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# Massachusetts Water Resources Authority; Water/Sewer

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# Massachusetts Water Resources Authority; Water/Sewer

Credit Profile		
US\$330.19 mil gen rev & gen rev rfdg bnds 2009 ser A&B due 08/01/2039		
<i>Long Term Rating</i>	AA+/Stable	New
<b>Massachusetts Wtr Resources Auth</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Upgraded

## Rationale

Standard & Poor's Ratings Services raised its standard long-term rating and underlying rating (SPUR) on Massachusetts Water Resources Authority's senior-lien general revenue debt one notch to 'AA+' from 'AA' and raised its SPUR on the authority's subordinate-lien debt one notch to 'AA' from 'AA-'. The outlooks are stable.

The upgrades reflect the improved credit quality of Boston Water & Sewer Commission, the authority's largest customer, and the authority's demonstrated record of maintaining sound finances as debt service costs increase.

Standard & Poor's also assigned its 'AA+' standard long-term rating, and stable outlook, to the authority's series 2009A general revenue bonds and series 2009B general revenue refunding bonds.

In our opinion, the ratings reflect the authority's:

- Strong management, which has generated a trend of satisfactory reserves and solid liquidity over a multiyear period while successfully implementing numerous large construction projects;
- 100% collection rate from member towns, bolstered by an effective statutory collection enforcement mechanism that includes a state aid intercept;
- Adequate legal provisions, following modifications to the general bond resolution, including a senior-lien debt service coverage (DSC) ratio of 1.2x;
- Fiscal stability of Boston Water & Sewer Commission ('AA+/Stable revenue debt rating), which accounts for about 31% of the authority's budgeted fiscal 2009 rate revenues; and
- Historical senior-lien coverage that has ranged from 1.7x-2.3x, before rate stabilization transfers, over the past six years.

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. As such, the authority has represented and warranted that the trustee has a first priority-perfected security interest in the revenues. Bond counsel has advised that the pledge is perfected automatically under the authority's 1984 enabling legislation.

In fiscal 2008, net revenues provided 2.3x coverage on the senior-lien bonds and 1.2x coverage on the combined

senior- and junior-lien bonds. At fiscal year-end 2008, the authority's unrestricted cash and investments were \$91.2 million, or 133 days' operating expenses. Other reserves include \$43.7 million in a rate stabilization fund; \$35.0 million in a renewal and replacement fund; \$32.9 million in a bond redemption fund; and \$20.0 million in a community obligation and revenue enhancement fund, which management could draw on if a community fails to pay on time. Management will use the rate stabilization reserve to smooth rates, and it can only use the bond redemption fund to retire or prepay debt outstanding.

The authority's 2009 budget required a 4.5% increase in rate revenues. The commonwealth cut debt service assistance midyear to the authority, but officials are projecting the authority will end the year with balanced operations without needing a midyear rate increase. To accomplish the \$11.3 million of budget adjustments, reductions included \$6.3 million in direct expenditures. Debt service is the largest component of this budget, accounting for about 55% of projected expenses. Management is projecting this fixed cost to increase to 65% of the total budget by 2010; and while these figures are, in our opinion, elevated, wholesale systems tend to have relatively high debt levels. The increase in debt service, however, should require the need for continued increases in the already above-average water and sewer rates. In 1990, debt service accounted for about 36% of the total budget.

The authority's recent senior-lien bonds have been sold pursuant to proposed modifications to the authority's general bond resolution that would become effective with two-thirds approval of bondholders. Authority officials expect these changes to be enacted in about 10 years. The authority's legal provisions would continue to provide adequate bondholder protection after the proposed changes. 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 for a wholesale entity. Actual coverage has remained consistently above covenanted levels despite the large capital projects and resulting debt service. The rate covenant for subordinate-lien bonds would be 1.1x under the modified provisions.

## Outlook

The stable outlook reflects Standard & Poor's view of the authority's sound liquidity position and its demonstrated willingness to increase rates. We expect the authority will continue to maintain satisfactory coverage and reserves as it experiences increasing debt service costs. The legal documents' legal structure is adequate and remains an important underpinning of the ratings.

## Service Area Economy

Massachusetts Water Resources Authority provides wholesale water and wastewater service to 61 communities, concentrated mostly in the greater Boston metropolitan statistical area (MSA). The authority provides water service to 49 cities, towns, and special districts and sewerage collection and treatment to 43 cities, towns, and special districts. Its service area encompasses about 2.8 million people, accounting for about 43% of the commonwealth's total population. Boston Water & Sewer Commission, the leading customer, accounts for 31% of total authority charges in the fiscal 2009 budget. We raised the rating on Boston Water & Sewer Commission to 'AA+' from 'AA' in September 2008.

The next four leading users include:

- Quincy, Mass. (('A+' general obligation (GO) debt rating), 4.7% of fiscal 2008 charges);

- Newton, Mass. (4.6%);
- Cambridge, Mass. ('AAA', 3.7%);
- Waltham, Mass. ('AA+', 3.3%); and
- Somerville, Mass. ('AA+', 3.3%).

No community in the service area with a public rating is rated below investment grade. Of the 30 communities that have published ratings, 21 are in the 'AA' category or higher, seven are rated 'AA+', and five are rated 'AAA'. Education, health care, financial services, and biotechnology are the diverse regional economy's leading current drivers.

Authority management is projecting it has ample water supply through at least 2030; the water supply is rated for a safe yield of 300 million gallons per day.

## Legal Structure/Enforcement Mechanism

In accordance with enabling legislation, Massachusetts Water Resources Authority's board of directors independently exercises its rate-setting authority without regulatory approval. The authority annually adopts rates and charges every June following an advisory board's notice, hearings, and receipt of nonbinding recommendations.

Authority assessments are billed annually and are paid 10 times during the year. Payment of the charges represents a GO pledge of the served communities; these communities are bound to the authority through legislation, not contract. With the exception of Boston Water & Sewer Commission, communities can offset increased water and sewer costs through the assessment of property taxes in excess of Proposition 2-1/2-imposed limits. All communities have retail water or sewer charges. Most communities' rate structures are designed to recover costs fully; a few, however, fund a portion of their water and sewer costs through property taxes.

If a community fails to pay the authority its charges, the authority, by legislative right, can intercept the community's state aid; the authority, however, cannot intercept Boston Water & Sewer Commission's state aid. The authority must certify to the state treasurer the amount of unpaid charges; then, the treasurer is required, under law, to deduct the amount from money the commonwealth pays to the community. The authority has agreed, in the general bond resolution, to use this enforcement mechanism in the event of nonpayment by a community. Since 1990, the authority has used this mechanism just six times, intercepting \$1.3 million; no single year's intercept, however, equaled more than 1% of revenues. Since fiscal 1993, the authority has collected 100% of its rate revenues without using the intercept. There have been no legal challenges to the intercept, and no challenges are pending.

## Legal Provisions

The 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 will be expanded to include more permitted investments, including securities repurchase agreements. Investments in the debt service reserve funds will no longer be limited to 15 years.
- The purpose of the renewal and replacement reserve fund will 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 can be covered by a line of credit, such as a commercial paper (CP) program, rather than having to be funded with cash and investments.

The modification to the general resolution would free up roughly \$170 million of reserves. Management expects that it would use the amounts released from the debt service reserve fund, due to the debt service reserve requirement reduction, to redeem bonds.

## Rates/Charges

Massachusetts Water Resources Authority's rates have increased by an average of about 4.5% annually from fiscal 2003 through fiscal 2008. For fiscal 2009, the authority's rates and charges increased by a combined 4.5%. Continued debt service costs and the authority's capital improvement program (CIP) financing needs, however, have led to a projection of higher rate increases (5.9%) for the next five fiscal years, assuming no commonwealth debt service assistance. The authority has traditionally received this assistance, but the commonwealth cut it midyear in fiscal 2009.

The elevated residential water and sewer bill remains a concern; the monthly rate for 7,500 gallons of combined water and sewer service is an estimated \$90 in fiscal 2009 and \$112 in fiscal 2013. Households in the authority's service area, however, tend to use closer to 5,000 gallons monthly, which results in a \$64 monthly bill; and the service area's high income levels provide more rate-paying ability.

## CIP/Debt

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 authority's remaining focus on its capital plans consists primarily of combined-sewer-overflow projects. The authority has \$244 million of capital spending in its 2009 budget; and the 2009-2013 CIP totals \$1.14 billion, which is large but represents a significant reduction from capital spending in the late-1990s. This reduction indicates the authority's shift to becoming a more-straightforward utility operation. Forecasting further out, the authority has recently completed a master plan for the repair and replacement of existing infrastructure and enhanced water system redundancy. The plan identified \$3.1 billion in system needs over the next 40 years.

## Debt Derivative Profile: '2'--A Low Credit Risk

Standard & Poor's has assigned Massachusetts Water Resources Authority a debt derivative profile (DDP) overall score of '2' on a scale of '1'-'4', with '1' representing the lowest risk and '4' the highest risk.

The overall score of '2' reflects our view that the authority's swap portfolio is a low credit risk due to:

- A low degree of involuntary termination risk under the authority's swaps due to a wide ratings trigger spread,

and

- The strong economic viability of the swap portfolio over stressful economic cycles.

These strengths are offset by:

- The more-narrow ratings trigger spread between three of the swap counterparties and their respective credit events, and
- A lack of an adopted swap policy.

The authority's interest rate swaps outstanding are all floating- to fixed-rate agreements with a total notional value of \$845 million.

The authority replaced the swap agreements it had with two Lehman Bros. entities with new agreements with Barclays Bank PLC (AA-/Negative) and Wells Fargo Bank NA. Under these swap agreements, the authority will pay a fixed rate and receive floating payments based on the Securities Industry and Financial Markets Assn. Index. The fixed rate ranges between 4.47% and 6.94% for the swaps effective from 2008 through 2030 and is 6.94% for a forward-starting swap effective from 2030 through 2037. In addition to these, the authority has floating- to fixed-rate swap agreements outstanding with Citigroup Financial Products, with a credit support guarantee from Citigroup, Inc. (A/Stable); 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/Stable).

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 declines to 'BBB+', which is seen as remote due to its strong 'AA' credit profile. The swaps are perfectly hedged. The authority has not adopted a debt derivative policy; authority officials, however, are aware of the risks associated with the agreements and have had an active swap program to help diversify the debt portfolio for more than 20 years. Of the authority's debt outstanding, roughly 15% is true variable-rate debt or CP. 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.

<b>Ratings Detail</b> (As Of January 30, 2009)		
<b>Massachusetts Wtr Resources Auth gen rev bnds</b>		
<i>Long Term Rating</i>	AA+/Stable	Upgraded
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008		
<i>Long Term Rating</i>	AA/A-1+/Stable	Upgraded
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008		
<i>Long Term Rating</i>	AA/A-1/Stable	Upgraded
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008		
<i>Long Term Rating</i>	AA/A-1/Stable	Upgraded
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008		
<i>Long Term Rating</i>	AA/A-1+/Stable	Upgraded
Massachusetts Wtr Resources Auth multi-modal subord gen rev rfdg bnds 2008		
<i>Long Term Rating</i>	AA/A-1+/Stable	Upgraded
<b>Massachusetts Wtr Resources Auth</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Upgraded

<b>Ratings Detail</b> (As Of January 30, 2009) <b>(cont.)</b>		
<b>Massachusetts Wtr Resources Auth gen rev</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Upgraded
<b>Massachusetts Wtr Resources Auth gen rev bnds</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Upgraded
<b>Massachusetts Wtr Resources Auth sub gen rev bnds</b>		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Upgraded
Many issues are enhanced by bond insurance.		

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