

# Honolulu Board of Water Supply, Hawaii

## New Issue Summary

**Sale Date:** Week of March 7

**Series:** Water System Revenue Bonds, Series 2023

**Purpose:** Bond proceeds will be used to fund or reimburse the Honolulu Board of Water Supply (BWS) for certain improvements to the system and pay costs of issuance of the bonds.

**Security:** The bonds are special obligations of BWS payable solely from water system net revenues.

The upgrade of the bond ratings and IDR to 'AAA' from 'AA+' reflects Fitch's expectations that leverage levels, which historically have been exceptionally low, will remain under 5.0x despite anticipated spending associated with BWS' 30-year water master plan (WMP). The rating and IDR further reflect BWS' leverage in the context of its very strong business profile (revenue defensibility and operating risk), which are both assessed at 'aa'.

The strength of BWS' revenue defensibility is rooted in its independent rate-raising ability and very favorable service area demographics. BWS' operating cost burden is very low, and while the life cycle ratio is considered elevated, planned capital spending has increased in recent years, which should ultimately reduce the age of assets.

BWS' financial profile, assessed at 'aaa', reflects currently exceptionally low leverage, measured as net adjusted debt to adjusted funds available for debt service, that is expected to rise modestly over Fitch's scenario analysis as BWS continues to implement its WMP, completed in October 2016. For fiscal 2022 (FYE June 30), the BWS leverage ratio was just 1.8x but it is expected to increase throughout Fitch's scenario analysis but remain well below 5.0x over the next five years and supportive of the rating.

Impacts from a recent fuel leak from the Navy's Red Hill Bulk Fuel Storage Facility (RHBFSF) are still being evaluated, but BWS has not detected any contamination in its well stations to date and is taking appropriate steps to monitor and mitigate damage. BWS planned in advance for a potential Red Hill contamination event and has been actively monitoring its wells in that area since a 2014 leak. According to BWS, it has the technical, managerial, and financial expertise to respond to the recent leak and it has thus far not experienced any adverse financial impacts.

BWS is tracking the costs of its actions in response to this incident, and reports less than \$1 million in associated spending as of Dec. 31, 2022 but cannot predict the ultimate costs or whether and to what extent it may be reimbursed by the Navy. The Navy has committed to defueling and permanently closing the storage tanks. Further, the federal government has appropriated \$1 billion in the fiscal 2023 budget to the Navy for related clean-up costs. Given actions taken to date and expected future actions of the BWS and federal government, the contamination does not affect BWS' rating or ESG relevance score at this time.

## Key Rating Drivers

**Revenue Defensibility: 'aa'; Robust Service Territory, Strong Rate Flexibility:** BWS provides an essential service to a large and economically diverse service territory that includes the state capital. Rate flexibility is considered very strong but is slightly lower when considering wastewater charges for which BWS provides billing service.

**Operating Risk: 'aa'; Very Low Cost Burden, Elevated Life Cycle to Decline:** The operating risk profile is considered very strong given the high quality of groundwater supplies. Asset life is



## Ratings

Long Term Issuer Default Rating<sup>a</sup> AAA

<sup>a</sup>Upgraded from 'AA+' on Feb. 2, 2023.

## New Issue

\$17,125,000 Water System Revenue Bonds, Series 2023 AAA

## Outstanding Debt<sup>b</sup>

Water System Revenue BondsFN2 AAA

Water System Revenue Bonds (Taxable)FN2 AAA

<sup>b</sup>Upgraded from 'AA+' on Feb. 27, 2023.

## Rating Outlook

Stable

## Applicable Criteria

[U.S. Water and Sewer Rating Criteria \(March 2021\)](#)

[Public Sector, Revenue-Supported Entities Rating Criteria \(September 2021\)](#)

## Related Research

[Fitch Rates Honolulu Board of Water Supply, HI Water Revs 'AAA'; Outlook Stable \(February 2023\)](#)

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somewhat elevated but should decline as BWS continues to increase capital spending associated with its WMP.

**Financial Profile: 'aaa'; Leverage to Rise Modestly But Remain Exceptionally Low:** The upgrade reflects BWS' leverage that has not exceeded 2.0x in any of the last five fiscal years. Despite increasing marginally over the five-year horizon as BWS increases spending related to the WMP, leverage will remain at a level supportive of the 'aaa' assessment. The liquidity profile is very strong, albeit neutral, to the assessment.

## Rating Sensitivities

**Factors that could, individually or collectively, lead to positive rating action/upgrade:**

- The ratings are at the highest level on Fitch's scale and cannot be upgraded.

**Factors that could, individually or collectively, lead to negative rating action/downgrade:**

- Sustained leverage in Fitch's base and stress case that approximates or exceeds 5.0x provided stability in the revenue defensibility and operating risk assessments.
- While not expected, material unanticipated impacts from the Red Hill facility fuel leak that affect the BWS operating risk and/or financial profile assessments.

## Credit Profile

BWS provides water service to the entire island of Oahu (city and county of Honolulu) with an estimated residential population of around 1,000,890. BWS serves approximately 171,300 accounts, over 90% of which are residential, lending stability to the customer base. BWS does not serve the large military installations on the island, since those sites have their own well systems and have permitted pumping amounts from the state.

BWS' water supply is provided by high-quality groundwater aquifers located under the island that require limited treatment. Currently, there is a sustainable yield of 394 million gallons per day (mgd) of available water supply on the island, of which 284 mgd is permitted. BWS' authorized use is 182.6 mgd, which was more than sufficient to meet system sales of 143.4 mgd in fiscal 2021. Water use has been largely flat for the past 10 years given conservation efforts and lower agricultural use, and while the WMP estimates an increase in demand of between 5% and 15% through 2040, it also notes that supplies should be sufficient through at least that period.

### Red Hill Fuel Leak

On Dec. 2, 2021, the U.S. Navy determined that its Red Hill Shaft water source, which is also used by BWS for a portion of its water supply, was contaminated with petroleum due to a November 20 leak from the RHBFSF. As mentioned, BWS has not detected any contamination in its well stations to date. The Navy is in the process of determining the amount of fuel that entered the aquifer, which will determine whether the contamination can be removed. The facility consists of 20 steel-lined underground storage tanks built in the 1940s, which can store up to 250 million gallons of fuel. The tanks are located 100 feet above the groundwater aquifer that the Navy uses to provide water to Pearl Harbor and the BWS also uses to provide water to metropolitan Honolulu.

BWS has increased its testing of five of its well stations located closest to the RHBFSF in response to this incident and indicated it will continue to do so until the situation warrants revising the testing frequency. Further, the BWS's 2018 Long Range Financial Plan (LRFP) developed a scenario for handling a major water source contamination event. In order to prevent any fuel contamination stemming from the December 2021 leak, the BWS shut down the Halawa Shaft pumping station, which delivers 20% of the water delivered to the metropolitan Honolulu water system, and subsequently shut down its Aiea and Halawa wells.

In order to make up for the 20% loss, the BWS is pumping at higher rates from other well stations that also serve metropolitan Honolulu. However, management reports that it is closely

## Rating History (IDR)

Rating	Action	Outlook/ Watch	Date
AAA	Upgraded	Stable	2/27/23
AA+	Affirmed	Positive	2/23/21
AA+	Revised	Stable	4/30/10
AA	Affirmed	Stable	2/08/02
AA	Upgraded		5/08/01
A+	Assigned		12/07/98

monitoring this situation as extended pumping at higher rates can increase water salinity levels and affect both the aquifer and the water pumped. Management further reports that the situation is stable, but that extended closure of Halawa Shaft could result in mandatory water conservation measures and moratoriums on new water use to prevent the effects of over pumping other well stations.

### Revenue Defensibility

Revenue defensibility is very strong and assessed at 'aa' with all revenue derived from business lines exhibiting monopolistic characteristics in a service area with demand characteristics and demographic trends deemed to be very favorable, supported by high income levels and very low historical unemployment.

Customer growth has been essentially flat, with a five-year average CAGR of 0.2%. Area income levels are very high and have consistently been around 140% of the national average. Unemployment has also traditionally been very strong over the last five years at 70% or less the national rate, although unemployment increased significantly as a result of the pandemic. Honolulu's unemployment was down to 3.4% in December 2022, about even with the overall U.S. rate of 3.3%.

While recognizing some cyclical, Honolulu's economy has demonstrated stability over the long term, with historical ongoing growth in tourism activity despite periodic downturns. The city also benefits from its position as the state capital and business center, in addition to substantial defense-related investments due to its strategic Pacific location.

The board has independent legal ability to increase service rates without external approval and approved a rate package for fiscals 2020 through 2023 intended to support the capital and financing program based off the capital improvement plan (CIP) stemming from the WMP. Rates increased 2% in each of fiscal years 2020 and 2021, and 4% in each of fiscal years 2022 and 2023. BWS is currently conducting a cost-of-service study to establish a five-year rate schedule and expects a slightly higher level of rate increases for fiscal 2024 and beyond.

Currently, monthly user charges equal around \$51 assuming Fitch's standard 7,500 gallons per month of water usage, which Fitch estimates is affordable for over 85% of the population. The level of water charges is very low as a result of the system not having to pay for water supply or expensive treatment processes. However, BWS provides billing services for the city's sewer system, and when water charges are combined with wastewater charges, which are higher, the overall level of affordability for water-related services is slightly lower with about 80% of the population having affordable combined water and sewer bills.

No asymmetric rating factor considerations affect the revenue defensibility assessment.

### Operating Risk

The operating risk assessment is 'aa', which takes into consideration a very low operating cost burden and an elevated life cycle ratio that is supported by adequate and increasing levels of capital spending. The cost burden generally trended slightly upward since fiscal 2018 as a result of relatively flat water production and steadily rising costs and stood at around \$4,100 per mg in fiscal 2022. Fitch expects unit production cost to remain low for at least the next several years and supportive of the assessment.

The system's life cycle ratio is elevated, yet consistently between 47% and 48% since fiscal 2018. However, capital needs have been supported by an increasing level of spending with the five-year average of capex relative to depreciation increasing from 86% in fiscal 2018 to 163% in fiscal 2022. BWS expects to boost spending even further in upcoming years, which, if achieved, could ultimately lower the life cycle ratio.

Both capital spending and borrowing are set to increase as a result of BWS' LRFPP, which reflects priorities included in its 30-year WMP. BWS' fiscal 2023-2027 CIP totals \$845 million and focuses on renewal and replacement (R&R) of system assets. The CIP materially increases the pace of pipeline replacement from six miles per year over the last decade to 21 miles per year by fiscal 2028. The CIP also roughly doubles annual capital spending over this time before decreasing starting around fiscal 2028.

Over the next five years, management expects to fund approximately 40% of the CIP from debt sources, including the current issuance, and about 8% (\$70 million) with grants, including a \$50 million awarded federal ARPA grant, while the balance is expected to be derived on a pay-go basis. Debt sources include revenue bonds, SRF loans and an anticipated \$100 million WIFIA loan with the majority of draws occurring in fiscals 2026 and 2027.

No asymmetric rating factor considerations affect the operating risk assessment.

### Financial Profile

The financial profile is assessed at 'aaa'. BWS' leverage ratio was 1.8x in fiscal 2022, up from just 0.2x in fiscal 2018 primarily due to debt issuances. The liquidity profile is neutral to the assessment. For fiscal 2022, the liquidity cushion ratio equaled 333 days of current cash while coverage of full obligations (COFO) was 3.7x; Fitch-calculated total debt service coverage for the same period was also 3.7x.

### Fitch Analytical Stress Test (FAST)

The FAST considers the potential trend of key ratios in a base case and a stress case. The stress case is designed to impose a capital cost increase of 10% above expected levels and evaluate potential variability in projected key ratios.

BWS' financial forecast was used to inform the base case, including the implementation of 4% approved rate increase in fiscal 2023 and projected revenue increases of 5.0% to 6.0% in each of fiscals 2024 to 2027. It also includes a significant increase in spending of about 18% in fiscal 2023 due to inflationary and energy cost increases, followed by modest spending adjustments in subsequent years.

Further, the base case also includes costs related to BWS' \$845 million fiscal 2023-2027 CIP along with projected \$318 million in additional debt funding, including the current issuance. The CIP also includes \$70 million in grant funding, including the awarded \$50 million in ARPA funds. Fitch also assumed receipt of \$8.7 million in annual water system facility charges, equal to the five-year average.

Under the base case, leverage ascends modestly annually throughout the scenario, reaching 2.4x by fiscal 2027. The stress case demonstrates similar results, with leverage rising to around 2.9x by fiscal 2027. Some additional debt is expected just past the five-year horizon, but capital spending is expected to begin to decline around fiscal 2028. Fitch expects leverage to remain under the 5.0x threshold for the 'aaa' financial profile assessment. The scenarios do not include any operational or capital spending related to the RHBFSF fuel leak that may arise unexpectedly as remediation action is expected to be covered by the Navy.

Of note, the FAST considers full execution of the CIP and historical actual execution is closer to 50% to 70%, which provides headroom to absorb unforeseen costs should they arise. The liquidity profile is expected to remain neutral to the assessment with COFO of at least 2.8x and relatively stable days cash levels.

### ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit [www.fitchratings.com/esg](http://www.fitchratings.com/esg).

## Financial Summary

(\$000, Audited Fiscal Years Ended June 30)	2018	2019	2020	2021	2022
<b>Revenue Defensibility</b>					
% of Total Revs from Monopolistic Services	100	100	100	100	100
<b>Service Area Characteristics</b>					
Service Area Population	981,076	973,491	1,016,508	1,000,890	-
Total Customer Count	169,886	170,329	170,694	171,328	171,307
5-Year Total Customer Count CAGR	0.3	0.3	0.2	0.3	0.2
Service Area MHI (\$)	82,906	85,857	87,722	92,600	-
Service Area MHI / US MHI (%)	138	137	135	134	-
Service Area Unemployment Rate (%)	2.3	2.3	10.5	5.3	-
Service Area Unemployment Rate / US Unemployment Rate (%)	59	62	130	100	-
<b>Rate Flexibility</b>					
Total Monthly Bill (7,500 gallons/6,000 gallons)	42.41	42.41	43.43	43.72	47.57
% of Population w/Unaffordable bill	14	13	13	13	-
<b>Operating Risk</b>					
<b>Operating Cost Burden</b>					
Operating Cost Burden (\$/mg)	3,882	4,098	4,251	4,481	4,108
<b>Capital Planning and Management</b>					
Life Cycle Ratio (%)	48	48	47	47	47
CapEx / Depreciation (%)	101	156	196	213	151
5-Yr Avg Capital Expenditures / Depreciation (%)	86	108	134	156	163
<b>Financial Profile (\$000)</b>					
Current Unrestricted Cash / Investments	73,033	127,770	139,711	109,475	143,962
Current Restricted Cash / Invest (Available Liquidity)					
<b>Current Cash Available</b>	<b>73,033</b>	<b>127,770</b>	<b>139,711</b>	<b>109,475</b>	<b>143,962</b>
Noncurrent Unrestricted Cash / Investments	320,355	283,878	306,912	315,325	285,596
Noncurrent Restricted Cash / Invest (Available Liquidity)					
<b>Available Cash</b>	<b>393,387</b>	<b>411,648</b>	<b>446,623</b>	<b>424,800</b>	<b>429,557</b>
Current Restricted Cash / Invest (Debt Service or Debt Service Reserve)	12,801	19,307	25,589	28,535	33,671
Noncurrent Restricted Cash / Invest (Debt Service or Debt Service Reserve)	22,408	21,149	4,732	3,139	2,412
<b>Funds Restricted for Debt Service</b>	<b>35,209</b>	<b>40,456</b>	<b>30,321</b>	<b>31,675</b>	<b>36,082</b>
Total Debt	300,327	304,888	381,267	448,652	530,624
<b>Capitalized Fixed Charges</b>					
Adjusted Net Pension Liability	146,954	156,572	148,897	170,767	145,587
Available Cash	393,387	411,648	446,623	424,800	429,557
Funds Restricted for Debt Service	35,209	40,456	30,321	31,675	36,082
<b>Net Adjusted Debt</b>	<b>18,685</b>	<b>9,356</b>	<b>53,220</b>	<b>162,944</b>	<b>210,571</b>
Total Operating Revs	232,378	228,662	231,108	238,003	248,264
<b>Purchased Water / Sewer Services</b>					
<b>Operating Leases</b>					
Other Operating Expenses	150,408	156,733	166,923	176,958	157,603
<b>EBITDA</b>	<b>81,969</b>	<b>71,929</b>	<b>64,185</b>	<b>61,046</b>	<b>90,660</b>
Investment Income/(Loss)	6,097	7,549	7,994	7,792	7,861
<b>Non-Operating Revenues from Taxes</b>					
Other Cash Revenues/(Expenses)	452	384	267	362	135
<b>BAB Subsidy</b>					
Capital Contributions	8,915	6,350	10,329	8,606	9,106
<b>FADS</b>	<b>97,434</b>	<b>86,212</b>	<b>82,776</b>	<b>77,806</b>	<b>107,762</b>

Fixed Services Expense					
Operating Leases					
Net Transfers In/(Out)					
Pension Expense	16,918	17,626	16,642	18,607	10,204
<b>Adjusted FADS</b>	<b>114,351</b>	<b>103,838</b>	<b>99,418</b>	<b>96,412</b>	<b>117,966</b>
<b>Net Adjusted Debt to Adjusted FADS (x)</b>	<b>0.2</b>	<b>0.1</b>	<b>0.5</b>	<b>1.7</b>	<b>1.8</b>
FADS	97,434	86,212	82,776	77,806	107,762
Fixed Services Expense					
Net Transfers In/(Out)					
<b>Adjusted FADS for COFO</b>	<b>97,434</b>	<b>86,212</b>	<b>82,776</b>	<b>77,806</b>	<b>107,762</b>
Total Annual Debt Service (automatic calculation)	21,850	21,694	22,804	25,908	29,203
Fixed Services Expense					
<b>Adjusted Debt Service (inc. fixed services expense)</b>	<b>21,850</b>	<b>21,694</b>	<b>22,804</b>	<b>25,908</b>	<b>29,203</b>
<b>Coverage of Full Obligations (COFO) (x)</b>	<b>4.46</b>	<b>3.97</b>	<b>3.63</b>	<b>3.00</b>	<b>3.69</b>
<b>COFO exc. connection Fees (x)</b>	<b>4.05</b>	<b>3.68</b>	<b>3.18</b>	<b>2.67</b>	<b>3.38</b>
<b>Current Days Cash on Hand</b>	<b>177</b>	<b>298</b>	<b>305</b>	<b>226</b>	<b>333</b>
<b>Liquidity Cushion Ratio (days)</b>	<b>177</b>	<b>298</b>	<b>305</b>	<b>226</b>	<b>333</b>
<b>All-in DSC (x)</b>	<b>4.46</b>	<b>3.97</b>	<b>3.63</b>	<b>3.00</b>	<b>3.69</b>

Notes: Fitch may have reclassified certain financial statement items for analytical purposes. N.A. - Not Available.  
Sources: Fitch Ratings, Fitch Solutions, Honolulu Board of Water Supply (HI)

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