Revenue
New Issue

Massachusetts Water Resources Authority

Ratings

New Issue	
General Revenue Bonds, 2011 Series B	AA+
Outstanding Debt	
General Revenue Bonds	AA+
Subordinate General Revenue Bonds	AA

Rating Outlook

Stable

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New Issue Details

Sale Information: Approximately $150,000,000 General Revenue Bonds, 2011 Series B, via negotiation the week of May 9.
Purpose: Bond proceeds will be used to fund general capital needs of the combined water and sewer system and to retire outstanding commercial paper notes.
Final Maturity: June 1, 2041.

Related Research

For information on Build America Bonds, visit www.fitchratings.com/BABs.

Applicable Criteria

- *Revenue-Supported Rating Criteria, Oct. 8, 2010*
- *Water and Sewer Revenue Bond Rating Guidelines, Aug. 6, 2008*

Other Research

- *2011 Water and Wastewater Medians, Jan. 18, 2011*
- *2011 Water and Wastewater Sector Outlook, Jan. 18, 2011*

Rating Rationale

- Massachusetts Water Resources Authority (MWRA, or the authority) provides an essential service to a large and diverse service area with strong economic underpinnings.
- The wholesale system benefits from an ample long-term water supply and sufficient excess water and sewer treatment capacity.
- Local governments served by the authority are required to pay for MWRA services as a general obligation, and nonpayment is subject to a tested state aid intercept.
- MWRA maintains independent rate-setting authority, prudent budgetary practices, comprehensive long-term planning, and vigilant project oversight and prioritization of its capital program.
- Financial flexibility has diminished over time due to significant leveraging and notably high user charges.
- The authority's capital program continues to transition from costly court-mandated projects to ongoing rehabilitation.
- MWRA has achieved strong collection rates of 100% since its inception.

Key Rating Drivers

- Containment of capital costs is critical, given existing leverage and high user charges.
- Maintenance of good financial metrics will maintain system flexibility.

Credit Summary

MWRA provides wholesale water and wastewater services to 61 communities located primarily in eastern Massachusetts. Almost 2.8 million people (or 43% of the population of the commonwealth) reside in the authority's service areas, the largest of which is the city of Boston, which contributes one-third of MWRA's revenue derived from rates and charges (Boston Water and Sewer Commission's general revenue bonds rated 'AA+' with a Stable Rating Outlook by Fitch Ratings). The service areas are generally economically diverse, and wealth levels are above state and national averages.

MWRA's rates are among the highest in the urban U.S. and an ongoing credit concern, somewhat mitigated by the above-average area income levels. However, as annual capital spending has declined over time, so has the size of needed rate hikes. Over the past five years, the authority boosted rates on average by a moderate 3.6% annually. For fiscal 2011, the board adopted a nominal 1.5% rate hike to give rate payers some degree of rate relief amid the economic downturn. Rates are forecast to rise by an annual average of 6.1% through fiscal 2016 to keep pace with rising debt service. The proposed budget for fiscal 2012 includes a 3.9% increase.

The authority's financial operations have remained relatively stable despite escalating debt service and the eventual elimination of commonwealth debt service assistance. Fiscal 2010 ended with a sizable operating surplus that was prudently applied to the

Rating History — General Revenue Bonds

Rating	Action	Outlook/ Watch	Date
AA+	Affirmed	Stable	4/28/11
AA+	Revised	Stable	4/30/10
AA	Affirmed	Stable	4/13/10
AA	Affirmed	Stable	1/26/09
AA	Affirmed	Stable	5/19/08
AA	Upgraded	Stable	3/8/05
AA–	Affirmed	Positive	12/11/03
AA–	Upgraded	Stable	6/7/00
A+	Upgraded	Stable	6/22/98
A	Assigned	Stable	9/14/92

Rating History — Subordinate General Revenue Bonds

Rating	Action	Outlook/ Watch	Date
AA	Affirmed	Stable	4/28/11
AA	Revised	Stable	4/30/10
AA–	Affirmed	Stable	4/13/10
AA–	Affirmed	Stable	1/26/09
AA–	Affirmed	Stable	5/19/08
AA–	Upgraded	Stable	3/8/05
A+	Affirmed	Positive	12/11/03
A+	Assigned	Stable	10/12/00
AA–	Upgraded	Stable	3/8/05

Financial Summary

($000, Audited Fiscal Years Ended June 30)

	2007	2008	2009	2010
Balance Sheet				
Unrestriced Cash and Investments	83,272	91,198	93,177	242,845
Accounts Receivable	1,922	490	447	541
Other Current Unrestriced Assets	22,097	22,660	25,324	(124,678)
Available Restricted Cash and Investments	116,754	120,396	115,958	130,981
Current Liabilities Payable from Unrestricted Assets	(146,318)	(129,667)	(126,609)	(114,006)
Net Working Capital	77,727	105,077	108,297	135,683
Net Fixed Assets	6,406,195	6,413,403	6,381,230	6,370,258
Net Long-Term Debt Outstanding	5,456,725	5,464,262	5,903,666	5,953,475
Operating Statement				
Operating Revenues	510,476	540,409	555,193	574,298
Non-Operating Revenues	42,966	41,199	21,247	26,403
Gross Revenues	553,442	581,608	576,440	600,701
Operating Expenses (Excluding Depreciation)	(226,967)	(251,055)	(260,171)	(260,767)
Depreciation	(180,179)	(180,173)	(181,314)	(189,798)
Operating Income	146,296	150,380	134,955	150,136
Net Revenues Available for Debt Service[a]	**326,475**	**330,553**	**316,269**	**339,934**
Senior Lien Debt Service Requirements	161,189	153,746	171,958	179,440
Total Debt Service Requirements	280,451	305,013	303,990	309,107
Financial Statistics				
Senior Lien Debt Service Coverage (x)	2.0	2.1	1.8	1.9
Total Debt Service Coverage (x)	1.2	1.1	1.0	1.1
Days Cash on Hand	322	308	293	523
Days Working Capital	125	153	152	190
Debt to Net Plant (%)	85	85	93	93
Outstanding Long-Term Debt per Capita ($)	1,949	1,952	2,108	2,126
Free Cash to Depreciation (%)[b]	26	14	7	16

[a]Equals gross revenues less operating expenses. [b]Equals net revenues available for debt service less operating transfers out, less total debt service, divided by depreciation. Note: Numbers may not add due to rounding.

defeasance of approximately $51 million of senior lien obligations. Historical coverage on senior lien annual debt service (ADS) has been strong, averaging 1.9x over the last five fiscal years, and all-in coverage has been adequate at just above the 1.1x threshold established by bond resolution. Year-end projections for fiscal 2011 show coverage of 1.9x and 1.2x on senior lien and all-in ADS, respectively. Liquidity is good, with unrestricted cash increasing in fiscal 2010 to over 500 days cash.

Following the massive capital investments undertaken during the 1990s, MWRA's mission is increasingly focused on completion of combined sewer overflow (CSO) projects, regulatory compliance, and system rehabilitation and maintenance. The fiscal years 2012–2016 capital improvement plan (CIP), which totals approximately $1.3 billion and addresses substantially all current regulatory compliance issues, is significantly reduced from prior CIPs, partially reflecting the significant scale of capital spending on the cleanup of Boston Harbor in the 1990s and the completion of the majority of the CSO master plan. Fitch believes future capital costs should remain manageable, given MWRA's vigilant project oversight and its board's self-imposed spending cap. Funding for capital needs will continue to come almost entirely from long-term borrowings, including revenue bonds and state loans.

Because of the size of historical capital investments, the authority's debt levels have been and will remain high for the foreseeable future. Debt to net plant is notably high at 93%, and debt per capita equals about $2,100. However, the authority's capital cycle has declined substantially over the last several years, with annual spending equal to about one-half the amount expended each year in the 1990s. Fitch expects this trend to continue.

Exposure to variable-rate debt and derivatives is fairly sizable, although management's demonstrated ability to prudently monitor debt portfolio performance offsets this risk. Of the total amount of debt outstanding, approximately 21% is variable rate, with each series of variable-rate bonds backed by liquidity agreements from a diverse pool of liquidity providers. Almost two-thirds of outstanding variable-rate debt is hedged through floating- to fixed-rate swaps. The outstanding notional amount totals $757.0 million, and the most recent (April 2011) mark to market value of the swaps totaled negative $113.2 million. Regular swap payments are on parity with subordinate lien bonds.

Legal Provisions

Security Pledge: MWRA's debt is secured by senior and subordinated liens on net authority revenues derived largely from wholesale rates and charges assessed on local units of government.

State Aid Intercept: In the event of nonpayment by a local entity to MWRA, the state treasurer may intercept state aid to certain localities to cover the assessment.

Rate Covenant and Parity Issuance Test: Rates and charges, including operating and rate stabilization reserve withdrawals, must equal at least 1.2x annual senior lien debt service and at least 1.1x subordinated lien debt service. Debt service assistance by the commonwealth is effectively treated as a reduction in debt service requirements under MWRA's covenant tests. MWRA may adjust the senior lien debt service covenant to at least 1.1x annually, provided this action does not result in a rating downgrade on any series of outstanding authority debt. The additional bonds tests are similar to the rate covenant requirements.

Operating and Insurance Reserve Funds: The operating reserve requirement is at least one-sixth of annual operating expenses. The insurance fund level is determined by an outside consultant and currently has a balance of $19 million.

Debt Service Reserve Fund: Under an amended indenture, the debt service reserve requirement changed to just 50% of MADS from the current requirement of the standard three-prong lesser of test. Reserves are funded with cash from bond proceeds.

Community Obligation and Revenue Enhancement Fund: Amendments to the indenture also included eliminating the obligation to maintain the community obligation and revenue enhancement (CORE) fund, which was designed to provide an extra layer of bondholder protection in the event of nonpayment by a local member community. The CORE fund balance requirement was 10% of annual debt service requirements for senior lien general revenue bonds without consideration of debt service assistance by the commonwealth. The fund still exists and continues to carry a $21 million balance.

Renewal and Replacement Fund: The renewal and replacement (R&R) fund requirement did not change under the amended indenture, but the manner in which MWRA can fund the reserve does. Instead of funding the current requirement of $35 million with cash, MWRA will fund $10 million with cash and use capacity under its commercial paper program to fund the remainder. The R&R fund is for catastrophic events and has never been tapped.

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