

Honolulu Board of Water Supply, Hawaii

New Issue Summary

Sale Date: Week of March 8.

Series: Water System Revenue Bonds, Series 2021A (Tax-Exempt); Water System Revenue Bonds, Series 2021B (Taxable).

Purpose: Bond proceeds will be used to fund or reimburse the Honolulu Board of Water Supply, HI (BWS) for certain improvements to the system, refund a portion of BWS' outstanding bonds for interest savings and pay costs of issuance.

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

The Rating Outlook revision to Positive reflects Fitch Ratings' expectations that leverage levels, which historically have been very low, will remain largely consistent with the 'AAA' rating level, despite anticipated spending associated with BWS' 30-year water master plan (WMP). Positive rating action could occur in the next few years if peak leverage over Fitch's scenario analysis remains around or below 5.0x.

The 'AA+' revenue bond rating and Issuer Default Rating (IDR) reflect BWS' leverage in the context of its very strong business profile (revenue defensibility and operating risks), which are both assessed at 'aa'. The strength of BWS' revenue defensibility is rooted in its independent rate-raising ability and the very favorable service area demographics. BWS' operating burden is very low, and while the life cycle is considered elevated, capital spending has ramped up in recent years, which should ultimately improve the age of assets.

BWS' financial profile, assessed at 'aa', reflects currently very low leverage, measured as net adjusted debt to adjusted funds available for debt service, which is expected to rise over Fitch's scenario analysis as BWS continues to implement its WMP, completed in October 2016. For fiscal 2020, the BWS leverage ratio was just 0.5x, but is expected to increase through Fitch's scenario analysis and reach slightly over 5.0x in the stress case by fiscal 2025.

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 Risks: 'aa'; Very Low Cost Burden, Elevated Life Cycle to Decline: Operating risks are considered very low given the high quality of groundwater supplies. Asset life is somewhat elevated but should decline as BWS continues to increase capital spending associated with its WMP.

Financial Profile: 'aa'; Very Low but Increasing Leverage: BWS' leverage is currently very low but will escalate over Fitch's scenario analysis as it increases spending related to the WMP. The assessment could improve to 'aaa' within the next couple of years if peak leverage approximates, or is below, 5.0x in Fitch's scenario analysis. The liquidity profile is very good, albeit neutral, to the assessment.

Ratings

Long-Term Issuer Default Rating AA+

New Issues

\$47,020,000 Water System Revenue Bonds (Tax-Exempt), Series 2021A	AA+
Up to \$109,255,000 Water System Revenue Bonds (Taxable), Series 2021B	AA+

Outstanding Debt

(Board of Water Supply) Water System Revenue Bonds	AA+
Water System Revenue Bonds (Taxable)	AA+

Rating Outlook

Positive^a

^aRevised from Stable on Feb. 23, 2021.

Applicable Criteria

U.S. Water and Sewer Rating Criteria (April 2020)

Public Sector, Revenue-Supported Entities Rating Criteria (February 2021)

Related Research

Fitch Rates Honolulu Board of Water Supply, HI Water Revs 'AA+'; Outlook to Positive (February 2021)

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Rating Sensitivities

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

- Peak and sustained leverage in Fitch's base and stress case that approximates or remains below 5.0x as BWS continues to execute its WMP and implementation of rate increases.

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 7.0x.

Credit Profile

BWS provides water service to the entire island of Oahu (city and county of Honolulu) with an estimated residential population of about 980,000. BWS serves approximately 170,700 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 393.5 million gallons per day (mgd) of available water supply on the island, of which 284 mgd is permitted. BWS' authorized use is 182.6mgd, which was more than sufficient to meet system sales of 139.7mgd in fiscal 2020. 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.

BWS, in conjunction with the Water Research Foundation, conducted a vulnerability assessment in 2019 relative to climate change and natural disasters. Using the most probable water demand projections through 2040 from the WMP, BWS determined that groundwater supplies would be available even during periods of drought but may be pressured under a high-demand scenario. Including risks associated with climate change, sustainable yield on Oahu would be sufficient to meet projected low-demand, but could be pressured in other scenarios. Finally, the assessment found that no groundwater wells, treatment facilities and pump stations were located within the sea-level rise exposure areas. However, pipeline exposure to rising sea levels increased from approximately 0.1% at mid-century (1' sea-level rise) to about 1% inundation by the end of the century (3.2' rise).

Coronavirus Considerations

The outbreak of the coronavirus has not had a material impact on BWS' revenue or cost profiles. Overall demand patterns have remained relatively stable, although there has been a shift between usage from commercial/industrial to residential customers. Furthermore, while BWS has discontinued water shutoffs for non-payment through March 2021, customer delinquencies remain low and relatively consistent with levels seen over the past several years. Uncollected accounts as a percentage of total operating revenues also remain less than 1%. Fitch's ratings remain forward-looking in nature. As such, Fitch will continue to monitor developments related to the severity and duration of the virus outbreak and revise expectations for future performance as appropriate.

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. The service area characteristics subfactor is assessed at 'aa' with modest customer growth, high income levels and very low historical unemployment.

Customer growth has been essentially flat, with a five-year average annual compound growth rate of 0.2%. Area income levels are very high and have consistently been around 140% of the national average. Unemployment has also been very low over the past five years at 70% or less the national rate, although unemployment has risen significantly as a result of the coronavirus pandemic and was 8.0% in December 2020, compared with the U.S. rate of 6.5%.

Rating History (IDR)

Rating	Action	Outlook/ Watch	Date
AA+	Affirmed	Positive	2/23/21
AA+	Revised	Stable	4/30/10
AA	Affirmed	Stable	2/8/02
AA	Upgraded	—	5/8/01
A+	Assigned	—	12/7/98

While recognizing the recent weakening, Honolulu's economy has proven its stability over the long term, with 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 fiscal years 2020 through 2023, which is intended to support the capital and financing program based off the CIP stemming from the WMP. Rates increased 2% in each of fiscal years 2020 and 2021, and will increase an additional 4% in each of fiscal years 2022 and 2023.

Currently, monthly user charges equal about \$45, 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 risks 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 operating cost burden has historically remained well below Fitch's threshold of \$6,500 per million gallons (mg) of water production for the 'aa' subfactor and was just \$4,173 per mg in fiscal 2020. Fitch expects the unit production cost to remain low for at least the next several years.

Capital planning and management is assessed at 'a' given the life cycle ratio has been above 45% over the past five fiscal years; for fiscal 2020, the life cycle ratio was 47%. However, capital needs have been supported by an increasing level of spending, rising from just 61% of annual depreciation expense to over 130% in fiscal 2020. BWS expects to boost spending even further over the next five years, which if achieved, could ultimately improve the capital planning and management assessment.

Both capital spending and borrowing are set to increase as a result of BWS' Long Range Financial Plan (LRFP), which reflects priorities included in its 30-year WMP. BWS' fiscal 2021-2025 capital improvement program (CIP) totals \$924 million and focuses on renewal and replacement 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 capital spending to about \$150 million to \$200 million annually from \$80 million in recent years.

The LRFP estimates further increases to approximately \$255 million per year by fiscal 2028 and sustained pipeline replacement investments through fiscal 2047. Over the next five years, management expects to fund approximately \$572 million of the CIP from debt sources (approximately 62% of total sources), including the current issuance, while the balance (\$353 million) is expected to be derived on a pay-go basis (38%).

In January 2014, one of the fuel tanks at the U.S. Navy's Red Hill Bulk Fuel Storage Facility (RHBFSF) leaked an estimated 27,000 gallons of jet fuel into the aquifer that provides roughly 25% of the drinking water to metro Honolulu. To date, no contamination has been detected at any of BWS' drinking water wells, although contamination has occurred at some of the monitoring wells located on Navy property. The U.S. Navy, along with the Department of Defense's logistics agency, entered into an administrative order of consent with state and federal regulators in 2015 to upgrade the fuel tanks and take steps to address the fuel releases, among other items. BWS is working closely with regulators and the Navy to ensure drinking water supplies are protected.

In the event that contamination from the RHBFSF spill was to occur at one of BWS' potable wells, BWS has the capacity to meet customer demand from other supply sources on an interim

basis, although over the long term, remediation of the aquifer would be required. Such operating and capital costs could be significant and might be borne, at least initially, by BWS.

No asymmetric rating factor considerations affect the operating risks assessment.

Financial Profile

The financial profile is assessed at 'aa'. BWS' leverage ratio was a low 0.5x in fiscal 2020, up slightly from the prior year. The liquidity profile, while robust, is neutral to the assessment. For fiscal 2020, the liquidity cushion ratio equaled 305 days of current cash, while coverage of full obligations was 3.6x. The Fitch-calculated total debt service coverage for the same period was also 3.6x.

Fitch Analytical Stress Test (FAST)

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 2%-4% approved rate increases through fiscal 2023 and projected rate increases of 4.5% and 5.0% in fiscal years 2024 and 2025, respectively. Also included are costs related to BWS' \$924 million fiscal 2021-2025 CIP, along with the expected \$571 million in debt funding, including the current issuance. Fitch also assumed \$6 million in annual water system facility charges (WSFCs) in each year, approximating BWS' lowest year collection of WSFCs during fiscal years 2016-2020.

Under the base case, leverage ascends annually through the scenario, reaching 4.6x by fiscal 2025. The stress case demonstrates similar results, with leverage rising to about 5.3x by fiscal 2025. The scenarios support the current rating, although the assessment may be changed to 'aaa' over the next couple of years if expectations for leverage in Fitch's scenario analysis generally remain below 5.0x.

ESG Considerations

Fitch has updated BWS' ESG Relevance Score for Waste & Hazardous Materials Management; Ecological Impacts to '3' from '4' based on ongoing management of risks, particularly at the regulatory level where any permit for operation of RHBFSF is expected to provide increased measures to protect BWS' groundwater supplies from contamination. 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.

Issuer Summary

(\$000, Audited Fiscal Years Ended June 30)	2016	2017	2018	2019	2020
Revenue Defensibility					
% of Total Revenue from Monopolistic Services	100	100	100	100	100
Service Area Characteristics					
Service Area Population	992,268	986,353	979,858	974,563	N.A.
Total Customer Count	169,016	169,393	169,886	170,329	170,694
Five-Year Total Customer Count CAGR (%)	(0.2)	(0.3)	0.3	0.3	0.2
Service Area MHI (\$)	77,161	80,078	82,906	85,857	N.A.
Service Area MHI/US MHI (%)	139	139	138	137	N.A.
Service Area Unemployment Rate (%)	2.8	2.3	2.4	2.6	—
Service Area Unemployment Rate/U.S. Unemployment Rate (%)	57	52	62	70	N.A.
Rate Flexibility					
Total Monthly Bill (7,500 gallons/6,000 gallons)	42.41	42.41	42.41	42.41	43.43
% of Population w/Unaffordable Bill	15	14	14	13	N.A.
Operating Risks					
Operating Cost Burden	—	—	—	—	—
Operating Cost Burden (\$/mg)	3,652	3,764	3,882	4,098	4,173
Capital Planning and Management					
Life Cycle Ratio (%)	46	47	48	48	47
Capex/Depreciation (%)	101	116	101	156	196
Five-Year Avg. Capital Expenditures/Depreciation (%)	61	75	86	108	134
Financial Profile					
Current Unrestricted Cash/Investments	56,807	91,899	73,033	127,770	139,711
Current Restricted Cash/Investments (Available Liquidity)	—	—	—	—	—
Current Cash Available	56,807	91,899	73,033	127,770	139,711
Noncurrent Unrestricted Cash/Investments	260,656	268,759	320,355	283,878	306,912
Noncurrent Restricted Cash/Investments (Available Liquidity)	—	—	—	—	—
Available Cash	317,463	360,658	393,387	411,648	446,623
Current Restricted Cash/Investments (Debt Service or Debt Service Reserve)	14,539	14,083	12,801	19,307	25,589
Noncurrent Restricted Cash/Investments (Debt Service or Debt Service Reserve)	27,300	23,023	22,408	21,149	4,732
Funds Restricted for Debt Service	41,840	37,106	35,209	40,456	30,321
Total Debt	318,145	316,130	300,327	304,888	381,267
Capitalized Fixed Charges	—	—	—	—	—
Adjusted Net Pension Liability	—	148,820	146,954	156,572	148,897
Available Cash	317,463	360,658	393,387	411,648	446,623
Funds Restricted for Debt Service	41,840	37,106	35,209	40,456	30,321
Net Adjusted Debt	(41,157)	67,186	18,685	9,356	53,220
Total Operating Revs	238,696	231,445	232,378	228,662	231,108
Purchased Water/Sewer Services	—	—	—	—	—
Other Operating Expenses	138,131	139,586	150,408	156,733	166,923
EBITDA	100,565	91,860	81,969	71,929	64,185
Investment Income/(Loss)	4,151	4,617	6,097	7,549	7,994
Other Cash Revenues/(Expenses)	307	268	452	384	267
Capital Contributions	12,678	12,526	8,915	6,350	10,329
FADS	117,702	109,271	97,434	86,212	82,776
Fixed Services Expense	—	—	—	—	—

Issuer Summary

(\$000, Audited Fiscal Years Ended June 30)	2016	2017	2018	2019	2020
Net Transfers In/(Out)	–	–	–	–	–
Pension Expense	–	15,437	16,918	17,626	16,642
Adjusted FADS	117,702	124,708	114,351	103,838	99,418
Net Adjusted Debt to Adjusted FADS (x)	(0.4)	0.5	0.2	0.1	0.5
FADS	117,702	109,271	97,434	86,212	82,776
Fixed Services Expense	–	–	–	–	–
Net Transfers In/(Out)	–	–	–	–	–
Adjusted FADS for COFO	117,702	109,271	97,434	86,212	82,776
Total Annual Debt Service (Automatic Calculation)	21,675	22,242	21,850	21,694	22,804
Fixed Services Expense	–	–	–	–	–
Adjusted Debt Service (Inc. Fixed Services Expense)	21,675	22,242	21,850	21,694	22,804
Coverage of Full Obligations (COFO) (x)	5.43	4.91	4.46	3.97	3.63
COFO Exc. Connection Fees (x)	4.85	4.35	4.05	3.68	3.18
Current Days Cash on Hand	150	240	177	298	305
Liquidity Cushion Ratio (Days)	150	240	177	298	305
All-In DSC (x)	5.43	4.91	4.46	3.97	3.63

N.A. – Not available. Note: Fitch may have reclassified certain financial statement items for analytical purposes.
Source: Fitch Ratings, Fitch Solutions, Honolulu Board of Water Supply (HI).

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