

MINUTES

THE REGULAR MEETING OF THE BOARD OF WATER SUPPLY

June 22, 2020

At 2:03 PM on June 22, 2020, in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, Board Chair Andaya called to order the Regular Meeting.

Present: Bryan P. Andaya, Board Chair
Kapua Sproat, Board Vice Chair via WebEx
Kay C. Matsui, Board Member via WebEx call
Ray C. Soon, Board Member via WebEx
Ross S. Sasamura, Board Member, Ex-Officio via WebEx
Jade T. Butay, Board Member, Ex-Officio via WebEx

Also Present: Ernest Lau, Manager and Chief Engineer
Ellen Kitamura, Deputy Manager, and Chief Engineer
Michael Fuke, Program Administrator,
Field Operations Division
Joseph Cooper, Waterworks Controller,
Finance Division
Barry Usagawa, Program Administrator,
Water Resources Division
Deanna Thyssen, Executive Secretary,
Office of the Manager and Chief Engineer
Joy Cruz-Achiu, Board Secretary
Steven Norstrom, Information Specialist II,
Communications Office

Others Present: Jeff Lau, Deputy Corporation Counsel
via Conference Call
Moana Yost, Deputy Corporation Counsel
via Conference Call

Absent: Max J. Sword, Board Member

Chair Bryan Andaya announced for the record an amendment to the Notice dated June 16, 2020. The Notice incorrectly stated today's meeting to be a Public Hearing. However, the Board of Water Supply (BWS) meeting on Monday, June 22, 2020, at 2:00 PM is a Regular Meeting.

REGULAR MEETING

Chair Andaya requested roll call for the Regular Meeting and asked each Board Member to respond verbally when their name is called. Vice Chair Kapua Sproat, present; Board Member Jade Butay, aye; Board Member Kay Matsui, aye; Board Member Ross Sasamura, aye; Board Member Ray Soon, aye. Chair Andaya noted that the Board Member Max Sword was unable to attend today's Board Meeting.

Chair Andaya requested that all those participating remotely to mute their microphone at this time and unmute when they intend to speak. Chair Andaya also noted that due to COVID-19 modifications are in place for the Board Meeting. Chair Andaya mentioned that he was wearing a face-shield instead of a face covering for ease of speaking and conducting the meeting.

Chair Andaya also thanked everyone for being flexible and helping to keep everyone safe while maximizing the opportunity for members of the public to provide testimony. The public is not allowed to be present in the Board Room; however, they have the opportunity to provide testimony via email through the BWS website and via telephone, which are currently open. The telephone number is 808-748-6040. Callers will be placed on hold, and the telephone lines will be opened up one at a time to allow each caller to testify.

Chair Andaya also announced that the Board Meeting was being broadcast via Facebook live.

Manager Ernest Lau also noted that the Board Meeting was also streamed on Vimeo on the BWS website, www.boardofwatersupply.com.

APPROVAL OF MEETING	Approval of the Minutes of the Public Hearing and Regular Meeting held on May 26, 2020.
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MOTION TO APPROVE	Ross Sasamura and Jade Butay motioned and seconded, respectively, to approve the Minutes of the Public Hearing and Regular Meeting of May 26, 2020. The motion was unanimously carried.
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Upon review and approval of the minutes of the Public Hearing and Regular Meeting held on May 26, 2020, Ms. Moana Yost, Deputy Corporation Counsel, requested that the Board Members identify themselves when they speak. Chair Andaya agreed and indicated that a roll call vote was needed to approve the minutes.

Chair Andaya asked Mr. Steven Norstrom if anyone had called in to testify on the minutes. Mr. Norstrom indicated that there were no callers in the queue.

Chair Andaya asked if there was any discussion on the minutes. Being that there were no discussion, Chair Andaya requested that Ms. Deanna Thyssen, Private Secretary, to conduct the roll call vote.

Ms. Thyssen conducted the roll call vote: Vice Chair Kapua Sproat, aye; Board Member Kay Matsui, aye; Board Member Ray Soon, aye; Board Member Ross Sasamura, aye; Board Member Jade Butay, aye; and Chair Bryan Andaya, aye.

Ms. Thyssen announced that the motion passes with six ayes.

THE MINUTES OF THE PUBLIC HEARING AND REGULAR MEETING HELD ON MAY 26, 2020, WERE APPROVED AT THE JUNE 22, 2020 BOARD MEETING			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
KAY C. MATSUI	X		
RAY C. SOON	X		
MAX J. SWORD			ABSENT
ROSS S. SASAMURA	X		
JADE T. BUTAY	X		

"June 22, 2020

ELECTION OF
THE VICE
OF THE BOARD
OF WATER
SUPPLY
BEGINNING
JULY 1, 2020

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

Chair and Members:

Subject: Election of the Chair and Vice Chair of the Board of Water
Supply Beginning July 1, 2020

The Bylaws of the Board of Water Supply provides that the Chair and Vice Chair of the Board shall be elected annually from among and by the appointed members of the Board at the first regular meeting in June.

Accordingly, election of the Chair and Vice Chair of the Board for the ensuing year commencing July 1, 2020, is on the agenda for this June 22, 2020 regular meeting.

Respectfully Submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION:

Ernest Lau, Manager and Chief Engineer of the Honolulu Board of Water Supply, gave the report.

Manager Ernest Lau stated that each year there is an election of the Chair and Vice Chair of the Board of Water Supply (BWS) for the upcoming fiscal year. This term is for the Fiscal Year, July 1, 2020 – June 30, 2021.

Chair Andaya asked Mr. Norstrom if anyone had called in to testify on this item. Mr. Norstrom indicated that there were no callers in the queue. Chair Andaya asked Ms. Thyssen if any written testimonies were received for this item. Ms. Thyssen indicated that no written testimonies were submitted.

Chair Bryan Andaya asked the members for nominations for the position of the Chair.

NOMINATION
AND MOTION

Vice Chair Kapua Sproat nominated the current Chair Bryan Andaya, and Board Member Ross Sasamura seconded.

Chair Andaya stated there is a motion by Vice Chair Kapua Sproat and seconded by Board Member Ross Sasamura to appoint Bryan Andaya as Chair of the Board of Water Supply (BWS).

Chair Andaya indicated support for the motion and asked Ms. Deanna Thyssen to conduct the roll call vote.

Ms. Thyssen conducted the roll call vote, Vice Chair Kapua Sproat, aye; Board Member Kay Matsui, aye; Board Member Ray Soon, aye; Board Member Ross Sasamura, aye; Board Member Jade Butay, aye; and Chair Andaya, aye.

Ms. Thyssen announced the motion passes with six ayes.

ELECTION OF THE CHAIR OF THE BOARD OF WATER SUPPLY FOR FISCAL YEAR JULY 1, 2020 TO JUNE 30, 2021			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
KAY C. MATSUI	X		
RAY C. SOON	X		
MAX J. SWORD			ABSENT
ROSS S. SASAMURA	X		
JADE T. BUTAY	X		

Chair Andaya expressed that it is an honor to serve the BWS and appreciates the Members for their vote of confidence in him.

Chair Andaya asked the members for Vice Chair nominations.

NOMINATION AND MOTION

Board Member Ross Sasamura nominated the current Vice Chair Kapua Sproat, seconded by Board Member Jade Butay.

Chair Andaya mentioned in favor of the motion to have the current Vice Chair Kapua Sproat serve another term for the year July 1, 2020, to June 30, 2021. Madam Secretary, Deanna Thyssen will now take a roll call.

Ms. Thyssen conducted roll call vote, Vice Chair Kapua Sproat, abstained; Board Member Kay Matsui, aye; Board Member Ray Soon, aye; Board Member Ross Sasamura, aye; Board Member Jade Butay, aye; Chair Andaya, aye.

Ms. Thyssen announced that the motion passes with six ayes. Manager Lau asked for clarification on the vote. Chair Andaya corrected to vote to one abstention and five ayes.

Chair Andaya congratulated Vice Chair Sproat for another year as Vice Chair.

ELECTION OF THE VICE CHAIR OF THE BOARD OF WATER SUPPLY FOR FISCAL YEAR JULY 1, 2020 TO JUNE 30, 2021			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT			ABSTENTION
KAY C. MATSUI	X		
RAY C. SOON	X		
MAX J. SWORD			ABSENT
ROSS S. SASAMURA	X		
JADE T. BUTAY	X		

"June 22, 2020

ADOPTION OF
RESOLUTION
911, 2020
REIMBURSEMENT
OF CAPITAL
EXPENDITURES
FROM THE
PROCEEDS OF
INDEBTEDNESS

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

Chair and Members:

Subject: Adoption of Resolution No. 911, 2020, Reimbursement of
Capital Expenditures from the Proceeds of Indebtedness

We recommend adoption of Resolution No. 911, 2020, Declaring the Official Intent of the Board of Water Supply of the City and County of Honolulu to Reimburse Itself for Certain Capital Expenditures from the Proceeds of Indebtedness.

The Resolution establishes the time limit for reimbursement of capital expenditures at eighteen months. This brings the Board of Water Supply into compliance with Section 1.150-2 of the U. S. Treasury Regulations and does not bind the Board to make any expenditure, incur any indebtedness, or proceed with the Project.

The Resolution establishes a limit of \$170,127,500 and attaches the FY 2021 Capital Improvement Program.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

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

Chair Andaya asked if it is required by the United States (U.S.) Treasury Regulations to pass a resolution for reimbursement of capital expenditures.

Mr. Joseph Cooper replied that it is not a requirement by the U.S. Treasury regulations. He further explained that bonds are issued to finance a specific list of projects in the budget. This resolution gives the BWS the flexibility and ability to use bonds for other Capital Improvement Program (CIP) projects that are not included on the original list.

Manager Lau stated that the City and County (C&C) of Honolulu also passed a similar resolution.

**MOTION
TO ADOPT**

Ross Sasamura and Jade Butay motioned and seconded, respectively, to adopt Resolution No. 911, 2020, Reimbursement of Capital Expenditures from the Proceeds of Indebtedness.

Chair Andaya asked if there are any public testimony or written communication on this action item. There were none.

Ms. Thyssen conducted the roll call vote. Vice Chair Kapua Sproat, aye; Board Member Kay Matsui, aye; Board Member Ray Soon, aye; Board Member Jade Butay, aye; Chair Andaya, aye.

Ms. Thyssen announced that the motion passes with six ayes.

RESOLUTION NO. 911, 2020, REIMBURSEMENT OF CAPITAL EXPENDITURES FROM THE PROCEEDS OF INDEBTEDNESS ADOPTED ON JUNE 22, 2020			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
KAY C. MATSUI	X		
RAY C. SOON	X		
MAX J. SWORD			ABSENT
ROSS S. SASAMURA	X		
JADE T. BUTAY	X		

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

RESOLUTION NO. 911, 2020

**A RESOLUTION DECLARING THE OFFICIAL INTENT OF THE
BOARD OF WATER SUPPLY OF THE CITY AND COUNTY
OF HONOLULU TO REIMBURSE ITSELF FOR CERTAIN CAPITAL
EXPENDITURES FROM THE PROCEEDS OF INDEBTEDNESS**

WHEREAS, the Board intends to provide for the acquisition, construction, rehabilitation and/or equipping of certain capital facilities for the Board constituting water system facilities and other capital improvements for the use and benefit of the Board comprising improvements related to the FY 2021 Capital Improvement Program and other related facilities (the "Project"); and

WHEREAS, the Board expects to pay certain expenditures (the "Reimbursement Expenditures") in connection with the Project prior to the issuance of indebtedness for the purpose of financing costs associated with the Project on a long-term basis; and

WHEREAS, the Board reasonably expects that debt obligations for the Project in an amount not expected to exceed \$170,127,500 will be issued and that certain of the proceeds of such debt obligations will be used to reimburse the Reimbursement Expenditures; and

WHEREAS, proceeds of such debt obligations will be allocated to Reimbursement Expenditures no later than 18 months after the later of (i) the date the cost is paid, or (ii) the date the Project is placed in service or abandoned (but in no event more than three years after the cost is paid); and

WHEREAS, the Board may issue debt obligations for the Project in connection with obligations for other projects;

BE IT RESOLVED by the Board of Water Supply of the City and County of Honolulu, Hawaii, as follows:


1. It is hereby found and determined that it is the intent of the Board that bonds be authorized and issued by the Board to provide monies to carry out one or more purposes of the Board, including the acquisition and construction of improvements to the water system of the Board as specified in Schedule I attached hereto.

2. This declaration is made solely for purposes of establishing compliance with the requirements of Section 1.150-2 of the Treasury Regulations, and this declaration does not bind the Board to make any expenditure, incur any indebtedness, or proceed with the Project.

3. The Board hereby declares its official intent to use proceeds of the indebtedness to reimburse itself for the Reimbursement Expenditures after adoption of this resolution.

4. This resolution shall take effect upon the adoption thereof.

ADOPTED:


BRYAN ANDAYA
Chair

Honolulu, Hawaii
June 22, 2020

RESOLUTION NO. 911, 2020, REIMBURSEMENT OF CAPITAL EXPENDITURES FROM THE PROCEEDS OF INDEBTEDNESS ADOPTED ON JUNE 22, 2020			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
KAY C. MATSUI	X		
RAY C. SOON	X		
MAX J. SWORD			ABSENT
ROSS S. SASAMURA	X		
JADE T. BUTAY	X		

Board of Water Supply
Capital Improvement Program
FY 2021

Summary by Categories	Operating Fund	Operating Fund - SRF Eligible	Operating Fund - Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal Funds	Improvement Fund	Improvement Fund - Federal Funds	Total
I - Research and Development	2,660,000	-	-	-	-	-	-	2,660,000
II - Renewal and Replacement								
A. Pumps	7,200,000	-	3,800,000	-	-	3,200,000	2,500,000	16,700,000
B. Reservoirs	-	-	-	-	-	3,500,000	-	3,500,000
C. Pipeline	4,075,000	-	-	-	-	54,150,000	-	58,225,000
D. Treatment	2,000,000	-	-	-	-	-	-	2,000,000
E. Facilities	19,700,000	3,100,000	2,500,000	-	-	-	-	25,300,000
Category II - sub-total	32,975,000	3,100,000	6,300,000	-	-	60,850,000	2,500,000	105,725,000
III - Capacity Expansion								
A. Pumps	-	-	-	100,000	-	-	-	100,000
B. Reservoirs	-	-	-	17,800,000	-	-	-	17,800,000
C. Pipeline	-	-	-	2,150,000	10,700,000	-	-	12,850,000
D. Treatment	-	-	-	-	-	-	-	-
E. Facilities	-	-	-	-	-	3,500,000	-	3,500,000
Category III - sub-total	-	-	-	20,050,000	10,700,000	3,500,000	-	34,250,000
Total Categories I - III	35,635,000	3,100,000	6,300,000	20,050,000	10,700,000	64,350,000	2,500,000	142,635,000
Construction Cost Index Adjustment	2,652,500	310,000	630,000	1,700,000	1,070,000	5,880,000	250,000	12,492,500
Contract Adjustment Account	15,000,000	-	-	-	-	-	-	15,000,000
Capital Improvement Program Total	53,287,500	3,410,000	6,930,000	21,750,000	11,770,000	70,230,000	2,750,000	170,127,500

CIP-SUMM

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
1. Construction Management for Various BWS Construction Projects	Provide construction management and training services for selected BWS construction projects.	P&E	2,000,000	-	-	-	-	-	-	2,000,000
2. Pipeline Condition Assessment	Condition assessment of transmission pipelines as identified by the InfoMaster decision frame work.	P&E	100,000	-	-	-	-	-	-	100,000
3. Kunia Wells IV Exploratory Wells	Drill, install, test pump and sample three exploratory wells (TMK 9-2-001:014 or TMK 9-4-003:010).	P&E	200,000	-	-	-	-	-	-	200,000
4. Manoa Well II Exploratory Well	Drill and case replacement exploratory well at existing Manoa Wells II Station (TMK: 2-9-054:033).	P&E	200,000	-	-	-	-	-	-	200,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
5. Waikele Gulch Exploratory Well Environmental Assessment	Prepare Environmental Assessment for three (3) exploratory wells at Waikele Gulch.	P&E	160,000	-	-	-	-	-	-	160,000
Total Category I - Research and Development			2,660,000	-	-	-	-	-	-	2,660,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
II. Renewal and Replacement										
A. Pumps										
6. Waihee Line Booster: Replace Pumping Units	Remove all eight (8) booster pumps including pumps, motors, piping, valves, concrete supports, gauges, and all electrical components. Install two (2) new booster pumps and new free flow lines including piping, control valves, flow tubes, elevated steel platform, MCC, and appurtenant electrical equipment. Install new backfeed line connecting Waihee and Punaluu systems.	Const	-	-	3,800,000	-	-	-	-	3,800,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
7. Mariners Ridge Booster No. 2 Renovation	Remove and replace the two (2) existing booster pumps including piping, valves, flow tube, instrumentation, and appurtenant work. Install two new station isolation valves. Replace MCC including all of the motor starters. Replace transformer. Remove existing concrete block openings and louver windows and replace with hurricane proof windows and insect screens.	Const	-	-	-	-	-	-	2,500,000	2,500,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
8. Kunia Wells III Renovation	Replace MCC, replace Pump No. 1 and associated above ground piping and valves. Replace above ground piping and valves for Pumps Nos. 2 and 3. Replace flow tube and associated above ground piping, repair and repaint holding tank, and replace compressor and associated tank. Install concrete walkway, repaint building, provide new gutters and downspouts, replace window screens, and other miscellaneous building and site work.	Const	-	-	-	-	-	3,200,000	-	3,200,000
9. Pump Renewal and Replacement	Renewal and replacement of various BWS pumps and plant facilities.	Const	5,500,000	-	-	-	-	-	-	5,500,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
10. Wilder Wells Starter Upgrades and Facility Repairs	Install starter upgrades and well station repairs.	P&E	500,000	-	-	-	-	-	-	500,000
11. Kalihi Shaft MCC Replacement	Remove and replace MCC, two pump units including piping, valves, instrumentation and appurtenances within the shaft facility.	P&E	700,000	-	-	-	-	-	-	700,000
12. Pump Renewal and Replacement	Renewal and replacement of various BWS pumps and plant facilities.	P&E	500,000	-	-	-	-	-	-	500,000
Pumps Total			7,200,000	-	3,800,000	-	-	3,200,000	2,500,000	16,700,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
B. Reservoirs										
13. Kapaa 272 Reservoir Replacement	Install 1.0 MG reservoir and appurtenances, and demolish existing 2.0 MG reservoir.	Const	-	-	-	-	-	3,500,000	-	3,500,000
Reservoirs Total			-	-	-	-	-	3,500,000	-	3,500,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
C. Pipelines										
14. Wahiawa Water System Improvements, Part IV	Install 16-inch mains and appurtenances along Nichols Street from Glen Avenue to Eames Street; and along Eames Street from Uuku Street to Nichols Street - approx. 1,620 lin. ft. Install 8-inch mains and appurtenances along Lehua Street from Kilani Avenue to end; along Koa Street from Kilani Avenue to Auwai Drive; along Eames Street from Nichols Street to 1735 Eames Street; along Eames Street from Glen Avenue to 1746 Eames Street; along Glen Avenue from Eames Street to Glenview Place; along Royal Palm Drive from Nichols Street to Glen Avenue; along Turner Street from Royal Palm Drive to Eames Street	Const	-	-	-	-	-	18,500,000	-	18,500,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
Wahiawa Water System Improvements, Part IV (continued)	along Glenview Place from Glen Avenue to end; along Wonderview Place from Glenview Place to end; along Kanoelehua Place from Glen Avenue to end; along Hakuone Street from Hakuone Place to end; along Hakuone Place from Hakuone Street to end; along Hill Drive from California Avenue to Puu Place; along Puu Place from Nakeke Place to end; along Leilehua Road from 90 feet south of FH C00722 to end; along Leimomi Place from Leilehua Road to 37A Leilehua Road; along Alai Place from Leilehua Road to end; along Laniloa Place from Leilehua Road to end; along Lena Place from									

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
Wahiawa Water System Improvements, Part IV (continued)	along Mie Place from Laniloa Place to end; along the side road north of FH C00216 from Glen Avenue to end; along the side road south of FH C00380 from Glen Avenue to end; along side road north of FH C00217 from Glen Avenue to end; and along the side road north of FH C00329 from Lakeview Circle to end - approx. 14,570 lin. ft.									

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
15. Pearl City Water System Improvements, Part IV	Install 12-inch mains and appurtenances along Huikahi Street, from Hoolehua Street to Hoolaulea Street - approx. 940 lin. ft. Install 8-inch mains and appurtenances along Palamoi Street, from Kuahaka Street to end of 8-inch main near FH L02004; along Panee Street, from Palamoi Street to Kaweloka Street; along Kaweloka Street, from Panee Street to Palamoi Street; along Kalauipo Street, from Kaweloka Street to Palamoi Street; along Kalauipo Place, from Kalauipo Street to end; along Kalai Place, from Kalauipo Street to end; along Maiha Circle, from Waimano Home Road to end;	Const	-	-	-	-	-	13,500,000	-	13,500,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
Pearl City Water System Improvements, Part IV (continued)	along Maiha Place, from Maiha Circle to end; along Hooehoihoi Street, from Hoomoana Street to end; along Hooehoihoi Place, from Hooehoihoi Street to end; along Hoowae Street, from Hooehoihoi Street to Hoolele Street; along Hoomalolo Street, from Hoomoana Street to Hoolaulea Street; along Hoolele Street, from Hoolaulea Street to Hoomalolo Street; along Hoomoana Street, from Komo Mai Drive to Hookeikei Street; along Komo Mai Drive, from Hoolehua Street to Hoolaulea Street; and along Hoolehua Street, from Komo Mai Drive to end of cast iron pipe - approx. 16,420 lin. ft. Install 4-inch mains and appurtenance along Maiki Place from Maiha Circle to end - approx. 125 lin. ft.									

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
16. Wikao Street 12-Inch Water Main	Install 12-inch main and appurtenances along Wikao Street from Melemanu 808 Reservoir to Waikalani Drive - approx. 1,200 lin. ft. Restore connection of the Melemanu 808 Reservoir to the Mililani-Wahiawa 808 water system.	Const	-	-	-	-	-	2,500,000	-	2,500,000
17. McArthur Street 8-Inch Water Main	Install 8-inch mains and appurtenances along McArthur Street, from Mill Street to Waianae Valley Road - approx. 1,500 lin. ft. Install 8-inch and 4-inch mains and appurtenances along Kawili Street, from Ihuku Street to end; and along Alamihi Street, from Kawili Street to end - approx. 1,900 lin. ft.	Const	-	-	-	-	-	3,000,000	-	3,000,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
18. Kapolei Parkway 12-Inch Water Main	Install 12-inch mains and appurtenances along Kapolei Parkway, from Park Row to Kolowaka Drive - approx. 1,100 lin. ft.	Const	-	-	-	-	-	1,100,000	-	1,100,000
19. Beretania Street Inactivate 12-Inch Blow-Off Main	Inactivate the existing 12-inch blow-off main and appurtenances at the intersection of Beretania Street and Kalakaua Avenue.	Const	250,000	-	-	-	-	-	-	250,000
20. Service Lateral Replacement at Various Locations	Install and replace service laterals at various locations.	Const	500,000	-	-	-	-	-	-	500,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
21. New Service Lateral Installations at Various Location	Install new service laterals at various locations.	Const	1,875,000	-	-	-	-	-	-	1,875,000
		P&E	500,000	-	-	-	-	-	-	500,000
22. Auloa Road and Ulukahiki Street 16-Inch Main	Install 16-inch mains and appurtenances along Auloa Road, from FH W03044 to Kalanianaʻole Highway; and along Ulukahiki Street, from Kalanianaʻole Highway to Kailua Road - approx. 7,635 lin. ft. Install 8-inch main along Ulukahiki Street, from near Manu Aloha Street to Kailua Road – approx. 250 lin. ft.	Const	-	-	-	-	-	10,000,000	-	10,000,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
23. Water Main Installation & Replacement	Install and replace water mains at various locations.	Const	100,000	-	-	-	-	-	-	100,000
24. Kaimuki Avenue Area Water System Improvements	Install 8-inch mains and appurtenances along Maunaloa Avenue, from 16th Avenue to 20th Avenue; along Kaimuki Avenue, from 16th Avenue to 21st Avenue; along Pahoa Avenue, from 18th Avenue to 150 feet beyond FH M03591; along 17th Avenue, from Kilauea Avenue to Kaimuki Avenue; along 18th Avenue, from Kaimuki Avenue to Pahoa Avenue; along 19th Avenue, from Maunaloa Avenue to Pahoa Avenue; and along 20th Avenue, from Maunaloa Avenue to Pahoa Avenue - approx. 9,850 lin. ft.	P&E	-	-	-	-	-	1,100,000	-	1,100,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
25. Aiealani Place and Welelau Place 8-Inch Main	Install 8-inch mains and appurtenances along Aiealani Place, from Halawa Heights Road to end and along Welelau Place, from Hoapono Place to end - approx. 1,000 lin. ft. Install 8-inch PRV and appurtenances along Halawa Heights Road, between Aiealani Place and Fernridge Place.	P&E	-	-	-	-	-	250,000	-	250,000
26. Prince Edward Street and Koa Avenue 8-Inch Mains	Install 8-inch mains and appurtenances along Prince Edward Street, from Kaiulani Avenue to Liliuokalani Avenue; and along Koa Street, from Kaiulani Avenue to Liliuokalani Avenue - approx. 2,050 lin. ft.	P&E	-	-	-	-	-	400,000	-	400,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
27. Lower Mariners Ridge Water System Improvements	Install 12-inch mains and appurtenances along Kaluanui Road, from Kaloaloe Street to Kaluanui Place - approx. 1,460 lin. ft. Install 8-inch mains and appurtenances along Kaloaloe Street, from Kaahue Street to Kaluanui Road; along Kaahue Street, from Kaloaloe Street to Kaluanui Road; and along Kaluanui Place from Kaluanui Road to Kaluanui Way - approx. 2,885 lin. ft. Install 8-inch and 4-inch mains and appurtenances along Kawaiki Place, from Kaahue Street to end; along Kauku Place, from Kaahue Street to end; along Kapoho Place, from Kaahue Street to end; along Kapapala Place, from Kaahue Street to end; along Kaohe Place, from Kaahue Street to End; along Kamoi Place, from	P&E	-	-	-	-	-	1,000,000	-	1,000,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
Lower Mariners Ridge Water System Improvements (continued)	from Kaluanui Road to end; along Kakapa Place, from Kaluanui Road to end; along Kaipuhaa Place, from Kaluanui Road to end; along Kahuwai Place, from Kaluanui Road to end; along Kahauloa Place, from Kaluanui Road to end; along Kaluanui Way, from end to end - approx. 4,785 lin. ft.									

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
28. Monterey Drive and Sierra Drive 8-Inch Mains	Install 8-inch mains and appurtenances along Monterey Drive, from Lurline Drive to Mariposa Drive; and along Sierra Drive, from Wilhelmina Rise to Wilhelmina Rise near Manini Way - approx. 3,360 lin. ft. Install 8-inch and 4-inch mains and appurtenances along Monterey Place, from Monterey Drive to end; and along Lanipili Place, from Monterey Drive to end - approx. 1,170 lin. ft.	P&E	-	-	-	-	-	550,000	-	550,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
29. Fort Weaver Road and Hapalua Street Water System Improvements	Install 16-inch mains and appurtenances along Fort Weaver, from Papipi Road to Pohakupuna Road - approx. 2,600 lin. ft. Install 8-inch mains and appurtenances along Hapalua Street, from Fort Weaver Road to Ewa Beach Road; along Nalomeli Place, from Fort Weaver Road to end; and along Popoi Place, from Fort Weaver Road to end - approx. 5,750 lin. ft.	P&E	-	-	-	-	-	1,000,000	-	1,000,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
30. Kapahulu Avenue and Leahi Avenue Water System Improvements	Install 24-inch mains and appurtenances along Kapahulu Avenue, from Kuhio Avenue to Ala Wai Boulevard - approx. 1,365 lin. ft. Install 16-inch mains and appurtenances along Kapahulu Avenue, from Kalakaua Avenue to Kuhio Avenue - approx. 880 lin. ft. Install 8-inch mains and appurtenances along Leahi Avenue, from Kapahulu Avenue to Pualei Circle - approx. 2,680 lin. ft.	P&E	-	-	-	-	-	700,000	-	700,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
31. Kaunaoa Street Area Water System Improvements	<p>Install 30-inch mains and appurtenances along Kanaina Avenue, from Makini Street to Kaunaoa Street; and along Kaunaoa Street, from Kanaina Avenue to Campbell Avenue - approx. 915 lin. ft.</p> <p>Install 12-inch mains and appurtenances along Campbell Avenue, from Makini Street to Kaunaoa Street - approx. 250 lin. ft.</p> <p>Install 8-inch mains and appurtenances along Kaunaoa Street, from Campbell Avenue to Trouseau Street; along Makini Street, from Campbell Avenue to Trouseau Street; and along Campbell Avenue, from Monsarrat Avenue to Collins Street - 2,695 lin. ft.</p>	P&E	-	-	-	-	-	550,000	-	550,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund-Federal Funds	Total
32. Non-Potable Irrigation Conversion for Keehi Lagoon Beach Park	Install new irrigation meter and appurtenances along Lagoon Drive for Keehi Lagoon Beach Park. Remove existing potable irrigation meter and perform cross-connection survey of irrigation system.	P&E	100,000	-	-	-	-	-	-	100,000
33. Water Sampling Stations At Various Locations	Install water sampling stations at various locations.	P&E	500,000	-	-	-	-	-	-	500,000
34. Service Lateral Replacement at Various Locations	Topographic Survey for the service lateral replacement at various locations.	P&E	150,000	-	-	-	-	-	-	150,000
35. Water Main Installation & Replacement	Install and replace water mains at various locations.	P&E	100,000	-	-	-	-	-	-	100,000
Pipelines Total			4,075,000	-	-	-	-	54,150,000	-	58,225,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
D. Treatment										
36. GAC Interior Corrosion Control at Various Locations	Perform interior corrosion control of selected BWS GAC facilities.	Const	1,500,000	-	-	-	-	-	-	1,500,000
		P&E	500,000	-	-	-	-	-	-	500,000
Treatment Total			2,000,000	-	-	-	-	-	-	2,000,000
E. Facilities										
37. Makiki 180 Reservoir Replace Altitude Valve Assembly	Replace altitude valve (AV) in AV vault, provide new titled disc check valve and emergency pump connection, install new electrical duct bank from control building to AV vault and various controls for new AV.	Const	-	-	2,500,000	-	-	-	-	2,500,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
38. Pump Station Instrumentation & Controls And SCADA Upgrade	Upgrade instrumentation and controls equipment at various pump stations and revamp SCADA system to provide smarter functionality.	Const	1,000,000	-	-	-	-	-	-	1,000,000
39. Halawa Xeriscape Garden Improvements	Install landscaping and irrigation, additional ADA parking stalls, modify existing parking and pathways to meet the ADA requirements, install accessible ramp/pathway connection to different garden attractions, additional gravel area for over-flow parking, perimeter fence to enclose the entire garden, and renovating the existing office and pavilion building.	Const	3,100,000	-	-	-	-	-	-	3,100,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
40. Rehabilitation of Pipeline Tunnels: Keanu and Fort Ruger Tunnels	Renovate pipeline and tunnel at Keanu and Ruger Tunnels.	Const	-	3,100,000	-	-	-	-	-	3,100,000
41. Facility Repair and Renovation	Repair, renovation, reroofing, fencing and repainting of selected BWS facilities.	Const	6,000,000	-	-	-	-	-	-	6,000,000
42. Security Improvements at Various Locations	Security improvements and enhancements includes, but not limited to fencing, doors and windows, vegetation setbacks and access control systems at various BWS locations.	Const	3,600,000	-	-	-	-	-	-	3,600,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
43. Beretania Public Service Building Exterior Improvements	Repave parking lot and courtyard, reconstruction curb and gutter, install curb ramps, repairs to the catwalk and fountain, and repaint the public service building exterior.	Const	3,100,000	-	-	-	-	-	-	3,100,000
44. Waimalu Wells I Slope Stabilization	Install slope stabilization along the downhill slope at Waimalu Wells I.	P&E	400,000	-	-	-	-	-	-	400,000
45. Slope Stabilization Investigation at Various Facilities	Inspect slopes and determine appropriate mitigation at various reservoir facilities.	P&E	400,000	-	-	-	-	-	-	400,000
46. Halawa Xeriscape Garden Multipurpose Building	Construct new multipurpose building within the Halawa Xeriscape Garden. Prepare environmental assessment.	P&E	500,000	-	-	-	-	-	-	500,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
47. Nanakuli 242 Altitude Valve	Install altitude valve and appurtenances in the vicinity of the Nanakuli Booster.	P&E	150,000	-	-	-	-	-	-	150,000
48. Facility Repair and Renovation	Repair, renovation, reroofing, fencing and repainting of selected BWS facilities.	P&E	1,000,000	-	-	-	-	-	-	1,000,000
49. Monitoring Well Assessment and Repair	Provide well condition assessment and associated repair services for monitor wells.	P&E	50,000	-	-	-	-	-	-	50,000
50. Professional Services for BWS Projects	Obtain services of archaeologists, botanists, environmental engineers, water quality labs, planners, government agencies and others.	P&E	300,000	-	-	-	-	-	-	300,000
51. Haiku Stairs Removal	Removal of Haiku Stairs	P&E	100,000	-	-	-	-	-	-	100,000
Facilities Total			19,700,000	3,100,000	2,500,000	-	-	-	-	25,300,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
Total Category II - Renewal and Replacement			32,975,000	3,100,000	6,300,000	-	-	60,850,000	2,500,000.00	105,725,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
III. Capacity Expansion										
A. Pumps										
52. Pacific Heights Booster No. 1	Land acquisition for new Pacific Heights Booster No. 1 to eliminate cross-country water main between Jack Lane and the Pacific Heights 578 Reservoir.	Land	-	-	-	100,000	-	-	-	100,000
Pumps Total			-	-	-	100,000	-	-	-	100,000
B. Reservoirs										
53. Kalawahine 180 2.0 MG Reservoir	Install 2.0 MG reservoir and appurtenances (TMK: 2-4-043:082) and 24-inch main along Auwaiolimu Street and Pensacola Street to Kinau Street - approx. 4,700 lin. ft.	Const	-	-	-	17,000,000	-	-	-	17,000,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund - Federal Funds	Total
54. East Kapolei 215 R-1 3.0 MG Reservoir	Install 3.0 MG R-1 reservoir and appurtenances (TMK: 9-1-018:008). Install 16-inch main and appurtenances along the access road, from the proposed reservoir to the Farrington Highway - approx. 2,300 lin. ft.	P&E	-	-	-	800,000	-	-	-	800,000
Reservoirs Total			-	-		17,800,000		-	-	17,800,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
C. Pipelines										
55. Salt Lake Boulevard 36- Inch Main - Foster Village to Aliamanu	Install 36-inch main and appurtenances along Salt Lake Boulevard, from 525 feet south of Maluna Street to Ala Lilikoi Street - approx. 4,275 lin. ft.	Const	-	-	-	-	6,700,000	-	-	6,700,000
56. Sand Island Access Road 20- Inch Mains Along Bascule Bridge	Install two 20-inch mains and appurtenances along the Sand Island Access Road Bascule bridge - approx. 3,000 lin. ft.	Const	-	-	-	-	4,000,000	-	-	4,000,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
57. Nimitz Highway 16-Inch Main, Waiakamilo Road to Sumner Street	Install 16-inch mains appurtenances along Nimitz Highway, from Waiakamilo Road to Sumner Street; and along Waiakamilo Road, from Nimitz Highway to Hart Street - approx. 5,960 lin. ft. Install 12-inch mains appurtenances along Hart Street, from Waiakamilo Road to end; along the Pier 31 access road, from N. Nimitz Highway to end; along the pier access road near FH no. M02371, from N. Nimitz Highway to end, along the pier access road near Alakawa Street, from N. Nimitz Highway to end and along Pier 38 Access Road, from N. Nimitz Highway to end - approx. 2,615 lin. ft.	P&E	-	-	-	1,400,000	-	-	-	1,400,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
58. Kalakaua Avenue 16-Inch Main, Beretania Street to Ala Wai Canal	Install 20-inch main and appurtenances along Ala Wai Boulevard, at the intersection of McCully Street - approx. 200 lin. ft. Install 16-inch main and appurtenances along Kalakaua Avenue, from Beretania Street to Ala Wai Promenade; and along Ala Wai Promenade, from Kalakaua Avenue to McCully Street - approx. 4,800 lin. ft.	P&E	-	-	-	750,000	-	-	-	750,000
Pipelines Total			-	-	-	2,150,000	10,700,000	-	-	12,850,000
D. Treatment										
Treatment Total			-	-	-	-	-	-	-	-

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
E. Facilities										
59. Kapolei Base Yard Facility	Design-Build contract for installation of administration building,	Const	-	-	-	-	-	3,500,000	-	3,500,000
Facilities Total			-	-	-	-	-	3,500,000	-	3,500,000
Total Category III - Capacity Expansion										
			-	-	-	20,050,000	10,700,000	3,500,000	-	34,250,000
Total Categories I - III										
			35,635,000	3,100,000	6,300,000	20,050,000	10,700,000	64,350,000	2,500,000.00	142,635,000
Construction Cost Index Adjustment										
			2,652,500	310,000	630,000	1,700,000	1,070,000	5,880,000	250,000	12,492,500
Contract Adjustment Account										
			15,000,000	-	-	-	-	-	-	15,000,000

Board of Water Supply
Capital Improvement Program
FY 2021

Project Title	Description	Type	Operating Fund	Operating Fund-SRF Eligible	Operating Fund-Federal Funds	Special Expendable Fund	Special Expendable Fund - Federal funds	Improvement Fund	Improvement Fund- Federal Funds	Total
<hr/>										
<hr/>										
FY2021 Capital Improvement Program Total			53,287,500	3,410,000	6,930,000	21,750,000	11,770,000	70,230,000	2,750,000.00	170,127,500

ITEM FOR INFORMATION NO. 1

"June 22, 2020

WATER
SYSTEM
REVENUE
BOND -
COMPLIANCE
WITH RATE
COVENANT

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

Chair and Members:

Subject: Water System Revenue Bonds – Compliance with
Rate Covenant

In accordance with Article VIII, Section 8.02, Rates and Charges, of the Water System Revenue Bonds, Resolution No. 717, 2001, we have completed a review of the financial condition of the Board of Water Supply for the purpose of estimating whether the Net Revenues for the current fiscal year and the next succeeding fiscal year will be sufficient to comply with the rate covenant in Section 8.02.

Our review included an examination of the financial and accounting records which we considered necessary to express an opinion on the adequacy of the department's rates and other charges such that Net Revenues shall not be less than the Net Revenue Requirement in each fiscal year.

In our opinion, Net Revenues for fiscal years 2020 and 2021 will not be less than the Net Revenue Requirement for such fiscal years.

The attached schedules present the actual and estimated revenues and expenditures in compliance with the above rate covenant.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION: Joseph Cooper, Waterworks Controller, Finance Division, gave the report. There were no comments or discussion.

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
SUPPLEMENTAL SCHEDULE OF NET REVENUE REQUIREMENT
AS OF APRIL 30, 2020

	<u>Actual July 1, 2019 - April 30, 2020</u>
REVENUES	
Water sales	\$ 189,588,189
Interest	4,812,808
Other	<u>4,613,328</u>
Total revenues	<u><u>199,014,325</u></u>
DEDUCTIONS	
Operating expenses	114,966,590
Less depreciation expense	<u>(27,967,568)</u>
Total deductions	<u>86,999,022</u>
Net revenues	<u><u>\$ 112,015,303</u></u>
NET REVENUE REQUIREMENT	
Greater of:	
1) Aggregate debt service	\$ 17,722,128
Required deposits - subordinate obligation fund	<u>17,722,128</u>
	<u><u>17,722,128</u></u>
2) Aggregate debt service	17,722,128
x	<u>1.20</u>
	<u><u>21,266,554</u></u>
Net revenue requirement	<u><u>\$ 21,266,554</u></u>
Target New Requirement of 1.7	30,127,618
Current ratio	6.32

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
CALCULATIONS OF NET REVENUES AND NET REVENUE REQUIREMENT
FISCAL YEAR ENDING JUNE 30, 2021

	PROJECTED FY 2021
REVENUES	
Water sales	\$ 236,361,000
Interest	5,164,264
Other	<u>3,564,036</u>
Total revenues	<u>\$ 245,089,300</u>
DEDUCTIONS	
Operating expenses	<u>\$ 183,634,937</u>
Net revenues	<u>\$ 61,454,363</u>
NET REVENUE REQUIREMENT	
Greater of:	
1) Aggregate debt service	\$ 18,874,086
Required deposits - subordinate obligation fund	<u></u>
	<u>\$ 18,874,086</u>
2) Aggregate debt service	\$ 18,874,086
	<u>x 1.20</u>
	\$ 22,648,903
Net revenue requirement	<u>22,648,903</u>
Target Net Requirement of 1.7	\$ 32,085,946
Current Ratio	3.26

ITEM FOR INFORMATION NO. 2

"June 22, 2020

STATUS
UPDATE OF
GROUNDWATER
LEVELS AT
ALL INDEX
STATIONS FOR
MAY 2020

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 two aquifer index wells within low groundwater status for the production month of May 2020. Punaluu and Waialua are under a Caution status. The monthly production average for May 2020 was 140.04 million gallons per day.

The Board of Water Supply rainfall index for the month of May 2020 was 49 percent of normal, with a 5-month moving average of 96 percent. As of June 2, 2020, the Hawaii Drought Monitor shows abnormally dry conditions for most of Oahu, with moderate drought conditions along the coastal regions from Ewa Beach to Makaha. The National Weather Service describes Hawaii as entering a dry season and is predicting below-normal precipitation through August 2020.

Most monitoring wells are exhibiting decreasing trends, likely due to increased pumping during the summer dry season. Production for May 2020 was slightly higher compared to the previous year.

Respectfully Submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION: Barry Usagawa, Program Administrator, Water Resources Division, gave the report.

Chair Andaya expressed how interesting it is that despite the condition of our economy, water production is up. This could be driven by community habits.

Manager Lau mentioned weather conditions also contribute to water production being up.

Mr. Barry Usagawa stated, even with the stay-at-home, work-from-home order and the loss of tourism during March and April 2020, potable water production has risen above the 5-year monthly average due to hot

temperatures and low rainfall from mid-April to June. Weather forecasts below normal rainfall through August, so we expect water production to be high through the summer.

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF MAY 2020**

POTABLE

STATION	MGD
HONOLULU (1)	
KULIOUOU	0.12
WAILUPE	0.14
AINA KOA	0.12
AINA KOA II	0.79
MANOA II	0.97
PALOLO	1.16
KAIMUKI HIGH	2.12
KAIMUKI LOW	2.38
WILDER	6.22
BERETANIA HIGH	2.61
BERETANIA LOW	0.04
KALIIHI HIGH	3.19
KALIIHI LOW	2.11
KAPALAMA	0.57
KALIIHI SHAFT	7.97
MOANALUA	1.16
HALAWA SHAFT	9.39
KAAMILO	0.86
KALAUAO	5.51
PUNANANI	7.27
KAAHUMANU	0.25
HECO WAIU	2.69
MANANA	0.26
WELLS SUBTOTAL:	57.90
MANOA TUNNEL	0.17
PALOLO TUNNEL	0.23
GRAVITY SUBTOTAL:	0.40
HONO. SUBTOTAL:	58.30

STATION	MGD
WINDWARD (2)	
WAIMANALO II	0.41
WAIMANALO III	0.00
KUOU I	1.73
KUOU II	0.05
KUOU III	0.81
LULUKU	0.96
HAIKU	0.00
IOLEKAA	0.00
KAHALUU	0.75
KAHANA	1.01
PUNALUU I	0.00
PUNALUU II	3.59
PUNALUU III	1.08
KALUANUI	1.32
MAAKUA	0.28
HAUULA	0.27
WELLS SUBTOTAL:	12.24
WAIM. TUNNELS I & II	0.00
WAIM. TUNNELS III&IV	0.19
WAIHEE INCL. WELLS	0.52
WAIHEE TUNNEL	4.40
LULUKU TUNNEL	0.10
HAIKU TUNNEL	0.98
KAHALUU TUNNEL	1.37
GRAVITY SUBTOTAL:	7.57
WIND. SUBTOTAL:	19.81

STATION	MGD
NORTH SHORE (3)	
KAHUKU	0.37
OPANA	0.10
WAIALEE I	0.35
WAIALEE II	0.43
HALEIWA	0.00
WAIALUA	1.97
N.SHORE SUBTOTAL:	3.23

STATION	MGD
MILILANI (4)	
MILILANI I	3.84
MILILANI II	0.00
MILILANI III	1.08
MILILANI IV	0.00
MILILANI SUBTOTAL:	4.92

STATION	MGD
WAIHAWA (5)	
WAIHAWA	0.97
WAIHAWA II	2.21
WAIHAWA SUBTOTAL:	3.18

STATION	MGD
PEARL CITY-HALAWA (6)	
HALAWA 277	0.72
HALAWA 550	0.00
AIEA	1.27
AIEA GULCH 497	0.00
AIEA GULCH 550	0.23
KAONOHI I	1.16
WAIMALU I	0.00
NEWTOWN	1.41
WAIU	1.36
PEARL CITY I	0.84
PEARL CITY II	1.20
PEARL CITY III	0.24
PEARL CITY SHAFT	0.00
PEARL CITY-HALAWA SUBTOTAL:	8.44

STATION	MGD
WAIPAHU-EWA (7)	
WAIPIO HTS.	2.03
WAIPIO HTS. I	1.01
WAIPIO HTS. II	0.41
WAIPIO HTS. III	1.39
WAIPAHU	3.90
WAIPAHU II	2.25
WAIPAHU III	1.79
WAIPAHU IV	3.02
KUNIA I	4.50
KUNIA II	2.50
KUNIA III	1.46
HOAEAE	6.21
HONOULIULI I	0.00
HONOULIULI II	6.35
MAKAKILO	0.56
WAIPAHU-EWA SUBTOTAL:	37.38

STATION	MGD
WAIANAE (8)	
MAKAHA I	0.00
MAKAHA II	0.08
MAKAHA III	1.07
MAKAHA V	0.78
MAKAHA VI	0.00
MAKAHA SHAFT	0.00
KAMAILE	0.17
WAIANAE I	0.22
WAIANAE II	0.25
WAIANAE III	0.64
WELLS SUBTOTAL:	3.22
WAI. C&C TUNNEL	1.40
WAI. PLANT. TUNNELS	0.16
GRAVITY SUBTOTAL:	1.56
WAIANAE SUBTOTAL:	4.78

NONPOTABLE

NONPOTABLE	MGD
KALAUAO SPRINGS	0.27
BARBERS POINT WELL	1.26
GLOVER TUNNEL NP	0.33
NONPOTABLE TOTAL:	1.85

RECYCLED WATER (APRIL 2020)

RECYCLED WATER	MGD
HONOULIULI WRF R-1	7.07
HONOULIULI WRF RO	1.35
RECYCLED WATER TOTAL:	8.42

**PRODUCTION, HEAD AND RAINFALL REPORT
MONTH OF MAY 2020**

PRODUCTION SUMMARIES

TOTAL WATER	MGD
PUMPAGE	130.52
GRAVITY	9.53
POTABLE TOTAL:	140.04
NONPOTABLE	1.85
RECYCLED WATER	8.42
TOTAL WATER:	150.31

CWRM PERMITTED USE AND BWS ASSESSED YIELDS FOR BWS POTABLE SOURCES				
WATER USE DISTRICTS		A	B	C
		PERMITTED USE/ BWS YLDS	MAY 2020	DIFF. A-B
1	HONOLULU	82.93	57.90	25.03
2	WINDWARD	25.02	14.89	10.13
3	NORTH SHORE	4.70	3.23	1.47
4	MILILANI	7.53	4.92	2.61
5	WAIHAWA	4.27	3.18	1.09
6	PEARL CITY-HALAWA	12.25	8.44	3.81
7	WAIPAHU-EWA	50.63	37.38	13.25
8	WAIANAE	4.34	3.22	1.12
TOTAL:		191.67	133.16	58.51

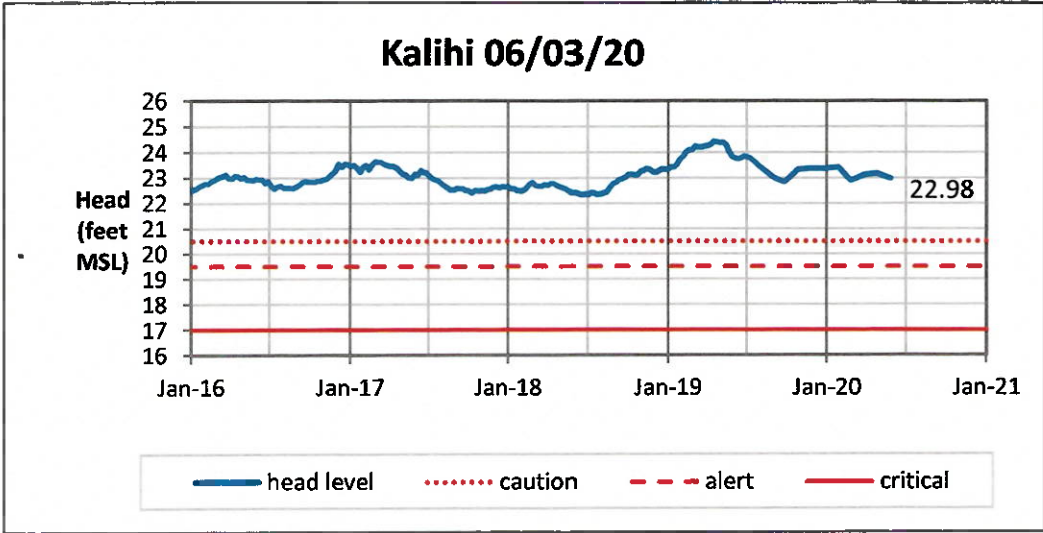
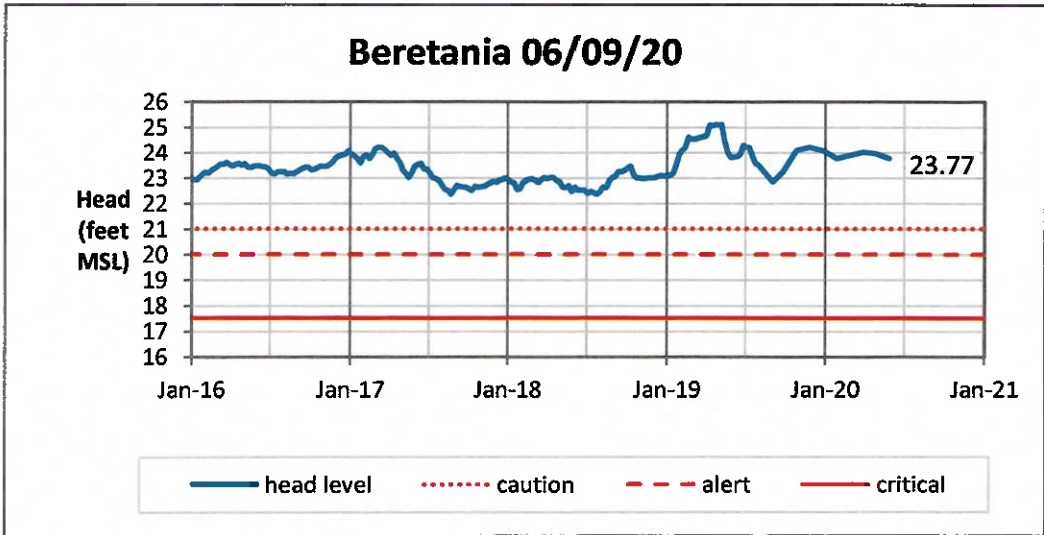
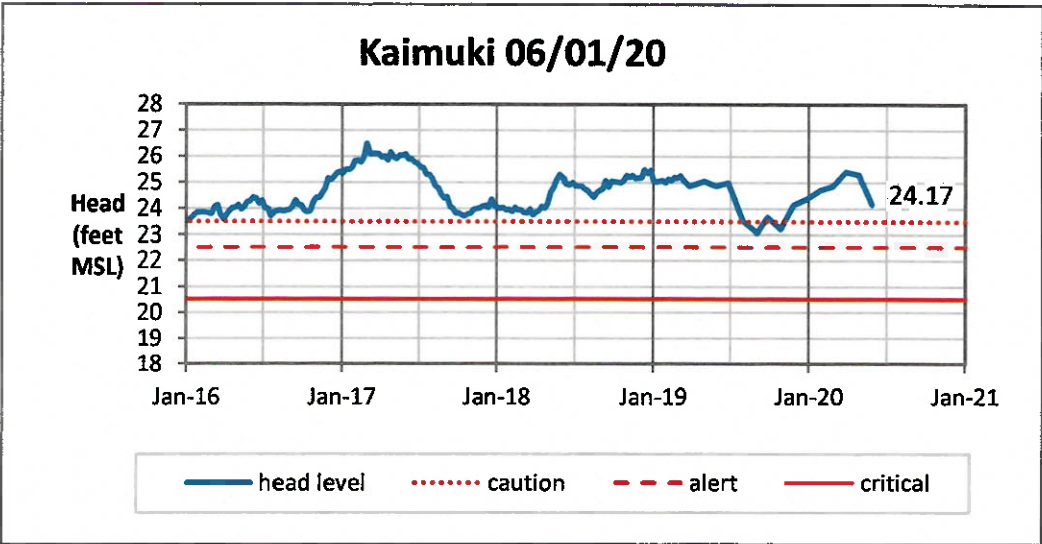
CWRM PERMITTED USE FOR BWS NONPOTABLE SOURCES				
WATER USE DISTRICTS		A	B	C
		PERMITTED USE	MAY 2020	DIFF. A-B
7	WAIPAHU-EWA (BARBERS POINT WELL)	1.00	1.26	-0.26
TOTAL:		1.00	1.26	-0.26

EFFECTIVE WATER DEMAND PER DISTRICT

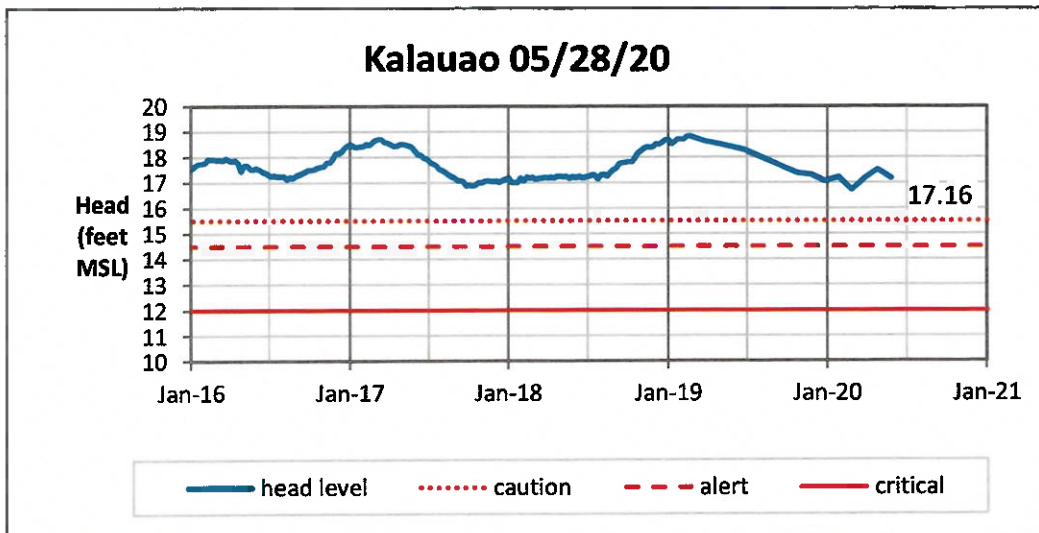
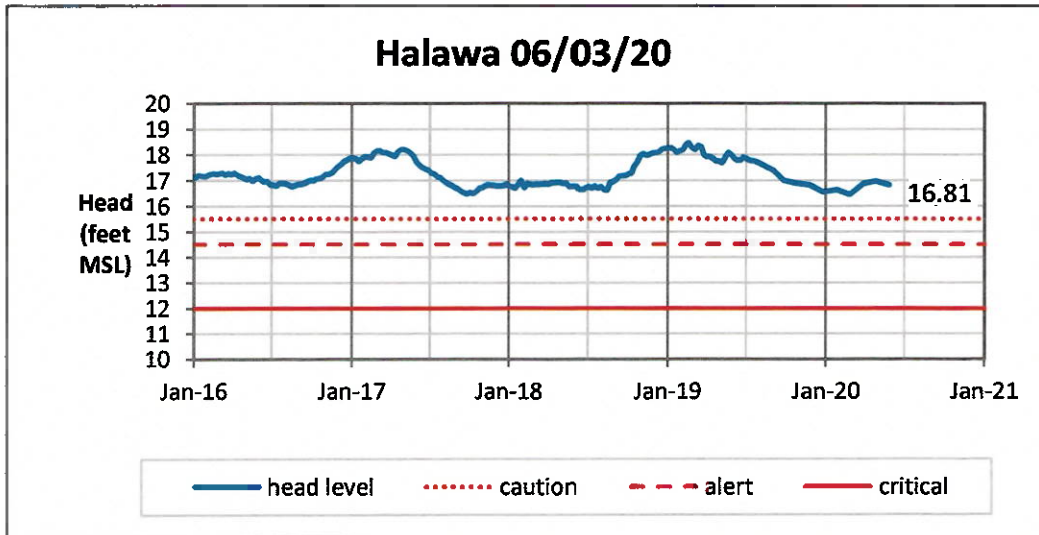
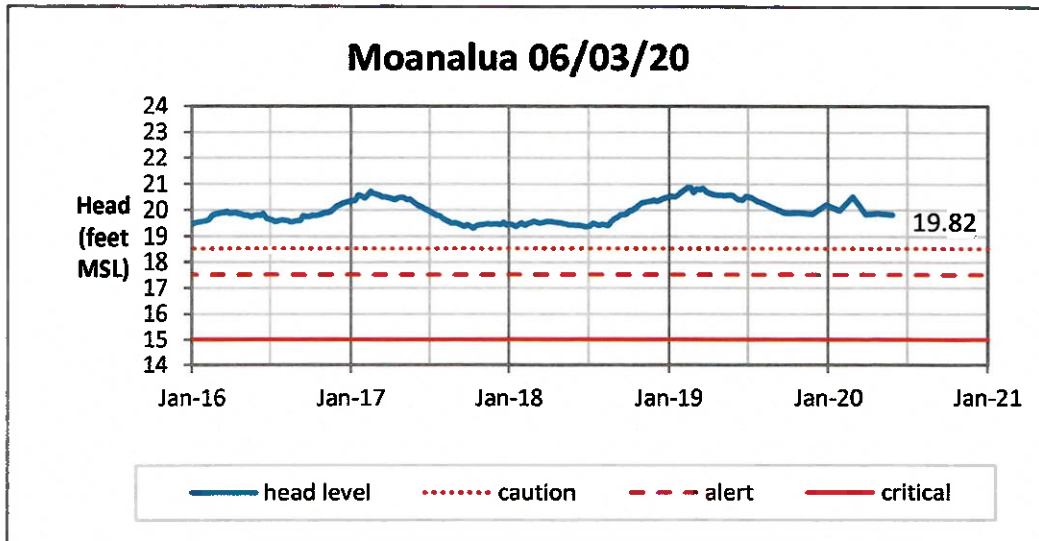
IMPORT/EXPORT BETWEEN WATER USE DISTRICTS			
FROM	TO		MGD
2	1	WINDWARD EXPORT	1.70
7	8	BARBERS PT LB	5.64

WATER USE DISTRICTS		SUBTOTAL	IMPORT	EXPORT	EFFECTIVE WATER DEMAND
1	HONOLULU	57.90	1.70	-	59.60
2	WINDWARD	14.89	-	1.70	13.19
3	NORTH SHORE	3.23	-	-	3.23
4	MILILANI	4.92	-	-	4.92
5	WAIHAWA	3.18	-	-	3.18
6	PEARL CITY-HALAWA	8.44	-	-	8.44
7	WAIPAHU-EWA	37.38	-	5.64	31.73
8	WAIANAE	3.22	5.64	-	8.87
TOTAL:		133.16	7.34	7.34	133.16

Head Report

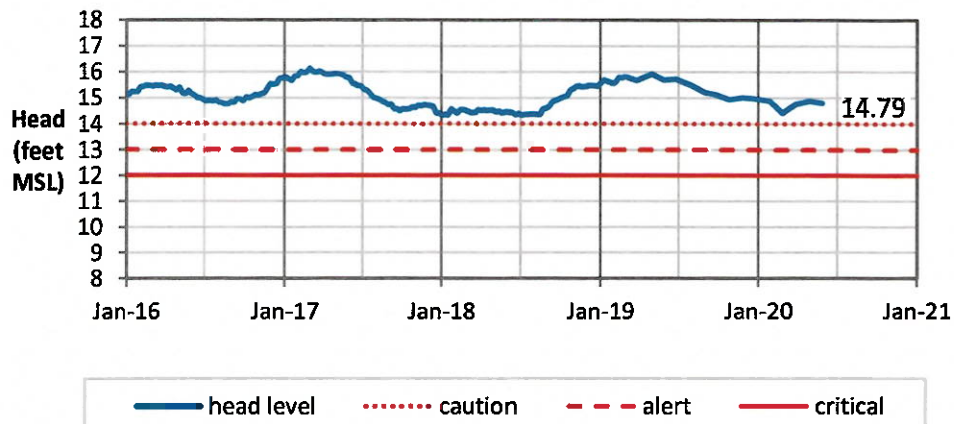


Head Report

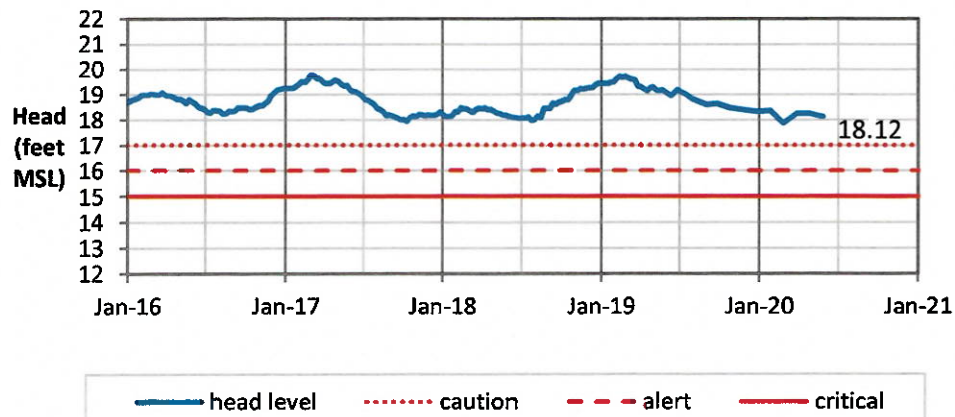


Head Report

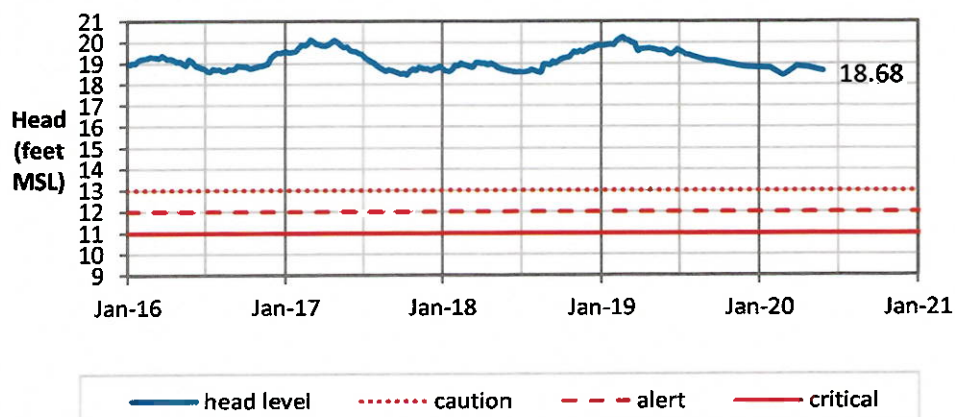
Pearl City 05/28/20



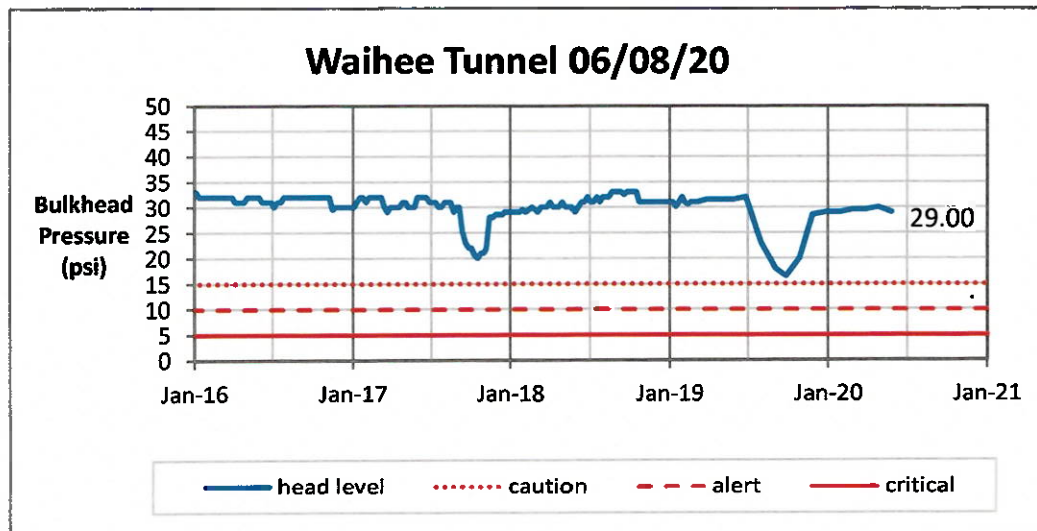
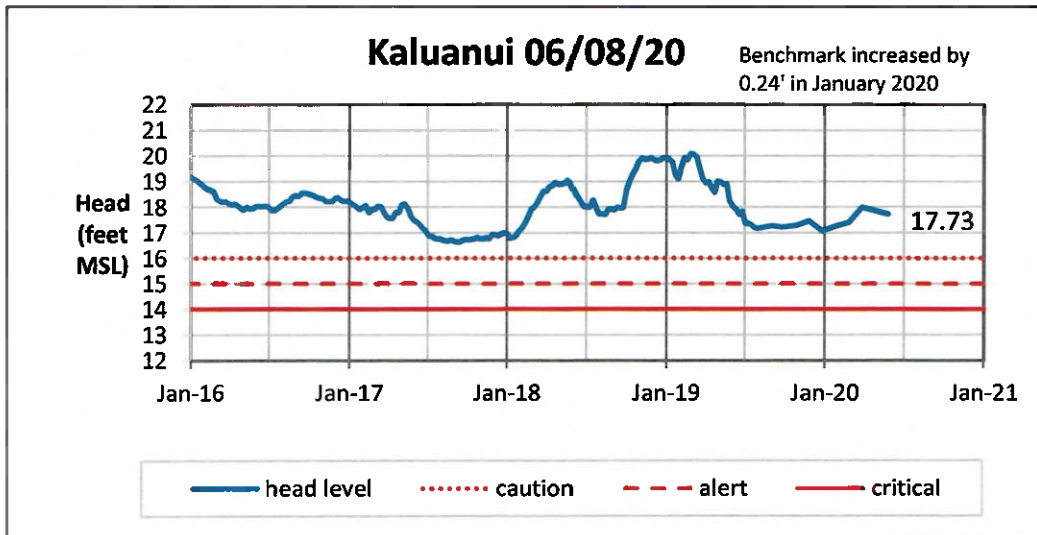
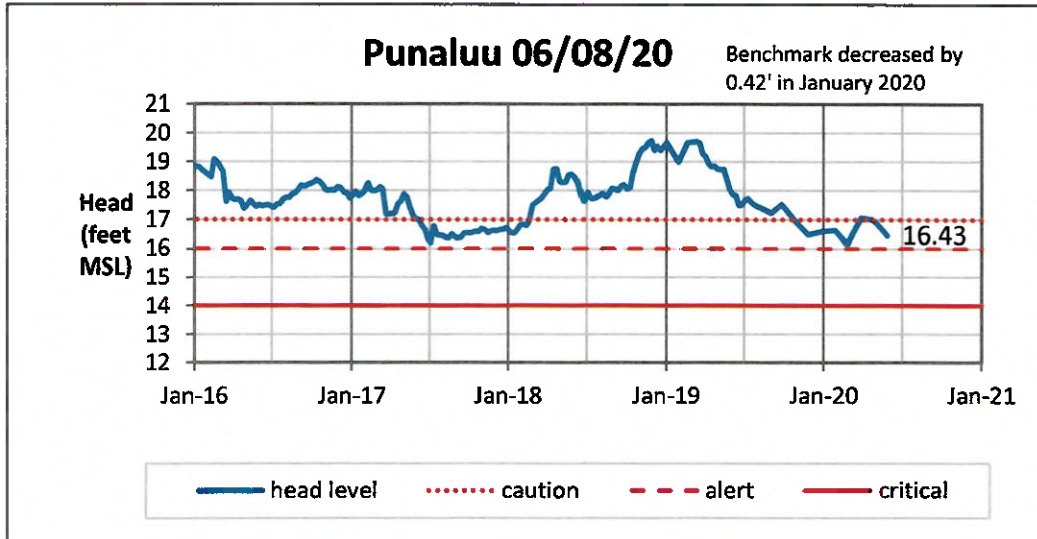
Waipahu 05/28/20



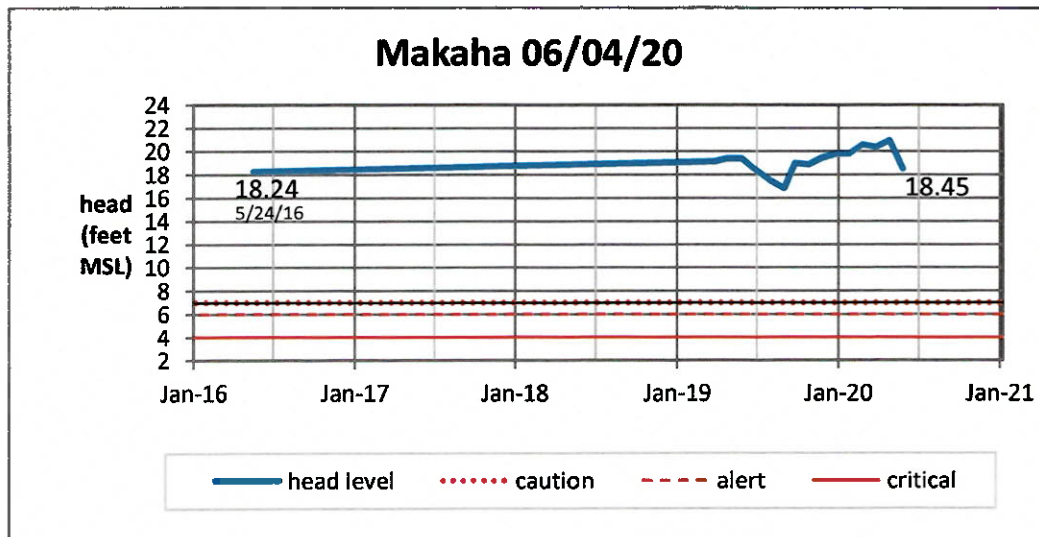
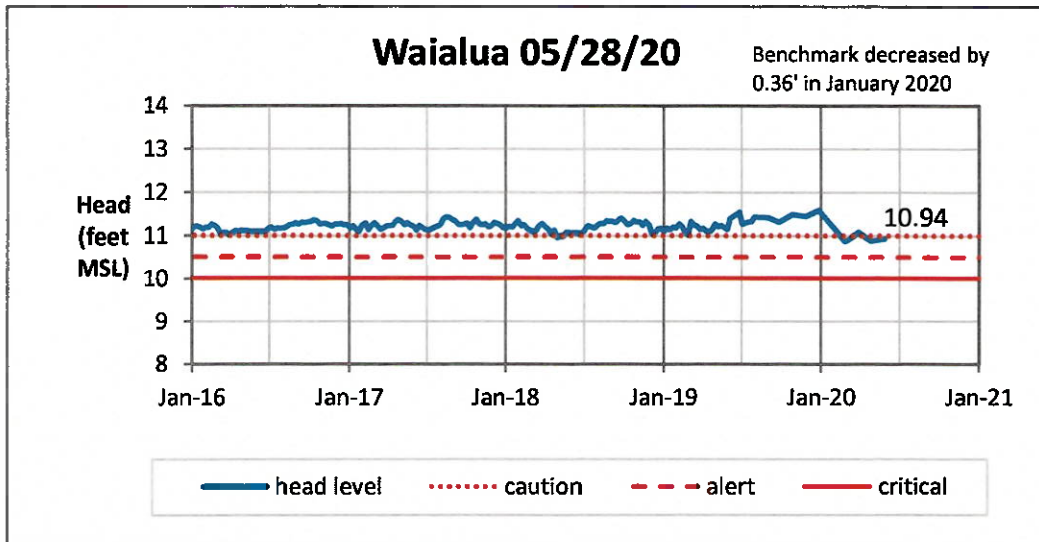
Hoeaee-Kunia 05/28/20



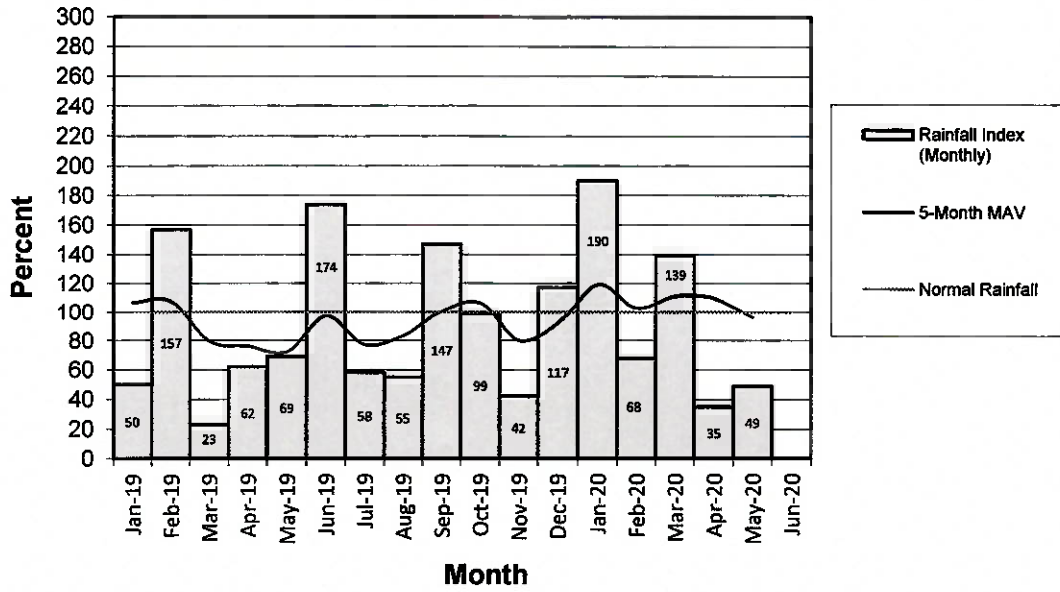
Head Report



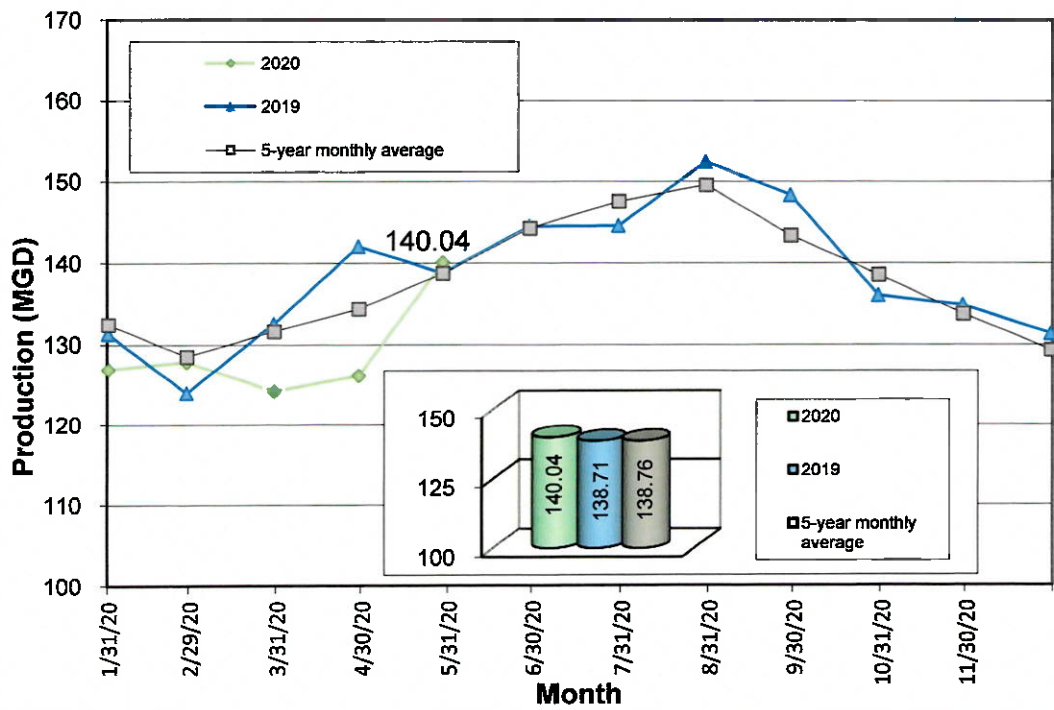
Head Report



HONOLULU WATERSHED AREA Rainfall Intake



Monthly Production



ITEM FOR INFORMATION NO. 3

"June 22, 2020

WATER MAIN
REPAIR
REPORT FOR
MAY 2020

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

Chair and Members:

Subject: Water Main Repair Report for May 2020

Michael Fuke, Program Administrator, Field Operations Division, will report on water main repair work for the month of May 2020.

Respectfully submitted,

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

Attachment"

The foregoing was for information only.

DISCUSSION:

Michael Fuke, Program Administrator, Field Operations Division, gave the report.

Vice Chair Sproat shared she received a glowing email from a resident of the Waikiki community who observed the BWS team attending to an enormous geyser, as they were diligently working for approximately 12 hrs. to repair the break.

Vice Chair Sproat expressed appreciation of the outstanding work by Mr. Michael Fuke's leadership and his team's hard work.

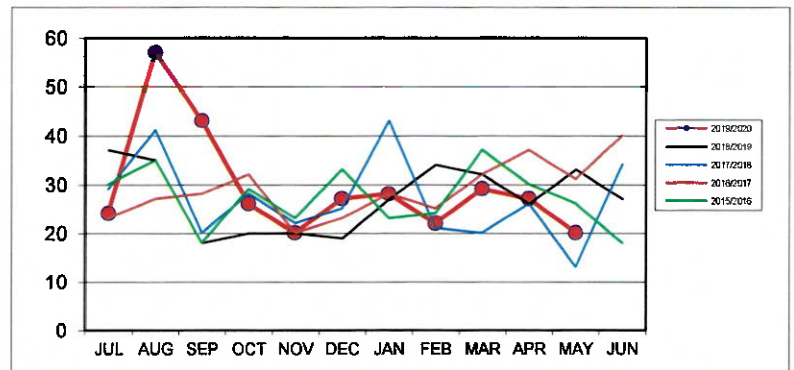
Mr. Fuke appreciated the praise and stated it is not him alone, but everyone in the Field who work hard to finish the job.

Chair Andaya and Manager Lau congratulated Mr. Fuke and his team.

WATER MAIN REPAIR REPORT for May 2020

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2019/2020	24	57	43	26	20	27	28	22	29	27	20		323
2018/2019	37	35	18	20	20	19	27	34	32	26	33	27	328
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

Date	Address	Size (In)	Pipe Type
5/1/2020	2223 Aamanu St, Pearl City	8	CI
5/1/2020	1588 Alewa Dr, Honolulu	8	CI
5/2/2020	1344 Kona St, Honolulu	4	CI
5/4/2020	2422C 10th Ave, Honolulu	6	CI
5/6/2020	86-281 Kawili St, Waianae	8	PVC
5/8/2020	71 Country Club Rd, Honolulu	4	CI
5/9/2020	47-526 Nenehiwa Pl, Kahaluu	8	CI
5/11/2020	98-1048 Alania St, Aiea	8	CI
5/11/2020	94-1026 Upai Pl, Waipahu	8	AC
5/12/2020	94-624 Kipou St, Waipahu	12	CI
5/12/2020	87-797 Hakimo Rd, Waianae	8	DI
5/14/2020	2227 Komo Mai Dr, Pearl City	8	CI
5/14/2020	5270 Makalena St, Honolulu	6	CI
5/21/2020	170 Aloha Tower Dr, Honolulu	8	CI
5/22/2020	767 Pumehana St, Honolulu	8	DI
5/23/2020	3815 Maunaloa Ave, Honolulu	6	CI
5/27/2020	1203 Liliha St, Honolulu	8	CI
5/27/2020	1561 Kanunu St, Honolulu	8	CI
5/28/2020	3156 Alika Ave, Honolulu	8	PVC
5/30/2020	300 Wai Nani Way, Honolulu	8	CI



14 miles of pipeline were surveyed by the Leak Detection Team in the month of May.

MOTION TO
RECESS INTO
EXECUTIVE
SESSION

Upon unanimously approved the motion; the Board recessed into Executive Session Pursuant to [HRS §92-5(a)(4)] at 2:38 PM to Consider with the Board's Attorney on Questions and Issues Pertaining to the Board of Water Supply's Proposed Settlement of Claim #20-063, Relating to the Property Damages at 1320 Kainui Drive, Kailua, Hawaii Following a 12" Cast Iron Main Break on 1306 Kainui Drive, Kailua, Hawaii on January 20, 2020.

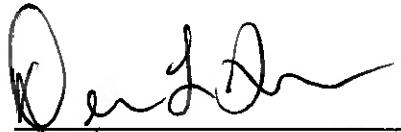
OPEN
SESSION

The Board reconvened in Open Session at 2:46 PM.

MOTION TO
ADJOURN

There being no further business Chair Bryan Andaya at 2:47 PM called for a motion to adjourn the Open Session. Board Member Ross Sasamura so moved; seconded by Vice Chair Kapua Sproat and unanimously carried.

The minutes of the Regular Meeting held on June 22, 2020 are respectfully submitted,



DEANNA THYSSEN

THE MINUTES OF THE REGULAR SESSION BOARD MEETING ON JUNE 22, 2020 WERE APPROVED AT THE AUGUST 24, 2020 BOARD MEETING				
	AYE	NO	ABSTAIN	COMMENT
BRYAN P. ANDAYA	X			
KAPUA SPROAT	X			
RAY C. SOON				ABSENT
MAX J. SWORD			X	
ROSS S. SASAMURA	X			
JADE T. BUTAY	X			

APPROVED:



BRYAN P. ANDAYA
Chair of the Board

AUG 24 2020

Date