FitchRatings

Massachusetts Water Resources Authority

Public Finance
Water & Sewer
United States

Ratings

Long-Term IDR and Subordinate Lien	AA
General Resolution - Senior Lien	AA+

Outlooks

Long-Term IDR and Subordinate Lien	Positive
General Resolution – Senior Lien	Stable

New Issues

$184,338,000 Multi-Modal Subordinate General Revenue Refunding Bonds, Series 2025C, D, E and F	AA

Sale Date

Week of Oct. 20 via negotiated sale

Outstanding Debt

Issuer Ratings Information

Applicable Criteria

U.S. Public Sector, Revenue-Supported Entities Rating Criteria (January 2025)

U.S. Water and Sewer Rating Criteria (February 2025)

Related Research

Fitch Revises MWRA's IDR and Sub Revs Outlook to Positive; Rates Sub Gen Revs 2025 C-F 'AA' (October 2025)

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The Positive Outlook on the subordinate general revenue bond rating and Issuer Default Rating (IDR) reflects Fitch Ratings' expectation that leverage, measured as net adjusted debt to adjusted funds available for debt service (FADS), will continue to improve and decline below 6.0x over the next few years, even as capex increases to support wastewater upgrades, water pipeline replacement and water redundancy projects.

The difference in the financial cushion between the senior lien and subordinate lien bonds has been narrowing, with the total amount of subordinate lien debt decreasing to about 25% of total debt outstanding from 40% just a few years ago. If leverage improves to below 6.0x on a sustained basis and the financial profiles of the senior and subordinate lien debt no longer reflect a material difference, ratings for the two liens would likely converge at the higher rating level.

Massachusetts Water Resources Authority's (MWRA) 'AA+' general revenue bond rating, and 'AA' subordinate general revenue bond rating and IDR reflect its 'Very Strong' financial profile within the framework of 'Very Strong' revenue defensibility and a 'Very Strong' operating risk profile, both assessed at 'aa'. The authority's leverage was very low at 6.8x in fiscal 2024 (ended June 30) and is projected to decline modestly, to about 5.7x over the five-year horizon in Fitch's Analytical Stress Test (FAST) rating case, supporting the IDR's Positive Outlook.

Capital spending is increasing as the authority focuses on water pipeline replacement and water system redundancy. The 2024-2028 five-year capital spending plan has risen to $1.9 billion from the 2019-2023 plan of $1.1 billion. Every five years, the authority allocates a total amount to spend over a five-year period, further detailed below. Despite the higher spending, Fitch expects leverage to gradually decline, supported by consistent FADS growth and strategic debt defeasance with amortization that has typically outpaced debt issuance.

Fitch currently makes a one-notch distinction between the senior and subordinate lien obligations, but the financial profile between the two liens is narrowing. The Outlook on the senior lien is Stable since any positive rating action on the authority's IDR and subordinate lien debt would not be expected to affect the current senior lien rating.

Security

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

Key Rating Drivers

Revenue Defensibility - 'aa'

Very Strong Purchaser Credit Quality (PCQ) and Revenue Source Characteristics

Revenue defensibility is supported by purchasers' very strong credit quality. The PCQ assessment considers the credit quality of Boston Water and Sewerage Commission (BWSC; IDR: AA+/Stable), and the cities of Newton, Cambridge and Quincy, as they account for over 40% of the authority's aggregate rates and charges. The authority provides service in whole or in part to 64 communities, or approximately 44% of the total population of the commonwealth.

The authority has contractual provisions allowing for full cost recovery and the unlimited reallocation of costs across users. The authority also retains independent legal ability to raise rates without external approval. The authority plans additional annual rate revenue adjustments of 3.1% or less through fiscal 2031.

Operating Risk - 'aa'

Very Low Operating Cost Burden, Elevated Investment Needs Supported by Adequate Capital Investment

In fiscal 2024, the system's operating cost burden was very low at $3,076 per million gallons (mg), consistent with the operating risk assessment. The life cycle ratio was elevated at 49% in fiscal 2024. Capex to depreciation is weaker, despite improving to a five-year average of 73% over fiscal 2020 to fiscal 2024. Planned capital spending for the next five years should generally outpace historical depreciation, resulting in a stable to improving life cycle ratio.

Since 2003, the authority has established a five-year spending cap (the cap) for capex to create a not-to-exceed amount of spending over the five-year period. The current cap totals over $1.9 billion and runs from 2024 to 2028. This is a substantial increase from the previous cap of $1.1 billion for 2019-2023. The authority continues to expect the majority of the cap will be debt financed with 5% in pay-as-you-go capex. The authority typically executes at less than 100% of the cap and, for budgeting purposes, assumes a 75% execution rate based on historical actual execution levels.

Financial Profile - 'aa'

Leverage to Decrease; Neutral Liquidity

The authority had very low leverage of 6.8x as of fiscal 2024, continuing the yoy decline from 9.0x in fiscal 2020. The improvement is a result of continued debt defeasance, with the authority maturing more debt than it typically issues each year. The liquidity profile is neutral to the overall assessment with current days cash on hand of 222 and coverage of full obligations (COFO) of 1.1x. Fitch-calculated total debt service coverage for fiscal 2024 was 1.1x and senior lien coverage was 1.8x, down from 2.3x in fiscal 2020, reflecting the increasing senior lien debt outstanding.

The FAST considers the potential trend of key ratios in a base case and stress scenario over a five-year period. The stress scenario is designed to impose capital costs 10% above expected base case levels and evaluate potential variability in projected key ratios. The FAST reflects Fitch's view of a reasonable scenario, which is generally informed by publicly available and/or management-provided information with respect to capex, user charges and rate of revenue and expenditure growth. The FAST includes the authority's actual 2025 capital spending and the remaining annual spending under the cap, taking into consideration the lower execution rate.

In the base case scenario, the leverage ratio is projected to continue its favorable yoy decline, with leverage of 5.4x by fiscal 2029. In the stress scenario, which is considered the rating case, the leverage is expected to follow a similar downward trend and fall to 5.7x by fiscal 2029, supporting the IDR's Positive Outlook. The liquidity profile is expected to remain neutral to the assessment over the five-year horizon.

Asymmetric Additional Risk Considerations

No asymmetric additive risk considerations affected this rating determination.

Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- A reversal of the current leverage trend, with leverage more closely approximating 8.0x, could result in a revision of the Outlook to Stable.
- Leverage sustained above 9.0x in Fitch's rating case scenario analysis.
- Deterioration of the credit quality of the authority's largest purchasers that pressures the revenue defensibility assessment.

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 rating case scenario analysis, in conjunction with the planned increase in capital spending.

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 community within the service area is the city of Boston, which is served through the BWSC. BWSC contributes approximately 30% of MWRA's revenue derived from rates and charges. The city of Boston 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 Wachusetts 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 authority 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.

The authority's retail customers 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 registered just over 300 mgd.

MWRA Response to Updated U.S. Environmental Protection Agency (EPA) Regulations

The authority is addressing new regulations set forth by the U.S. EPA. The EPA's enhanced focus on lead and copper lines and per-and-polyfluoroalkyl substance (PFAS) contaminants has led to the finalized Lead and Copper Rule Improvements (LCRI), along with specific testing requirements for PFAS. However, recent announcements by the EPA suggest the testing and treatment requirements for PFAS could change.

MWRA is addressing the LCRI, ensuring compliance through lead testing and adhering to copper standards. MWRA has also initiated a review of corrosion control practices. In districts with high lead levels, local bodies are required to undertake educational programs and replace lead service lines. The authority has a local assistance program that provides interest free loans and grants to replace lead service lines for eligible communities. Regarding PFAS, based on current and historical sampling results, the authority has tested for all regulated compounds. MWRA supplies are either non-detectable or at trace levels too low to be quantified.

Revenue Defensibility

Revenue Source Characteristics

Revenue source characteristics are very strong, reflecting the authority's independent rate-setting authority and ability to reallocate costs among purchasing entities to provide for full cost recovery.

Authority revenues are derived from an assessment on the 64 local communities included within its service area; assessments for MWRA services are a general obligation of each community. 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.

Rate Flexibility

The authority adopted a 2.5% rate adjustment for fiscal 2025, in line with the 2.4% and 2.8% adjustments adopted in fiscal years 2024 and 2023, respectively. The adopted assessment increase for fiscal 2026 was 2.7% and planned rate adjustments are expected to range from 3.0% to 3.1% through fiscal 2031. Although the planned adjustments are slightly higher than historical increases, MWRA’s long-term rate forecasts continue to trend below prior estimates. Actual rate adjustments may be less, as MWRA applies surplus revenues to level off near-term escalations in debt service costs.

Purchaser Credit Quality

The revenue defensibility assessment also considers the very strong PCQ, represented by a Purchaser Credit Index score of 1.1. The largest purchasing member communities include BWSC, Newton, Quincy and Cambridge, which together make up more than 40% of authority revenues. Fitch assesses the credit quality of BWSC, Newton and Cambridge as very strong, while Quincy is considered strong.

Boston Water and Sewer Commission

BWSC, which is expected to account for about 30% of the authority's fiscal 2026 rates and charges, buys water from the authority and uses its system to transport wastewater. Governance of BWSC is provided by a separate, independent board of commissioners appointed by the city's mayor. BWSC provides water distribution and sewer collection service to the residents of the city of Boston, providing essential services to a diverse and stable customer base.

In fiscal 2023, BWSC served a population of approximately 692,000 residents and about 90,000 accounts. It recently added a stormwater charge, increasing accounts by 8,000. No revenue or usage concentration exists among BWSC's customer base, the vast majority of which is residential. BWSC self-funds through user fees and charges, which are set independently and must cover operational costs, debt service, reserves, repairs and legal obligations. BWSC has secured its revenues against its outstanding bonds and prioritizes bond debt service and operational expenses over the authority's charges. Authority assessments for water and wastewater services are a significant portion of BWSC's expenses and are anticipated to be about 55% in 2024.

Asymmetric Factor Considerations

No asymmetric rating factor considerations affect the revenue defensibility assessment.

Operating Risk

Operating Cost Burden

The authority's operating cost burden is very low, averaging about $2,800 per mg for the past five years. Operating costs are expected to increase based on inflationary costs, and generally stable demand should continue supporting the assessment for the foreseeable future. The metric can vary according to the weather but remains favorable for the assessment.

Capital Planning and Management

Started in 2003, the authority established the cap to create an amount not-to-exceed over a five-year period. The fifth and most recent capital improvement plan (CIP) cap adopted runs from 2024 to 2028 and totals about $2 billion. Wastewater system improvements account for the majority of spending in the cap at 60%; 35% is related to waterworks system improvements and 5% is for business and operation support. Projects are focused on asset protection ($1.2 billion) and improving the authority's water redundancy ($365.8 million).

The life cycle ratio has trended up and now registers 49%. However, planned increases to capital spending in the coming years are expected to result in average annual spending of $325 million, which could reverse the trend. The authority routinely has an outside party assess its capital assets, and a recent report, from October 2023, states that assets are in good condition and finds that levels of investment under the current spending cap are appropriate to maintain assets in good operating order.

The 2024-2028 CIP includes $166.2 million to cover the initial costs of a redundancy tunnel, which is in the early planning stages. Total costs of the Metro Tunnel Project are currently estimated at $2.1 billion, with the bulk of the spending ($1.1 billion) starting around fiscal 2034; as such, the current five-year spending cap does not represent peak planned spending on the project.

The 2024-2028 cap continues a trend of increased capital investment. Past caps totaled $1.1 billion (2019-2023) and $791 million (2014-2018). Despite the uptick in expected spending with the current spending cap, Fitch believes future capital costs will remain manageable, given MWRA's project oversight and its board's self-imposed spending cap for capital projects.

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 last capital-intensive periods addressed the cleanup of Boston Harbor in the 1990s and, more recently, completion of projects to reduce combined sewer overflows.

Asymmetric Factor Considerations

No asymmetric rating factor considerations affect the operating risk assessment.

Financial Profile and FAST Analysis

The financial profile is very strong and reflects the authority's continued downward leverage trend, to 6.8x for fiscal 2024 from 9.0x in fiscal 2020. 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 bonds with a total of $938.1 million in debt service. The liquidity profile is considered neutral to the assessment. The authority's COFO for fiscal 2024 registered at 1.1x. The liquidity cushion regularly measures close to 200 days, averaging 208 days over the past five years.

FAST Analysis

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 2025 current expense budget. It also assumes about 5% pay-as-you-go funding for the CIP and the authority's planned debt financing, including draws on state revolving loans. Revenue growth from 2026 to 2029 is assumed at the five-year CAGR of 2.4% and expense growth was assumed at the five-year CAGR of 2.7%. Capital spending represents actual 2025 capex and fiscal years 2026 to 2029 represent planned capital spending at a 75% execution rate. Debt assumed in the FAST was also adjusted to a 75% execution rate.

Leverage in the FAST base case declines yoy to 5.4x by fiscal 2029. The stress case reflects a similar trend, with leverage declining to 5.6x over the same period. Realization of leverage below 6.0x could support a higher rating and drives the IDR's Positive Outlook. The liquidity profile is expected to remain neutral to the assessment, with annual COFO of at least 1.3x and sound days cash on hand.

Asymmetric Additive Risk Considerations

No asymmetric additive risk considerations affected this rating determination.

ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' 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. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

Additional information is available on www.fitchratings.com.

Financial Summary

(Audited Fiscal Years Ended June 30)	2020	2021	2022	2023	2024
Operating Risk					
Operating Cost Burden					
Operating Cost Burden ($/mg)	2,865	2,790	2,648	2,731	3,076
Capital Planning and Management					
Life Cycle Ratio (%)	44	45	46	48	49
Annual Capex/Depreciation (%)	72	71	65	72	87
5-Year Average Capex/Depreciation (%)	65	70	71	70	73
Financial Profile ($000, Unless Otherwise Indicated)					
Current Unrestricted Cash/Investments	70,858	74,674	77,457	84,334	89,597
Current Restricted Cash/Invest (Available Liquidity)	83,811	94,007	85,531	91,048	122,597
Current Cash Available	154,669	168,681	162,988	175,382	212,194
Noncurrent Unrestricted Cash/Investments	—	—	—	—	—
Noncurrent Restricted Cash/Investments (Available Liquidity)	75,067	72,104	71,393	65,752	67,241
Available Cash	229,736	240,785	234,381	241,134	279,435
Current Restricted Cash/Investments (Debt Service or Debt Service Reserve)	—	—	—	—	—
Noncurrent Restricted Cash/Investments (Debt Service or Debt Service Reserve)	505,505	502,977	513,420	529,721	588,246
Funds Restricted for Debt Service	505,505	502,977	513,420	529,721	588,246
Total Debt	5,235,335	5,137,471	4,851,088	4,664,653	4,527,193
Capitalized Fixed Charges	—	—	—	—	—
Adjusted Net Pension Liability	162,244	141,477	100,140	235,106	222,473
Available Cash	229,736	240,785	234,381	241,134	279,435
Funds Restricted for Debt Service	505,505	502,977	513,420	529,721	588,246
Net Adjusted Debt	4,662,338	4,535,186	4,203,427	4,128,904	3,881,985
Total Operating Revenues	778,326	786,119	811,854	836,955	851,718
Purchased Water/Sewer Services	—	—	—	—	—
Other Operating Expenses	293,627	291,370	281,292	312,971	348,258
EBITDA	484,699	494,749	530,562	523,984	503,460
Investment Income/(Loss)	17,645	-2,658	-22,743	19,313	39,002
Non-Operating Revenues from Taxes	—	—	—	—	—
Other Cash Revenues/(Expenses)	—	—	—	—	—
BAB Subsidy	—	—	—	—	—
Capital Contributions	—	—	—	—	—
Funds Available for Debt Service	502,344	492,091	507,819	543,297	542,462
Fixed Services Expense	—	—	—	—	—
Net Transfers In/(Out)	—	—	—	—	—
Pension Expense	15,347	12,437	6,700	33,781	25,010
Adjusted Funds Available for Debt Service	517,691	504,528	514,519	577,078	567,472
Net Adjusted Debt/Adjusted Funds Available for Debt Service (x)	**9.0**	**9.0**	**8.2**	**7.2**	**6.8**
Funds Available for Debt Service	502,344	492,091	507,819	543,297	542,462
Fixed Services Expense	—	—	—	—	—

Financial Summary

(Audited Fiscal Years Ended June 30)	2020	2021	2022	2023	2024
Net Transfers In/(Out)	—	—	—	—	—
Adjusted FADS for Coverage of Full Obligations	502,344	492,091	507,819	543,297	542,462
Total Annual Debt Service	507,781	433,974	414,459	454,903	487,191
Fixed Services Expense	—	—	—	—	—
Adjusted Debt Service (Includes Fixed Services Expense)	507,781	433,974	414,459	454,903	487,191
Coverage of Full Obligations (x)	0.99	1.13	1.23	1.19	1.11
Coverage of Full Obligations Excluding Connection Fees (x)	0.99	1.13	1.23	1.19	1.11
Current Days Cash on Hand	192	211	211	205	222
Liquidity Cushion Ratio (Days)	192	211	211	205	222
All-In Debt Service Coverage (x)	0.99	1.13	1.23	1.19	1.11

Notes: Fitch may have reclassified certain financial statement items for analytical purposes.
Source: Fitch Ratings, Fitch Solutions, Massachusetts Water Resources Authority

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.