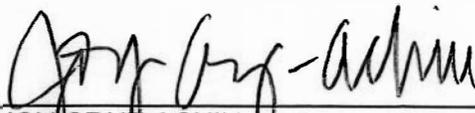
OPEN SESSION

The Board reconvened in Open Session at 4:31 PM.

MOTION TO ADJOURN

There being no further business, Chair Anthony, at 4:32 PM, called for a motion to adjourn the Regular Session. Lance Wilhelm so moved, seconded by Jonathan Kaneshiro, and unanimously carried.

The minutes of the Regular Meeting held on July 22, 2024, are respectfully submitted,


 JOY CRUZ-ACHIU

APPROVED:


 NĀ'ĀLEHU ANTHONY
 Chair of the Board
 AUG 26 2024
 Date

THE MINUTES OF THE REGULAR MEETING HELD ON JULY 22, 2024, WERE APPROVED AT THE AUGUST 26, 2024, BOARD MEETING			
	AYE	NO	COMMENT
NĀ'ĀLEHU ANTHONY	X		
JONATHAN KANESHIRO	X		
BRYAN P. ANDAYA			ABSTAIN
KAPUA SPROAT			ABSTAIN
LANCE WILHELM	X		
EDWIN H. SNIFFEN			ABSENT
GENE C. ALBANO	X		