

November 4, 2011

Summary:

Massachusetts Water Resources Authority; Joint Criteria; Water/Sewer

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Table Of Contents

Rationale

Outlook

Bond Provisions

Related Criteria And Research

Summary:

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| Credit Profile | | |
|--|------------|----------|
| US\$338.680 mil gen rev rfdg bnds 2011 ser C dtd 12/08/2011 due 08/01/2042 | | |
| <i>Long Term Rating</i> | AA+/Stable | New |
| Massachusetts Wtr Resources Auth gen rev bnds | | |
| <i>Long Term Rating</i> | AA+/Stable | Affirmed |

Rationale

Standard & Poor's Ratings Services has assigned its 'AA+' long-term rating to Massachusetts Water Resources Authority's (MWRA) series 2011C general revenue refunding bonds. We also affirmed the following ratings:

- The 'AA+' long-term rating and Standard & Poor's underlying rating (SPUR) on various series of MWRA's senior-lien debt,
- The 'AA' long-term rating and SPUR on various series of MWRA's subordinate-lien debt,
- The 'AAA' long-term rating on various series of subordinate-lien debt that is jointly secured by 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 of the counterparty providing liquidity support.

The outlook on the series 2011C 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 outlook on MWRA's other series of bonds is also stable.

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 of the served communities, and a state aid intercept mechanism;
- A revenue stream that is largely dependent on 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, since 2006;
- A swap portfolio we view as low risk given the counterparty diversification and the wide gap between 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 considered 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 2011C bonds to refund various portions of its outstanding debt.

MWRA is a regional, wholesale, water and sewer services provider for slightly more than 40% of Massachusetts' population (or, about 2.8 million), including Boston and its metropolitan area. The authority has statutory authority to serve 61 communities. 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's bonds, given Boston Water and Sewer Commission's bond rating of AA+/Stable.

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 to MWRA monthly in 10 installments. Assessments are essentially based on proportional flow or use and can be changed as needed through board approval. Assessments are a general obligation of each local body and are also subject to a state aid intercept mechanism (for those communities that receive local aid). In recent years, combined rates have risen anywhere from 1% to 7% annually, which is consistent with projected annual rate increases through 2016. Management reports that average water and sewer utility bills are about \$105 for a household using 7,500 gallons per month.

Financial operations have remained at least adequate, in our view. At the end of fiscal 2011 (June 30), net revenues provided a strong 1.9x coverage on the senior-lien bonds and a more adequate 1.2x coverage on the combined senior- and subordinate-lien bonds. 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 payments in lieu of taxes and payments to the commonwealth. In addition, at fiscal year-end 2011, the authority's unrestricted current cash and investments were \$89.6 million, or a strong 130 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 \$42 million in a rate stabilization fund and \$33 million in a bond redemption fund as of June 30, 2011, along with additional amounts in the community obligation and revenue enhancement funds (together totaling \$21 million as of June 30 2011), which management could draw on if a community fails to pay on time. Management projects to draw the bond redemption fund down through 2020 as it defeases additional debt and the rate stabilization fund down through 2017 for general rate stabilization.

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. For the variable rate portion of its portfolio, 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.

Unhedged variable-rate debt represents about 10% of the authority's portfolio (or, \$589 million). Another 11% is hedged through various swap agreements. The total notional value of its swaps is \$708 million, their fair value is negative \$164 million (with respect to MWRA), and all swaps are floating-to-fixed rate. Counterparties include Barclays Bank PLC (AA-/Negative); Wells Fargo Bank N.A. (AA/Negative); 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 is seen 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 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, in our view, to fiscal stress. 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 a sufficient amount of time to examine its financial options. Regarding the swaps, an additional termination event occurs if the counterparties' rating or MWRA's bond rating drops below 'A-'. We view a drop of MWRA's bond rating to this level as remote, and if any counterparty rating should drop to this level, a collateral posting or replacement counterparty would need to be furnished.

Massachusetts Water Resources Authority 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 \$411.4 million of projects for 2012-2013 is large but represents a significant reduction from capital spending in the late 1990s. For the 2014-2018 time period, management's current projections indicate \$1.67 billion of capital needs. Both of these figures include contingencies of between 5%-7%.

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 continue to maintain financial metrics consistent with historical trends and to benefit from the diversity of the underlying economic base.

If the authority is not able to 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, the rating on the bonds could be lowered. However, given management's demonstrated willingness to implement rate increases and the wide and diverse nature of the economic base, we do not believe at this time that creditworthiness will be pressured in these ways within the two-year outlook horizon.

Bond Provisions

The authority's recent senior-lien bonds, including the series 2011 bonds, have been sold pursuant to proposed modifications to the authority's general bond resolution. Management expects these changes to be enacted by about 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 be 1.1x under the modified provisions. The modifications to the general resolution would also free up roughly \$145 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 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 would be expanded to include more permitted investments, including securities repurchase agreements. Investments in the debt service reserve funds 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

- 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

| Ratings Detail (As Of November 4, 2011) | | |
|---|----------------|----------|
| 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 ser 2008B | | |
| <i>Long Term Rating</i> | AA/A-1/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 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 multi-modal subord gen rev rfdg bnds 2008 ser A-2 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 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 multi-modal subord gen rev rfdg bnds 2008 ser C-2 dtd 11/29/2008 due 11/01/2026 rmkted. dtd 05/07/2011 | | |
| <i>Long Term Rating</i> | AA/A-1+/Stable | Affirmed |
| Massachusetts Wtr Resources Auth multi-modal subord ser C-1 | | |
| <i>Long Term Rating</i> | AA/A-1/Stable | Affirmed |

| Ratings Detail (As Of November 4, 2011) (cont.) | | |
|---|------------------|----------|
| Massachusetts Wtr Resources Auth (wrap of insured) (AMBAC & BHAC) (SEC MKT) | | |
| <i>Unenhanced Rating</i> | AA+(SPUR)/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 | | |
| <i>Unenhanced Rating</i> | AA+(SPUR)/Stable | Affirmed |
| Massachusetts Wtr Resources Auth multi modal sub gen rev rfdg bnds | | |
| <i>Unenhanced Rating</i> | AA(SPUR)/Stable | Affirmed |
| <i>Long Term Rating</i> | AA/NR | Affirmed |

Many issues are enhanced by bond insurance.

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