

# BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843  
[www.boardofwatersupply.com](http://www.boardofwatersupply.com)



May 9, 2023

RICK BLANGIARDI, MAYOR

BRYAN P. ANDAYA, Chair  
KAPUA SPROAT, Vice Chair  
MAX J. SWORD  
NA'ALEHU ANTHONY  
JONATHAN KANESHIRO

EDWIN H. SNIFFEN, Ex-Officio  
WARREN K. MAMIZUKA, Acting Ex-Officio

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

ERWIN M. KAWATA  
Deputy Manager

## NOTICE

The Board of Water Supply, City and County of Honolulu, Budget Workshop will be held on Monday, May 15, 2023, at 2:00 p.m. in the Boardroom, Public Service Building, 630 South Beretania Street, Honolulu, HI 96843.

### TESTIMONY

Testimony may be submitted as follows:

- Written testimony should include the submitter's address, email address, and phone number. Testimony should be received by Monday, May 15, 2023. Submit written testimony by:

- Email to [board@hbws.org](mailto:board@hbws.org)
- Online at [boardofwatersupply.com/testimony](http://boardofwatersupply.com/testimony)
- Mail to Board of Water Supply, 630 S. Beretania St., Honolulu, HI 96843
- Fax to (808) 748-5079

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

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

- Email to [board@hbws.org](mailto:board@hbws.org)
- Online at [boardofwatersupply.com/testimony](http://boardofwatersupply.com/testimony)

Zoom registration instructions, as well as participant guidelines, will be sent to the contact information provided. Once confirmed as registered, testifiers will receive an email containing the links and instructions to join the Zoom session. Submit your request to testify remotely by Friday, May 12, 2023, at noon.

- To testify in person at the Board of Water Supply, Public Service Building, 630 S. Beretania St., Honolulu, HI 96843, please pre-register by submitting your request by Monday, May 15, 2023:

- Email to [board@hbws.org](mailto:board@hbws.org)
- Online at [boardofwatersupply.com/testimony](http://boardofwatersupply.com/testimony)

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

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

### MATERIALS AVAILABLE FOR INSPECTION

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

## **VIEWING THE MEETING**

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

## **SPECIAL REQUESTS AND ACCOMMODATIONS**

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

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

The agenda for May 15, 2023, Workshop Meeting of the Board of Water Supply is as follows:

**ITEMS FOR INFORMATION**

1. Workshop Meeting on the Proposed Fiscal Year 2023-2024 Operating and Capital Improvement Program Budget

## MINUTES

### THE BUDGET WORKSHOP OF THE BOARD OF WATER SUPPLY

May 15, 2023

At 2:00 PM on May 15, 2023, in the Board Room of the Public Service Building at 630 South Beretania Street, Honolulu, Hawaii, Board Chair Andaya called to order the Budget Workshop.

**Present:** Bryan P. Andaya, Chair  
Max J. Sword, Board Member  
Na'alehu Anthony, Board Member  
Jonathan Kaneshiro, Board Member  
Warren K. Mamizuka, Ex-Officio via Zoom

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

Michele Harman, Community Relations Specialist I,  
Communications Office via Zoom  
Wayne Maria, Information Specialist II,  
Communications Office

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

Absent: Kapua Sproat, Vice Chair  
Edwin H. Sniffen, Ex-Officio

Chair Bryan Andaya welcomed everyone to the May 15, 2023, Budget Workshop of the Board of Water Supply (BWS). He stated that the BWS is dedicated to “providing safe, dependable, and affordable supply of water now and into the future.

Before beginning the workshop, Chair Andaya reviewed a few meeting regulations required by law. Board Members attending the Board Meeting remotely must be visible to the public to be considered present and meet quorum guidelines. He also stated that during roll call Board Members participating remotely must disclose their location and anyone that may be present at their location.

Chair Andaya announced that the public is invited to attend Board Meetings in person at the BWS Public Service Building, 630 S. Beretania Street, Honolulu, HI 96843, or via interactive conference technology.

Chair Andaya requested a roll call for the Budget Workshop. He asked each Board Member to respond verbally and state who is present in the room if participating via Zoom when their names were called. Board Member Max Sword aye and present in the Board room; Board Member Na’alehu Anthony aye and present in the Board room; and Board Member Jonathan Kaneshiro aye and present in the Board room. Chair Andaya was present in the Boardroom.

Chair Andaya asked all attendees calling in or video conferencing to mute their microphones when not speaking to the audience. When intending to speak, unmute their microphone and identify themselves before speaking.

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

The following procedures are in effect for the meeting:

Chair Andaya shared the various ways to submit testimony: Written testimony may be submitted by email to [board@hbws.org](mailto:board@hbws.org), by fax to (808) 748-5079; mailed to Board of Water Supply, 630 S. Beretania St., Honolulu, HI 96843; or online at the [boardofwatersupply.com/testimony](http://boardofwatersupply.com/testimony), which were all due on Monday, May 15, 2023, at noon. However, late testimony will be accepted by email, fax, or mail. Videoconference testimony was accepted by registering at [boardofwatersupply.com/testimony](http://boardofwatersupply.com/testimony) by Friday, May 9, 2023. In-person testimony is being accepted at the Board of Water Supply, Public Service Building located at 630 S. Beretania St., Honolulu, HI 96843. Pursuant to HRS Section 92-7.5, Board Meeting materials are available to view on our website at [www.boardofwatersupply.com/boardmeeting](http://www.boardofwatersupply.com/boardmeeting).

Chair Andaya also announced the Board Meeting is broadcasted live on the BWS website at [www.boardofwatersupply.com/live](http://www.boardofwatersupply.com/live).

ITEM FOR INFORMATION 1

Chair Andaya recognized Ms. Raelynn Nakabayashi, Executive Office Assistant I, Executive Support Office, and Ms. Jadine Urasaki, Acting Program Administrator, Capital Projects Division.

At 2:08 PM, Chair Andaya welcomed Board Member Warren Mamizuka to the Board meeting via Zoom.

Ms. Raelynn Nakabayashi began the presentation by stating that the BWS Operating Budget for Fiscal Year 2024 is proposed at \$241,683,964, or a 1.9% increase over the prior year, and the Capital Improvement Program (CIP) Budget is proposed at \$212,646,000 or 15.5% increase over the prior year.



## FY 2024 BUDGET SUMMARY

	FY 2023 – Adopted	FY 2024 – Proposed	\$ Change	% Change
Operating Budget	\$237,240,444	\$241,683,964	\$4,443,520	1.87%
Capital Improvement Program Budget	\$184,076,325	\$212,646,000	\$28,569,675	15.52%
<b>Total</b>	<b>\$421,316,769</b>	<b>\$454,329,964</b>	<b>\$33,013,195</b>	<b>7.84%</b>



Ms. Nakabayashi presented the Operating Budget. She stated that over the Fiscal Year 2020 through the Fiscal Year 2024, the Operating Budget consistently grew due to increased costs for personnel, materials, supplies, and services, and additional debt service cost as the BWS issued more revenue bonds. She explained that the Operating Budget increase is primarily due to increased personnel costs driven by collective bargaining agreements and fixed costs, such as electricity. Ms. Nakabayashi stated the CIP Budget steadily increases as the BWS continues to achieve its Water Master Plan (WMP) goals and contend with the Red Hill crisis.

Ms. Nakabayashi shared that the proposed Operating Fund Budget is based on a total operating fund resources of \$292.9 million (M), a combination of the beginning fund balance, anticipated revenues, and prior year lapses and adjustments. The BWS is dedicated to maintaining safe and reliable water service, despite increased inflationary pressures and the Red Hill crisis.



## OPERATING FUND RESOURCES AND EXPENDITURES (MILLIONS OF DOLLARS)

	FY 2022	FY 2023	FY 2024
	Actual	Estimated Actual	Budget
Beginning Balance	\$50.0	\$63.4	\$29.8
Revenues	\$255.3	\$255.3	\$263.1
Lapses/ Adjustments	\$15.4	-	-
<b>Total Resources</b>	<b>\$320.7</b>	<b>\$318.7</b>	<b>\$292.9</b>
Operating Expenditures	\$202.0	\$242.0	\$241.7
Capital Improvement Program	\$55.3	\$46.9	\$34.7
<b>Total Expenditures</b>	<b>\$257.3</b>	<b>\$288.9</b>	<b>\$276.4</b>
Ending Balance	\$63.4	\$29.8	\$16.5



Ms. Nakabayashi continued by sharing the highlights and changes in the Operating and CIP budgets from previous fiscal years consisting of the proposed operating fund expenditures and anticipated revenue projections.

Ms. Nakabayashi stated that the BWS revenues have increased by 1.7%. However, the Operating Fund expenses, which include the CIP, are projected to decrease by 3.4%. The BWS Fiscal Year 2024 budget reflects the BWS response to the rising cost of electricity, the Red Hill crisis, and inflation in the economy.

## OPERATING FUND REVENUE & EXPENDITURE SUMMARY (MILLIONS OF DOLLARS)

	FY 2023	FY 2024	Change	
	Adopted	Proposed	\$ Mil.	%
Revenues	\$258.6	\$263.1	\$4.5	1.7%
<b>Total Operating Fund Expenditures</b>	<b>\$289.6</b>	<b>\$279.7</b>	<b>(\$9.9)</b>	<b>-3.4%</b>





Board Member Na'alehu Anthony referred to the "Fiscal Year 2024 Budgets Strike a Careful Balance" slide. He asked what category did the BWS have to tighten its budget.



Ms. Nakabayashi responded that the BWS reduced its budget for all Divisions in the material, supplies, and service, and equipment categories.

Manager Ernest Lau stated that the last rate schedule was adopted in 2018, which runs for five years at a time. The following rate schedule will need to be discussed to consider how much revenue the BWS will need to generate to continue operating and upgrade the water system but keep water service affordable for ratepayers.

Board Member Anthony commented that the cost to remedy the Red Hill crisis would carry on for many years.

Manager Lau also stated that the BWS had detected low levels of Per-and polyfluorakyl substances (PFAS) in seven different well locations and possibly in other areas as we continue to test.

Board Member Max Sword inquired if the Federal Government or the Navy would cover any of the costs related to Red Hill.

Manager Lau replied that the proposed budget does not account for any money that is not guaranteed. However, the BWS is pursuing state and federal funding, rather than the BWS ratepayers, to offset the financial impact.

Board Member Sword asked if having only a 1.6x debt service coverage ratio with a 10.8% increase in Debt Service is normal.

Ms. Nakabayashi responded that the Debt Service costs are increasing; however, it is keeping pace with the amount the BWS is issuing compared to the revenue ratio. She stated that the

Debt Service ratio is healthy at 3.16x coverage for all Debt and 4.3x coverage on just the senior debt.

Manager Lau explained that the BWS plans to spread the cost to current and future customers by utilizing State Revolving Funds to finance projects over a 30-year loan term.

Ms. Nakabayashi stated that the BWS Long Range Financial Plan (LRFP) contemplated a 50/50 ratio of debt and cash. However, for Fiscal Year 2023, the ratio is \$35M cash and \$50M issued debt.

Chair Andaya inquired about the difference between Debt Service Coverage senior versus all in.

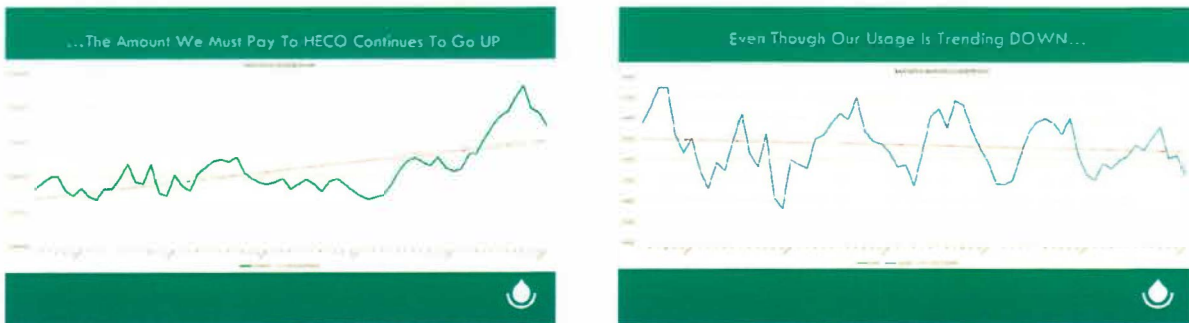
Ms. Nakabayashi replied that the 1.6x Debt Service Coverage ratio target is for all-in or total debt. The current coverage ratio is 3.16x all-in and deferred to the Waterworks Controller to explain the difference between Senior and Junior or subordinate debt.

Chair Andaya asked if the BWS had Fiscal Year 2021 Debt Service Coverage Ratio available to view and compare.

Manager Lau stated that Fiscal Year 2021 Budget information was not readily available.

Manager Lau requested Mr. Joseph Cooper, Waterworks Controller, to join the meeting.

Chair Andaya referred to the graphs showing that the BWS's electricity usage is decreasing, but the cost is increasing. He suggested that since the BWS is not increasing rates this year, the BWS discuss inflation, rising costs, and whether a fuel surcharge would be appropriate.



Manager Lau stated that the BWS has a water rates provision for adjustments for power costs, which can be recovered after the cost is incurred.

At 2:34 PM, Mr. Joseph Cooper, Waterworks Controller, joined the meeting via Zoom. He referred to Chair Andaya's question regarding the difference between debt service and all-in. He explained the difference between senior debt service coverage and all-in: Senior Debt Service Coverage is the debt on BWS municipal bonds, whereas the all-in includes the State Revolving Funds (SRF) debt coverage.

Chair Andaya asked if the BWS would have to pay the senior Debt Service first.

Mr. Cooper responded that the BWS would pay its senior Debt Service Coverage first, then its junior Debt Service. He further explained that the ratio is calculated by taking the total

revenues, subtracting the operating cost, and dividing that by the annual debt service, which equals the Debt Service Coverage Ratio. Mr. Cooper stated that the BWS has enough money to pay its Debt Service Coverage that year by three times over.

Manager Lau asked Mr. Cooper to explain the Power Cost Adjustment.

Mr. Cooper explained that in the Rate Study, the BWS develops rates for the upcoming year and a budget for expected costs, including power. He further explained that at the end of each fiscal year, if the BWS exceeds the budgeted amount for power costs used in the rate study, the BWS can increase the consumption rate by a penny for every 1,000 gallons for each increment of \$500,000 overspent to recover the overage. The calculation is performed annually, and the power cost adjustment is not permanent, which allows the BWS to adjust the consumption rates based on actual spending of the prior year.

Chair Andaya commented that the rate increase would be considered a recapture of costs already spent.

Mr. Cooper agreed with Chair Andaya's comment.

Manager Lau stated that he recently decided not to recapture power costs or increase rates since the community is still trying to recover from the pandemic, rising costs, inflation, and the BWS's participation in a rate study.

Chair Andaya inquired if the BWS could look into how much was absorbed by the BWS and not collected.

Mr. Cooper responded that the BWS can provide the lost revenue from waived power cost adjustment.

Manager Lau replied that the BWS is also looking into federal funding to help recover some of the lost revenue. He stated that the BWS would be able to provide information on the waived power cost and rate proposals and discuss a potential fuel surcharge at the next meeting.

Board Member Jonathan Kaneshiro asked when the Power Cost Adjustment was adopted.

Manager Lau responded that the Power Cost Adjustment was already implemented when he arrived at the BWS; therefore, he is unsure when it took effect, but also hasn't used it since being Manager.

The presentation moved on to the CIP Budget.

Ms. Jadine Urasaki began by stating the annual CIP is the BWS's commitment to the water system's future. The annual program is compiled by the Capital Projects Division and includes projects from all divisions and staff offices. The proposed CIP supports the Department's vision and mission and is aligned to meet the goals and objectives of each Division to support the Water Master Plan (WMP), the BWS Strategic Plan, and the six-year long-range CIP.

Ms. Urasaki stated the CIP carefully balances the water system's needs by providing safe, reliable water service with cost-effective management of assets and funding.

The CIP comprises three project categories: Research and Development, Renewal and Replacement, and Capacity Expansion.

Ms. Nakabayashi stated that the proposed Fiscal Year 2024 CIP Budget is \$212,646,000. She described the different sources of funding that would be used for various projects. These sources of funding are Operating Funds, low-interest loans from the Department of Health (DOH) State Revolving Fund (SRF); the Special Expendable Fund, which is a collection of water system facility charges that fund system expansions; the Improvement Fund, which is bond-funded projects; and the Extramural Fund, which are Federal, State, or other limited purpose type monies that carry a restrictions on use.

Manager Lau expressed the BWS’s appreciation to the State Legislature for their support in securing General Obligation Bond Funding to assist with CIP projects related to Red Hill. He stated that the General Obligation Bond Funding does not require the BWS to repay the bonds but is for the State of Hawaii to repay.


Ms. Nakabayashi shared the specific projects that the Extramural Fund would fund, its process, and other projects and how they would be financed.

Ms. Urasaki shared a map of the various CIP projects and areas on Oahu where design and construction projects would be distributed as the BWS manages an island-wide municipal water system.

Ms. Urasaki concluded her presentation with the highlights of each category’s different categories and projects. She mentioned that due to the high priority of the Red Hill projects, the 21 miles pipeline replacement target has temporarily been placed on hold.

**CAPITAL IMPROVEMENT PROGRAM BUDGET  
FY 2024**

	Categories	Operating Fund	State Revolving Fund	Special Expendable Fund	Improvement Fund	Extramural Fund	Total
I.	Research & Development	\$ 2,500,000	---	---	\$ 2,500,000	\$ 10,000,000	\$ 15,000,000
II.	Renewal & Replacement	\$ 18,110,000	\$ 5,100,000	---	\$ 31,740,000	\$ 5,100,000	\$ 60,050,000
III.	Capacity Expansion	---	\$ 30,700,000	\$ 35,000,000	\$ 8,400,000	\$ 28,300,000	\$ 102,400,000
	Subtotal	\$ 20,610,000	\$ 35,800,000	\$ 35,000,000	\$ 42,640,000	\$ 43,400,000	\$ 177,450,000
	Construction Cost Index	\$ 1,586,000	\$ 3,580,000	\$ 3,500,000	\$ 3,520,000	\$ 4,010,000	\$ 17,196,000
	Contract Adjustment	\$ 12,500,000	---	\$ 2,250,000	\$ 4,250,000	---	\$ 19,000,000
	<b>Total</b>	<b>\$ 34,696,000</b>	<b>\$ 39,996,000</b>	<b>\$ 40,750,000</b>	<b>\$ 50,410,000</b>	<b>\$ 47,410,000</b>	<b>\$ 212,646,000</b>



Board Member Anthony commented that he understood that Red Hill is a priority but asked if the 21 miles of pipeline replacement was halted due to the availability of money or workforce.



Ms. Urasaki responded that the decision was based on what the BWS could afford. Manager Lau explained that the BWS focuses on developing new sources to replace the capacity shutdown at Halawa due to Red Hill and other sources that may become affected. He stated that the workforce is a continuous challenge, but the BWS is not the only organization faced with workforce challenges.

Chair Andaya asked how much of the 21 miles of the pipeline the BWS replaced in Fiscal Year 2023.

Ms. Urasaki responded that the BWS would reach 11 miles of pipeline replacement by the close of Fiscal Year 2023. However, in Fiscal Year 2024, the projected pipeline miles that the BWS will be able to replace is 1.54 miles.

Manager Lau explained that the importance of source development is to ensure there is enough capacity to support the community and other community initiatives, such as affordable housing. He agrees pipeline replacement is essential; however, source development is critical and requires more time. Therefore, the BWS will work to develop source capacity, then return and continue with pipeline replacement. The BWS is relying on satellite technology and working on expanding its leak detection to find and repair the leaks before becoming a main break.

Chair Andaya inquired if the Kualakai Parkway 16-inch Recycled Water Main and the Honolulu District 42-inch mains are part of the water delivery system.



Manager Lau replied that the Honolulu District 42-inch main is a design contract and not in construction. The Honolulu District 42-inch main is new; it is designed to replace a main over the Honolulu area, which was constructed in the 1950s. He further explained that moving water from the wells on the west side would be challenging to move east if the older pipeline breaks. The BWS's idea is to begin the design process, develop sources capacity, then refocus on pipeline replacement.

Ms. Urasaki stated that the Kualakai Parkway 16-inch Recycled Water Main is not potable.

Manager Lau shared that the Kualakai Parkway 16-inch Recycled Water Main will contribute toward expanding the use of recycled water in the Ewa plains. He explained that the system is a pump system, which does not have a tank; therefore, customers on this system only have water available during certain hours. The upgrade to Kualakai Parkway would provide all-day access to recycled water.

Board Member Anthony commented that it is essential that the public is aware of the changes the BWS is making in reaching its goals and staying within budget due to the Red Hill crisis. The BWS has done a good job managing the uncertainties of Red Hill and not passing the burden onto the ratepayers.

Manager Lau commented that the impact of Red Hill would affect the community well into the future. Unfortunately, due to the lack of an inadequate monitoring network, including sufficient sentinel monitoring wells that monitor the contamination moving in the underground aquifer, there is a possibility that it could be moving toward the BWS well sources.

Chair Andaya stated that during the BWS rate study, it is essential to look into all aspects of the BWS. The BWS faces challenges and unprecedented times due to the Red Hill crisis, needing to shift much of its focus to source development. However, the BWS infrastructure is also important.

Manager Lau agreed with Chair Andaya. He shared that the BWS anticipates updating the Water Master Plan (WMP) to include the Red Hill crisis.

Board Member Sword inquired if the North Shore had the water capacity, would it be possible to move water to Honolulu.

Manager Lau replied that the cost to move water from the North Shore would be horrendous. He stated that in the following presentation, the BWS would share more about the project being worked on. Manager Lau recognized Mr. Barry Usagawa, Program Administrator, Water Resources Division, to share about the Kalaeloa Saltwater Desalination Project.

Mr. Barry Usagawa shared that the BWS acquired through public conveyance a 20-acre parcel for a desalination facility at the end of Olai Street in Campbell Industrial Park at no cost under the Navy's Barbers Point Base Realignment and Closure (BRAC). In April 2023, BWS awarded a contract for the design, build, operate, and maintain contract for the Kalaeloa Seawater Desalination Facility, which will be funded over multiple fiscal years and provide a capacity beginning with 1.7 million gallons per day (mgd), expandable up to 5 mgd. The objective of the Kalaeloa Seawater Desalination Facility is to support the Ewa development plan growth, provide a drought-proof and high-quality local water supply that is environmentally sustainable, enhance water resilience to climate change, and reduce the water transfers from Central Oahu to Ewa.

Mr. Usagawa shared that the structure will include an administration building, a lab, a conference room, a process building, tanks, grading drainage roads, parking lots, utilities, fencing, landscaping, and mechanical and security systems. The property currently has two deep seawater wells developed in the early 2000s. He stated that four million gallons of saltwater would be pumped through the treatment plant to be demineralized and deliver 1.7 mgd to Campbell Industrial Park. Mr. Usagawa further described the desalination process and the Watershed Management Plan.


Mr. Usagawa stated that the community relies on groundwater for drinking, hygiene, and sanitation. However, due to the challenges faced: climate change, regulatory actions, and contamination events, it was necessary to find alternative ways to use the sources available through treatment. The Kalaeloa Saltwater Desalination Facility is a sustainable and resilient source, diversifying the communities drinking water.

Mr. Usagawa concluded by sharing the details of the awarded contract.

**NOTICE OF AWARD**

<b>PROJECT NAME:</b>	BWS-21-WR-05 KALAELOA SEAWATER DESALINATION FACILITY DESIGN, BUILD, OPERATE, MAINTAIN PROJECT
<b>CONTRACT NUMBER:</b>	C23004601
<b>CONTRACT AMOUNT:</b>	\$149,648,118.00 – FIXED DESIGN -BUILD AMOUNT \$2,721,919.00 - ANNUAL OPERATING & MAINTENANCE FEE
<b>CONTRACTOR:</b>	KALAELOA DESALCO, LLC in Partnership with NORDIC PCL CONSTRUCTION, INC.
<b>NOTICE OF AWARD DATE:</b>	04/28/2023

This project will be funded over multiple Fiscal Years; \$60M Funded FY2024  
Project completion estimated in 2026



Ms. Nakabayashi stated that the Kalaeloa Saltwater Desalination Project is a unique opportunity for the BWS. She shared that the BWS has the opportunity to acquire \$44M in funding from the Federal Government through the US Bureau of Reclamation and American Rescue Plan Act to help buy down the cost, and the Federal Government provided the land to build the facility, reducing the impact on ratepayers. The only condition was that a desalination facility is constructed, or the BWS would lose the property, and funding provided through the American Rescue Plan Act (ARPA) must be spent by the end of 2026.

Board Member Sword inquired if the community becomes more dependent on desalination, would the facility be able to expand to more than the estimated five mgd.

Mr. Usagawa responded that the facility could be expanded beyond the five mgd but would require another connecting pipeline at an additional cost.

Manager Lau shared that there were two bids received for the project. The BWS awarded the contract to the contractor with a higher upfront capital cost over a 30-year equity but a lower operating cost.

Chair Andaya asked how the BWS plans to finance the remaining balance once the funding is applied to the cost.

Ms. Nakabayashi explained that in Fiscal Year 2023, the BWS financed \$18M from the Special Expendable Fund, which accounted for the BWS's first-year project spending and awarded the project. In Fiscal Year 2024, the BWS budgeted \$60M, which will come from grant monies shown in the Special Expendable Fund and Water System Facility Charges. In Fiscal Year 2025, the BWS hopes to secure the United State Bureau of Reclamation (USBR) grant and Water Infrastructure Finance and Innovation Act (WIFIA) loans. The BWS is expecting to complete the construction by Fiscal Year 2026.



Manager Lau further explained that WIFIA loans are financed through the Environmental Protection Agency (EPA) for larger projects with flexible repayment plans. The BWS has submitted a letter of interest to the EPA that has been accepted and currently working to secure a loan for the project. If the EPA loan is granted, this type of loan would be the first one awarded to Hawaii.

Chair Andaya asked about the dollar value of larger projects financed through WIFIA.

Ms. Nakabayashi responded that the BWS is looking to finance \$70M - \$80M in WIFIA loans and hoping to receive the application in mid-fall, which can take up to nine months to process.

Mr. Cooper explained that WIFIA loans are for projects over \$20M, and projects over \$1 billion (B) are considered Master Loan Agreements. He stated that the BWS expects to be granted \$73M in the WIFIA loan, allowing the BWS to start paying interest only when money begins to be drawn from the loan. The BWS will also be permitted to renegotiate the interest rate if there is an increase or decrease once during the loan duration. Mr. Cooper mentioned that the BWS could also receive between \$20M to \$25M from State Revolving Funds (SRF).

Chair Andaya inquired if the BWS is guaranteed the \$25M in American Rescue Plan Act (ARPA).

Manager Lau replied that the City and County of Honolulu transferred the ARPA funds to the BWS. He stated that the condition of the ARPA funds is that they must be encumbered into a contract by the end of 2024 and fully spent by the end of 2026. The BWS was granted a total of \$50.3M in ARPA funds to support the BWS efforts. Manager Lau stated that receiving federal and state funding has opened doors to a rare opportunity to build Hawaii's first Saltwater Desalination Facility and will support the next generation. The BWS has completed the procurement process and awarded the contract to begin the design and construction of the Kalaeloa Saltwater Desalination Facility.

Board Member Kaneshiro asked if the BWS would be responsible for operating the Kalaeloa Saltwater Desalination Facility.

Manager Lau responded that the BWS owns the property; however, the facility's operation is contracted out.

Board Member Kaneshiro inquired if the company that oversees the property is local or from the mainland.

Mr. Usagawa shared that the Kalaeloa Desalco, LLC is a company created and incorporated in Hawaii. He stated that Kalaeloa Desalco, LLC has operation and maintenance experience in seawater desalination from saltwater wells on the East Coast and Caribbean.

Board Member Kaneshiro asked if Kalaeloa Desalco, LLC would be responsible for the improvements and fees.

Manager Lau replied that as long as the BWS fulfills the condition set forth by the federal government of building a desalination facility, the BWS would be the fee owner of the property. The federal government can reclaim the land if the desalination facility is not built.

Mr. Usagawa also responded that the BWS would retain the deed once the federal government's conditions were met.

Manager Lau stated that the first step before finalizing the design of the treatment system would be to do pilot testing. He stated that there are site challenges due to archeological issues, which the BWS is working through, but invited the Board Members to take a site tour. Manager Lau commented that it was not an easy procurement but expressed his appreciation to the Water Resources Division and Procurement Office.

Chair Andaya expressed his excitement for the Kalaeloa Desalination Facility and also his infrastructure concerns. However, he stated that he is confident in the BWS.



# FY 2024 BUDGET WORKSHOP

Raelynn Nakabayashi & Jadine Urasaki, P.E., LEED AP  
May 15, 2023

[boardofwatersupply.com](http://boardofwatersupply.com)



# FY 2024 BUDGET SUMMARY

	<b>FY 2023 – Adopted</b>	<b>FY 2024 – Proposed</b>	<b>\$ Change</b>	<b>% Change</b>
Operating Budget	\$237,240,444	\$241,683,964	\$4,443,520	1.87%
Capital Improvement Program Budget	\$184,076,325	\$212,646,000	\$28,569,675	15.52%
Total	\$421,316,769	\$454,329,964	\$33,013,195	7.84%



# OPERATING FUND RESOURCES AND EXPENDITURES

(MILLIONS OF DOLLARS)

	FY 2022	FY 2023	FY 2024
	Actual	Estimated Actual	Budget
<b>Beginning Balance</b>	\$50.0	\$63.4	\$29.8
Revenues	\$255.3	\$255.3	\$263.1
Lapses/ Adjustments	\$15.4	-	-
<b>Total Resources</b>	<b>\$320.7</b>	<b>\$318.7</b>	<b>\$292.9</b>
Operating Expenditures	\$202.0	\$242.0	\$241.7
Capital Improvement Program	\$55.3	\$46.9	\$34.7
<b>Total Expenditures</b>	<b>\$257.3</b>	<b>\$288.9</b>	<b>\$276.4</b>
<b>Ending Balance</b>	<b>\$63.4</b>	<b>\$29.8</b>	<b>\$16.5</b>



## BOARD ADOPTED FINANCIAL POLICIES

(FISCAL YEAR END JUNE 30, 2022)

### 4.4.2 Debt Service Coverage – **FY22 - 4.31x (Senior) & 3.16x (All-In)**

Per Board Resolution No. 873, 2017, the financial plan supports the BWS maintaining a minimum of 1.6x debt service coverage on total debt.

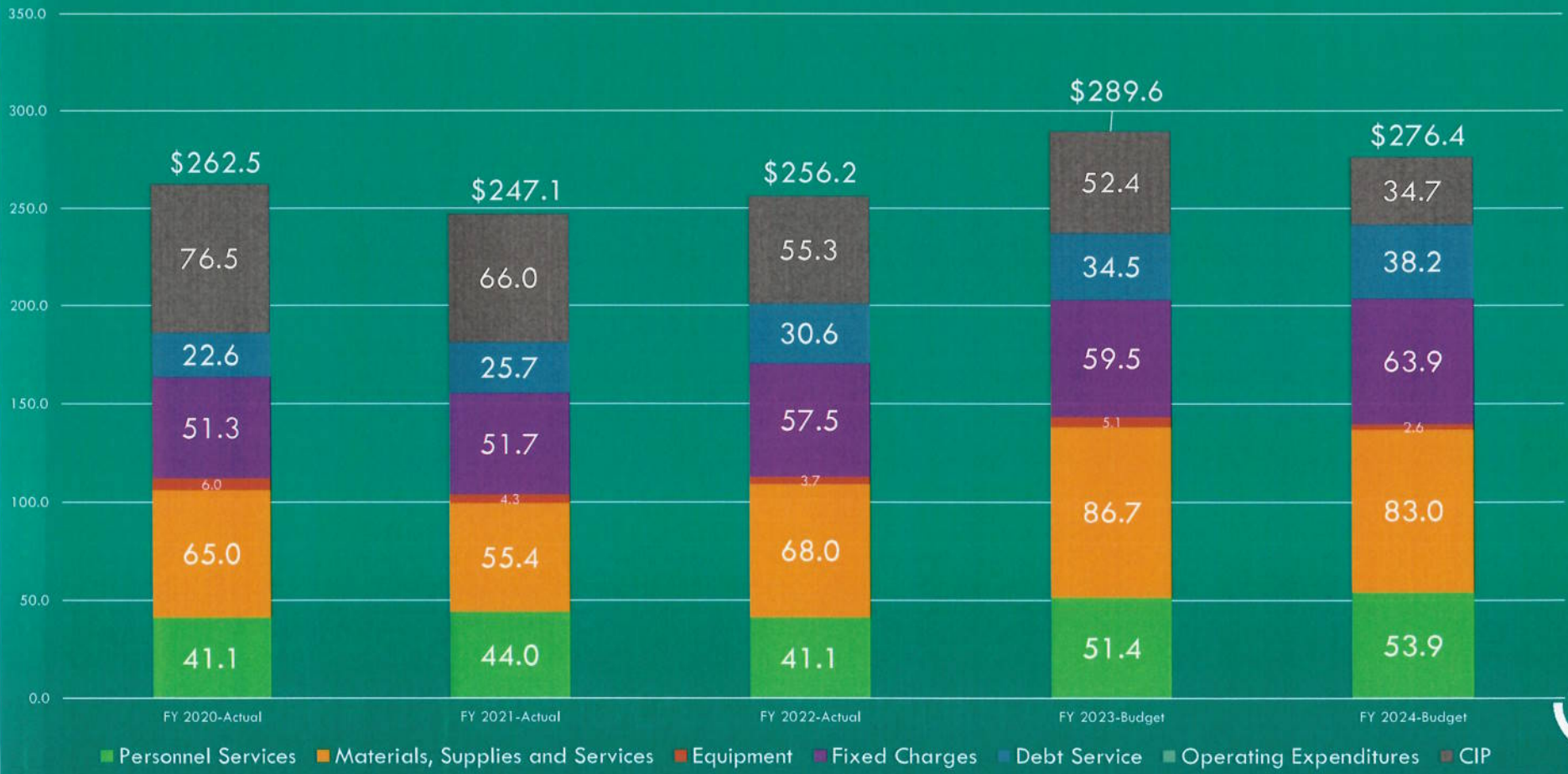
### 4.4.3 Net Working Capital – **FY22 - 115 Days**

Revenue requirements include targeting 180 days of unencumbered working capital while never having less than 60 days.





# OPERATING BUDGET EXPENDITURES





# HIGHLIGHTS OF THE OPERATING BUDGET

## Salaries

- No net increase in FTE
  - Department Staffing remains below the Authorized 741 FTE
- \$2.5 million increase in salaries or 4.8%
- Human Resources Initiatives
  - Optimize and expand operational capacity through reorganizations of functions and the leveraging of technology
  - Recruitment and Advertisement of positions through additional venues



# 1965 CAMPBELL INDUSTRIAL PARK



# HIGHLIGHTS OF THE OPERATING BUDGET

## **Materials, Services & Supplies (MS & S)**

- \$3.7 million decrease in MS&S or 4.2% decrease
- Primarily due to decreases in funding for Professional Services and Other Contractual Services.





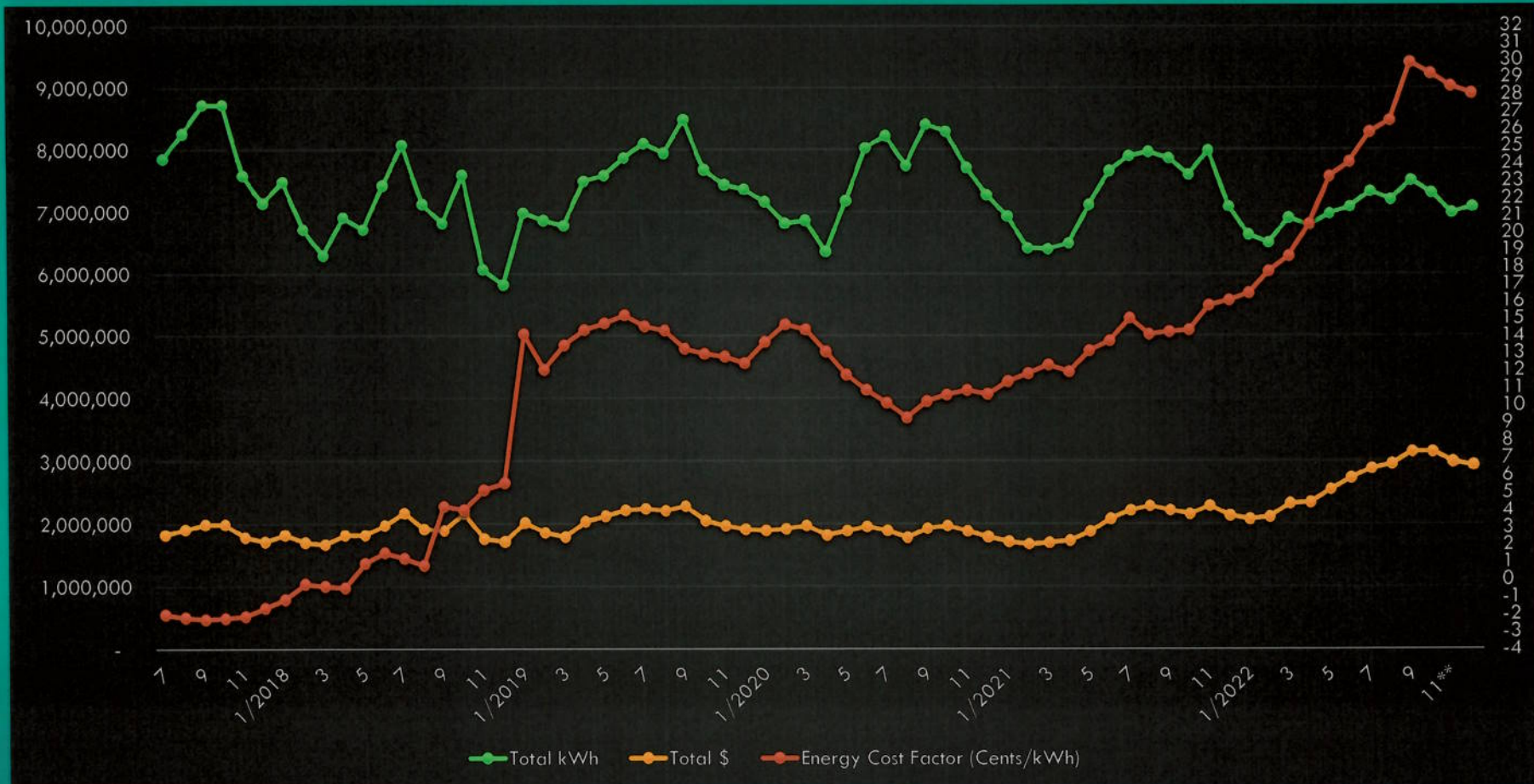
# HIGHLIGHTS OF THE OPERATING BUDGET

## Fixed Charges

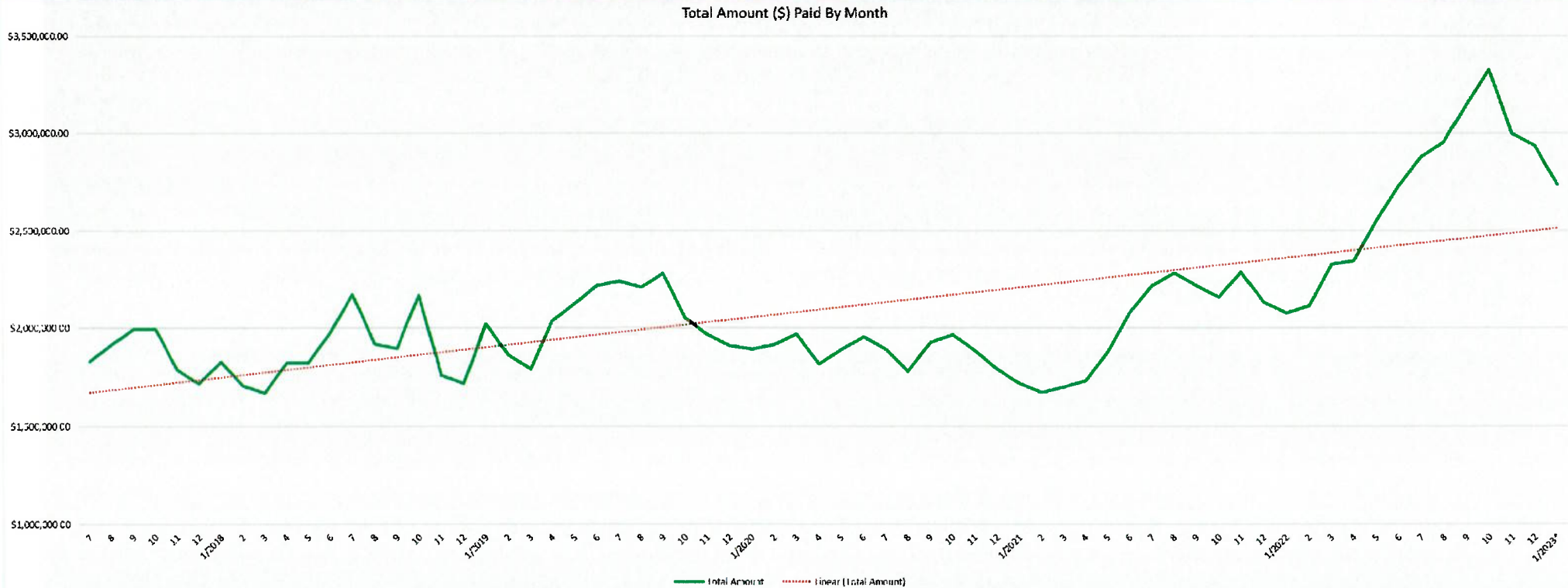
- \$4.4 million increase or +7.5% increase
  - +\$5.4 million increase in electricity costs
  - -\$1.0 million decrease in Employee Benefits (ERS and Health Benefits for Employees and Retirees)



# BWS ELECTRICITY CONSUMPTION & EXPENSE



# ...The Amount We Must Pay To HECO Continues To Go UP





# REVENUE PROJECTIONS FY 2024

Revenue Sources	FY 2022 Actual	FY 2023 Budget	FY 2024 Budget	% Change
Metered Sales				
Potable & Non-Potable Water	238,799,197	243,000,000	248,000,000	2.1%
Recycled Water	6,136,159	6,200,000	6,600,000	6.5%
Other Revenues	6,852,247	9,360,000	8,460,000	-9.6%
<b>TOTAL REVENUES</b>	<b>251,787,603</b>	<b>258,560,000</b>	<b>263,060,000</b>	<b>1.7%</b>





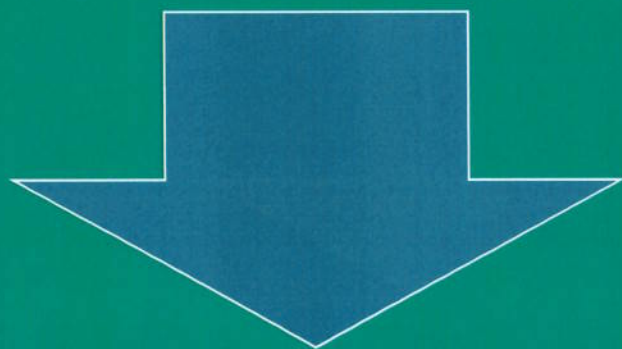
# OPERATING FUND REVENUE & EXPENDITURE SUMMARY

(MILLIONS OF DOLLARS)

	FY 2023	FY 2024	Change	
	Adopted	Proposed	\$ Mil.	%
Revenues	\$258.6	\$263.1	\$4.5	1.7%
Total Operating Fund Expenditures	\$289.6	\$279.7	(\$9.9)	-3.4%



# FISCAL YEAR 2024 BUDGETS STRIKE A CAREFUL BALANCE



## BWS MISSION

SAFE

DEPENDABLE

AFFORDABLE

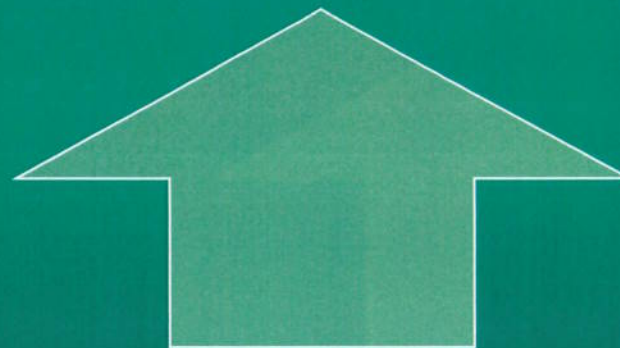


## BWS PRESSURES

FIXED COSTS (ELECTRICITY)

RED HILL

INFLATION



## FY 2024 CIP

- Supports the BWS vision and mission - **Water for Life: Safe, dependable and affordable water now and into the future**
- Aligned with the BWS Water Master Plan, Strategic Plan 2018-2022, Department's Goals and Objectives, and the Six-Year Capital Improvement Program





# PROJECT CATEGORIES

Research and Development

Renewal and Replacement

Capacity Expansion



# CAPITAL IMPROVEMENT PROGRAM BUDGET FY 2024

	Categories	Operating Fund	State Revolving Fund	Special Expendable Fund	Improvement Fund	Extramural Fund	Total
I.	Research & Development	\$ 2,500,000	---	---	\$ 2,500,000	\$ 10,000,000	\$ 15,000,000
II.	Renewal & Replacement	\$ 18,110,000	\$ 5,100,000	---	\$ 31,740,000	\$ 5,100,000	\$ 60,050,000
III.	Capacity Expansion	---	\$ 30,700,000	\$ 35,000,000	\$ 8,400,000	\$ 28,300,000	\$ 102,400,000
	Subtotal	\$ 20,610,000	\$ 35,800,000	\$ 35,000,000	\$ 42,640,000	\$ 43,400,000	\$ 177,450,000
	Construction Cost Index	\$ 1,586,000	\$ 3,580,000	\$ 3,500,000	\$ 3,520,000	\$ 4,010,000	\$ 17,196,000
	Contract Adjustment	\$ 12,500,000	---	\$ 2,250,000	\$ 4,250,000	---	\$ 19,000,000
	<b>Total</b>	<b>\$ 34,696,000</b>	<b>\$ 39,996,000</b>	<b>\$ 40,750,000</b>	<b>\$ 50,410,000</b>	<b>\$ 47,410,000</b>	<b>\$ 212,646,000</b>





Board of Water Supply  
Capital Improvement Program  
FY 2024

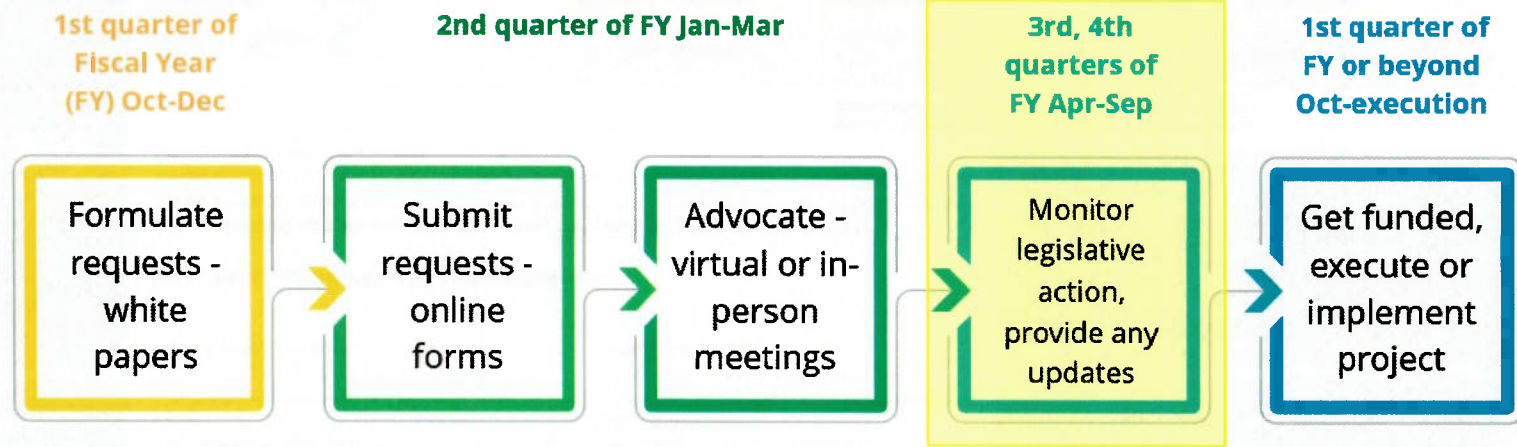
				Operating Fund	State Revolving Fund	Special Expendable Fund	Improvement Funds	Extramural Fund	Total
<b>C. Pipelines</b>									
<b>11. Kahilina Place and Aiea Heights Drive Water System Improvements</b>	Install 8-inch mains and appurtenances along Kahilina Place, from Aiea Heights Drive to end; along Aiea Heights Drive, from Holo Street to Aiea 277 Reservoir; along Ahehe Street, from Kanaloa Street to Aiea Heights Drive; and along Hakina Street, from Kanaloa Street to Kaulainahoe Place - approx. 4,070 lin. ft.	CP-D	Const	-	5,100,000	-	-	5,100,000	10,200,000

\$5,100,000 “Extramural” in anticipation of a “Congressionally Directed Spending” Appropriation for the Kahilina Place and Aiea Heights Drive Water System Improvements Project

\*\*BWS Funds also budgeted



## Appropriations Request Process





CONGRESSMAN  
**ED CASE**  
Hawaii • District 1

COMMUNITY PROJECT FUNDING  
Constituent Services

## Community Project Funding

### Fiscal Year 2024

• INTERIOR, ENVIRONMENT, AND RELATED AGENCIES

• Kahilainai Place and Aiea Heights Drive Area Water System Improvements

**Project Recipient:** Honolulu Board of Water Supply

**Recipient Address:** 630 S Beretania Street, Honolulu, HI 96813

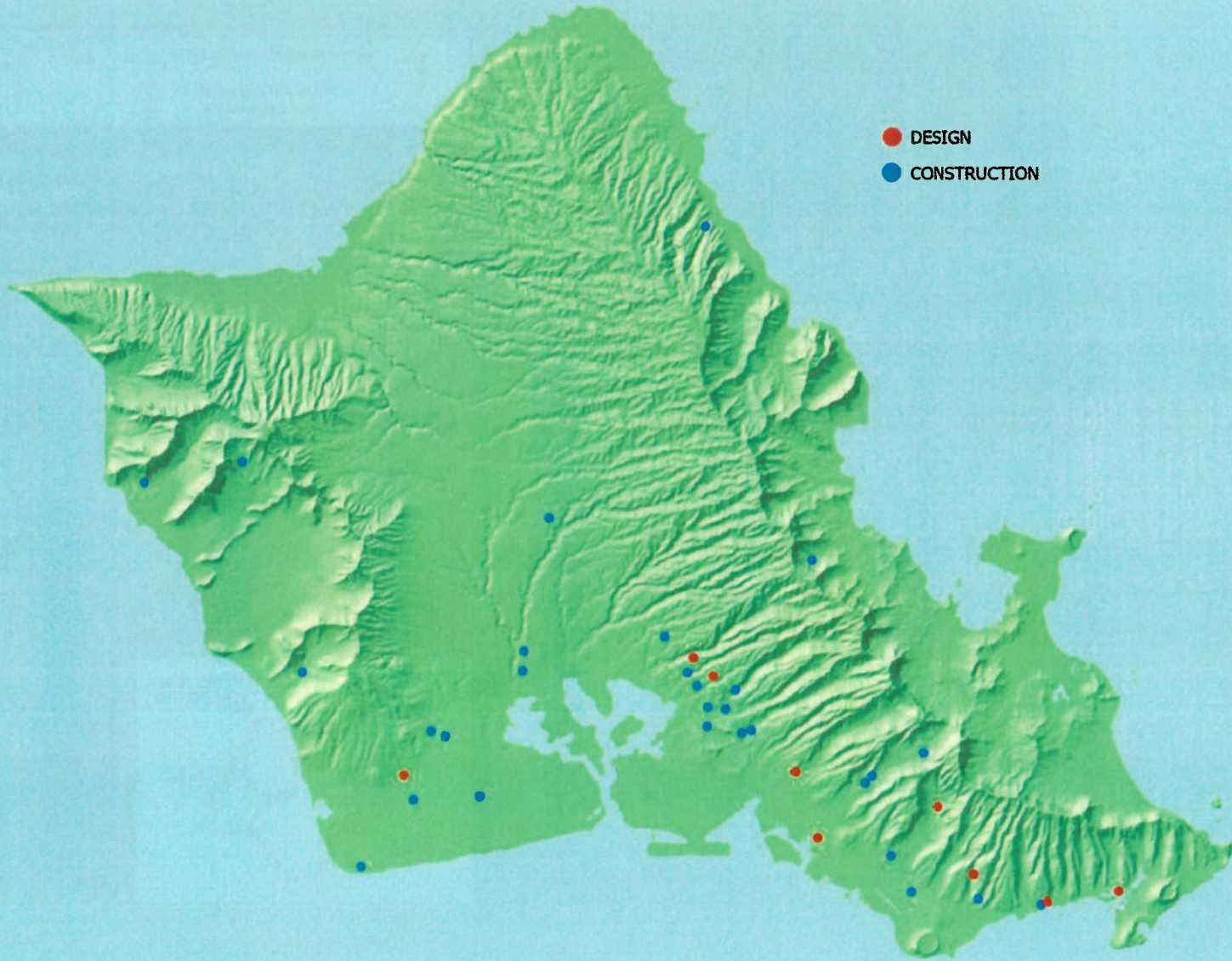
**Amount Requested:** \$5,680,000

**Project Description:** This project will replace 3,900 linear feet of critical aging potable waterline infrastructure segments at the end of their useful life, which will reduce instances of loss of water services. Main line water breaks in this area often cause disruption to safe drinking water services, property damage, significant impacts to street traffic and may affect the water system operations in other areas as well. The project will replace existing 6-inch and 8-inch cast iron pipe water mains with ductile iron pipe in accordance with local water system standards. Once complete, these segments will ensure a significant reduction in main breaks and extend the life of this segment of the water system for up to another 100 years. This project aligns with the working goals outlined in the Board's 30-year Water Master Plan. It will improve system reliability and adequacy to provide uninterrupted water services at proper pressures, provide vital emergency service and deliver water at an affordable and responsible cost.

**Explanation of Taxpayer Value:** The project is an appropriate use of taxpayer funds because it will replace transmission and distribution pipes to prevent contamination caused by leaks and improve water pressure to safe levels.

**Federal Nexus:** The project has a federal nexus because the funding provided is for purposes authorized by Section 1452 of the Safe Drinking Water Act, 42 U.S.C. 300j-12.

**Financial Disclosure Certification Letter**



- DESIGN
- CONSTRUCTION





# PROJECT CATEGORY HIGHLIGHTS

## Renewal and Replacement (\$60 million)

- Waihee Tunnel and Inclined Wells Chlorinator
- Makakilo Booster No.1 Electrical Upgrades and Facility Projects
- Kaonohi Booster No. 2 MCC Replacement and Facility Repairs
- Kalihi High Service Booster Electrical Upgrades
- Hawaii Loa Booster No.1 Pump and MCC Replacement

WAIHEE  
INCLINED  
WELLS

WAIHEE TUNNEL

WAIHEE WELLS  
INCLINED

WAIHEE  
WELL CHLORINATOR





# PROJECT CATEGORY HIGHLIGHTS

## Renewal and Replacement (continued)

- Makaha Shaft Tunnel Rehabilitation
- Pump Renewal and Replacement
- Facility Repair and Renovations
- Security Improvements at Various Locations









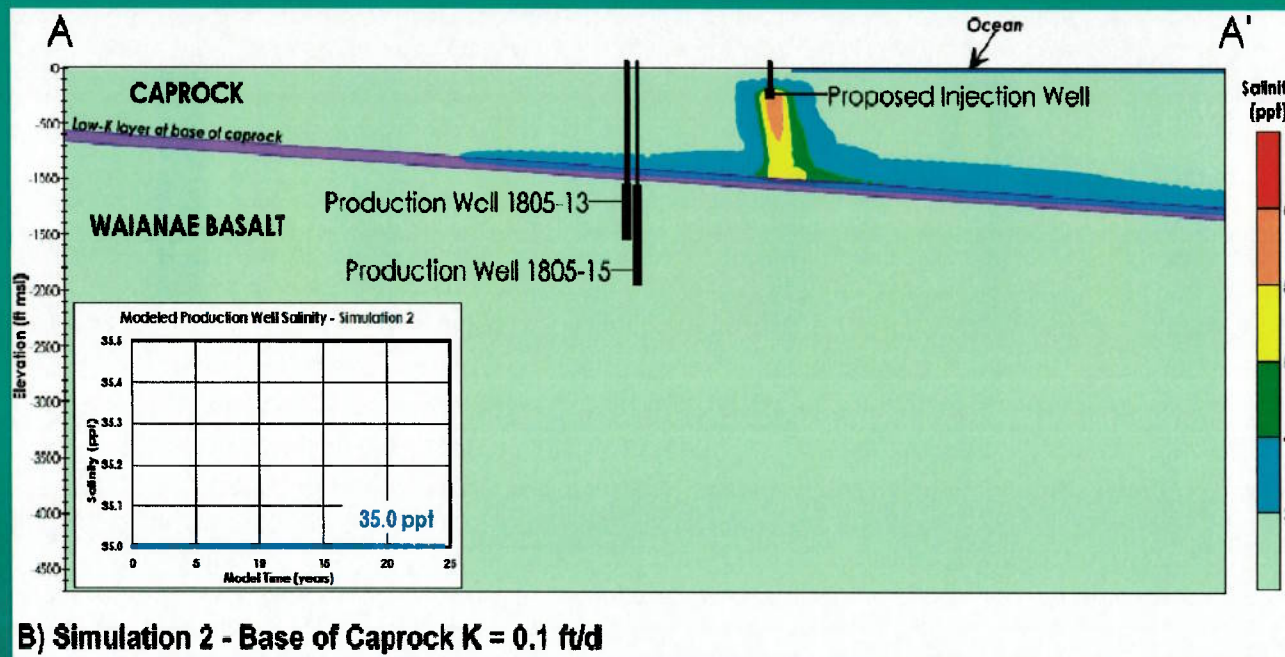
# Kalaheo Seawater Desalination Conceptual Site Plan





# Concentrate Disposal Well Groundwater Model Findings

Brine will sink because of higher density and flow along the caprock/basal contact along a 4% slope to the ocean and be diluted. Brine will not impact the benthic nearshore environment.



## KALAELOA DESALINATION PROJECT IMPORTANCE

We currently rely solely on Ground Water for drinking, hygiene and sanitation. We are facing challenges in three areas as it relates to Ground Water Resources:

1. Climate Change (depletion of supply),
2. Regulatory Actions (CWRM),
3. Contamination Events (Red Hill, PFAS).

**Desalination is a sustainable and resilient source that will diversify our drinking water supply.**



**NOTICE OF AWARD**

**PROJECT NAME:** BWS-21-WR-05 KALAELOA SEAWATER DESALINATION FACILITY DESIGN, BUILD, OPERATE, MAINTAIN PROJECT

**CONTRACT NUMBER:** C23004601

**CONTRACT AMOUNT:** \$149,648,118.00 – FIXED DESIGN -BUILD AMOUNT  
\$2,721,919.00 - ANNUAL OPERATING & MAINTENANCE FEE

**CONTRACTOR:** KALAELOA DESALCO, LLC in Partnership with  
NORDIC PCL CONSTRUCTION, INC.

**NOTICE OF  
AWARD DATE:** 04/28/2023

This project will be funded over multiple Fiscal Years; \$60M Funded FY2024

Project completion estimated in 2026





# SCWD (CA) IS PURSUING A SIMILAR PROJECT AT COMPARABLE COST: \$140M



## DOHENY OCEAN DESALINATION PROJECT INFORMATION SHEET

**South Coast Water District (SCWD)** is committed to providing safe, clean, reliable water to its customers. SCWD has continued to enhance our recycled water system/ supplies since the 1980's, investing significantly in conservation programs and measures, and utilizing brackish groundwater, when available; and we still must rely on imported water for 90% of our drinking water supply, which is not a sustainable solution.

The **Doheny Ocean Desalination Project** would create a new, reliable, local, and drought-proof water supply that would also provide emergency water supplies should the delivery of imported water be disrupted due to earthquakes or other natural disasters.

The facility's proposed location between Pacific Coast Highway and Stonehill Drive near to San Juan Creek is within 100 yards of existing regional water transmission lines. SCWD would build the facility on property that SCWD already owns, and the infrastructure is already in place with the Joint Regional Water Supply System to distribute desalinated water to SCWD customers and south Orange County, significantly reducing costs and construction impacts. The facility would have a capacity of up to 5 Million Gallons per Day (MGD).

### PROPOSED SCHEDULE



### PROPOSED PROJECT LOCATION



### PROJECT BENEFITS

- ◆ New, sustainable, local, high-quality water at a reasonable cost
- ◆ Reliability for natural disasters
- ◆ Drought-proof and resilient to climate change
- ◆ Up to 5 million gallons per day of drinking water supply
- ◆ Potential long-term and regional benefits

### KEY NUMBERS

- \$32.4 million in grants received, to date
- ~\$3/month increase to average Single Family Residential household
- ~\$140 million capital cost

For More Project Information: [SCWD.ORG/DohenyDesal](https://www.scwd.org/DohenyDesal)  
 For Information on Water Conservation & Financial Assistance: [SCWD.ORG/Resources](https://www.scwd.org/Resources)

### RENDERING OF PROPOSED DESALINATION FACILITY



### FIRST DESALINATION PROJECT IN THE STATE OF CALIFORNIA TO BE FULLY COMPLIANT WITH THE CALIFORNIA OCEAN PLAN

- ✓ Source water is from subsurface intake (slant) wells proposed at Doheny State Beach, which are the environmentally preferred technology because they are fully buried beneath the ocean floor to ensure the full protection of marine life
- ✓ Brine, the saltwater left over from the desalination process, would be commingled with treated wastewater in an existing outfall pipe and discharged to the ocean, which is the environmentally preferred discharge method

### SUBSURFACE SLANT WELL FOR OCEAN WATER INTAKE



### ABOUT SOUTH COAST WATER DISTRICT

SCWD provides potable water, recycled water, and wastewater services to approximately 85,000 residents, 1,000 businesses, and 2 million visitors per year in south Orange County, California. SCWD's service area, divided into five districts, includes the communities of Dana Point, South Laguna Beach, and areas of San Clemente and San Juan Capistrano. A five-member elected Board of Directors oversees SCWD's policymaking, financial stewardship, rate-setting, capital programs, and long-term planning.

Para una versión en español de este documento:  
 For accessible versions of this document:  
[SCWD.ORG/DohenyDesal](https://www.scwd.org/DohenyDesal)







# Mahalo!

## BOARD OF WATER SUPPLY

FY 2023 Budget Workshop

Raelynn Nakabayashi & Jadine Urasaki, P.E., LEED AP

[rnakabayashi@hbws.org](mailto:rnakabayashi@hbws.org) & [jurasaki@hbws.org](mailto:jurasaki@hbws.org)

[boardofwatersupply.com](http://boardofwatersupply.com) for more information

May 15, 2023

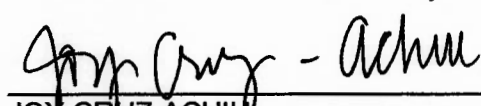
Providing safe, dependable, and affordable  
drinking water, now and into the future.

**MOTION TO  
ADJOURN**


There being no further business Chair Andaya at 3:52 PM called for a motion to adjourn the Budget Workshop. Max Sword so moved, seconded by Na'alehu Anthony, and unanimously carried.

The minutes of the Budget Workshop held on May 15, 2023, are respectfully submitted,

THE MINUTES OF THE BUDGET WORKSHOP HELD ON MAY 15, 2023 WERE APPROVED AT THE JUNE 26, 2023 BOARD MEETING			
	AYE	NO	COMMENT
BRYAN P. ANDAYA	X		
KAPUA SPROAT	X		
MAX J. SWORD	X		
NA'ALEHU ANTHONY	X		
JONATHAN KANESHIRO	X		
EDWIN H. SNIFFEN	X		
WARREN K. MAMIZUKA	X		

  
 \_\_\_\_\_  
 JOY CRUZ-ACHUI

APPROVED:

  
 \_\_\_\_\_  
 BRYAN P. ANDAYA  
 Chair of the Board  
**JUN 26 2023**

\_\_\_\_\_  
 Date