

RatingsDirect®

Summary:

Massachusetts Water Resources Authority; Joint Criteria; Water/Sewer

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Credit Profile

US\$107.33 mil gen rev bnds ser 2018B dtd 05/17/2018 due 08/01/2043		
<i>Long Term Rating</i>	AA+/Stable	New
US\$21.92 mil gen rev bnds ser 2018 C dtd 05/17/2018 due 08/01/2026		
<i>Long Term Rating</i>	AA+/Stable	New
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008 ser A-3 dtd 05/29/2008 rmkted. dtd 05/09/2011 due 08/01/2037		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Massachusetts Wtr Resources Auth gen rev bnds		
<i>Long Term Rating</i>	AA+/Stable	Affirmed

Rationale

S&P Global Ratings has assigned its 'AA+' rating to the Massachusetts Water Resources Authority's (MWRA) series 2018B general revenue bonds and 2018C general revenue refunding bonds, which will be designated as green bonds. We have also affirmed various ratings on numerous series of general revenue and refunding bonds issued by the authority, including our:

- 'AA+' long-term rating and underlying rating (SPUR) on various series of MWRA's senior-lien debt;
- 'AA' long-term rating and SPUR on various series of MWRA's subordinate-lien debt;
- 'AAA' long-term rating on various series of subordinate-lien debt jointly secured by the MWRA and a letter of credit provider; and
- 'A-1+', and 'A-1' short-term ratings on various series of subordinate-lien debt where the ratings are based on the short-term rating on the counterparty providing liquidity support.

The outlook is stable.

The MWRA also has outstanding direct-purchase bonds issued in 2012, 2014, and 2018 with counterparties including Citibank N.A. (series 2012E), Wells Fargo Municipal Capital Strategies LLC (series 2012G), Bank of America Preferred Funding Corp. (series 2014A and B), and TD Bank N.A. (2018A). It is our understanding that MWRA's series 2018D bonds, which will retire the 2012F bonds, will be directly placed with U.S. Bank N.A. We have affirmed our 'AA' ratings on the 2012 and 2014 direct-purchase bonds, except for the series 2012G, which we do not rate. The security on all of the MWRA's direct-purchase bonds is a subordinate-lien net revenue pledge. We would expect to remove the rating on the 2012F bonds after the 2018D transaction closes.

While we do not consider the existence of the direct-purchase bonds as introducing additional contingent liquidity risk at this time, our view on several provisions of these agreements is as follows:

- If an unsuccessful remarketing occurs, there is a term-out period (either three or five years, again depending on the agreement) for any unremarketed bonds still outstanding. The term-out period starts at least six months after the date of any unsuccessful remarketing, which, in our view, provides an adequate period to achieve market access and refund the unremarketed bonds, if the authority believes it financially necessary to do this to avoid large debt service cost increases.
- A mandatory tender provision exists in all the supplemental indentures for any bonds outstanding on the agreement expiration date. It is our understanding that the timing of these agreement expirations is part of MWRA's larger variable-rate and counterparty management strategy. Management has ongoing experience in renewing and extending liquidity and credit agreements, and expiring credit, liquidity, or direct-purchase agreements at any one time represents no more than 30% (in 2018) of the notional value of MWRA's total variable-rate portfolio in any given year. We expect the authority to continue managing the expiration of its various liquidity, credit, and direct-purchase agreements to avoid liquidity calls due to agreement expiration, as it has in the past.
- Occurrence of various events of default could lead to acceleration of direct-purchase bonds. While a payment default on the related refunding bonds, parity bonds, or other MWRA debt could cause an immediate or seven-day acceleration under all the purchase agreements, we view this acceleration risk as credit risk already incorporated into our long-term credit rating. However, acceleration caused by a covenant default (which includes various reporting and other requirements pursuant to the purchase agreements or related transaction documents), only occurs after an uncured period of 180 days. We believe that if acceleration occurs due to a covenant default, this 180-day period would be adequate for the MWRA to achieve market access and refund the bonds subject to acceleration, or achieve some other resolution to avoid acceleration.
- If the rating on MWRA's 2012E bonds falls below 'A-', the Citibank agreement allows for immediate acceleration, while the other agreements allow for a 180-day cure period. Since the rating on these bonds is more than two notches above the rating trigger, we do not consider the debt an immediate contingent liability under our contingent liability criteria.

The outlook on the bonds is stable, except for when joint criteria has been applied to the issue's long-term rating, in which case the outlook is not meaningful.

The ratings reflect our opinion of the authority's:

- Large and diverse service base that serves the Boston metropolitan statistical area (MSA);
- Rate-setting autonomy combined with a historical 100% collection rate, rates and charges considered general obligations (GOs) of the served communities, and a state aid intercept mechanism;
- Revenue stream that largely depends on the Boston Water and Sewer Commission (revenue bonds rated 'AA+/Stable'), which adds fiscal stability;
- Generally good financial performance when considering unrestricted liquidity and coverage of total debt service costs with annual net operating revenues;
- Low-risk swap portfolio given the counterparty diversification and the wide gap between the rating on MWRA's bonds and the 'BBB+' trigger that would cause an additional credit event;

- Manageable capital improvement program (CIP) given the size of the system; and
- Adequate bond provisions following modifications to the general bond resolution, including a senior-lien debt service coverage ratio of 1.2x.

MWRA also has a \$100 million revolving credit agreement with Bank of America N.A. that management has indicated it uses as a commercial paper program. We mention this agreement separately from the authority's other direct-purchase agreements because of the existence of several events of default provisions that we view as permissive. These include various material adverse clauses, no cure periods for covenant defaults, and cross-default provisions. An additional event of default is a downgrade below 'A-' or equivalent. If any of these events are triggered, there could be significant, downward pressure on the rating if MWRA does not maintain its market access to make full and timely payment on any accelerated amounts due under this agreement. The existence of these provisions is not currently having an effect on the rating since we view the likelihood of these nonpayment events of default occurring to be equal to the likelihood of a two-notch downgrade, which would still not result in a rating below the rating trigger on this agreement.

A senior-lien net revenue pledge secures the senior-lien bonds and a subordinate-lien net revenue pledge secures the subordinate-lien bonds. The authority pledges all revenues--defined as all income, revenues, receipts, and other funds derived by the authority from its ownership and operation of the systems, combined with any existing rights to receive the same in the future, other than certain grant receipts and other funds--as security for the bonds. A debt service reserve requirement for senior bonds is 50% of maximum annual debt service (MADS). A covenant to set rates such that net revenues are at least equal to 1.2x annual senior-lien debt service and subordinate-lien bonds equal to 1.1x.

The MWRA is a regional, wholesale water and sewer services provider for about 45% of Massachusetts' population (about 3 million), including Boston and its MSA. The authority has statutory authority to serve 61 communities. The Boston Water and Sewer Commission comprises about 30% of the authority's overall rates and charges revenue, which, in our view, lends stability to the rating on MWRA bonds, given the 'AA+/Stable' rating on the commission's bonds.

The MWRA's operations are primarily funded with rates and charges received from communities within the service area. These are assessed to the local governments annually and payable in 10 equal monthly installments to the MWRA (excluding January and July). Assessments are essentially based on proportional flow or use and can be changed as needed through board approval. Assessments are a GO of each local body and are also subject to a state aid intercept mechanism (for those communities that receive local aid). Since 2010, combined water and sewer rates have risen from 1% to 4% annually, and management projects that annual rate increases through 2023 will be no more than 3.9%. Management reports that average water and sewer utility bills for a household using 7,500 gallons per month are currently about \$130.

Financial operations have remained at least adequate, in our view. At the end of fiscal 2017 (June 30), net revenues provided strong 1.7x coverage on the senior-lien bonds. When including subordinate-lien and other fixed-charge obligations (which includes capital leases and obligations paid to the Massachusetts Clean Water Trust), net revenues still provided 1.1x coverage, which we consider good. Net revenues have been calculated to include rates, charges, and interest earnings, but exclude transfers in from the rate stabilization fund. In addition, net revenues have been

increased by noncash other postemployment benefit expenses and subordinated commonwealth payments. At fiscal year-end 2017, the authority's unrestricted current cash and investments were \$101 million, or a strong 131 days' operating expenses.

These levels of coverage and unrestricted cash have been consistent with previous years, and management has indicated that, over the next several years, these financial metrics will not deviate significantly from the historical trends.

Other reserves include \$37 million in a rate stabilization fund and \$26 million in a bond redemption fund at June 30, 2017. Management projects to draw from both the bond redemption fund as it defeases additional debt, and the rate stabilization fund for general rate stabilization, through 2028.

Debt service is the largest component of the budget, accounting for about 60% of audited operating and debt service expenses; while these figures are elevated, in our opinion, wholesale systems tend to have relatively high debt levels compared to retail systems and present less of a credit concern to us. For the variable-rate portion of its portfolio, the MWRA currently budgets for a 3.25% average interest cost, which is well above the actual rate of about 1.4%, as indicated by management.

Unhedged variable-rate debt represents 9% of the authority's portfolio (or \$442 million). Another 8% is hedged through various swap agreements. The total notional value of the swaps is \$389 million; their fair value is negative \$88 million (with respect to the MWRA) as of March 16, 2018, and all swaps are floating-to-fixed. Counterparties include Barclays Bank PLC; Wells Fargo Bank N.A.; Citigroup Financial Products, with a credit support guarantee from Citigroup Inc.; and Morgan Stanley Capital Services, with a credit support guarantee from Morgan Stanley. All documents list a 'BBB+' rating trigger as an additional credit event for the counterparties. There is an additional credit event if the authority's rating goes down to 'BBB+', which we see as remote due to its strong 'AA+' credit profile. The authority has also adopted a debt derivative policy and has incorporated this into its general debt policy. In addition, management has reported that it actively manages and reviews its swap agreements. Due to the low degree of termination risk, we did not factor in the swaps' value-at-risk as a contingent liability for the authority.

Given the MWRA's large swap and variable-rate portfolio, if termination triggers are implemented on the swaps or failed remarketings on any variable-rate bonds occur, these could also lead to fiscal stress, in our view. However, it is our understanding that most of the additional interest costs in the case of a failed remarketing would only occur after 90 days; we believe this provides the authority sufficient time to examine its financial options. Regarding the swaps, an additional termination event occurs if the counterparties' rating or the MWRA bond rating drops to 'BBB+' or lower. We view a drop of the rating on the MWRA bonds to this level as remote, and if any counterparty rating should do so, a collateral posting or replacement counterparty would need to be furnished.

The MWRA has completed most of the major projects in its CIP, including the Deer Island Harbor wastewater treatment plant, the MetroWest water supply tunnel, and the John J. Carroll water treatment plant. The planned CIP spending for 2018 is \$179.4 million, and the current plan identifies an additional \$1.35 billion to be spent from 2019-2023.

Outlook

The stable outlook reflects S&P Global Ratings' view of the authority's financial position, as well as management's demonstrated willingness to increase rates. We expect that the authority will maintain financial metrics consistent with historical trends and will also continue to benefit from the diversity of the underlying economic base.

Downside scenario

If the authority can't maintain its financial stability supported by consistent rate increases or if the local units begin to experience difficulty in paying their annual assessments, we could lower our rating on the bonds. However, given management's demonstrated willingness to implement rate increases and the broad and diverse economic base, we currently do not believe that MWRA's creditworthiness will be pressured in these ways in the next two years.

Upside scenario

Since the stable financial performance and large service base is already factored into the existing credit rating, we do not foresee raising the rating within the two-year outlook horizon.

Ratings Detail (As Of April 20, 2018)		
Massachusetts Wtr Resources Auth multi-modal subord		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008A-1		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Massachusetts Wtr Resources Auth WTRSWR		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Massachusetts Wtr Resources Auth WTRSWR		
<i>Long Term Rating</i>	AA/A-1+/Stable	Affirmed
Massachusetts Wtr Resources Auth WTRSWR		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts Wtr Resources Auth WTRSWR		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts Wtr Resources Auth WTRSWR		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts Wtr Resources Auth		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
<i>Long Term Rating</i>	AAA/A-1+	Affirmed
Massachusetts Wtr Resources Auth gen rev		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Massachusetts Wtr Resources Auth gen rev bnds		

Ratings Detail (As Of April 20, 2018) (cont.)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Many issues are enhanced by bond insurance.		

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on the S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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