

MINUTES
REGULAR MEETING
OF THE
BOARD OF WATER SUPPLY

August 27, 2018

The Public Hearing was held in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, to Consider (1) Adopting the Revisions to the Schedule of Rates and Charges for the Furnishing of Water and Water Service for Fiscal Years 2019-2023, Effective September 10, 2018, through June 30, 2023.

Present: Bryan P. Andaya, Chair
 Kapua Sproat, Vice Chair
 Kay C. Matsui
 Ray C. Soon
 Ross S. Sasamura

Also Present: Ernest Lau, Manager and Chief Engineer
 Ellen Kitamura, Deputy Manager and Chief Engineer
 Erwin Kawata
 Barry Usagawa
 Robert Morita
 Jason Takaki
 Joe Cooper
 Kevin Ihu
 Jennifer Elflein
 Garon Hamasaki
 Anabel Lindsey
 Kathleen Pahinui
 Dymian Racoma
 Mike Matsuo
 Mike Fuke
 Henderson Nuuhiwa
 Michele Thomas
 Kathy Mitchell
 Lisa Kim
 Gerrene Yukuno
 Marc Chun
 Molly Skeel

Others Present: Jessica Wong, Deputy Corporation Counsel
 Jeff Lau, Deputy Corporation Counsel
 Dave Ebersold, CDM Smith
 Audrey Harris, CDM Smith
 Tom Myers, Brown and Caldwell
 Tek Yoon

Absent: David C. Hulihee
 Jade T. Butay

Agenda items were taken out of order.

At 2:00 PM, Chair Andaya called to order the Public Hearing.

Discussion:

Mr. Andaya began the Board Meeting by opening with the Public Hearing. This public hearing was to consider proposed changes to Board of Water Supply's (BWS) water rates for fiscal year 2019 to 2023. Mr. Andaya mentioned the public hearing notice appeared in the July 27 and July 29, 2018 Honolulu Advertiser newspaper. The Board also held four previous public hearings on the proposed schedule of rates and charges on Thursday, April 26, 2018 in Honolulu; Monday, May 14, 2018 in Kapolei; Tuesday, May 15, 2018, in Kaneohe; and Thursday, May 24, 2018, in Mililani. Mr. Andaya stated that the Board is dedicated to the provision of a safe, dependable, and affordable supply of water to our customers. One way to ensure this occurs was updating BWS Financial Policies, Long Range Financial Plan to implement the infrastructure investment plan, and establishing the Water Master Plan. The board held a water rates workshop in January 2018 and has received monthly updates on the development of proposed changes to water rates and charges, in addition to the extensive efforts to seek public input to the changes being proposed.

Mr. Andaya called on Ernest Lau, Manager and Chief Engineer and Dave Ebersold of CDM Smith.

Mr. Ernest Lau stated that all life depends on water, that's BWS vision and what BWS is motivated to provide to our community. BWS delivers safe, dependable, affordable water to BWS customers' taps every minute of every hour and every day. BWS has 13 tunnels, 5 shafts, 194 groundwater wells, and 13 treatment systems that are mainly activated carbon treatment systems in central Oahu. Water flows to 171 potable water tanks. BWS has 190 booster pumps because our customers live in different elevations around the island. The water flows through the 2,100 miles of water mains in BWS system, and it also includes about 21,000 fire hydrants that helps to provide the Honolulu Fire Department with water to fight fires. BWS serves an average of 145 million gallons of water per day to almost a million people on Oahu.

Mr. Ebersold talked about the proposed water rates. He reinforced that sewer services are provided by Wastewater Management under the City Department of Environment Services. The BWS has proposed changes to its water rates to increase investments in Oahu's water infrastructure, reduce water main breaks, encourage conservation, provide funding for disaster recovery, and more equitably distribute rates and charges among types of customers. The water rate proposal includes schedules of monthly charges, consumption charges, fire meter standby charges, and fee subsidies to support affordable and homeless housing incentives and fire sprinkler retrofit of existing high-rise residential buildings. The BWS also proposes to continue to subsidize agricultural rates for qualified farmers.

Water rates are for a five-year period beginning September 10, 2018, through June 30, 2023. Rate increases won't take effect until July 1, 2019. Rates will be raised gradually so that people don't experience rate shock or a sudden jump in their rates. BWS wanted to ensure that all rate increases were spread across all rate classes fairly and equitably. A study showed that single-family residences currently pay less than it costs to serve them, while multi-unit residential customers and non-residential customer pay more than the actual cost to serve them.

Subsequent rate adjustments would begin on July 1, 2020, 2021, and 2022. Also, this proposed rate provides an “essential needs” tier that rewards people who conserve water. For high water users, adjustments to other tiers are designed to encourage conservation.

Increases are expected to generate about an additional \$60 million for BWS. BWS needs to increase revenue to keep up with its fixed costs as well as its goal to increase the miles of pipes it replaces annually to 21 from the current six. There are an estimated 2,100 miles of pipeline.

BWS is also looking at fee waivers for affordable housing, for homeless housing and to retrofit fire sprinklers. The Board may waive the water system facilities charge and new meter costs for qualified dwelling units, up to 500 dwelling units per year. The waivers would be granted when the building permit is submitted for approval. To qualify, the dwelling units must be certified as either affordable or homeless dwelling units by the appropriate City and County agency. The amount of the meter waiver should be calculated as a percentage of the number of certified dwelling units to the total number of dwelling units in the project. And if the annual cap of 500 dwelling units has not been reached in a given year and a project is proposed that would qualify for more than the remaining number of dwelling units in that year, then the Manager and Chief has the discretion to increase that year’s limit. The waiver provision shall expire on June 30, 2023.

Other BWS charges include a fire meter standby charge, a standby charge for emergency interconnections, a power cost adjustment, and environmental regulations compliance fee cost adjustment. The fire meter standby charge will become effective on July 1, 2019.

Those customers that receive private fire service will need to pay a new monthly fire meter standby charge, which will be based on the size of a fire meter.

The monthly bill, beginning July 1, 2019, will consist of a new monthly customer charge based on the size of the customer’s meter, and a revamped schedule of tiers and rates for the quantity charge, based on how many thousands of gallons of water is used from month to month.

Regarding the public hearings, five people gave public testimony at the four different hearings. One was opposed to higher single-family residential increases and the tier changes. Two had comments that were not related to the proposed water rates. They were opposed to BWS’s Red Hill advocacy. One was a BWS employee, and another was concerned that any increases are big for retirees on fixed income. There have been 15 neighborhood board presentations with a total of about 500 attendees. There have also been ten interest group presentations with about 150 attendees.

Mr. Ebersold stated that ENV was the most common other topic that came up from the total of 33 questions and comments received through the totality of the public outreach process.

Mr. Yoon: From the audience, Mr. Yoon asked, ENV means what? Mr. Lau answered Department of Environmental Services, another City Department. Mr. Yoon replied Thank you very much.

Mr. Ebersold talked about the board submitting a small business impact statement to the Small Business Regulatory Review Board on June 20. The process requires at least 30 days notice of the related public hearing. Following this, the board would need to submit to the Small Business Regulatory Review Board a post-hearing small business impact statement. Then rates can become effective 10 days after filing with the City Clerk.

The Stake holder advisory group has reviewed the public input on proposed rates and expressed satisfaction with the outreach, especially with the neighborhood boards. Overall, the comments at neighborhood board meetings were positive and supportive of the BWS's approach and rationale for water rate increases.

BWS's last rate increase took effect July 1, 2015, with an increase of approximately 9.65 percent.

Mr. Andaya asked the members in the audience if they have any questions.

Mr. Yoon had a question regarding everyone paying their fair share, especially hotels.

Mr. Ebersold responded by discussing the work BWS did on the cost of service for each customer class and that from this study, it was noted that single-family residential customers pay less than it costs to serve them and multi-unit residential and non-residential customers (including hotels) pay more than it costs to serve them.

Mr. Andaya said if there are no other questions, we will move to public testimony. Due to time constraints, please limit your presentations to three minutes each, and state your name and any organization you represent. Since there was no public testimony, the hearing was closed.

Mr. Lau mentioned that there is a slight correction to the agenda. There was a slight error on the original post and the agenda on Item Number 2. Effective September 10, 2018 through September 30, 2023. The original posting, which has been corrected, indicated 2018. So the 2018 on June 30 should have been 2023.

Mr. Andaya noted the correction.

MOTION TO
ADOPT
RESOLUTION
NO. 889, 2018

Ross Sasamura motioned to adopt Resolution No. 889, 2018, Adopting the Revisions to the Schedule of Rates and Charges for the Furnishing of Water and Water Service for Fiscal Years 2019-2023, Effective September 10, 2018 through June 30, 2023, seconded by Ray Soon. The motion was unanimously carried.

ADOPTION OF
RESOLUTION
NO. 889, 2018

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

Chair and Members:

Subject: Adoption of Resolution No. 889, 2018, Adopting the
Revisions to the Schedule of Rates and Charges for the
Furnishing of Water and Water Service for Fiscal Years
2019 – 2023, Effective September 10, 2018 through
June 30, 2023

We recommend adoption of Resolution No. 889, 2018, relating to the Schedule of Rates and Charges for the Furnishing of Water and Water Service ("Schedule") for Fiscal Years (FY) 2019 – 2023, Effective September 10, 2018 through June 30, 2023.

In summary, the proposed rates and charges, as reflected in the proposed Schedule, remain essentially the same until July 1, 2019, when the following changes become effective:

- The Billing Charge switches to a meter-based monthly Customer Charge (a customer charge based on the size of the meter);
- the Quantity Charge tiers and rates are updated for single-family residential, multi-unit residential, non-residential, and agricultural classes; and
- a new monthly Fire Meter Standby Charge is implemented.

Additionally, rates for R-1 Golf, R-1 Other, and reverse osmosis (RO) recycled water service have been added to the Schedule, effectively moving some of these customers off contract rates.

Upon adoption of Resolution No. 889, changes to the Power Cost Adjustment and Environmental Regulations Compliance Fee Cost Adjustment will take effect on September 10, 2018. For each of these adjustments, the incremental increase in costs that would result in changes to rates is reduced from \$600,000 to \$500,000, to be consistent with the overall decreasing trend in per capita water use by our customers.

Under Resolution No. 889, the ability to waive the Water System Facilities Charge and new meter costs for qualified affordable housing and homeless dwelling units, under the terms specified in the proposed Schedule, will also take effect on September 10, 2018. Waivers of certain charges for the installation of fire meters to support the retrofit of high rise multi-unit residential buildings for the installation of fire sprinkler systems will take effect on the same date. All of these waivers will end on June 30, 2023.

Public hearings to consider the revisions were held on April 26, 2018, May 14, 2018, May 15, 2018 and May 24, 2018. An additional public hearing, before a quorum of the Board, is being held on August 27, 2018, prior to adoption of the revisions. The affidavit attesting to the publication of the public hearing notice is attached.

We recommend the adoption of Resolution No. 889, 2018, relating to the Schedule of Rates and Charges for the Furnishing of Water and Water Service.

Respectfully submitted,

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

Attachments”

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

RESOLUTION NO. 889, 2018

ADOPTING THE REVISIONS TO THE SCHEDULE OF RATES AND CHARGES FOR
THE FURNISHING OF WATER AND WATER SERVICE FOR FISCAL YEARS
2019 – 2023, EFFECTIVE SEPTEMBER 10, 2018 THROUGH JUNE 30, 2023

WHEREAS, after notices of publication, five public hearings were held by the Board of Water Supply on April 26, 2018, May 14, 2018, May 15, 2018, May 24, 2018, and August 27, 2018, for the purpose of considering proposed revisions to the Schedule of Rates and Charges for the Furnishing of Water and Water Service; and

WHEREAS, testimonies presented at said hearings and received in writing through August 27, 2018 on the proposed revisions were given due consideration; and

WHEREAS, the Board of Water Supply held 27 meetings with a Stakeholder Advisory Group to solicit feedback and gather input on the Water Master Plan, Infrastructure Investment Plan, Long Range Financial Plan, and proposed changes to the water rates and charges; and

WHEREAS, the mission of the Board of Water Supply is to provide safe, dependable, and affordable water now and into the future; and

WHEREAS, a Water Master Plan adopted in October 2016 identifies the needs of the Board of Water Supply in order to meet its mission; and

WHEREAS, an Infrastructure Investment Plan was developed from the findings of the Water Master Plan to identify and schedule capital improvements to implement the findings and recommendations in the Water Master Plan in order to meet the mission of the Board of Water Supply; and

WHEREAS, a Long Range Financial Plan adopted by the Board of Water Supply in March 2018 was developed and included a projection of ten-year revenue requirements, evaluation of financing strategies, supporting revised Financial Policies adopted by the Board of Water Supply in May 2017, and assessment of long-term (30-year) trends and risks associated with supporting the Infrastructure Investment Plan; and

WHEREAS, a five-year cost of service and rate study were completed to determine the necessary revenue adjustments to support implementation of the findings in the Water Master Plan and the Infrastructure Investment Plan; and

WHEREAS, the Board of Water Supply seeks to increase its annual replacement of pipeline to 21 miles per year over the next decade; and

WHEREAS, the cost of service analysis identified opportunities to adjust rates and charges to better align revenues with the costs to serve different customer classes; and

WHEREAS, the rate study identified opportunities to incentivize efficient use of water within the residential customer classes by changing tiers and rates; and


WHEREAS, the Board of Water Supply recognizes the importance of affordable water to meet essential household needs; and

WHEREAS, the Board of Water Supply recognizes the benefits of a viable local agricultural industry on Oahu and the importance of an affordable supply of water for that industry; and

WHEREAS, the Board of Water Supply recognizes the benefit of encouraging the use of recycled and non-potable water resources as a way to manage and sustain the potable water resources on Oahu; now, therefore

BE IT RESOLVED by the Board of Water Supply, City and County of Honolulu, that in support of these objectives and the mission of the Board of Water Supply, the Schedule of Rates and Charges be revised, as attached hereto, and that said rates and charges shall become effective from and after September 10, 2018.

ADOPTED:


BRYAN P. ANDAYA
Chair

Honolulu, Hawaii
August 27, 2018

APPROVED

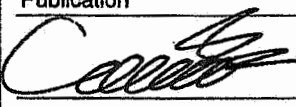
RESOLUTION NO. 889, 2018, ADOPTING THE REVISIONS TO THE SCHEDULE OF RATES AND CHARGES FOR THE FURNISHING OF WATER AND WATER SERVICE FOR FISCAL YEARS 2019-2023, EFFECTIVE SEPTEMBER 10, 2018 THROUGH JUNE 30, 2023 WAS ADOPTED ON AUGUST 27, 2018			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
DAVID C. HULIHEE			ABSENT
KAY C. MATSUI	X		
RAY C. SOON	X		
ROSS S. SASAMURA	X		
JADE T. BUTAY			ABSENT

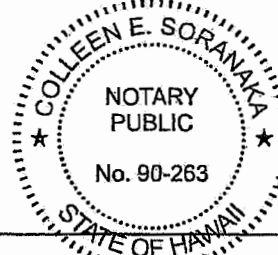
AFFIDAVIT OF PUBLICATION

IN THE MATTER OF
Notice of Public Hearing

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STATE OF HAWAII }
} SS.
City and County of Honolulu }

Doc. Date:	<u>JUL 30 2018</u>	# Pages:	<u>1</u>
Notary Name:	<u>COLLEEN E. SORANAKA</u>	First Judicial Circuit	
Doc. Description:	<u>Affidavit of</u>		
Publication	<u></u>		
	<u>JUL 30 2018</u>		
Notary Signature	Date		



Gwyn Pang being duly sworn, deposes and says that she is a clerk, duly authorized to execute this affidavit of Oahu Publications, Inc. publisher of The Honolulu Star-Advertiser, MidWeek, The Garden Island, West Hawaii Today, and Hawaii Tribune-Herald, that said newspapers are newspapers of general circulation in the State of Hawaii, and that the attached notice is true notice as was published in the

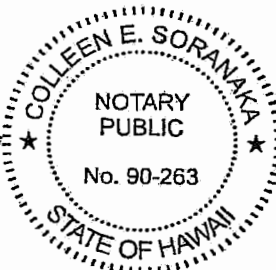
Honolulu Star-Advertiser 2 times on:
07/27, 07/29/2018
MidWeek 0 times on:
The Garden Island 0 times on:
Hawaii Tribune-Herald 0 times on:
West Hawaii Today 0 times on:

Other Publications: 0 times on:

And that affiant is not a party to or in any way interested in the above entitled matter.

Gwyn Pang
Gwyn Pang

Subscribed to and sworn before me this 30 day of July A.D. 2018



Colleen E. Soranaka, Notary Public of the First Judicial Circuit, State of Hawaii
My commission expires: Jan 06 2020

Ad # 0001118402

SP.NO.: _____ L.N.

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the BOARD OF WATER SUPPLY, CITY AND COUNTY OF HONOLULU, will hold a PUBLIC HEARING in the Board Room, Public Service Building, 630 South Beretania Street, on MONDAY, AUGUST 27, 2018, at 2:00 p.m., or soon thereafter, where all interested persons shall be afforded the opportunity of being heard on the adoption of the Proposed Schedule of Rates and Charges of the Board of Water Supply for the Fiscal Years (FY) 2019 through 2023.

Information to be discussed at this public hearing is available at Room 306 of the Public Service Building, Board of Water Supply, 630 South Beretania Street. All comments on or suggested changes to the proposed FY 2019-2023 Schedule of Rates and Charges should be filed in writing before the date of the public hearing or presented in person at the time of the hearing. Persons wishing to speak are requested to register by 1:00 p.m. with Lesley Coon by providing your name, phone number, and subject matter of testimony. Testimony is limited to three minutes and shall be presented by the registered speaker only. Any questions, please call 748-6172. If you require special assistance, auxiliary aid and/or service to participate in this meeting (i.e. sign language interpreter, interpreter for language other than English, or wheelchair accessibility), please call 748-6172 or email your request to board@hbw.org at least three business days prior to the meeting date.

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

Schedule for September 10, 2018 – June 30, 2019

Billing Charge

There is a billing charge of \$9.26 each time a bill is issued, effective September 10, 2018.

Quantity Charge

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

Single-Family Residential (Monthly per dwelling unit)	9/10/2018
Tier 1: First 13,000 gallons	\$4.42
Tier 2: 13,001–30,000 gallons	\$5.33
Tier 3: Over 30,000 gallons	\$7.94
Multi-Unit Residential (Monthly per dwelling unit)	9/10/2018
Tier 1: First 13,000 gallons	\$4.42
Tier 2: 13,001–30,000 gallons	\$5.33
Tier 3: Over 30,000 gallons	\$7.94
Non-Residential	9/10/2018
All Usage	\$4.96
Agricultural (Monthly per account)	9/10/2018
Tier 1: First 13,000 gallons	\$4.42
Tier 2: Over 13,000 gallons	\$1.89
Non-Potable/Brackish	9/10/2018
All Usage	\$2.47

Customer Class Definitions

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

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

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

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

Non-Potable/Brackish refers to customers that receive non-potable/brackish water. This water does not meet State Department of Health Drinking Water Standards. The Non-Potable Quantity Charges shall not supersede existing or individually negotiated non-potable quantity charge agreements.

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

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

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

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

Waiver of Water System Facilities Charge for Qualified Affordable and Homeless Dwelling Units: The Board of Water Supply may waive the Water System Facilities Charges and new meter cost for qualified on-site affordable and homeless dwelling units, up to 500 dwelling units per year. The waivers will be granted when the building permit is submitted for approval. To qualify, the dwelling units must be certified as either affordable or homeless dwelling units by the appropriate agency of the City and County of Honolulu. Waiver of the Water System Facilities Charge will apply only to future units associated with the certified dwelling units. The amount of the meter waiver shall be calculated as a percentage of the number of certified dwelling units to the total number of dwelling units in the project. If the annual cap of 500 dwelling units has not been reached and a project is proposed that would qualify for more than the remaining number of dwelling units in that year, the Manager and Chief Engineer has the discretion to increase that year's limit. This waiver provision shall expire on June 30, 2023.

Waiver of Meter Charges for Residential Fire Sprinkler Retrofits: The Board of Water Supply may waive the new meter charges for high-rise multi-unit residential fire sprinkler retrofits. This waiver provision shall expire on June 30, 2023.

Schedule for July 1, 2019 – June 30, 2023

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

Meter Size	7/1/2019	7/1/2020	7/1/2021	7/1/2022
5/8" or 3/4"	\$10.42	\$10.80	\$11.38	\$12.09
1"	\$13.31	\$13.79	\$14.45	\$15.28
1.5"	\$15.23	\$15.78	\$16.50	\$17.41
2"	\$38.81	\$40.18	\$41.61	\$43.45
3"	\$47.95	\$49.64	\$51.35	\$53.55
4"	\$91.74	\$94.95	\$97.98	\$101.92
6"	\$163.91	\$169.63	\$174.84	\$181.64
8"	\$250.03	\$258.76	\$266.57	\$276.78
12"	\$541.31	\$560.18	\$576.78	\$598.53

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

Single-Family Residential (Monthly per dwelling unit)	7/1/2019	7/1/2020	7/1/2021	7/1/2022
Tier 1 Essential Needs: First 2,000 gallons	\$3.79	\$3.91	\$4.17	\$4.46
Tier 2 2,001 – 6,000 gallons	\$4.46	\$4.60	\$4.90	\$5.25
Tier 3 6,001 – 30,000 gallons	\$5.06	\$5.20	\$5.50	\$5.85
Tier 4 Over 30,000 gallons	\$8.46	\$8.60	\$8.90	\$9.25

Continued in the next column:

Schedule for July 1, 2019 – June 30, 2023, Continued:

Multi-Unit Residential (Monthly per dwelling unit)	7/1/2019	7/1/2020	7/1/2021	7/1/2022
Tier 1 Essential Needs: First 2,000 gallons	\$3.70	\$3.71	\$3.72	\$3.77
Tier 2 2,001 – 4,000 gallons	\$4.35	\$4.36	\$4.38	\$4.43
Tier 3 4,001 – 10,000 gallons	\$4.95	\$4.96	\$4.98	\$5.03
Tier 4 Over 10,000 gallons	\$5.90	\$5.91	\$5.93	\$5.98
Non-Residential	7/1/2019	7/1/2020	7/1/2021	7/1/2022
All Usage	\$5.01	\$5.06	\$5.16	\$5.27
Agricultural (Monthly per account)	7/1/2019	7/1/2020	7/1/2021	7/1/2022
Tier 1 Essential Needs: First 2,000 gallons	\$3.79	\$3.91	\$4.17	\$4.46
Tier 2 2,001 – 6,000 gallons	\$4.46	\$4.60	\$4.90	\$5.25
Tier 3 Over 6,000 gallons	\$1.95	\$1.98	\$2.05	\$2.12
Non-Potable/Brackish	7/1/2019	7/1/2020	7/1/2021	7/1/2022
All Usage	\$2.53	\$2.62	\$2.75	\$2.90
Recycled Water R-1 Golf	7/1/2019	7/1/2020	7/1/2021	7/1/2022
All Usage	\$0.57	\$0.59	\$0.62	\$0.65
Recycled Water R-1 Other	7/1/2019	7/1/2020	7/1/2021	7/1/2022
All Usage	\$1.84	\$1.88	\$1.92	\$1.96
Reverse Osmosis (RO)	7/1/2019	7/1/2020	7/1/2021	7/1/2022
All Usage	\$5.76	\$5.88	\$6.12	\$6.36

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

Fire Meter Size	7/1/2019	7/1/2020	7/1/2021	7/1/2022
2" and smaller	\$6.72	\$6.95	\$7.42	\$7.99
3"	\$8.82	\$9.08	\$9.64	\$10.29
4"	\$12.43	\$12.74	\$13.44	\$14.23
6"	\$25.42	\$25.94	\$27.13	\$28.44
8"	\$47.83	\$48.69	\$50.74	\$52.94

Customer Class Definitions

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

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

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

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

Non-Potable Water means all water that does not meet State Department of Health Drinking Water Standards. It is divided into the following classes:

Non-Potable/Brackish

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

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

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

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

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

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

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

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Waiver of Meter Charges for Residential Fire Sprinkler Retrofits: The Board of Water Supply may waive the new meter charges for high-rise multi-unit residential fire sprinkler retrofits. This waiver provision shall expire on June 30, 2023.



Honolulu Board of Water Supply
630 S. Beretania St. • Honolulu, HI 96843
(808) 748-5041 • contact@hbw.org
www.boardofwatersupply.com/water-rates/

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

NOTICE OF PUBLIC HEARINGS

NOTICE IS HEARBY GIVEN that the BOARD OF WATER SUPPLY, CITY AND COUNTY OF HONOLULU, will hold a series of PUBLIC HEARINGS where all interested persons shall be afforded the opportunity of being heard on a draft water rate proposal for Fiscal Years 2019-2023. The draft water rate proposal includes schedules of monthly charges, consumption charges, fire meter standby charges, and fee subsidies to support affordable, homeless housing incentives, and fire sprinklers retrofit of existing high-rise residential buildings.

The PUBLIC HEARINGS will be held on the following dates, times and locations:

- % Honolulu-April 26, 2018, at 6:30 p.m. at the Mission Memorial Auditorium, 550 South King Street
- % Kapolei-May 14, 2018, at 6:30 p.m. at Kapolei Hale in the Conference Room, 1000 Uluohia Street
- % Kaneohe-May 15, 2018, at 6:30 p.m. at Benjamin Parker Elementary School Cafeteria, 45-259 Walkalua Road
- % Mililani-May 24, 2018, at 6:30 p.m. at Mililani Recreation Center #5, 95-1101 Ainamakua Drive

To view the proposed rates visit www.boardofwatersupply.com or by coming to the BOARD OF WATER SUPPLY at 630 South Beretania Street. For more information call 748-5041 or email contactus@hbws.org.

ERNEST Y.W. LAU, Manager and Chief Engineer
BOARD OF WATER SUPPLY
(SA1086070 4/15, 4/18, 4/22/18 MW 4/18/18)

Revision to the Schedule of Rates and Charges for the Furnishing of Water and Water Service

Amended by Resolution No. 889, 2018, effective September 10, 2018

Schedule for September 10, 2018 – June 30, 2019

Billing Charge

There is a billing charge each time a bill is issued effective as follows:

Sep. 10, 2018
\$9.26

Quantity Charge

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

Single-Family Residential (Monthly per dwelling unit)	Sep. 10, 2018
Tier 1 First 13,000 gallons	\$4.42
Tier 2 13,001 – 30,000 gallons	\$5.33
Tier 3 Over 30,000 gallons	\$7.94
Multi-Unit Residential (Monthly per dwelling unit)	Sep. 10, 2018
Tier 1 First 9,000 gallons	\$4.42
Tier 2 9,001 – 22,000 gallons	\$5.33
Tier 3 Over 22,000 gallons	\$7.94
Non-Residential	Sep. 10, 2018
All Usage	\$4.96
Agricultural (Monthly per account)	Sep. 10, 2018
Tier 1 First 13,000 gallons	\$4.42
Tier 2 Over 13,000 gallons	\$1.89
Non-Potable/Brackish	Sep. 10, 2018
All Usage	\$2.47

Customer Class Definitions

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

Residential

Single-family residential refers to single-family and duplex residences.

Multi-Unit refers to multi-unit residences including apartments, condominiums and townhouses. Low-rise constitutes up to three stories in height. High-rise refers to higher than three living stories.

Agricultural

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

Non-Residential

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

Non-Potable/Brackish

Non-Potable/ Brackish refers to customers that receive non-potable/ brackish water. This water does not meet State Department of Health Drinking Water Standards. The Non-Potable Quantity Charges shall not supersede existing or individually negotiated non-potable quantity charge agreements.

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

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

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

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

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

The Board of Water Supply may waive the Water Systems Facilities Charges and new meter cost for qualified on-site affordable and homeless dwelling units, up to 500 dwelling units per year. The waivers will be granted when the building permit is submitted for approval. To qualify, the dwelling units must be certified as either affordable or homeless dwelling units by the appropriate agency of the City and County of Honolulu. Waiver of the Water System Facilities Charge will apply only to fixture units associated with the certified dwelling units. The amount of the meter waiver shall be calculated as a percentage of the number of certified dwelling units to the total number of dwelling units in the project. If the annual cap of 500 dwelling units has not been reached and a project is proposed that would qualify for more than the remaining number of dwelling units in that year, the Manager and Chief Engineer has the discretion to increase that year's limit. This waiver provision shall expire on June 30, 2023.

Waiver of Meter Charges for Residential Fire Sprinkler Retrofits

The Board of Water Supply may waive the new meter charges for high rise multi-unit residential fire sprinkler retrofits. This waiver provision shall expire on June 30, 2023.

Schedule for July 1, 2019 – June 30, 2023**Customer Charge**

There is a customer charge each month service is provided based on the meter size effective as follows:

Meter Size	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
5/8" or 3/4"	\$10.42	\$10.80	\$11.38	\$12.09
1"	\$13.31	\$13.79	\$14.45	\$15.28
1.5"	\$15.23	\$15.78	\$16.50	\$17.41
2"	\$38.81	\$40.18	\$41.61	\$43.45
3"	\$47.95	\$49.64	\$51.35	\$53.55
4"	\$91.74	\$94.95	\$97.98	\$101.92
6"	\$163.91	\$169.63	\$174.84	\$181.64
8"	\$250.03	\$258.76	\$266.57	\$276.78
12"	\$541.31	\$560.18	\$576.78	\$598.53

Quantity Charge

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

Single-Family Residential (Monthly per dwelling unit)	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
Tier 1: Essential Needs First 2,000 gallons	\$3.79	\$3.91	\$4.17	\$4.46
Tier 2 2,001 – 6,000 gallons	\$4.46	\$4.60	\$4.90	\$5.25
Tier 3 6,001 – 30,000 gallons	\$5.06	\$5.20	\$5.50	\$5.85
Tier 4 Over 30,000 gallons	\$8.46	\$8.60	\$8.90	\$9.25
Multi-Unit Residential (Monthly per dwelling unit)	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
Tier 1: Essential Needs First 2,000 gallons	\$3.70	\$3.71	\$3.72	\$3.77
Tier 2 2,001 – 4,000 gallons	\$4.35	\$4.36	\$4.38	\$4.43
Tier 3 4,001 – 10,000 gallons	\$4.95	\$4.96	\$4.98	\$5.03
Tier 4 Over 10,000 gallons	\$5.90	\$5.91	\$5.93	\$5.98
Non-Residential	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
All Usage	\$5.01	\$5.06	\$5.16	\$5.27
Agricultural (Monthly per account)	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
Tier 1: Essential Needs First 2,000 gallons	\$3.79	\$3.91	\$4.17	\$4.46
Tier 2 2,001 – 6,000 gallons	\$4.46	\$4.60	\$4.90	\$5.25
Tier 3 Over 6,000 gallons	\$1.95	\$1.98	\$2.05	\$2.12

Non-Potable/Brackish	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
All Usage	\$2.53	\$2.62	\$2.75	\$2.90
Recycled Water				
R-1 Golf	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
All Usage	\$0.57	\$0.59	\$0.62	\$0.65
R-1 Other	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
All Usage	\$1.84	\$1.88	\$1.92	\$1.96
Reverse Osmosis (RO)	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
All Usage	\$5.76	\$5.88	\$6.12	\$6.36

Fire Meter Standby Charge

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

Fire Meter Size	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022
2" and smaller	\$6.72	\$6.95	\$7.42	\$7.99
3"	\$8.82	\$9.08	\$9.64	\$10.29
4"	\$12.43	\$12.74	\$13.44	\$14.23
6"	\$25.42	\$25.94	\$27.13	\$28.44
8"	\$47.83	\$48.69	\$50.74	\$52.94

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

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Non-Residential

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

Non-Potable Water means all water that does not meet State Department of Health Drinking Water Standards. It is divided into the following classes:

Non-Potable/ Brackish

Customers that receive non-potable/ brackish water.

R-1 Recycled Water

R-1 recycled water is recycled wastewater that meets State Department of Health Reuse Guidelines.

R-1 Golf are those customers that receive R-1 water used primarily for golf course irrigation.

R-1 Other are those customers that receive R-1 recycled water for uses other than golf course irrigation

Reverse Osmosis (RO) Demineralized Water

RO water is recycled wastewater that has been demineralized through reverse osmosis.

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

Fire Meter Standby Charge

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

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Water Rates Public Hearing

August 27, 2018



Board of Water Supply

A young boy is shown from the chest up, drinking from a public water fountain. He is shirtless and has his head tilted back, with water spraying from his mouth. The fountain is a classic design with a metal basin and a spout. The background is a dense, out-of-focus green, suggesting a park or natural setting. The overall mood is fresh and healthy.

Ka Wai Ola

**All life depends
on water**



Board of Water Supply
City and County of Honolulu

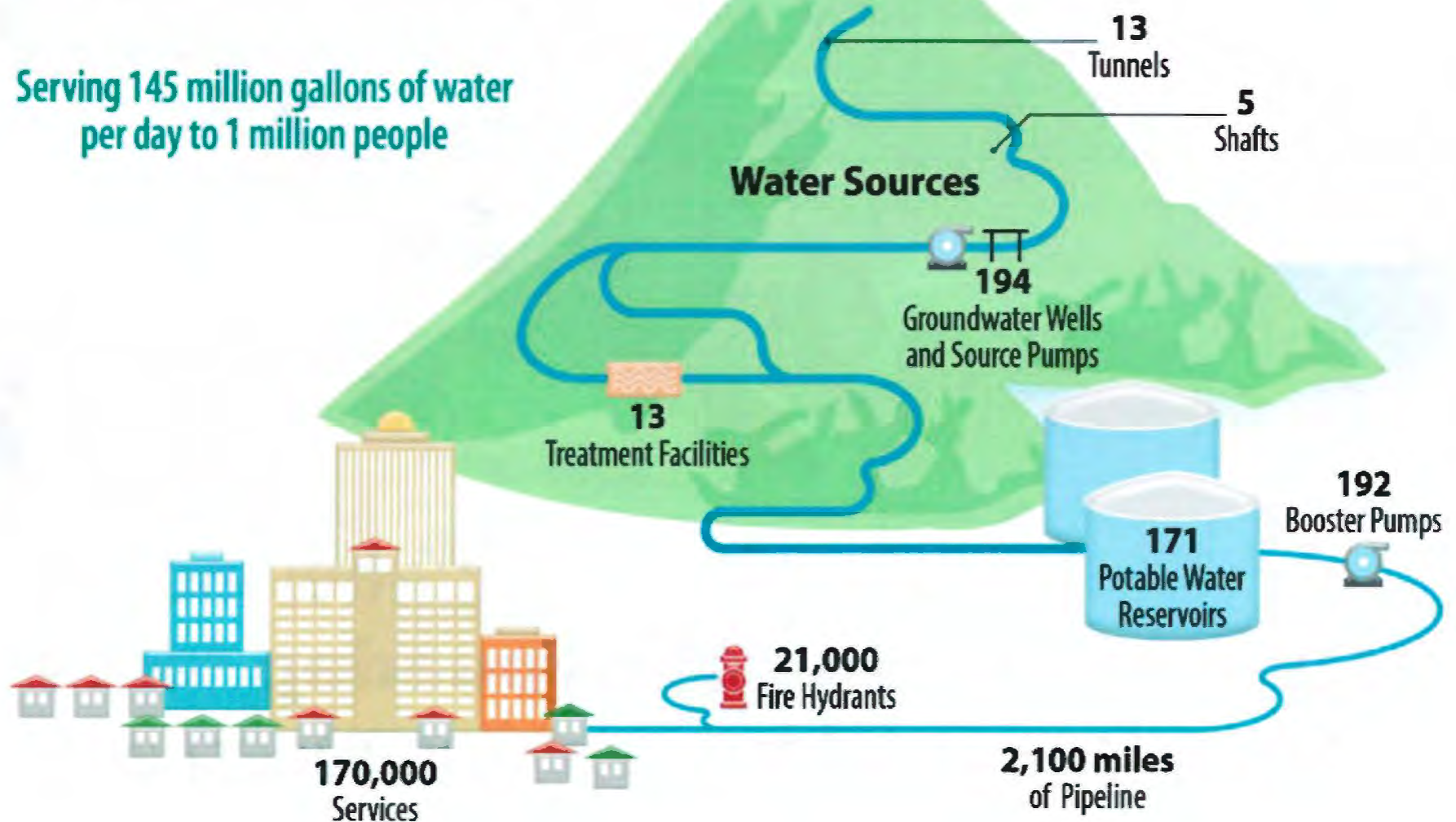
The Board of Water Supply (BWS) delivers
safe, dependable, affordable water
to your tap ...

... every minute of every hour
of every day.



Delivering water from **underground water sources to your home** requires a large and complex system.


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





Are we prepared
to provide safe,
dependable, and
affordable water
for **the next
generation?**

The BWS Water Master Plan ...

- 
- ... **Looked ahead** 30 years
 - ... **Evaluated** the entire water system
 - ... **Identified** necessary improvements
 - ... **Balanced needs with costs** of providing water to our customers

Here are some of the
findings of the **Water Master Plan.**



Finding: We need **new drinking water** supplies for Ewa, Waianae, and Honolulu.



Finding: We have sufficient pumping capacity today, but we need **additional backup** pump capacity.





Finding: BWS pipelines suffer **deterioration from age, corrosion, and soil**, leading to more than 300 water main breaks per year.

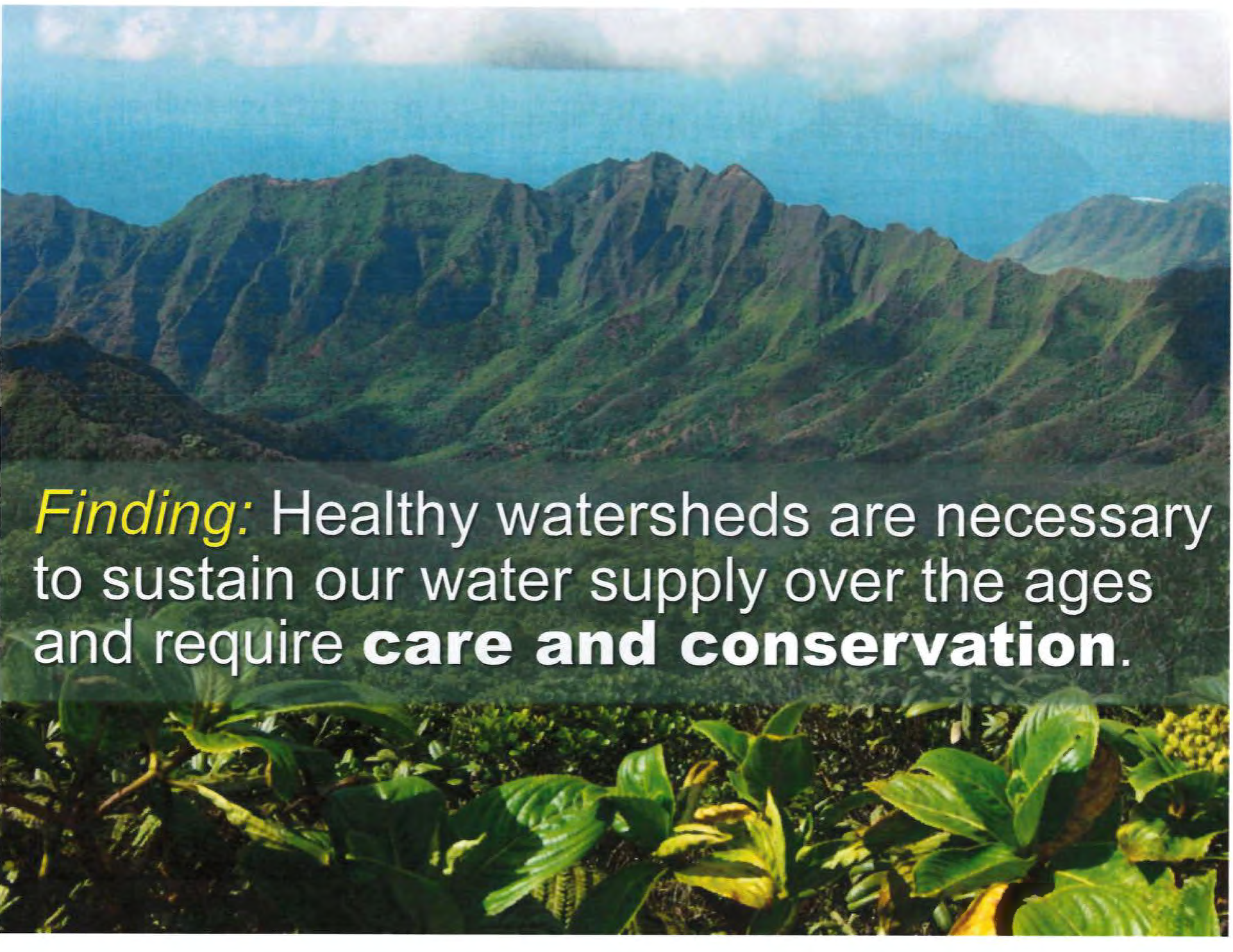
Finding: Oahu cut its daily water use by **30 gallons** per person since the 1990s, saving over 12 million gallons per day, but **we still need to do more.**




A satellite image of a tropical storm, likely a typhoon or hurricane, showing a well-defined eye and spiral cloud bands over a dark blue ocean. A small, semi-transparent globe icon is centered over the storm's eye. The text is overlaid on the top half of the image.

Finding: We expect **rainfall to decrease** in West Oahu, but the **intensity of storms** to increase.

A more **diverse water supply** is needed to adapt to climate change.



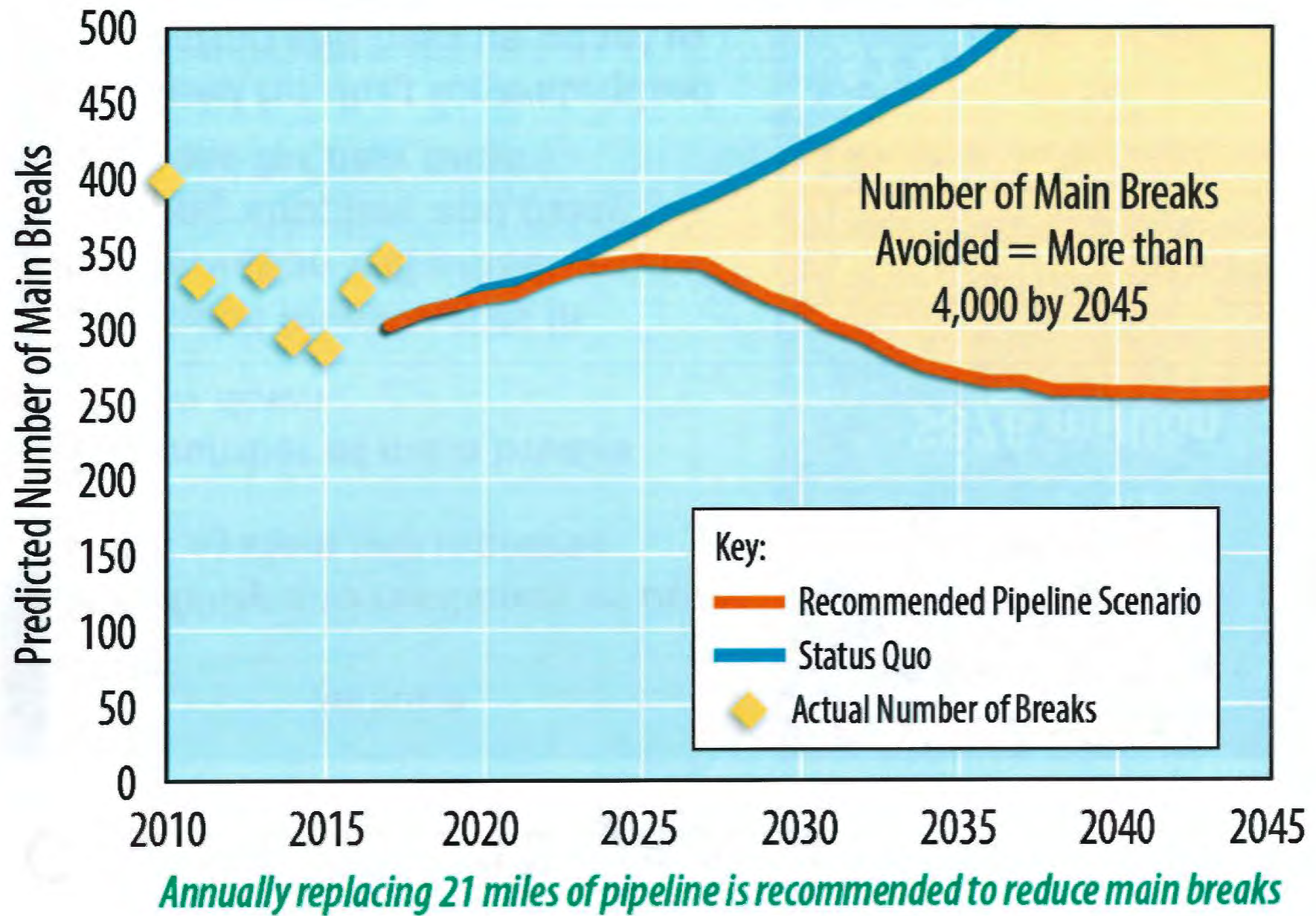
Finding: Healthy watersheds are necessary to sustain our water supply over the ages and require **care and conservation.**

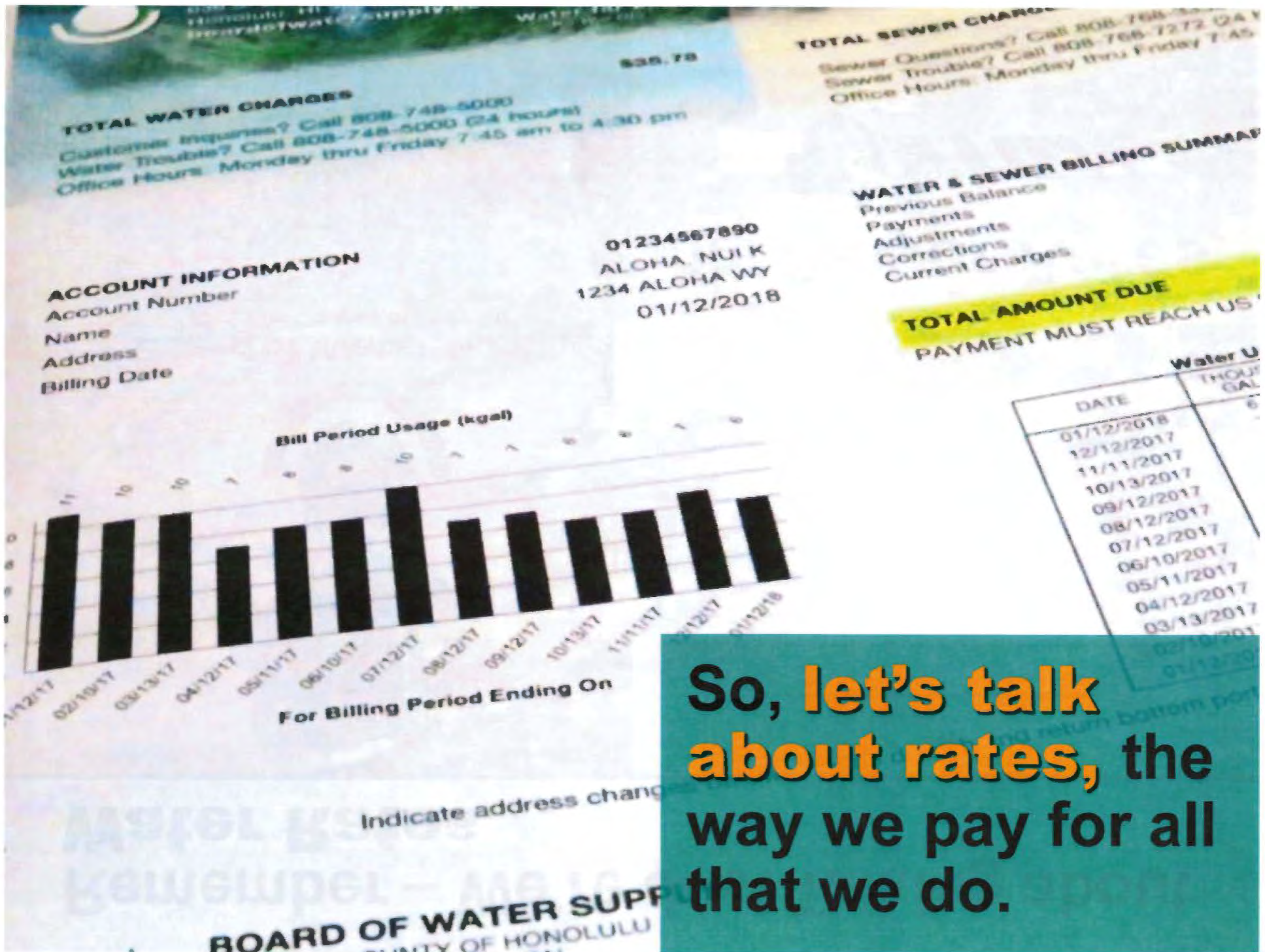


Over the next **30 years**, BWS will invest in **800+ infrastructure projects** island-wide, with total costs above **\$5.3 billion**.

Over the next **10 years**:

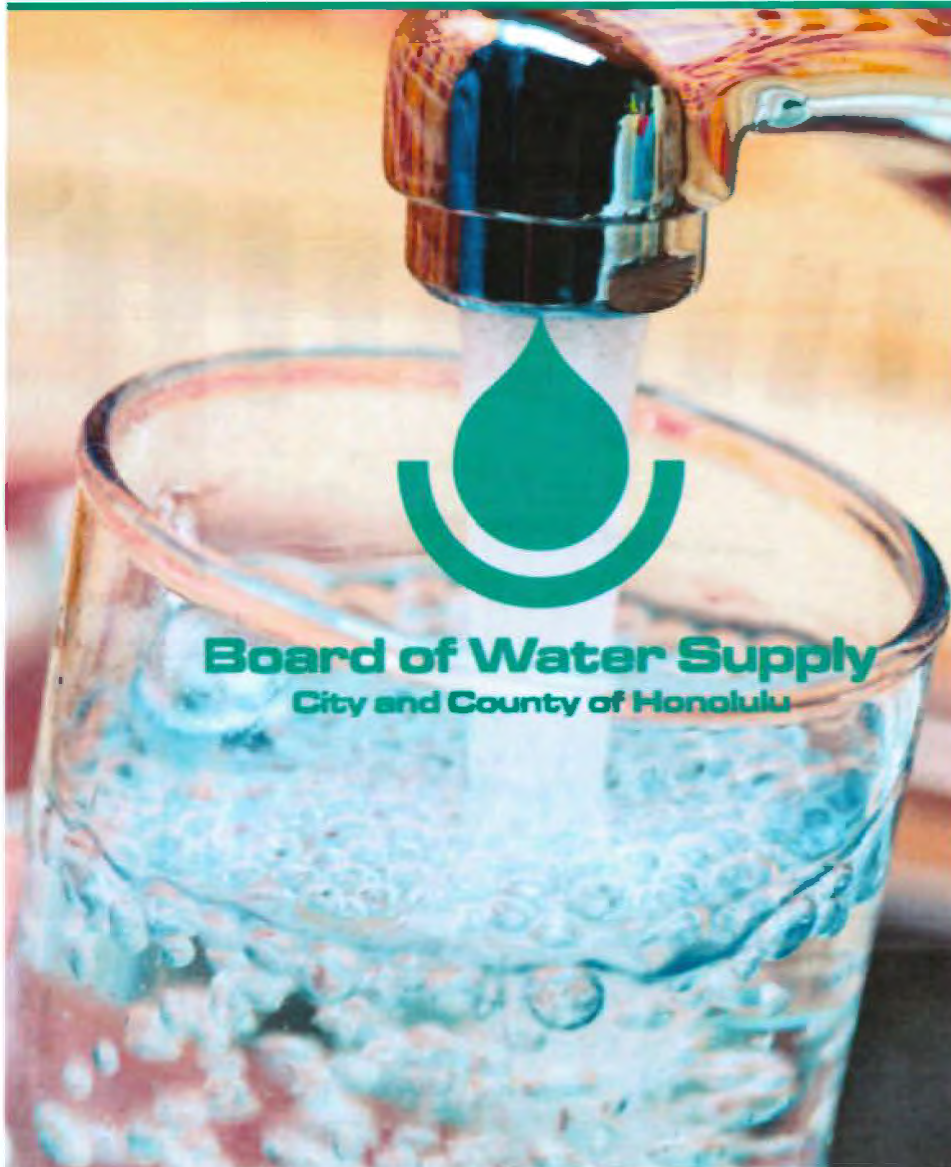
Results	Investment
💧 Reliability and resiliency of our water system will increase	\$511 million
💧 The number of main breaks will go down	\$876 million
💧 Increased investments in conservation will preserve existing supplies and delay the need for new ones	\$3.4 million (per year, 4% of infrastructure investments)
💧 Targeted funding for watershed protection will help us adapt to a changing climate	\$3.4 million (per year, 4% of infrastructure investments)





So, let's talk about rates, the way we pay for all that we do.

Remember – We're Just Talking about **Water Rates**



not Sewer Rates



Water rates are proposed for a 5-year period beginning September 10, 2018 through June 30, 2023.


There would be no increase until July 1, 2019.

Increases are expected to generate about an additional \$60 million over that time.



Board of Water Supply
City and County of Honolulu

This is what BWS is committed to do with new rates

- 
- A graphic of a water splash, rendered in a light blue, semi-transparent style, located in the upper right corner of the slide.
- Raise rates **gradually**
 - Provide a low cost **“Essential Needs” tier** that rewards conservation
 - **Encourage conservation** by highest water users
 - Address **subsidy of single-family** residential by multi-unit residential customers
 - Everyone pays their **fair share**

New: Essential needs tier

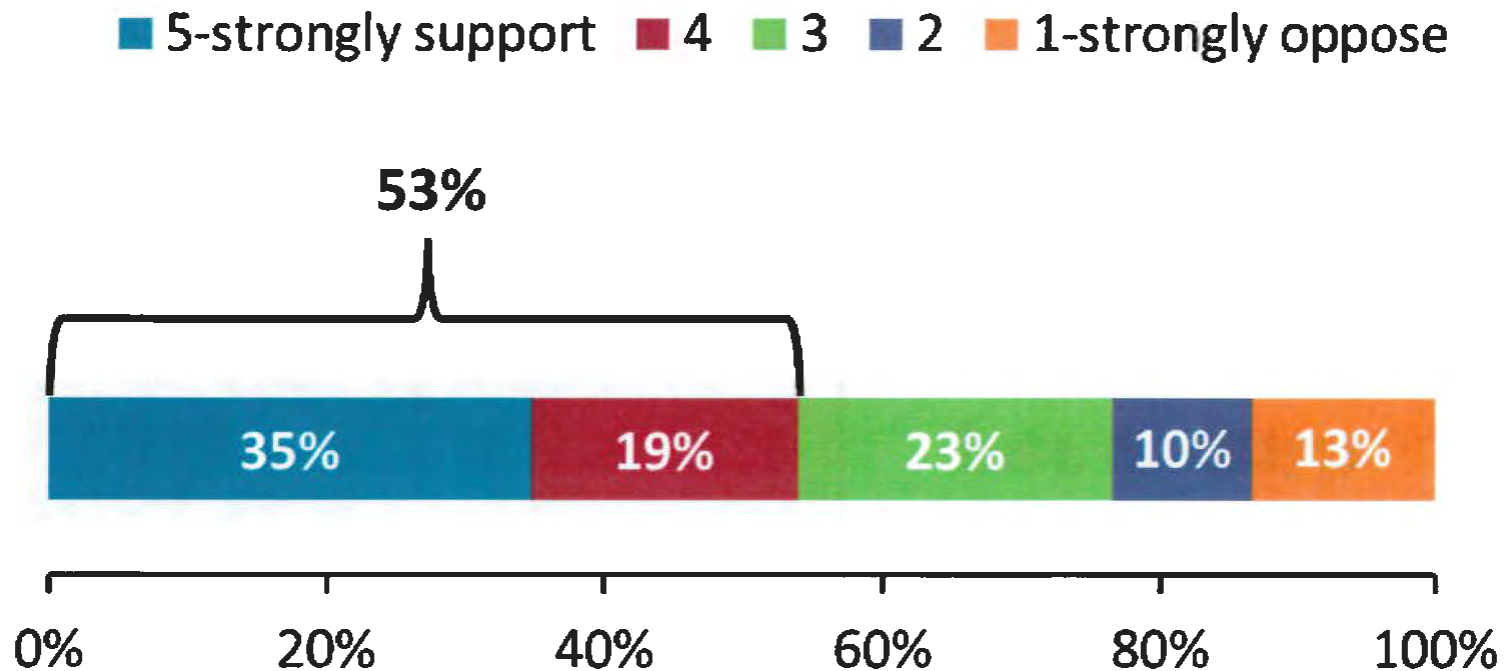


Below-cost rate for first **2,000 gallons per month**.

All residential customers get this rate.

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

Over half of our customers support adding a new tier with a very low rate to ensure affordability and reward conservation.




New: Adjust tiers to financially motivate
water conservation.



New Monthly customer charge – Based on water meter size

Proposed Monthly Customer Charge (per meter)

 Meter Size	Proposed Monthly Customer Charge in \$ / Month – Effective Dates					
	Current	July 2018	July 2019	July 2020	July 2021	July 2022
5/8-inch or 3/4-inch*	\$9.26	\$9.26	\$10.42	\$10.80	\$11.38	\$12.09
1-inch	\$9.26	\$9.26	\$13.31	\$13.79	\$14.45	\$15.28
1-1/2-inch	\$9.26	\$9.26	\$15.23	\$15.78	\$16.50	\$17.41
2-inch	\$9.26	\$9.26	\$38.81	\$40.18	\$41.61	\$43.45
3-inch	\$9.26	\$9.26	\$47.95	\$49.64	\$51.35	\$53.55
4-inch	\$9.26	\$9.26	\$91.74	\$94.95	\$97.98	\$101.92
6-inch	\$9.26	\$9.26	\$163.91	\$169.63	\$174.84	\$181.64
8-inch	\$9.26	\$9.26	\$250.03	\$258.76	\$266.57	\$276.78
12-inch	\$9.26	\$9.26	\$541.31	\$560.18	\$576.78	\$598.53

*** Typical for single-family residential customer.**

Single-family residential water rates 2018 - 2022



Existing			Proposed Rates, Effective Dates					
Tier	Gallons/ du/month	Rate	July 2018	Gallons/ du/month	July 2019	July 2020	July 2021	July 2022
EssN	0 to 13,000	\$4.42	\$4.42	0 to 2,000	\$3.79	\$3.91	\$4.17	\$4.46
1				2,001 to 6,000	\$4.46	\$4.60	\$4.90	\$5.25
2				6,001 to 30,000	\$5.06	\$5.20	\$5.50	\$5.85
3				More than 30,000	\$8.46	\$8.60	\$8.90	\$9.25

EssN – Essential needs

Rates are in \$ per thousand gallons

du – dwelling unit

Comparing bills – Essential Needs – 10% of **Single-family residential**

Essential Needs Tier – The Low Water User (2,000 gallons per month)

Current Bill	Future Bill at Proposed Rates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$18.10	\$18.10	\$18.00	\$18.62	\$19.72	\$21.01

Comparing bills – Median water user – 50% of **Single-family residential**

The Median Water User (6,000 gallons per month)

Current Bill	Future Bill at Proposed Rates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$35.78	\$35.78	\$35.84	\$37.02	\$39.32	\$42.01

Comparing bills – Average water user **Single-family residential**

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

Current Bill	Future Bill at Proposed Rates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$49.04	\$49.04	\$51.02	\$52.62	\$55.82	\$59.56

Comparing bills – High water users – top 3% of **Single-family residential**

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

Current Bill	Future Bill at Proposed Rates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$197.03	\$197.03	\$199.58	\$204.82	\$215.82	\$228.66

Multi-unit residential water rates 2018 - 2022



	Existing		Proposed Rates, Effective Dates					
Tier	Gallons/ du/month	Rate	July 2018	Gallons/ du/month	July 2019	July 2020	July 2021	July 2022
EssN	0 to 9,000	\$4.42	\$4.42	0 to 2,000	\$3.70	\$3.71	\$3.72	\$3.77
1				2,001 to 4,000	\$4.35	\$4.36	\$4.38	\$4.43
2	9,001 to 22,000	\$5.33	\$5.33	4,001 to 10,000	\$4.95	\$4.96	\$4.98	\$5.03
3	More than 22,000	\$7.94	\$7.94	More than 10,000	\$5.90	\$5.91	\$5.93	\$5.98

EssN – Essential needs

Rates are in \$ per thousand gallons

du – dwelling unit

Non-residential

water rates

2018 - 2022



Current	Proposed Rates, Effective Dates				
	July 2018	July 2019	July 2020	July 2021	July 2022
\$4.96	\$4.96	\$5.01	\$5.06	\$5.16	\$5.27

Rates are in \$ per thousand gallons

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

Current subsidies will be continued



Lower rates for
local agriculture

**and recycled
water**



Non-potable and recycled water rates 2018 - 2022



Type	Existing	Proposed Rates, Effective Dates				
		July 2018	July 2019	July 2020	July 2021	July 2022
Non-Potable	\$2.47	\$2.47	\$2.53	\$2.62	\$2.75	\$2.90
R-1 Golf	Varies by contract	Varies by contract	\$0.57	\$0.59	\$0.62	\$0.65
R-1 Other			\$1.84	\$1.88	\$1.92	\$1.96
RO			\$5.76	\$5.88	\$6.12	\$6.36

Rates are in \$ per thousand gallons

**And new fee
waivers**

A tall, modern building under construction. A yellow crane is positioned next to the building, lifting a large section. The building has a white facade with black accents.

**For affordable
housing**

A multi-story building is engulfed in flames. Thick black smoke billows from the top of the building, obscuring the upper floors. The fire is visible on several floors.

**And to retrofit
fire sprinklers**

A courtyard with a paved path leading through it. There are small plants and trees on either side of the path. The buildings on either side have a white facade with green accents.

**For homeless
housing**

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

The Board of Water Supply may waive the Water Systems Facilities Charges and new meter cost for qualified on-site affordable and homeless dwelling units, up to 500 dwelling units per year. The waivers will be granted when the building permit is submitted for approval. To qualify, the dwelling units must be certified as either affordable or homeless dwelling units by the appropriate agency of the City and County of Honolulu. Waiver of the Water System Facilities Charge will apply only to fixture units associated with the certified dwelling units. The amount of the meter waiver shall be calculated as a percentage of the number of certified dwelling units to the total number of dwelling units in the project. If the annual cap of 500 dwelling units has not been reached and a project is proposed that would qualify for more than the remaining number of dwelling units in that year, the Manager and Chief Engineer has the discretion to increase that year's limit. This waiver provision shall expire on June 30, 2023.

Waiver of Meter Charges for Residential Fire Sprinkler Retrofits

The Board of Water Supply may waive the new meter charges for high rise multi-unit residential fire sprinkler retrofits. This waiver provision shall expire on June 30, 2023.

Other BWS **charges:**

- 💧 **Fire Meter Standby Charge**
- 💧 **Standby Charge** (emergency interconnections)
- 💧 **Power Cost Adjustment**
- 💧 **Environmental Regulations Compliance Fee**
Cost Adjustment

Fire Meter Standby Charge (effective July 1, 2019)

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

Standby Charge (emergency interconnections)

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

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

Power Cost Adjustment

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

Environmental Regulations Compliance Fee Cost Adjustment

The Quantity Charge may be increased \$0.01 per 1,000 gallons for each \$500,000 of additional costs that the Board of Water Supply is required to incur in order to comply with any Federal or State environmental law or regulation.

4 Public Hearings

65 attendees

All hearings: 6:30 – 8:30 PM

Honolulu

Thursday, April 26

Mission Memorial Auditorium

550 South King St., Honolulu 96813

Kapolei

Monday, May 14

Kapolei Hale, ground floor conference room

1000 Uluohia Street, Kapolei 96707

Kaneohe

Tuesday, May 15

Benjamin Parker Elementary School Cafeteria

45-259 Waikalua Road, Kaneohe 96744

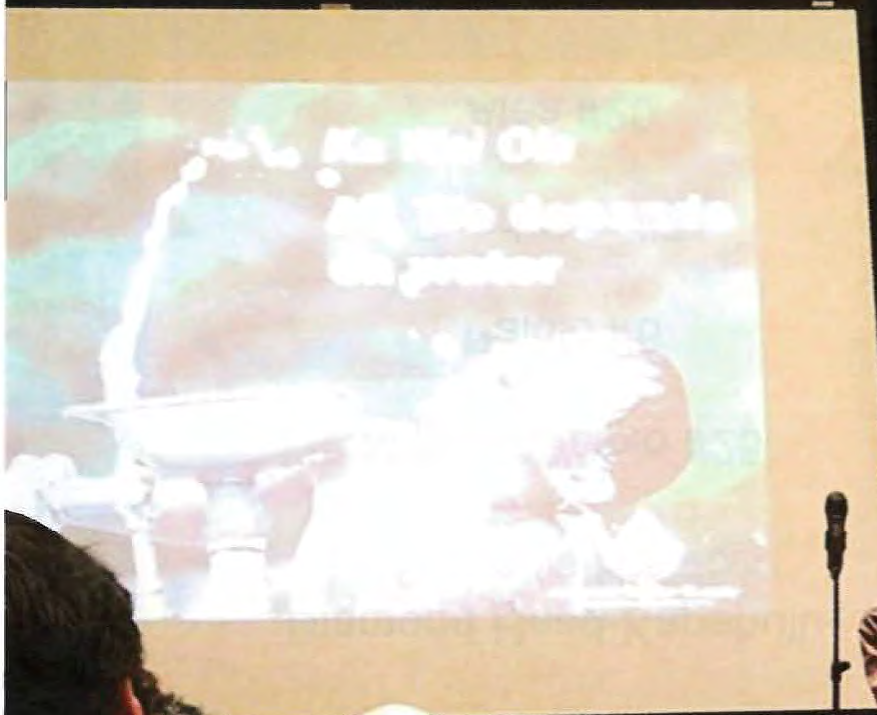
Mililani

Thursday, May 24

Mililani Recreation Center #5

95-1101 Ainamakua Drive, Mililani 96789

5 gave public testimony



Opposed to higher SFR
increases and tier
changes



Opposed to
BWS's Red Hill
advocacy



Employee



Concerned that any
increases are big for
retirees on fixed income

15 Neighborhood Board presentations

About 500 attendees

Waianae Coast #24	Waimanalo #32
Kuliouou-Kalani Iki #2	Wahiawa #26
Kahaluu #29	Kaimuiki #4
Diamond Head-Kapahulu- St. Louis Hts #5	Liliha / Puunui / Alewa / Kamehameha Heights #14
Mililani-Waipio #25	Waipahu #22
Palolo #6	Nanakuli-Maili #36
Pearl City #21	Nuuanu / Punchbowl #12
Aiea #20	Hawaii Kai (pending)

10 Interest group presentations

About 150 attendees

- ◆ Honolulu Board of Realtors
- ◆ Chamber of Commerce Hawaii:
Infrastructure Committee
- ◆ AARP: 2 committees
- ◆ Hawaii Community Foundation's Fresh Water Council
- ◆ Developers: MW Group, DR Horton, Stanford Carr, BIA
- ◆ 2 meetings with farmers including the Farm Bureau
- ◆ Golf course managers
- ◆ Hawaiian Electric
- ◆ Letters sent to members by Hawaii Lodging &
Tourism Association

Mailed special edition of Water Matters to 170,000 account holders



BWS Seeks Comment On Proposed Water Rate Hikes

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

Over the next 30 years, the BWS will invest in 800-plus infrastructure projects with total costs of more than \$5.3 billion to: boost pipeline replacement from 6 miles to 21 miles a year to reduce main breaks; renew or replace high risk pumps and reservoirs; and sustain our water supply by expanding water recycling facilities, establishing new wells, building a seawater desalination

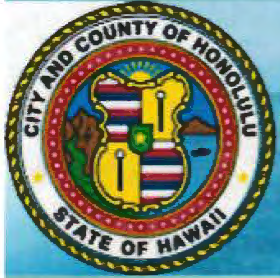
plant, and increasing conservation and watershed protection.

As a semi-autonomous City agency, the BWS is financially self-sufficient; no tax revenues are used to finance BWS operations. Infrastructure improvements and operations are funded mostly by rate revenues. Over the next five years, BWS's *revenues* will need to increase by a total of 12.5 percent to meet anticipated operating and infrastructure improvement expenses.

These proposed draft rate adjustments are needed to accomplish the following objectives:

- Increase investments in Oahu's water infrastructure
- Reduce main breaks
- Encourage conservation
- Provide funding for disaster recovery and
- Ensure that everyone pays more of their fair share of water service costs

These proposed draft rate adjustments would be implemented starting July 2018; however, actual impacts to the water bills are not anticipated until July 2019. Please note: these are proposed WATER rates, NOT sewer rates.



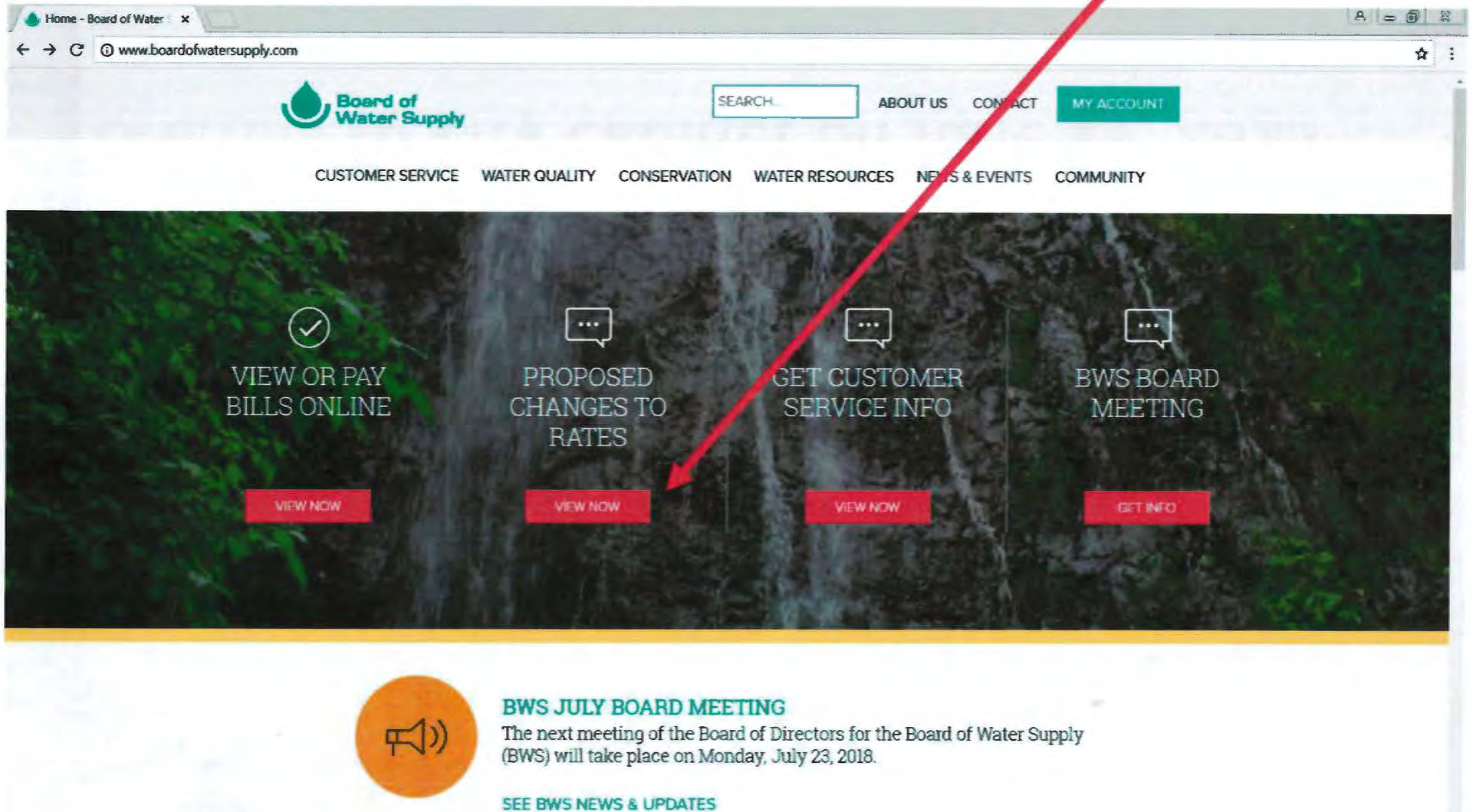
Honolulu
City Council



6 City Council Member briefings

Briefing to City Cabinet on June 19, 2018

Website visits
Over 1,374 page views of rates
Over 1,000 unique visits



13 Radio interviews



3 Articles in Star Advertiser

WEDNESDAY 3/28/18

STARADVERTISER.COM — 11 Oahu, 11.25 neighbor islands — Mostly sunny, High 81, low 67 — A/P

Star Advertiser

The Pulse of Paradise

BOARD OF WATER SUPPLY

RATE HIKE PROPOSED

SUGGESTED INCREASES

Here's how the monthly water bill would increase for average residential use, which is 9,000 gallons for single-family homes and 6,000 gallons for multifamily homes.

	SINGLE-FAMILY	MULTIFAMILY
Current	\$30.76	\$26.52
July 2018	\$30.76	\$26.52
July 2019	\$43.54	\$29.70
July 2020	\$46.80	\$29.74
July 2021	\$49.50	\$29.88
July 2022	\$52.65	\$30.18

Source: Board of Water Supply



All of our revenue

Larger residential water users would bear the brunt of a 12.5 percent increase over four years, starting in mid-'19

By Andrew Gorman

The Honolulu Board of Water Supply is proposing to raise the price of municipal water over the next four years and have larger users in single-family homes shoulder more of the increase than a being sought to keep up with expenses.

Board members of the independent city agency voted unanimously Tuesday to solicit public feedback on a draft package of rate increases that it describes as modest overall — 12.5 percent over four years — and a deviation from drastic past increases.

Increases, if approved, would start in mid-2019. For average residential customers, most of the hike would hit next year and be followed by smaller increases in the three years after that.

Star Advertiser

insight

EDITORIAL PAGE EDITOR: Long Young (City of Honolulu) (longyoung@hawaiiadvertiser.com) (202) 491-1234



SET UP SCHOOL SUCCESS
Editorial: Strengthening the bridge from Hawaii high school to college is needed >> F2

LETTERS TO THE EDITOR >> F2
GEORGE WALL >> F4

PIPE DREAMS



SUGGESTED INCREASES

Here's how the monthly water bill would increase for average residential use, which is 9,000 gallons for single-family homes and 6,000 gallons for multifamily homes.

Single-family

\$30.76	CURRENT
\$30.76	JULY 2018
\$40.60	JULY 2019
\$41.82	JULY 2020
\$44.84	JULY 2021
\$47.47	JULY 2022

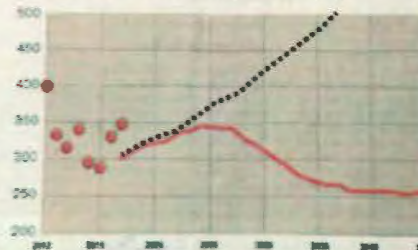
Source: Board of Water Supply

Multi-family

\$26.52	CURRENT
\$26.52	JULY 2018
\$26	JULY 2019
\$29.88	JULY 2020
\$36.16	JULY 2021
\$38.08	JULY 2022

FASTER PIPE REPLACEMENT, FEWER MAIN BREAKS

The recommended scenario of replacing 21 miles of pipes — funded by proposed water rate hikes — would avoid an estimated 4,000-plus water main breaks by the year 2047. Here's a look at the number of predicted water main breaks.



Recommended 21 miles replacement pipeline scenario
Status quo: 6 miles of replacement

Water rates, poised to rise to replace old pipes, are just one aspect of the supply picture

By Maureen O'Connell

moore@hawaiiadvertiser.com

Last month, as crews scrambled to patch an early-morning water main break near the University of Hawaii-Maui, rushing waters

closed all lanes along a stretch of Keolu Street. The resulting lack of spigot flow shut down four area schools for a day and left nearby neighborhoods with no water service, followed by limited essential-needs use for two days.

The messy incident triggered by the ruptured 20-inch cast-iron main, installed beneath the street 90 years ago, illustrates an upshot of our dependence on an aging municipal water system.

According to the Board of Water Supply, Oahu is now seeing about 300 water main breaks a year. And unless ongoing pipeline replacement efforts are stepped up, the annual cost of

Other media coverage



Total estimated reach for traditional and social media coverage about 500,000

33 additional commenters (letters, email, web, phone, Star Advertiser)

Support	Oppose	Requested Clarification	Other Topic
3	15	6	9

- Nearly all who opposed appear to be single-family residential customers
 - Impacts to customers on fixed, low incomes
 - Inefficient, monopoly
 - Conservation equity
 - Discounted rates for Ag, uniform non-residential rate, fire meter standby charge
- ENV was most common other topic

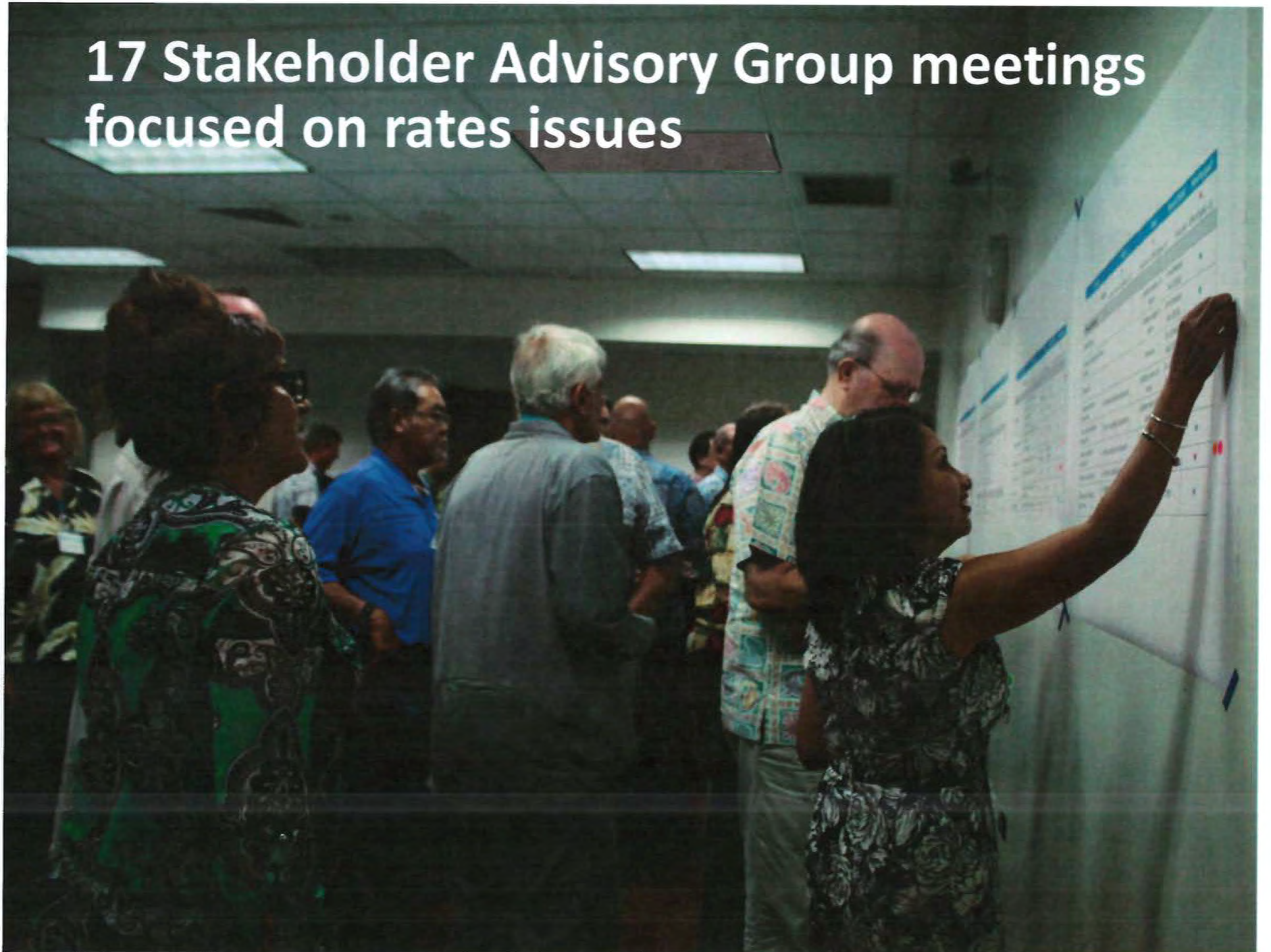


Department of Business, Economic Development & Tourism **Small Business Regulatory Review Board**

- ◆ Prepared Small Business Impact Statement and submitted to SBRRB (required prior to public hearing)
- ◆ SBRRB Review (June 20)
- ◆ Providing at least 30-days notice of public hearing
- ◆ Public hearing with full consideration of all written and oral submissions (August 27)
- ◆ Submit post-hearing Small Business Impact Statement
- ◆ Becomes effective 10 days after filing with City Clerk, or later as specified

[HRS 91 and 201M]

17 Stakeholder Advisory Group meetings focused on rates issues



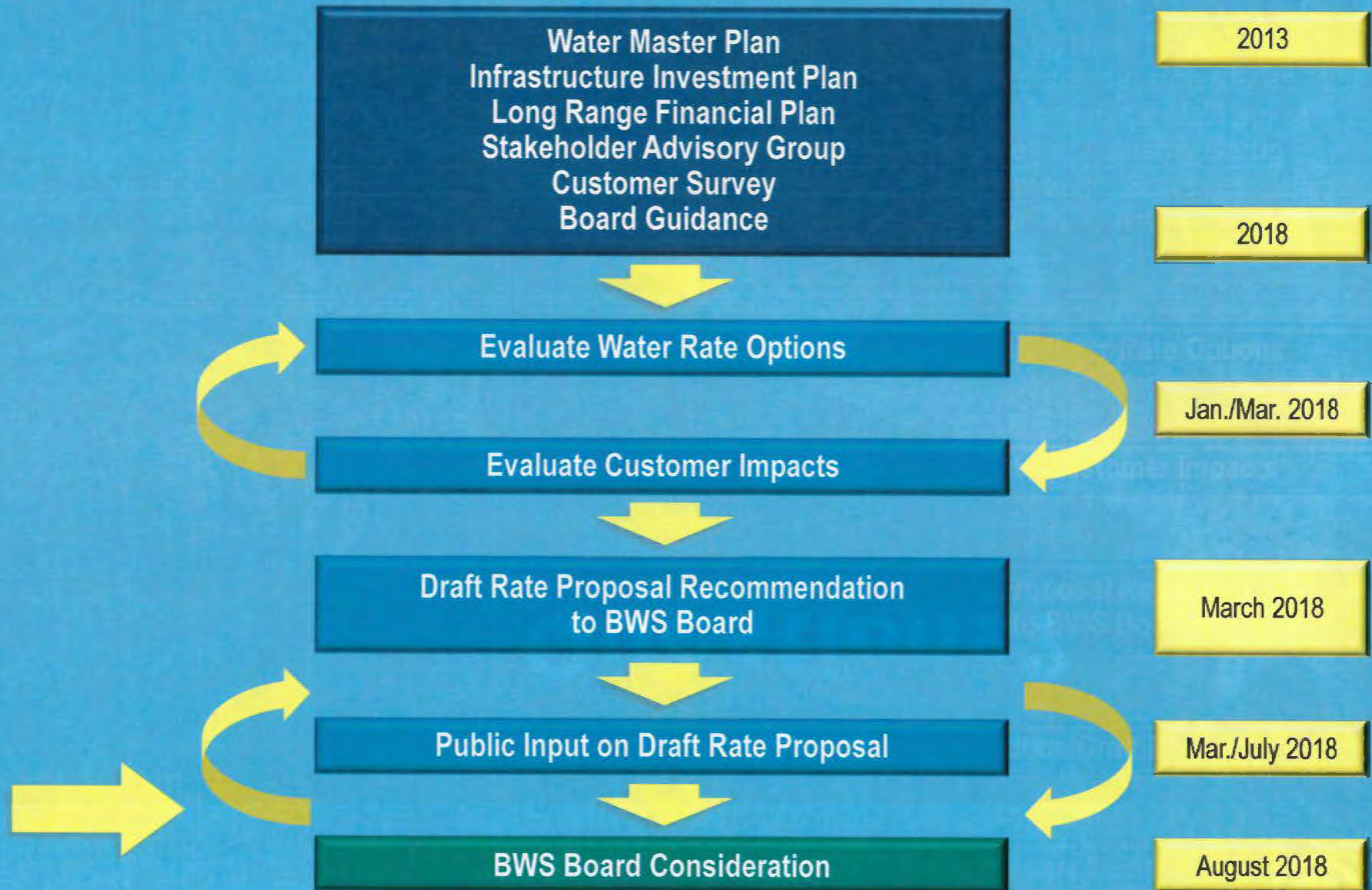
Stakeholder Advisory Group reviewed public input on proposed rates

- ◆ SAG pleased with extensive outreach especially to the Neighborhood Boards.
- ◆ Overall, comments at the NB positive and supportive of BWS's approach and rationale for the water rate increases.
- ◆ SAG echoed comments from NBs that sewer rates are very high and nothing anyone can do about it. Community feels "stuck" with the bill.
- ◆ Reception of Essential Needs Tier from SAG and public very positive.

Stakeholder Advisory Group reviewed public input on proposed rates (cont.)

- ◆ Strong support for ramp up to 21 miles of pipeline replacement over next decade along with other prioritized infrastructure upgrades.
 - Aggressive but balances ability to implement with economic impact to our customers.
 - Allows for flexibility as we work to ramp up staffing in order to implement the plan.
 - Sustainable and incremental approach to infrastructure replacement and upgrades.
- ◆ SAG members commented that it looks like you've done a lot of vetting and it doesn't sound like there are a lot of recommendations for changes. I would suggest that we approve it. BWS on the right track.

Process Overview



WATER FOR LIFE

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



Board of Water Supply
City and County of Honolulu

Questions?



APPROVAL OF
MINUTES

Approval of the Minutes of the Regular Meeting held on July 23, 2018

MOTION
TO APPROVE

Ross Sasamura and Ray Soon motioned and seconded, respectively, to approve the Minutes of the Regular Session Meeting of July 23, 2018. The motion was unanimously carried.



BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

RESOLUTION NO. 890, 2018

MOLLY M. SKEEL 2018 EMPLOYEE OF THE YEAR

WHEREAS, MOLLY M. SKEEL, a Safety Specialist II with the Executive Support Office, has been a dedicated and exceptional employee since joining the Board of Water Supply (BWS) in February 2015, and has been selected as the Department's 2018 Employee of the Year; and

WHEREAS, MS. SKEEL is an exemplary employee whose hard work and dedication has enabled the Department to strengthen its efforts to safeguard those who work to keep Oahu's water resource viable; and

WHEREAS, MS. SKEEL works to improve all aspects of safety awareness among BWS employees and has elevated the importance of maintaining a safe work environment, implementing many education and training programs to serve a wide range of BWS employees, all while keeping current with constantly evolving safety guidelines; and

WHEREAS, MOLLY M. SKEEL's outstanding efforts have led to long-term Safety Program improvements such as a revamping of the Department's Safety Manual; installation of Automated External Defibrillators at all staffed BWS facilities; regular job hazard analyses and customized monthly safety talk requirements for all divisions; and workplace inspections, including main break repair sites, to ensure continued compliance with federal safety rules; and

WHEREAS, MS. SKEEL's efforts to continually promote on-the-job safety, to ensure that BWS personnel remain mindful of preventing accidents whenever possible, is key to the Department's ability to fulfill its mission to provide safe, reliable, and affordable water now and into the future; and

WHEREAS, MOLLY M. SKEEL has been selected as a Board of Water Supply Employee of the Year and will go on to represent BWS in the upcoming City Employee of the Year Recognition Ceremony, bringing pride and honor to the Department, her family, and friends; now, therefore

BE IT RESOLVED by the Members of the Board of Water Supply, City and County of Honolulu, that we do hereby express to MOLLY M. SKEEL our sincere appreciation for her outstanding service to the Department and to the City and County of Honolulu; and

BE IT FURTHER RESOLVED that the Members of this Board express to MOLLY M. SKEEL our sincere congratulations upon her selection as the Board of Water Supply Employee of the Year for 2018; and

BE IT FINALLY RESOLVED that this Resolution be presented to MS. SKEEL with our heartfelt aloha and best wishes for success in all her future endeavors.



Resolution No. 890, 2018

Adopted this 27th day of August 2018
Board of Water Supply, Honolulu, Hawaii

BRYAN P. ANDAYA
Chair of the Board

MOTION TO
ADOPT

Ray Soon motioned to adopt Resolution No. 890, 2018, Molly M. Skeel - 2018 Board of Water Supply Employee of the Year, and was seconded by Kapua Sproat. The motion was unanimously carried.

RESOLUTION NO. 890, 2018 – MOLLY M. SKEEL, 2018 EMPLOYEE OF THE YEAR, WAS ADOPTED ON AUGUST 27, 2018			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
DAVID C. HULIHEE			ABSENT
KAY C. MATSUI	X		
RAY S. SOON	X		
ROSS S. SASAMURA	X		
JADE T. BUTAY			ABSENT



BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

RESOLUTION NO. 891, 2018

MARC S.O. CHUN
2018 MANAGER OF THE YEAR

WHEREAS, MARC S.O. CHUN, Assistant Program Administrator of the Water Resources Division (WRD), has been selected as the Board of Water Supply (BWS) Manager of the Year for 2018; and

WHEREAS, MR. CHUN administers strategic water resource, infrastructure and sustainability programs within WRD, including long-range water resource and systems planning, the capital improvement program related to system capacity expansion, water conservation and recycled water, hydro-geologic resource monitoring, and development reviews and water commitments for growth; and

WHEREAS, MR. CHUN has done an outstanding job serving as the project manager for the Energy Savings Performance Contract that will reduce the BWS's overall energy use by nine percent through efficient and renewable energy production; and

WHEREAS, MR. CHUN is a strong proponent of developing future managers through training and has encouraged the branch heads to create 101 level classes that span the basic work done in all areas of WRD. This has enabled new staff to start with a solid foundation and provides seasoned staff with supplemental information to do their jobs more efficiently; and

WHEREAS, in November 2017, MR. CHUN's management abilities were recognized when he was awarded the prestigious William Y. Thompson Award by the Hawaii Water Works Association (HWWA). The highest honor the HWWA can bestow on a member; and

WHEREAS, outside of work, MR. CHUN volunteers as a lay pastor at Hope Chapel Pearl West. For many years he has and continues to help the community and youth ministry he serves; and

WHEREAS, MARC S.O. CHUN has proven himself to be a dedicated, dependable, and skillful manager who leads by example and personifies attributes that employees desire in their leaders, earning the respect of his subordinates, colleagues, and BWS management; and

WHEREAS, MR. CHUN's selection as the 2018 BWS Manager of the Year and his nomination as a City Manager of the Year has brought pride and honor to the BWS and all his family and friends; now, therefore

BE IT RESOLVED by the Members of the Board of Water Supply, City and County of Honolulu, that we hereby do express to MARC S.O. CHUN our heartfelt appreciation for his outstanding service to the Department and to the City and County of Honolulu; and

BE IT FURTHER RESOLVED that the Members of this Board express our sincere congratulations upon his selection as the Board of Water Supply Manager of the Year for 2018; and

BE IT FINALLY RESOLVED that a copy of this Resolution be presented to MR. CHUN with our warmest aloha and best wishes for all his future endeavors.



Resolution No. 891, 2018

Adopted this 27th day of August 2018
Board of Water Supply, Honolulu, Hawaii

BRYAN P. ANDAYA
Chair of the Board

MOTION TO
ADOPT

Ray Soon motioned to adopt Resolution No. 891, 2018, Marc S.O. Chun - 2018 Board of Water Supply Manager of the Year, and was seconded by Ross Sasamura. The motion was unanimously carried.

RESOLUTION NO. 891, 2018 – MARC S.O. CHUN, 2018 MANAGER OF THE YEAR, WAS ADOPTED ON AUGUST 27, 2018			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
DAVID C. HULIHEE			ABSENT
KAY C. MATSUI	X		
RAY S. SOON	X		
ROSS S. SASAMURA	X		
JADE T. BUTAY			ABSENT

ITEM FOR INFORMATION NO. 1

**Quarterly Capital Improvement Program Status Report
All Divisions
as of June 30, 2018**

Quarter Awarded	JUL - SEP		OCT - DEC		JAN - MAR		APR - JUN		Awarded to Date	Total Budgeted
Design Contracts Awarded (#/\$)	0	\$0.00	7	\$3,829,559.13	1	\$451,835.32	29	\$16,235,615.32	\$20,517,009.77	\$16,420,000.00
Land Aquisitions (#/\$)	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	\$0.00	\$2,000,000.00
Construction Contracts Awarded (#/\$)	4	\$878,796.81	11	\$19,618,458.83	1	\$191,740.00	30	\$66,889,669.11	\$87,578,664.75	\$91,378,000.00
Project Totals	4	\$878,796.81	18	\$23,448,017.96	2	\$643,575.32	59	\$83,125,284.43	\$108,095,674.52	\$109,798,000.00

Quarter Completed	JUL - SEP		OCT - DEC		JAN - MAR		APR - JUN		Totals	
Design Contracts Completed (#/\$)	5	\$1,537,731.00	1	89,240.00	1	\$77,088.00	0	\$0.00	\$1,704,059.00	
Construction Contracts Completed (#/\$)	0	\$0.00	2	\$1,099,583.99	1	\$1,210,690.92	3	\$3,514,875.00	\$5,825,149.91	
Totals	5	\$1,537,731.00	3	\$1,188,823.99	2	\$1,287,778.92	3	\$3,514,875.00	\$7,529,208.91	

Ongoing Projects	
Ongoing Design Projects (#)	214
Ongoing Design Projects (\$)	\$74,932,222.24
Ongoing Construction Projects (#)	118
Ongoing Construction Projects (\$)	\$229,238,636.63

Quarterly Capital Improvement Program Status Report
All Divisions

DESIGN AND CONSTRUCTION PROJECTS AWARDED - FOURTH QUARTER FY 2018

Item #	Project Title	Expend Type	Budget Amount	Awarded
006	Waialae Nui Well Test	P&E	\$250,000.00	\$49,962.53
007	Nuuanu Hydro-Electric and Managed Aquifer Recovery Study and Environmental	P&E	600,000.00	996,855.59
010C	Construction Management for WSO projects	P&E	0.00	1,870,000.00
014	Punahoni Wells System Improvements	CONST	4,000,000.00	4,452,470.00
015	Pearl City Wells II System Improvements	CONST	3,200,000.00	2,607,519.20
016	Moanalua Wells: Replacement of Pump No. 1	CONST	2,000,000.00	1,856,056.40
017K	Replace Discharge Heads and Valves	CONST	455,174.37	768,319.20
017R	Kunia Booster Replacement of Pump No. 1	CONST	124,789.06	124,789.06
017T	Submersible Pump Motor Shroud for Kunia Booster Pump No. 1	CONST	8,519.64	8,519.64
018	Makaha Shaft Renovation	P&E	700,000.00	549,405.00
019	Kaamilo Booster and Kaamilo Wells Renovation	P&E	200,000.00	247,615.00
021	Mariner's Ridge Booster No. 2 Renovation	P&E	200,000.00	496,023.26
023	Wilhelmina Rise 811 Reservoir Replacement	P&E	500,000.00	1,270,442.00
024	Manoa Estates Water System Improvements	CONST	3,080,000.00	3,286,547.00
025	Molili Water System Improvements, Part IV	CONST	3,500,000.00	6,199,367.00
028A	Keolu Bridge Pipe Hanger Replacement	CONST	65,000.00	153,945.00
029A	Kailua Iwi Kupuna Reinterment	CONST	100,000.00	155,870.00
030	Puiwa Road 12-Inch and Dowsett Avenue 8-Inch Mains	P&E	210,000.00	512,768.00
031	Halupa Street 12-Inch Main	P&E	140,000.00	296,618.14
032	Kapolei Parkway 12-Inch Main	P&E	130,000.00	364,682.00
034	Kuhio Avenue and Kaiulani Avenue Water System Improvements	P&E	960,000.00	1,183,240.99
035	Sand Island Water System Improvements	P&E	930,000.00	1,034,671.00
036	Moanalua Road 8-Inch Main, Waimalu Neighborhood Park Vicinity	P&E	100,000.00	170,652.00
037	Beretania Street 12-Inch Blow-off Main	P&E	80,000.00	178,420.00
038	Waiomao Homestead Road 8-Inch Main	P&E	110,000.00	216,617.00
039	Ahihama Road 8-Inch Main	P&E	190,000.00	1,213,589.00
041	Ahuimanu Cross Country Main Abandonment and System Improvements	P&E	100,000.00	100,000.00
042A	Kalaniana'ole Highway Drain Manhole Replacement	P&E	100,000.00	161,845.21
043	GAC Facility Improvements	CONST	500,000.00	3,499,315.00
047	Data Center Renovation	P&E	150,000.00	114,306.00
048A	Security Fencing at Maakua Well and Kapunahala 272 Reservoir	CONST	648,633.34	756,770.00
048D(JI)	Security Fencing at Waihee Tunnel	CONST	100,866.66	182,700.00
050	Waimaku Wells I Site Drainage Improvements	CONST	2,200,000.00	2,612,500.00
051	Beretania Engineering Building Window Replacement	CONST	2,000,000.00	3,472,750.00
052B	Kaimuki Pump Station: Electrical Improvements	CONST	148,170.00	148,170.00
052D	Kalauao Wells Electrical and Mute Building Modifications	CONST	1,229,555.00	1,229,555.00
052G	Repair and Reroofing of Nuuanu 822 Reservoir	CONST	685,550.00	685,550.00
052H	Access Road Repair and Drainage Improvements at Kaluanui Wells	CONST	492,770.00	492,770.00
052K	Hihimanu Street Socket Replacement	CONST	15,706.00	15,706.80
052M	Aina Koa Booster No. 4 Transformer Replacement	CONST	85,030.00	85,030.00
052Q	Kuou Wells II: Hydropneumatic Pump Line Investigation and Replacement	CONST	257,295.00	257,105.00
052R	Kalihi Uka Booster Repainting	CONST	23,188.55	23,188.55
052T	Water System Operations IDIQ Reroofing	CONST	1,733,680.95	2,898,908.26
052AH	Halawa Shaft 24-inch and 36-inch Valve Replacements	CONST	1,325,110.00	1,454,085.00
052AT	Emergency Procurement for Replacement of Viewing Window at Halawa Shaft	CONST	0.00	726,000.00
053	Piliuka PRV Replacement	P&E	200,000.00	301,397.00
055B	Archaeological and Cultural Monitoring for the Diamond Head Water System Improvements, Part II	P&E	100,305.00	100,305.00
055C	Archaeological Monitoring for Molili Water System Improvements, Part IV	P&E	142,633.06	142,633.06
055C	Professional Services for BWS Projects -	P&E	4,600.00	4,600.00
055D	Emergency Procurement for Slope Stabilization Near Ekoa Place	P&E	52,461.94	293,455.00
056	Monitoring Well Assessment and Repair	P&E	60,000.00	51,072.54
058	Mauna Olu 530 Reservoir Improvements	P&E	50,000.00	101,529.00
059A	Water Meter Transponders Replacement - Phase I	CONST	15,860,584.00	15,255,000.00
059B	Water Meter Transponders Replacement - Phase I	CONST	1,339,416.00	1,339,416.00
059PE	Water Meter Transponders Replacement - Phase I	P&E	500,000.00	930,165.00
060	Kahuku Wells Unit No. 3	CONST	2,000,000.00	3,254,000.00
062	Ewa Shaft Tunnel Improvements	P&E	3,000,000.00	2,979,721.00
063	Nuuanu 822 Reservoir Replacement, Booster No. 2 Replacement, 940 Reservoir and Booster No. 4 Environment Assessment	P&E	350,000.00	303,025.00
064	Wahiawa Water System Improvements, Part IA	CONST	11,000,000.00	8,887,747.00
	4th Quarter totals		\$68,289,038.57	\$83,125,284.43

**Quarterly Capital Improvement Program Status Report
All Divisions**

DESIGN AND CONSTRUCTION PROJECTS COMPLETED - FOURTH QUARTER FY 2018

Job #	Project Title	Completion Date	Contract Amount
13-022	Heeia Corporation Yard Air Conditioning Improvements	7/15/2017	\$391,306.00
17-039A	Security Fencing Improvements for Pohakupu 272 Reservoirs No. 1 & 2 and Maunawili Booster	9/26/2017	936,437.00
09-017	Honouliuli 228 Reservoir No. 3 Box Culvert and Site Improvements	6/25/2018	2,187,132.00
4th Quarter totals			\$3,514,875.00

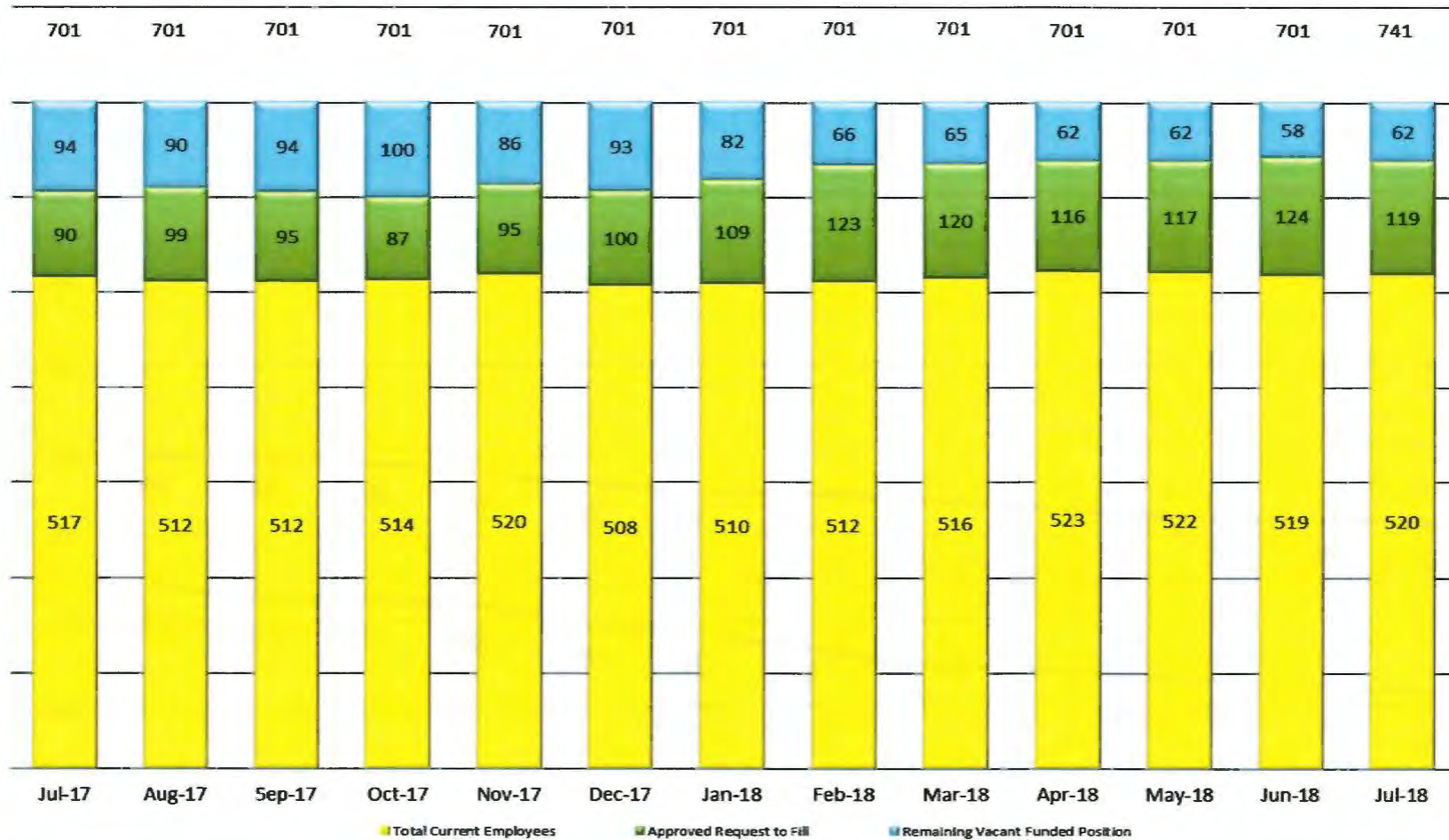
Jason Takaki, Capital Projects Program Administrator, gave the report.

In response to Mr. Soon's question regarding how Board of Water Supply is doing on construction projects, Mr. Takaki replied that it varies depending on the type of project. Capital Project Division has been very successful on being on time and budget, especially with water main projects.

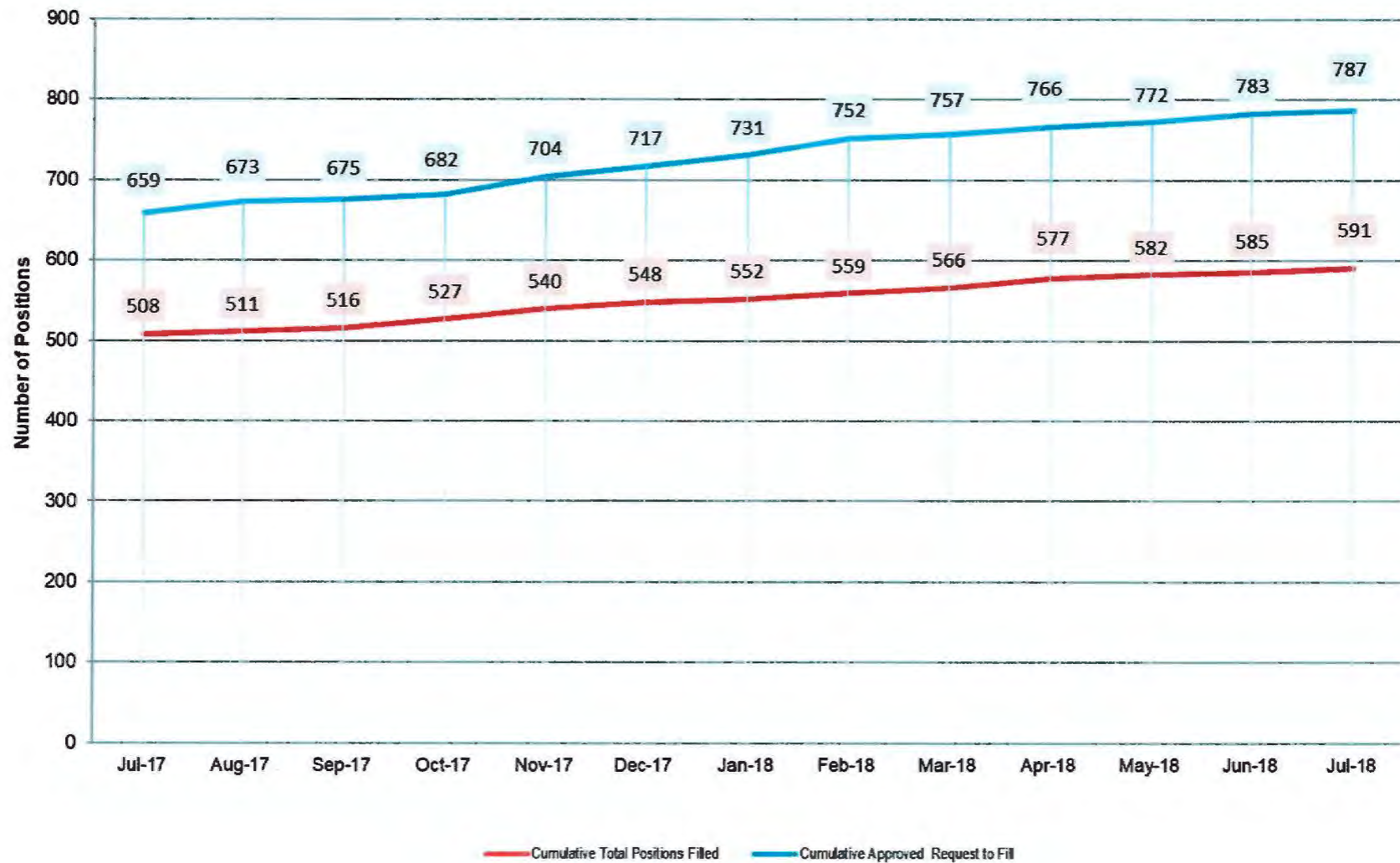
ITEM FOR INFORMATION NO. 2

For the period May 18 - July 18 Actions: 4 New Hires, 7 Promotions, 3 Transfers, 7 Separations, 21 New approvals to fill, 4 Cancelled Requests

**Positions Filled
July 1, 2017 through July 31, 2018**



Cumulative Totals July 1, 2017 through July 31, 2018



BOARD OF WATER SUPPLY

City and County of Honolulu

RECRUITMENT AND SEPARATION STATUS

For Period May 31, 2018 to July 31, 2018

Status of Positions Under Recruitment

	as of		
	5/31/2018	6/30/2018	7/31/2018
Pending DHR Classification Action	21	26	27
Pending DHR Open List	18	12	16
Pending IDCE	7	8	9
Pending Interview Questions	33	30	26
Pending Interviews	26	21	19
Anticipated Starts	12	27	22
Total Positions Under Recruitment	117	124	119

Filled Positions

Month	May-18	June-18	July-18
Open list	0	2	2
IDCE list	5	1	4

Separations

Month	May-18	June-18	July-18
Retire	0	3	0
Resign	2	2	1

Legend:

DHR = Department of Human Resources City and County of Honolulu

IDCE = Intra-Departmental Competitive Examination

PD = Position Description

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

In response to Mr. Andaya's question regarding anticipated number of retirees this year, Ms. Thomas said that Human Resources Office cannot predict when people are going to retire; however, Board of Water Supply (BWS) has 30 percent or more employees that are eligible to retire within the next 30 days. Mr. Lau added that there are some retirements that will happen at the end of this month including Lisa Kim, his secretary. Mr. Andaya mentioned on behalf of the board, thank you very much to Lisa Kim, she has been a great service to us. Mr. Lau also mentioned retirements of Ken Soares and Stephanie Kimura.

Mr. Soon asked, if 30 percent of BWS employees are eligible to retire, in what period are they eligible to retire. Ms. Thomas replied within the next 30 days. Ms. Thomas said the way it works for civil service staff is they are only required to give us 30 days' notice to retire. At any given point right now, BWS has at least 30 percent of its employees who can submit their retirement notice within the next 30 days. That number is trending to increase, and that trend is happening in a lot of industries right now due to the Baby Boomers all getting to the point where they are retirement eligible.

Ms. Thomas agreed with Mr. Soon when he stated that BWS is expanding recruitment for the additional staffing needs.

Mr. Lau stated that it is very important what the state legislature might do to the retirement benefits and BWS watches that very carefully in the legislative session.

In response to Mr. Andaya's question whether 30 percent in the next 30 days is normal, Ms. Thomas said yes, right now, because there are four different generations within the workforce. The latter of those generations is the Baby Boomers, who are ready to retire. BWS is working towards ensuring that BWS recruitment is constantly ongoing, in order to ensure sufficient staffing to meet the Board's needs.

In response to Mr. Andaya's question regarding BWS's current workforce, which he recalled as approximately 787 total positions or 591 current employees, Ms. Thomas indicated the correct number of positions should be 741 based on the recent budget approval for the FY 18-19 budget. Mr. Andaya also asked whether the 30 percent is in reference to the number of total positions or in reference to the total current employees. Ms. Thomas said the 30 percent is in reference to all the current employees, and is based on when the employees' eligible retirement dates are. Mr. Andaya asked about 150 employees, and Ms. Thomas agreed to the approximate number.

In response to Mr. Soon's question about what is the standard for eligibility for retirement, Ms. Thomas stated that the standard is that they have to meet the age requirement, as well as the 30-year requirement in order for employees to be able to have full benefits. BWS has 30 percent of employees that have 30 or more years of service and can retire. Mr. Soon and Mr. Andaya mentioned that this is substantial.

Mr. Lau stated that he doesn't believe this is unique to Board of Water Supply. It is a challenge.

Ms. Thomas stated that we have been trying to translate the historical knowledge from those employees down to the newer employees in order to make sure that BWS has running knowledge within the BWS.

Mr. Lau stated that another area of succession planning is documenting known procedures and policies. This helps with the transition for newer employees so they can have an easier time understanding what their job requirements are. Capital Projects and Water Resources have started this planning.

ITEM FOR INFORMATION NO. 3

"August 27, 2018

GROUNDWATER
LEVELS

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

Chair and Members:

Subject: Status Update of Groundwater Levels at All Index Stations

There were no aquifer index wells within low groundwater status for the production month of July 2018. The monthly production average for July 2018 was 150.05 million gallons per day (mgd).

The Board of Water Supply rainfall index for the month of July 2018 was 85 percent of normal; with a five-month moving average of 111 percent. As of August 7, 2018, the Hawaii Drought Monitor shows abnormally dry conditions for the central plain of Oahu and moderate drought conditions for the Leeward coast to the Waianae mountains.

Most monitoring wells are exhibiting static or declining trends due to the increased pumping during the summer season.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

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

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF JULY 2018**

POTABLE

STATION	MGD
HONOLULU (1)	
KULIOUOU	0.06
WAILUPE	0.13
AINA KOA	0.22
AINA KOA II	0.82
MANOA II	1.00
PALOLO	1.15
KAIMUKI HIGH	1.44
KAIMUKI LOW	2.31
WILDER	7.68
BERETANIA HIGH	4.24
BERETANIA LOW	4.03
KALIHI HIGH	2.12
KALIHI LOW	2.20
KAPALAMA	0.50
KALIHI SHAFT	8.51
MOANALUA	1.12
HALAWA SHAFT	9.28
KAAMILO	0.84
KALAUAO	5.49
PUNANANI	11.44
KAHUMANU	0.24
HECO WAIU	2.68
MANANA	0.42
WELLS SUBTOTAL:	67.92
MANOA TUNNEL	0.17
PALOLO TUNNEL	0.23
GRAVITY SUBTOTAL:	0.40
HONO. SUBTOTAL:	68.32

STATION	MGD
WINDWARD (2)	
WAIMANALO II	0.45
WAIMANALO III	0.00
KUOU I	1.67
KUOU II	0.19
KUOU III	0.81
LULUKU	0.98
HAIKU	0.00
IOLEKAA	0.00
KAHALUU	0.83
KAHANA	0.63
PUNALUU I	0.00
PUNALUU II	3.25
PUNALUU III	0.92
KALUANUI	0.14
MAAKUA	0.20
HAUULA	0.26
WELLS SUBTOTAL:	10.33
WAIM. TUNNELS I & II	0.00
WAIM. TUNNELS III&IV	0.19
WAIHEE INCL. WELLS	0.42
WAIHEE TUNNEL	4.85
LULUKU TUNNEL	0.17
HAIKU TUNNEL	0.90
KAHALUU TUNNEL	1.97
GRAVITY SUBTOTAL:	8.50
WIND. SUBTOTAL:	18.83

STATION	MGD
NORTH SHORE (3)	
KAHUKU	0.48
OPANA	0.51
WAILEE I	0.00
WAILEE II	0.50
HALEIWA	0.00
WAIALUA	1.93
N.SHORE SUBTOTAL:	3.42

STATION	MGD
MILILANI (4)	
MILILANI I	3.04
MILILANI II	0.00
MILILANI III	0.35
MILILANI IV	1.71
MILILANI SUBTOTAL:	5.10

STATION	MGD
WAIHAWA (5)	
WAIHAWA	1.68
WAIHAWA II	1.48
WAIHAWA SUBTOTAL:	3.16

STATION	MGD
PEARL CITY-HALAWA (6)	
HALAWA 277	0.95
HALAWA 550	0.00
AIEA	1.00
AIEA GULCH 497	0.41
AIEA GULCH 550	0.23
KAONOHI I	1.02
WAIMALU I	0.00
NEWTOWN	0.97
WAIU	0.93
PEARL CITY I	0.51
PEARL CITY II	1.00
PEARL CITY III	0.42
PEARL CITY SHAFT	1.00
PEARL CITY-HALAWA SUBTOTAL:	8.45

STATION	MGD
WAIPIHU-EWA (7)	
WAIPIO HTS.	0.77
WAIPIO HTS. I	0.59
WAIPIO HTS. II	0.44
WAIPIO HTS. III	1.33
WAIPAHU	5.50
WAIPAHU II	2.16
WAIPAHU III	2.04
WAIPAHU IV	2.89
KUNIA I	4.92
KUNIA II	2.04
KUNIA III	1.48
HOAEAE	5.68
HONOULIULI I	1.30
HONOULIULI II	7.30
MAKAKILO	0.17
WAIPAHU-EWA SUBTOTAL:	38.61

STATION	MGD
WAIANAE (8)	
MAKAHA I	0.46
MAKAHA II	0.07
MAKAHA III	0.22
MAKAHA V	0.18
MAKAHA VI	0.00
MAKAHA SHAFT	0.00
KAMAILE	0.10
WAIANAE I	0.00
WAIANAE II	0.86
WAIANAE III	0.71
WELLS SUBTOTAL:	2.59
WAI. C&C TUNNEL	1.40
WAI. PLANT. TUNNELS	0.16
GRAVITY SUBTOTAL:	1.56
WAIANAE SUBTOTAL:	4.15

NONPOTABLE

NONPOTABLE	MGD
KALAUAO SPRINGS	0.74
BARBERS POINT WELL	1.46
GLOVER TUNNEL NP	0.40
NONPOTABLE TOTAL:	2.60

RECYCLED WATER JUNE 2018)

RECYCLED WATER	MGD
HONOULIULI WRF R-1	8.30
HONOULIULI WRF RO	1.72
RECYCLED WATER TOTAL:	10.02

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF JULY 2018**

PRODUCTION SUMMARIES

TOTAL WATER	MGD
PUMPAGE	139.59
GRAVITY	10.46
POTABLE TOTAL:	150.05
NONPOTABLE	2.60
RECYCLED WATER	10.02
TOTAL WATER:	162.67

CWRM PERMITTED USE AND BWS ASSESSED YIELDS FOR BWS POTABLE SOURCES				
WATER USE DISTRICTS		A PERMITTED USE/ BWS YLDS	B JUL 2018	C DIFF. A-B
1	HONOLULU	82.93	67.92	15.01
2	WINDWARD	25.02	13.56	11.46
3	NORTH SHORE	4.74	3.42	1.32
4	MILILANI	7.53	5.10	2.43
5	WAHIAWA	4.27	3.16	1.11
6	PEARL CITY-HALAWA	12.25	8.45	3.80
7	WAIPAHU-EWA	50.63	38.61	12.02
8	WAIAANAE	4.34	2.59	1.75
TOTAL:		191.71	142.82	48.89

CWRM PERMITTED USE FOR BWS NONPOTABLE SOURCES				
WATER USE DISTRICTS		A PERMITTED USE	B JUL 2018	C DIFF. A-B
7	WAIPAHU-EWA (BARBERS POINT WELL)	1.00	1.46	-0.46
TOTAL:		1.00	1.46	-0.46

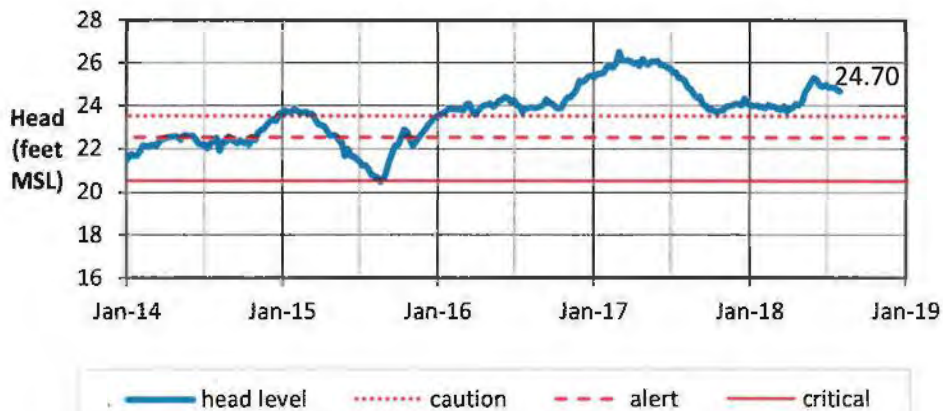
EFFECTIVE WATER DEMAND PER DISTRICT

IMPORT/EXPORT BETWEEN WATER USE DISTRICTS			
FROM	TO		MGD
2	1	WINDWARD EXPORT	1.15
7	8	BARBERS PT LB	7.03

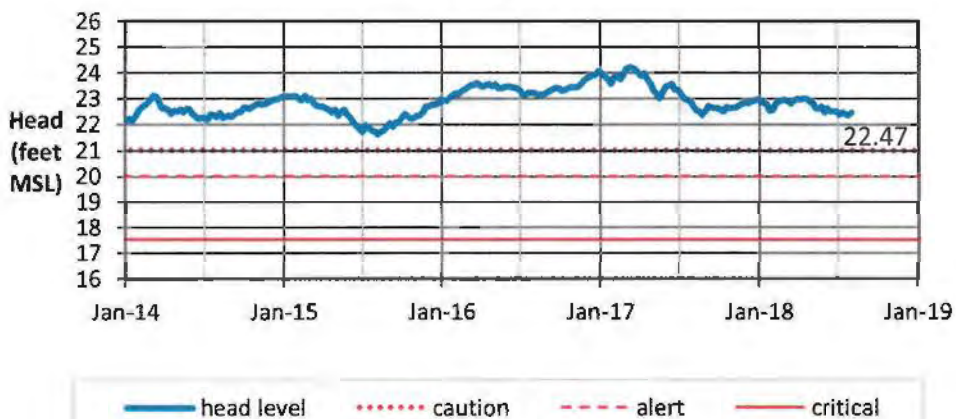
WATER USE DISTRICTS		SUBTOTAL	IMPORT	EXPORT	EFFECTIVE WATER DEMAND
1	HONOLULU	67.92	1.15	-	69.07
2	WINDWARD	13.56	-	1.15	12.41
3	NORTH SHORE	3.42	-	-	3.42
4	MILILANI	5.10	-	-	5.10
5	WAHIAWA	3.16	-	-	3.16
6	PEARL CITY-HALAWA	8.45	-	-	8.45
7	WAIPAHU-EWA	38.61	-	7.03	31.58
8	WAIAANAE	2.59	7.03	-	9.63
TOTAL:		142.82	8.19	8.19	142.82

Weekly Head Report

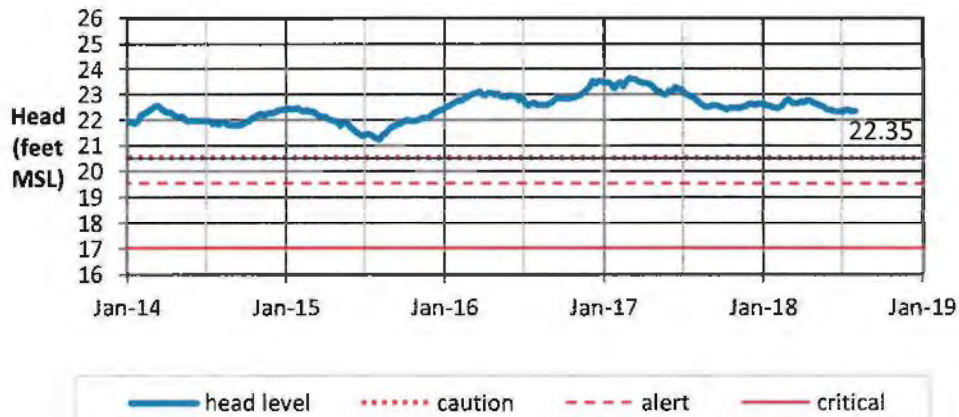
Kaimuki 08/07/18



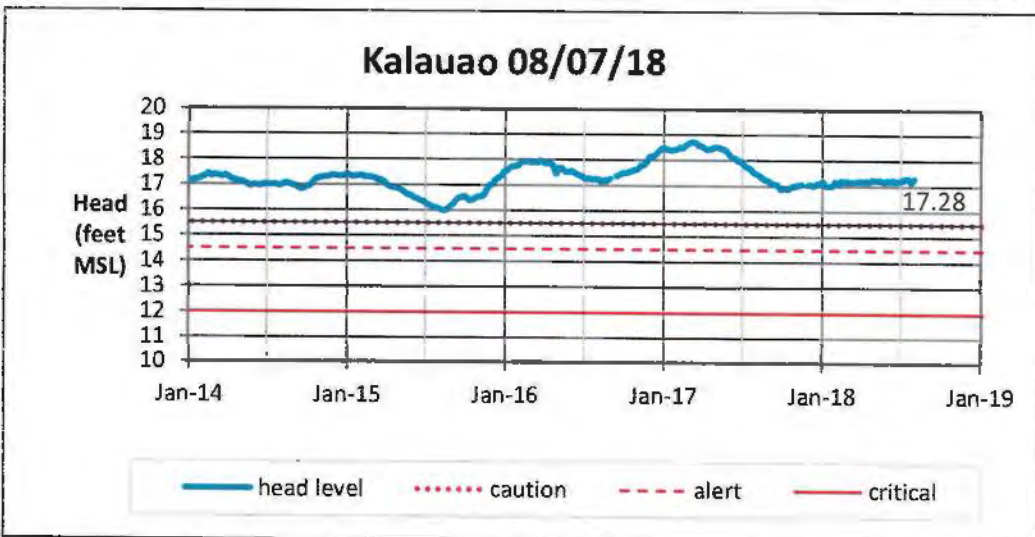
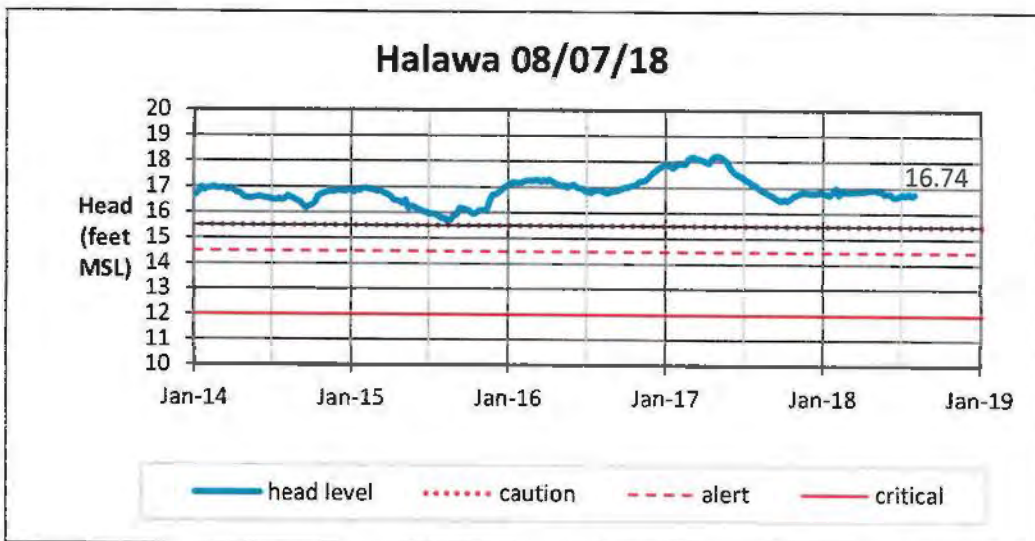
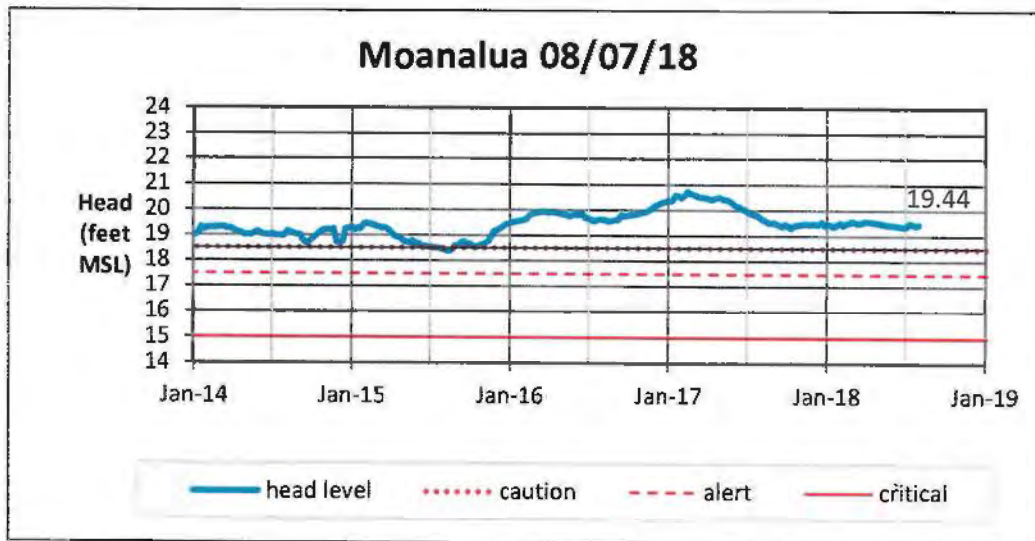
Beretania 08/07/18



Kalihi 08/07/18

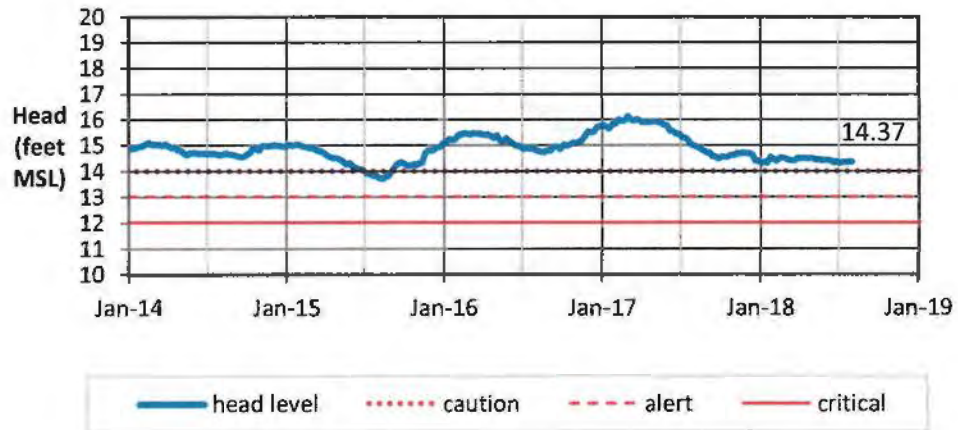


Weekly Head Report

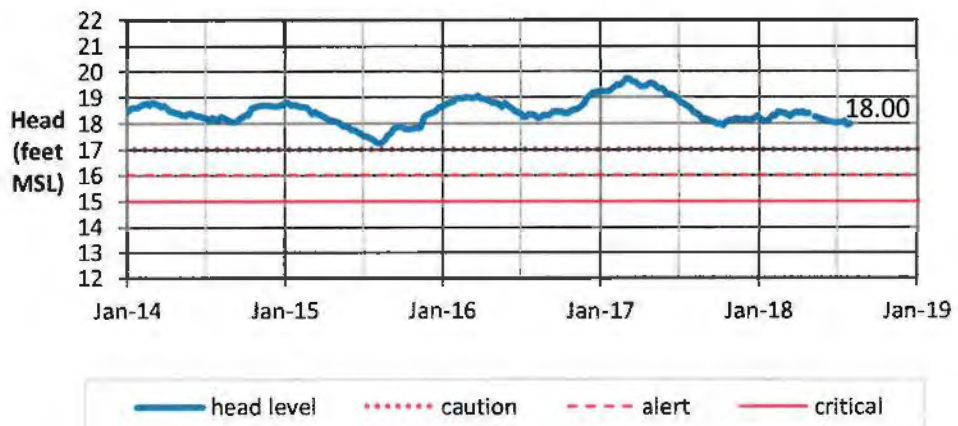


Weekly Head Report

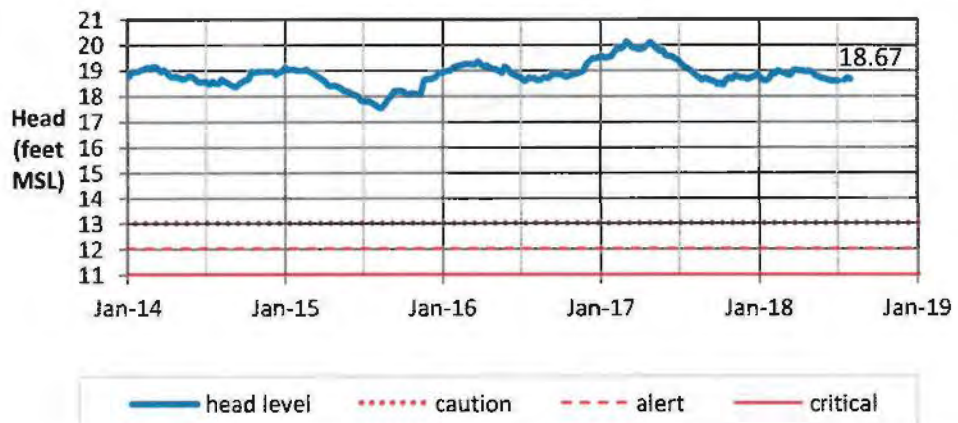
Pearl City 08/07/18



Waipahu 08/07/18

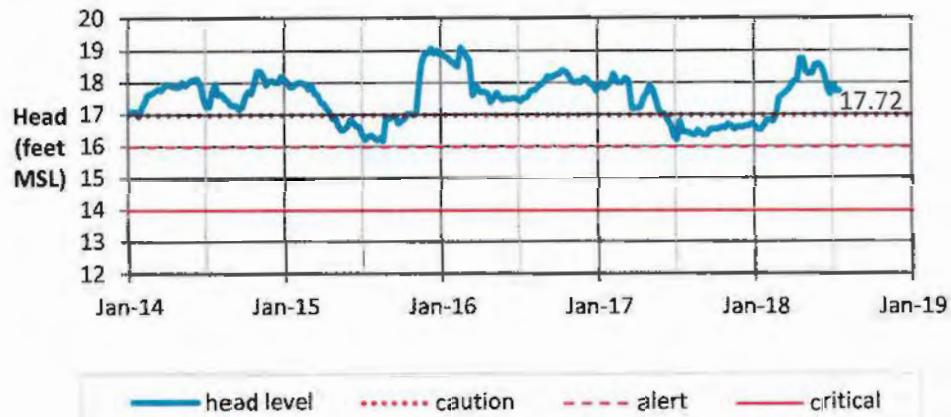


Hoeaee-Kunia 08/07/18

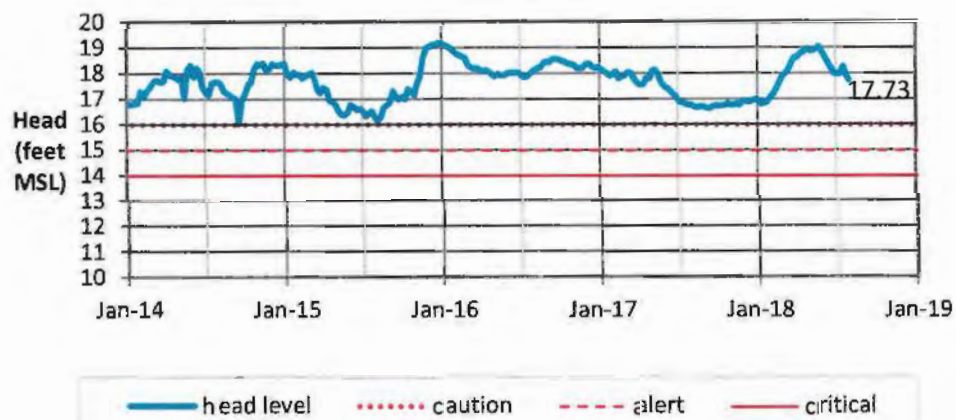


Weekly Head Report

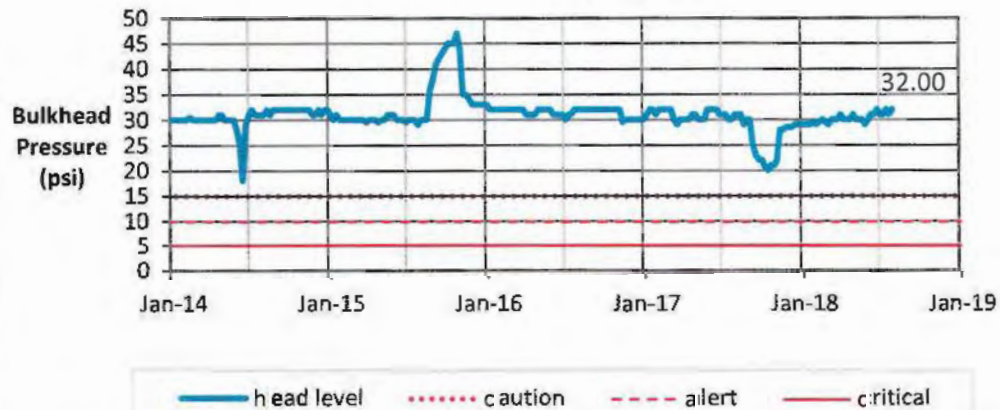
Punaluu 07/23/18



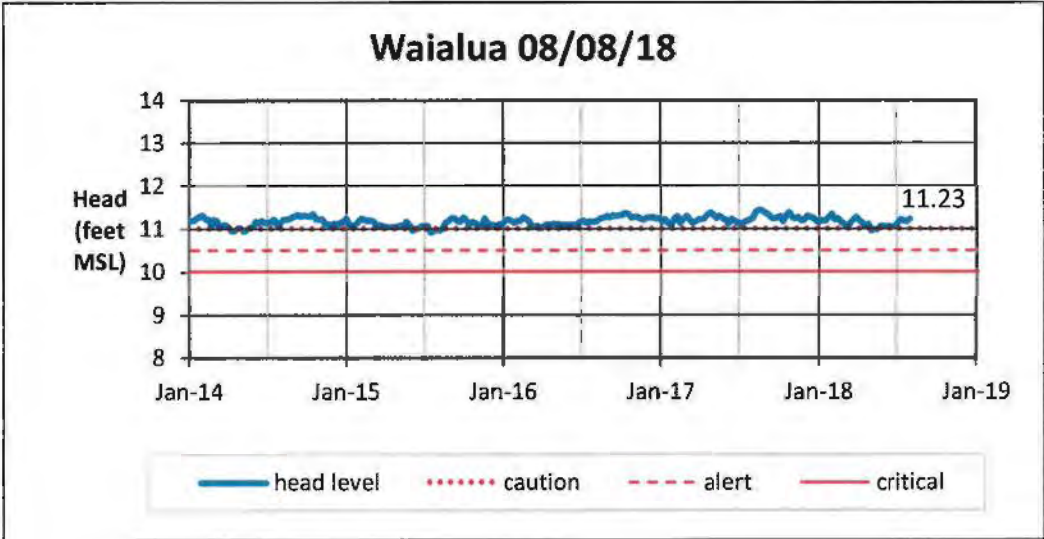
Kaluanui 08/08/18

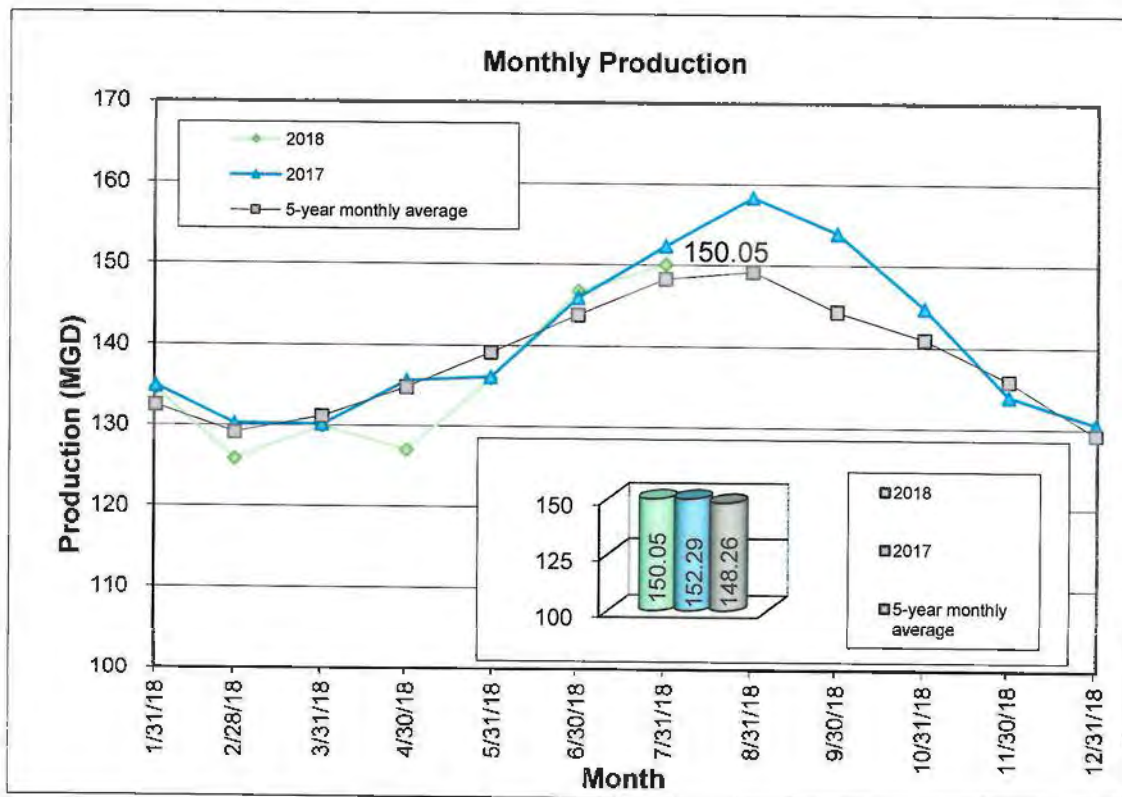
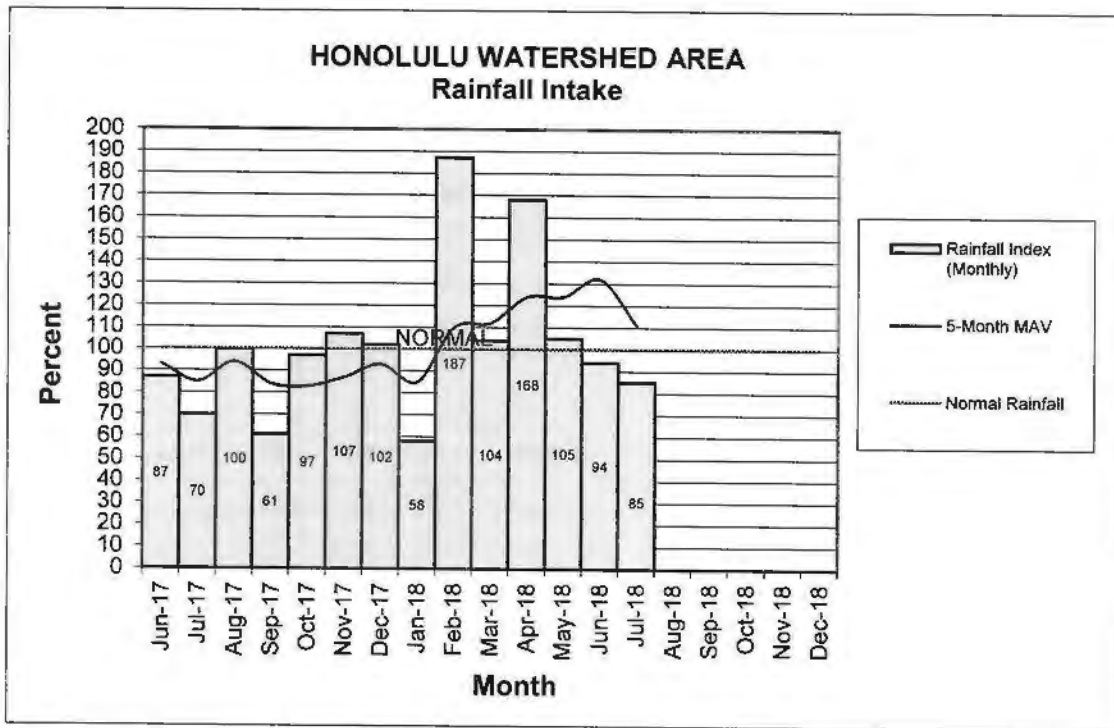


Waihee Tunnel 08/09/18



Weekly Head Report





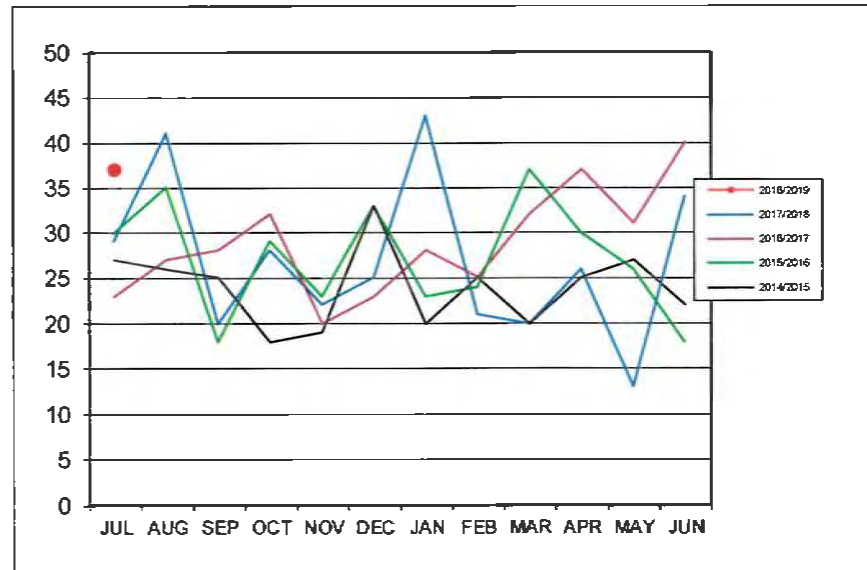
ITEM FOR INFORMATION NO. 4

WATER MAIN REPAIR REPORT

for July 2018

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2018/2019	37												37
2017/2018	29	41	20	28	22	25	43	21	20	26	13	34	322
2016/2017	23	27	28	32	20	23	28	25	32	37	31	40	346
2015/2016	30	35	18	29	23	33	23	24	37	30	26	18	326
2014/2015	27	26	25	18	19	33	20	25	20	25	27	22	287

Date	Address	Size (In)	Pipe Type
7/1/2018	44-138 Bayview Haven Pl, Kaneohe	6	CI
7/2/2018	3912 Waialae Ave, Honolulu	8	CI
7/2/2018	411 Alakawa St, Honolulu	16	CI
7/3/2018	2168 Aumakua St, Pearl City	8	CI
7/3/2018	87-195 St Johns Rd, Waianae	8	CI
7/6/2018	353 Kellog St, Wahiawa,	12	CI
7/9/2018	1741 Nalulu Pl, Honolulu	4	CI
7/11/2018	3042 Date St, Honolulu	30	CI
7/11/2018	2154 Aulii St, Honolulu	6	CI
7/11/2018	5036 Maunalani Cir, Honolulu	6	CI
7/12/2018	2013 Puna St, Honolulu	6	CI
7/12/2018	91-618 Pupu St, Ewa Beach	6	CI
7/12/2018	2040 Puu Pl, Wahiawa	6	CI
7/12/2018	1440 Akialoa Pl, Kailua,	8	CI
7/12/2018	642 N Vineyard Blvd, Honolulu	12	CI
7/13/2018	2280 Kalakaua Ave, Honolulu	4	CI
7/14/2018	Farrington Hwy (Hanawai Cir), Waipahu	6	CI
7/14/2018	91-44 Hailipo St, Ewa Beach	6	CI
7/14/2018	91-476 Pupu St, Ewa Beach	8	CI
7/16/2018	1017 11th Ave, Honolulu	6	CI
7/18/2018	5012 Maunalani Cir, Honolulu	8	CI
7/18/2018	86-357 Puhawai Rd, Waianae	6	PVC



80 miles of pipelines were surveyed by the Leak Detection Team in the month of July.

Date	Address	Size (In)	Pipe Type
7/20/2018	2465 Kula Kolea Dr, Honolulu	12	CI
7/22/2018	722 Lunalilo Home Rd, Honolulu	16	CI
7/23/2018	444 Ena Rd, Honolulu	8	CI
7/23/2018	1829 Mahana St, Honolulu	8	PVC
7/23/2018	54-138 Kamehameha Hwy, Hauula	12	CI
7/23/2018	2201 Kalakaua Ave, Honolulu	4	CI
7/24/2018	91-740 Oneula Pl, Ewa Beach	8	PVC
7/24/2018	94-880 Mokuahi St, Waipahu	8	CI
7/24/2018	94-926 Awanei St, Waipahu	8	CI
7/25/2018	Saratoga Ave, Kapolei	16	PVC-RO
7/27/2018	1941 Kinikohu St, Wahiawa	6	CI
7/28/2018	551 Hanana Pl, Honolulu	4	CI
7/29/2018	91-779 Makule Rd, Ewa Beach	8	CI
7/30/2018	2284 Kalakaua Ave, Honolulu	4	CI
7/30/2018	94-1102 Lumikuke Pl, Waipahu	4	CI

DISCUSSION: Mike Fuke, Acting Field Operations Division Program Administrator, gave the report.

For the month of July, BWS had 37 main breaks. There were three significant breaks. The first one was on Ala Kawa Street on July 2 at the intersection of Ala Kawa and Nimitz Highway. BWS ran into oil in the ground, so excavation work was tough.

The second significant main break was a 30-inch main on Date Street on July 11. This main transmission line feeds Diamond Head Booster station.

The third significant main break was a 12-inch main on Vineyard on July 12. BWS had to close the Palama Street off-ramp on the freeway due to traffic impacts on the site.

The leak detection team surveyed approximately 80 miles, and found two leaks that were repaired before they turned major.

MOTION TO
RECESS INTO
EXECUTIVE
SESSION

Upon unanimously approved motion, the Board recessed into Executive Session Pursuant to [HRS §92-5(a)(4)] at 3:21 PM to Consult with the Board's Attorney and to Consider Issues Pertaining to Matters Posted for Discussion at an Executive Session.


OPEN
SESSION

The Board reconvened in Open Session at 3:50 PM

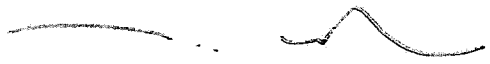
MOTION TO
ADJOURN

There being no further business Chair Andaya at 3:51 PM called for a motion to adjourn the Open Session. Ray Soon so moved; seconded by Ross Sasamura and unanimously carried.

Respectfully submitted,


LORRAINE H. LEE

APPROVED:


BRYAN P. ANDAYA
Chair of the Board

OCT 22 2018

Date

THE MINUTES OF THE PUBLIC HEARING AND REGULAR SESSION BOARD MEETING ON AUGUST 27, 2018 WERE APPROVED AT THE OCTOBER 22, 2018 BOARD MEETING			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
KAY C. MATSUI	X		
RAY C. SOON			ABSENT
ROSS S. SASAMURA	X		
JADE T. BUTAY	X		
MAX J. SWORD	X		