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Massachusetts Water Resources Authority; Joint Criteria; Water/Sewer

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Credit Profile		
US$64.755 mil multi-modal sub gen rev rfdg bnds - direct purchase ser 2014 B due 08/01/2022		
Long Term Rating	AA/Stable	New
US$50.0 mil multi-modal sub gen rev rfdg bnds - direct purchase ser 2014 A due 08/01/2025		
Long Term Rating	AA/Stable	New
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008		
Long Term Rating	AA/A-1+/Stable	Upgraded

Rationale

Standard & Poor's Ratings Services has assigned its 'AA' rating to the Massachusetts Water Resources Authority's (MWRA) series 2014A and 2014B subordinated general revenue refunding bonds, purchased through two direct purchase agreements with Bank of America Preferred Funding Corp. At the same time, we revised the short-term component of the rating assigned to the MWRA's 2008 series F bonds to 'A-1+' from 'A-1', based on the substitution of the standby bond purchase agreement (SBPA) provider to The Bank of New York Mellon (A-1+) from The Bank of Nova Scotia (A-1). It is our understanding that the SBPA substitution date is scheduled for May 20, 2014. The outlook is stable.

The MWRA also has outstanding direct purchase bonds issued in 2012, with counterparties including Citibank N.A. (series 2012E), RBC Municipal Products Inc. (series 2012F), and Wells Fargo Municipal Capital Strategies LLC (series 2012G). We have affirmed our 'AA' ratings on the series 2012E and 2012F bonds, though we do not carry a rating on the series 2012G bonds.

The security on all of the MWRA's direct purchase bonds is a subordinate-lien net revenue pledge. 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.

The 'AA' rating and stable outlook on the direct purchase bonds is the same existing rating as the MWRA's other subordinate-lien debt. We based the ratings on our opinion of the authority's ability to make payments under the agreements when due.

We also affirmed the following ratings:

- The 'AA+' long-term rating and underlying rating (SPUR) on various series of MWRA senior-lien debt,
- The 'AA' long-term rating and SPUR on various series of MWRA subordinate-lien debt,
- The 'AAA' long-term rating on various series of subordinate-lien debt jointly secured by the MWRA and a letter of credit provider, and
- The '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 new SBPA provided by The Bank of New York Mellon on the series 2008F bonds will continue to provide for the purchase price of tendered bonds upon a failed remarketing. The new SBPA will only enhance bonds in the weekly rate mode and, in our opinion, provides sufficient interest coverage at the maximum rate of interest for 34 days and will terminate following a mode conversion to a mode other than the weekly rate mode. We understand that the bonds are subject to a mandatory tender on a mode conversion and on expiration and/or early termination of the SBPA. The SBPA is a revocable instrument subject to immediate termination without notice on the occurrence of certain events, including (but not limited to) the MWRA's ratings being withdrawn, or suspended for credit-related reasons to below 'BBB-'. These events have been reviewed and are consistent with our published criteria. The anticipated expiration date of the SBPA is May 20, 2017, unless extended or earlier terminated in accordance with its terms.

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 area;
- 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;
- Historical senior-lien coverage that has hovered at about 2x, not including rate stabilization transfers;
- Swap portfolio we view as low risk, given the counterparty diversification and the wide gap between the MWRA's existing bond rating and the 'BBB+' trigger that would cause an additional credit event;
- Capital improvement program (CIP) we consider manageable given the size of the system; and
- Bond provisions we consider adequate, following modifications to the general bond resolution, including a senior-lien debt service coverage (DSC) ratio of 1.2x.

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.

MWRA will use the series 2014A and B bonds to refund a portion of its outstanding series 2008F bonds.

We have rated the bonds being purchased pursuant to direct purchase agreements with Citibank, RBC, and Bank of America 'AA'. Under these three and the unrated Wells Fargo agreements, the refunding bonds to be purchased will initially bear interest at Securities Industry and Financial Markets Association (SIFMA) or London Interbank Offered Rate (LIBOR) plus a spread (between 0.34% and 70%, depending on the agreement). In the event 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 deems it financially necessary to do this to avoid large debt service cost increases.

All the direct purchase agreements expire either three (RBC, Citibank, Bank of America 2014A) or five years (Wells Fargo, Bank of America 2014B) from the bond purchase date, while the purchased refunding bonds mature by 2022 (series 2014B), 2023 (series 2012G), 2025 (series 2014A), or 2031 (series 2012F and E). 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 renewing and extending liquidity and credit agreements, and through October 2017, expiring credit, liquidity, or direct purchase agreements at any one time represent no more than 44% (in 2015) of the notional value of the 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.

Occurrences 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 MWRA's credit rating 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.

Outlook

The stable outlook reflects Standard & Poor's 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.

If the authority can't maintain this stability in its financial position by not implementing 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 wide and diverse nature of the economic base, we currently do not believe that creditworthiness will be pressured in these ways within the two-year outlook horizon.

General Credit Factors

The MWRA is a regional, wholesale water and sewer services provider for slightly more than 40% of Massachusetts' population (or, about 2.9 million people), including Boston and its metropolitan area. 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 2019 could be as much as 6%. Management reports that average water and sewer utility bills for a household using 7,500 gallons per month are currently about $116.

Financial operations have remained at least adequate, in our view. At the end of fiscal 2013 (June 30), net revenues provided strong 2.2x coverage on the senior-lien bonds. When including subordinate-lien and other fixed-charge obligations (which includes capital leases and commonwealth obligations paid to the Massachusetts Water Pollution Abatement Trust), net revenues still provided 1.2x coverage. 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 (OPEB) expenses and subordinated payments in lieu of taxes and commonwealth payments. In addition, at fiscal year-end 2013, the authority's unrestricted current cash and investments were $94.8 million, or a strong 129 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 these historical trends.

Other reserves include $40 million in a rate stabilization fund and $33 million in a bond redemption fund at June 30, 2013, along with additional amounts in the community obligation and revenue enhancement fund (totaling $20 million at June 30, 2013), which management could draw on if a community fails to pay on time. Management projects to draw the bond redemption fund down, as it defeases additional debt, and the rate stabilization fund down, for general rate stabilization, through 2022.

Debt service is the largest component of the budget, accounting for about 60% of audited operating 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 has been budgeting for 3.25% average interest cost, which is well above the actual rate of less than 1%, as indicated by management.

After the issue of the 2014A and B bonds, unhedged variable-rate debt will represent about 7% of the authority's portfolio (or, $484 million). Another 11% is hedged through various swap agreements. The total notional value of its swaps is $605 million, their fair value is negative $128 million (with respect to the MWRA), and all swaps are floating-to-fixed. Counterparties include Barclays Bank PLC (A/Negative); Wells Fargo Bank N.A. (AA-/Stable); Citigroup Financial Products, with a credit support guarantee from Citigroup Inc. (A-/Negative); Morgan Stanley

Capital Services, with a credit support guarantee from Morgan Stanley (A-/Negative); and Goldman Sachs Capital Markets L.P., with a guarantee from Goldman Sachs Group (A-/Negative). 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 CIP for 2014 is $142.5 million, and for 2014-2018, management's current projections indicate $718 million of capital needs. While large, this represents a significant reduction from capital spending in the late 1990s.

Bond Provisions

The authority's recent senior-lien bonds, including the most recent senior-lien series 2013A bonds, have been sold pursuant to proposed modifications to the authority's general bond resolution. Management expects these changes to be enacted by about fiscal 2016 since some of the proposals require two-thirds approval of senior-lien bondholders. Under the modified legal provisions, the authority has agreed to set rates and charges so that net revenues are at least equal to 1.2x annual debt service, which is still high, in our view, for a wholesale entity; the rate covenant for subordinate-lien bonds would remain 1.1x under the modified provisions. The modifications to the general resolution would also free up roughly $112 million of reserves. Management expects that it would use the released amounts primarily to redeem bonds.

A summary of proposed changes to the general resolution include:

- The debt service reserve requirement for senior bonds would be reduced to 50% of maximum annual debt service (MADS) on an aggregate basis from the current level of 100% of average annual debt service on a series basis.
- The community obligation and revenue enhancement fund would be eliminated, abolishing the supplemental coverage ratio requirement. The community obligation and revenue enhancement fund coverage requirement is currently 0.1x DSC, and the total DSC requirement is 1.3x when combined with the primary coverage requirement.
- The investments permitted for the debt service funds and debt service reserve funds (DSRFs) would be expanded to include more permitted investments, including securities repurchase agreements. Investments in the DSRFs would no longer be limited to 15 years.
- The purpose of the renewal and replacement reserve fund would be defined more narrowly as a fund for emergency

needs, the balance of which a consultant engineer determines. Any renewal and replacement reserve fund requirement in excess of $10 million could be covered by a line of credit, such as a commercial paper program, rather than having to be funded with cash and investments.

Related Criteria And Research

Related Criteria

- USPF Criteria: Key Water And Sewer Utility Credit Ratio Ranges, Sept. 15, 2008
- USPF Criteria: Standard & Poor's Revises Criteria For Rating Water, Sewer, And Drainage Utility Revenue Bonds, Sept. 15, 2008
- USPF Criteria: Contingent Liquidity Risks, March 5, 2012
- Criteria: Methodology And Assumptions: Approach To Evaluating Letter Of Credit-Supported Debt, July 6, 2009
- USPF Criteria: Municipal Applications For Joint Support Criteria, June 25, 2007
- USPF Criteria: Standby Bond Purchase Agreement Automatic Termination Events, April 11, 2008
- Criteria: Joint Support Criteria Update, April 22, 2009

Ratings Detail (As Of May 21, 2014)		
Massachusetts Wtr Resources Auth multi-modal subord		
Long Term Rating	AA/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008		
Long Term Rating	AA/A-1/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008A-1		
Long Term Rating	AA/A-1/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008 ser A-2 dtd 05/29/2008 rmktd. dtd 05/09/2011 due 08/01/2037		
Long Term Rating	AA/A-1+/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008 ser A-3 dtd 05/29/2008 rmktd. dtd 05/09/2011 due 08/01/2037		
Long Term Rating	AA/A-1+/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008 ser C-2 dtd 11/29/2008 due 11/01/2026 rmktd. dtd 05/07/2011		
Long Term Rating	AA/A-1/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subordinate gen rev rfdg bnds ser 2012 E due 08/01/2031		
Long Term Rating	AA/Stable	Affirmed
Massachusetts Wtr Resources Auth multi-modal subordinate gen rev rfdg bnds ser 2012 F due 08/01/2031		
Long Term Rating	AA/Stable	Affirmed
Massachusetts Wtr Resources Auth (wrap of insured) (AMBAC & BHAC) (SEC MKT)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts Wtr Resources Auth		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Long Term Rating	AAA/A-1+	Affirmed
Massachusetts Wtr Resources Auth gen rev		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed

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Ratings Detail (As Of May 21, 2014) (cont.)		
Massachusetts Wtr Resources Auth gen rev bnds		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts Wtr Resources Auth multi modal sub gen rev rfdg bnds		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Long Term Rating	AA/NR	Affirmed

Many issues are enhanced by bond insurance.