



RATING ACTION COMMENTARY

Fitch Rates Massachusetts Water Resources Auth's General Rev, Ser 2023 B & C 'AA+'; Outlook Stable

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Fitch Ratings - Austin - 23 Mar 2023: Fitch Ratings has assigned a 'AA+' rating to the following Massachusetts Water Resources Authority (MWRA, or the authority) bonds:

--Approximately \$150 million general revenue bonds 2023 series B (Green Bonds);

--Approximately \$500 million general revenue refunding bonds 2023 series C (Green Bonds).

The bonds are scheduled to sell via negotiation as early as the week of April 17. Proceeds of the series 2023 B bonds will be used to repay the authority's outstanding 2016 notes and 2015 C Subordinate General Revenue Notes, to make a deposit to the debt service reserve fund and to pay the costs of issuance. Proceeds of the series 2023 C bonds will be used to refund a portion of the authority's outstanding bonds by means of paying the tender price of the refunded bonds and to pay the costs of issuance.

In addition, Fitch has affirmed the following MWRA ratings:

--\$3 billion general revenue bonds at 'AA+';

--\$532 million subordinate general revenue bonds at 'AA';

--Issuer Default Rating (IDR) at 'AA'.

The Rating Outlook is Stable.

RATING ACTIONS

ENTITY / DEBT ↕	RATING ↕		PRIOR ↕
Massachusetts Water Resources Authority (MA)	LT IDR	AA Rating Outlook Stable	AA Rating Outlook Stable
	Affirmed		
Massachusetts Water Resources Authority (MA) /Water & Sewer Revenues (2nd Lien)/1 LT	LT	AA Rating Outlook Stable	Affirmed
			AA Rating Outlook Stable
Massachusetts Water Resources Authority (MA) /Water & Sewer Revenues/1 LT	LT	AA+ Rating Outlook Stable	Affirmed
			AA+ Rating Outlook Stable

[VIEW ADDITIONAL RATING DETAILS](#)

ANALYTICAL CONCLUSION

The 'AA' IDR, and the 'AA+' and 'AA' ratings on the senior lien and subordinate lien bonds, respectively, reflect the authority's very strong purchaser credit quality, supported by its independent rate-raising ability and unlimited ability to reallocate costs. The authority and its purchasers benefit from very favorable demographics within the primary service area of the Massachusetts Commonwealth.

The operating risk profile of the authority is very strong given a very low operating cost burden and a very low life cycle ratio. The authority's leverage, measured as net adjusted debt to adjusted funds available for debt service (FADS), has declined yoy for the past five years, registering 8.2x in fiscal 2022 (FYE June 30), down from 9.0x the year prior. Capital spending has transitioned from costly court-mandated projects to ongoing rehabilitation, water pipeline replacement and water system redundancy and generally declined over the last several decades.

However, the next five-year block of proposed capital spending (2024-2028) is expected to exceed \$1.3 billion in projects. Nevertheless, Fitch expects leverage to continue trending down towards 7.0x by 2026 supported by consistent FADS growth and declining debt, due to strategic defeasance and amortization that generally outpaces debt issuances.

Fitch makes a one-notch distinction between the senior and subordinate lien obligations given that the difference in the financial profile between the two liens is considered meaningful and acceleration in the general bond resolution is reserved for senior lien bondholders; subordinate bondholders are precluded from direct remedies until such time as there are no senior bondholders.

CREDIT PROFILE

MWRA provides wholesale water and wastewater services to communities located primarily in eastern Massachusetts. About 3 million people (or 44% of the population of the commonwealth) reside in the authority's service area. The largest of these is the city of Boston, through the Boston Water and Sewer Commission (BWSC; revenue bonds AA+/Stable), which contributes approximately 30% of MWRA's revenue derived from rates and charges. The service area generally is economically diverse, and wealth levels tend to be above the national average.

The authority's ample water supply is drawn primarily from the Quabbin and Wachusett reservoirs and the Ware River. Under present operating rules, the authority's water sources can supply a safe yield of approximately 300 million gallons daily (mgd), which has not been exceeded since 1989. Demand continues to decline due to improvements in water efficiency and increased conservation efforts, making current supply more than sufficient to meet demand through at least 2060. The system operates two relatively new water treatment plants with a combined treatment capacity of 428 mgd, which is more than sufficient capacity to meet the average demand of less than 200 mgd.

Retail customers of the authority collect and convey wastewater to MWRA, which provides transport and treatment at its two wastewater treatment facilities for combined average daily flow treatment capacity of 365 mgd. Average daily flows for the past five years register just over 300 mgd.

KEY RATING DRIVERS

Revenue Defensibility 'aa'

Very Strong Purchasers and Very Strong Revenue Defensibility

Very strong purchaser credit quality is evidenced by a Purchaser Credit Index (PCI) of 1. Revenues are derived from wholesale agreements that provide for full cost recovery. The authority retains independent legal ability to raise assessments without external approval.

Operating Risks 'aa'

Very Low Operating Cost Burden

The authority's operating cost burden is very low. Capital costs are focused on system renewal and water system redundancy and are no longer focused on court-mandated projects.

Financial Profile 'aa'

Very Strong Financial Profile

The authority's financial profile is very strong, characterized by declining leverage and ample reserves. The authority's strategic refinancing and defeasance program contribute to the continuous decline in leverage despite ongoing debt financing of capex.

Asymmetric Additive Risk Considerations

No asymmetric additive risk considerations affected this rating determination.

RATING SENSITIVITIES

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

--Continued favorable trend of leverage that more closely approximates 6.0x on a sustained basis within Fitch's base and stress case scenario analysis.

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

--Failure or interruption of the continued expected downward trend in leverage to below 9.0x over the next few years within Fitch's base and stress case scenario analysis;

--Deterioration of the credit quality of the authority's largest purchasers could pressure the revenue defensibility assessment;

--The senior lien rating could converge at the subordinate lien level if there is a significant erosion of the financial cushion afforded to senior bondholders that results in a lack of meaningful difference in the probability of payment default between the two liens.

Best/Worst Case Rating Scenario

International scale credit ratings of Sovereigns, Public Finance and Infrastructure issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit <https://www.fitchratings.com/site/re/10111579>.

SECURITY

The parity general revenue bonds are payable from a first lien on net revenues of the authority, derived largely from wholesale rates and charges assessed on local units of government. The subordinate lien bonds are payable from a second lien on net authority revenues, subordinate only to the authority's lien securing its senior lien obligations.

Revenue Defensibility

Revenue defensibility is very strong at 'aa', supported by the authority's independent rate-setting authority and ability to reallocate costs among purchasing entities to provide for full cost recovery. The assessment is also supported by the very strong purchaser credit quality, represented by a PCI of 1. The largest purchasing member communities include BWSC, Newton, Quincy and Cambridge, which make up more than 40% of authority revenues.

Authority revenues are derived from an assessment on the 61 local communities included within the service area, which are required to pay for MWRA services as a general obligation. Furthermore, rate-setting is not subject to any limitations, including the state's Proposition 2 1/2. These protections, coupled with the authority's ability (pursuant to its enabling act) to utilize a local aid intercept to recover amounts unpaid by one of its member communities (excluding revenues of BWSC and other special-purpose local bodies), provide significant revenue protection.

The authority adopted a 2.85% rate adjustment for fiscal 2023, generally on par with the 2.95% adopted in fiscal 2022. Planned rate adjustments are expected to range from 3.0% to 3.4% from 2024 through 2028. However, MWRA's long-term rate forecasts continue to trend below prior estimates. Combined rates originally were projected to climb by as much as 5.2% annually by 2021 but are now estimated to increase by no more than 3.4% annually through fiscal 2026. Actual rate adjustments may be less, as MWRA prudently applies surplus revenues to level off near-term escalations in debt service costs.

Operating Risks

Operating risk is assessed as very strong at 'aa', supported by a very low operating cost burden in conjunction with moderate investment needs that are supported by adequate capital investment. The operating cost burden is very low, averaging about \$2,700 per million gallons (mg) for the past five years. Operating costs are expected to increase based on inflationary costs and generally stable demand but should continue supporting the assessment for the foreseeable future.

Since 2003, the MWRA's board has adopted five-year spending caps for capital spending. A proposed 2024 five-year spending cap totals about \$1.3 billion and includes \$141 million for a redundancy tunnel -- the Metro Tunnel Project. The authority is in the early planning stages of the Metro Tunnel project, with total costs currently estimated at \$1.8 billion with the bulk of the spending for the project (\$1.1 billion) starting around fiscal 2034; as such, the upcoming 2024 five-year spending cap does not represent the peak planned spending on the project.

The fiscal 2019-2023 cap of \$984.8 million is up from the prior fiscal 2014-2018 cap of \$791 million. Despite the uptick in expected spending with the proposed 2024 spending cap, Fitch believes future capital costs will remain manageable given MWRA's vigilant project oversight and its board's self-imposed spending cap for capital projects.

MWRA maintains a 40-year master plan for the system that is updated every five years. The plan was last updated in fiscal 2018 and totaled \$5.75 billion, which includes \$2.58 billion for water projects and \$3.17 billion for sewer projects. About 69% of the water projects are focused on water redundancy, with remaining projects related to ongoing asset protection and rehabilitation; over 90% of wastewater projects are related to ongoing asset protection and rehabilitation.

Funding for capital needs will continue to come almost entirely from long-term borrowings, including revenue bonds, state revolving fund loans and commercial paper notes. The authority's capital improvement plan remains sizable but is significantly below historical spending levels, which were driven by the cleanup of Boston Harbor in the 1990s and the completion of the majority of the combined sewer overflow (CSO) control plan in recent years.

With all court-mandated CSO projects substantially completed in 2015, the five-year average capex has reflected a slowdown in capital investment, with the five-year capex/depreciation averaging just 71%. This has resulted in an increase in the life cycle ratio to 46% as of fiscal 2022.

Financial Profile

The financial profile is very strong, assessed at 'aa'. The authority's leverage continues its downward trend to 8.2x for fiscal 2022, down from 10.4x in fiscal 2017. The authority's continuous declining leverage is supported by the strategic defeasance of outstanding debt obligations from budget surplus and refinancing opportunities. Since fiscal 2006 the authority has defeased over \$780 million in debt service.

The liquidity profile is considered neutral to the assessment. The authority's coverage of full obligations (COFO) was just under 1.0x for fiscals 2018-2020, but concerns are mitigated given the favorable liquidity cushion of 211 days for fiscal 2022; COFO for fiscal 2022 registered at 1.2x.

Fitch notes the meaningful difference between Fitch-calculated debt service coverage (DSC) on the senior lien compared to the all-in DSC as support for the one-notch differential between the senior and subordinate liens. Historical Fitch-calculated DSC on senior lien obligations has averaged 2.0x since 2018, while all-in DSC has been generally sum-sufficient. The Fitch-calculated all-in DSC includes subordinate public debt and privately placed state revolving fund loans. Further supporting the meaningful difference in

financial profile is that the authority's senior lien debt accounts for about 60% of its total debt outstanding.

Management forecasts point to continued stable financial margins based on the authority's conservative budgeting practices. DSC is expected to remain near historical norms and generate surpluses that the authority expects to use to defease future debt maturities. MWRA's positive variances are driven by conservative budgeting estimates (particularly with regard to variable interest rate costs) and tight expenditure controls.

Fitch Analytical Stress Test (FAST)

The FAST considers the potential trend of key ratios in a base case and a stress case, with the stress case designed to impose capital costs 10% above expected levels and evaluate potential variability in projected key ratios. Fitch's base case was informed by the authority's fiscal 2023 current expense budget (CEB) and proposed fiscal 2024 CEB, management's expected capital spending, and expected capital funding sources: about 10% pay-go funding and planned debt financing, which include recent draws on state revolving loans. Fitch made reasonable assumptions regarding revenue growth from fiscal 2025 to 2027 based on anticipated rate adjustments. Expense growth was assumed to align with revenue growth.

Leverage in the FAST base case declines yoy, falling to 7.5x by fiscal 2025, with the stress case reflecting a similar trend declining to 7.6x over the same period. Fitch expects leverage to continue this downward trend past the fiscal 2026 forward look based on the expectation that annual capital spending does not increase materially. The liquidity profile is expected to remain neutral to the assessment with COFO of at least 1.1x and sounds days cash annually.

Sources of Information

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG Considerations

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APPLICABLE CRITERIA

[Public Sector, Revenue-Supported Entities Rating Criteria \(pub. 01 Sep 2021\) \(including rating assumption sensitivity\)](#)

[U.S. Water and Sewer Rating Criteria \(pub. 03 Mar 2023\) \(including rating assumption sensitivity\)](#)

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