Revenue
New Issue

Massachusetts Water Resources Authority

Ratings

New Issue	
Multi-Modal Subordinated General Revenue Refunding Bonds, 2008 Series A–F[a]	AA–/F1+
Outstanding Debt	
General Revenue Bonds	AA
Subordinate General Revenue Bonds	AA–

[a]The short-term 'F1+' rating is based on liquidity support in the form of standby bond purchase agreement provided by Dexia Credit Local for 2008 Series A, acting through its New York Branch; Bank of America for 2008 Series B; Bayerische Landesbank for 2008 Series C and D, acting through its New York Branch; JPMorgan Chase Bank, National Association for 2008 Series E; and Bank of Nova Scotia for 2008 Series F.

Rating Outlook

Stable

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New Issue Details

Sale Information: $1,197,745,000 Multi-Modal Subordinated General Revenue Refunding Bonds, 2008 Series A–F, scheduled to sell via negotiation on or about May 29.
Purpose: Refunding all of the authority's outstanding auction-rate bonds and a portion of the authority's outstanding variable-rate bonds that were originally sold with bond insurance.
Final Maturity: 2037.

Related Research

- *Boston, Massachusetts, March 6, 2008*
- *2007 Water and Sewer Revenue Bond Peer Study — Wholesale Systems, Oct. 18, 2007*

Rating Rationale

- Massachusetts Water Resources Authority (MWRA, or the authority) has maintained sound financial operations.
- Effective financial management is demonstrated by the authority's ability to achieve favorable operating results despite significant declines in commonwealth debt service assistance.
- The authority maintains prudent budgetary practices, comprehensive long-term planning, and vigilant project oversight and prioritization of its CIP.
- Legacy costs associated with the authority's historical borrowings are high and will remain so for some time.
- Leveraging is expected to slow considerably as the authority's CIP transitions from court-mandated projects to ongoing rehabilitation.
- Reserves are expected to remain strong despite amendments to the bond indenture and strong debt service coverage is expected to continue.
- Rates charged by the authority are among the highest in the urban U.S. and remain one of the most significant credit vulnerabilities.
- Wealth levels of the service areas are above average.
- The authority has achieved impeccable collection rates of 100% since its inception.

Key Rating Drivers

- Containment of capital costs is critical given existing leverage and user charges are already high.
- 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. Approximately 2.6 million people (or 42% 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. 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 high area income levels. Projected rate increases for fiscal 2009 are manageable at 5.9% and incorporate the anticipated receipt of $11.3 million in commonwealth debt service assistance. Beyond fiscal 2009, rates are projected to rise 6% annually through fiscal 2013 due to rising debt service, personnel, and utility expenses and more conservative assumptions related to receipt of ongoing debt service assistance from the commonwealth. Projections appear reasonable, although overall financial flexibility is slightly reduced as further operating efficiencies will be difficult to achieve. Historical debt service coverage has been strong and is expected to remain

Rating History — Subordinate General Revenue Bonds

Rating	Action	Outlook/ Watch	Date
AA–	Affirmed	Stable	5/19/08
AA–	Upgraded	Stable	3/8/05
A+	Affirmed	Positive	12/11/03
A+	Assigned	Stable	10/12/00

Rating History — General Revenue Bonds

Rating	Action	Outlook/ Watch	Date
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

so. Senior lien coverage is projected to range from 2.0 times (x) to 2.1x through fiscal 2013, above the 1.2x threshold established by bond resolution. Total debt service coverage is projected to be adequate at just above the 1.1x threshold.

Following the massive capital investments undertaken during the 1990s, MWRA's mission is now increasingly focused on CSO, regulatory compliance, and system rehabilitation and maintenance. The adopted fiscal years 2008–2013 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 and the completion of over 50% of the CSO master plan. Fitch Ratings believes future capital costs should remain manageable given MWRA's vigilant project oversight and its board's self-imposed spending cap.

The current offering will refund all of the authority's outstanding auction-rate bonds as well as the majority of the authority's variable-rate demand bonds to eliminate exposure to market dislocation. The bonds are being offered under an amended indenture that incorporates a significant reduction in restricted reserves. As liquidity remains strong and unaffected, it is Fitch's opinion that the amended indenture is still consistent with the current rating level.

Legal Provisions

Strong Legal Structure: MWRA was formed in 1985 to assume possession and control of the Metropolitan District Commission's water and sewer systems. The 61 local communities that make up the MWRA's service area are required to pay for MWRA services as a general obligation. All member communities currently impose some form of user charge on their retail customers, although not all of these charges are sized to fully recover local costs, including the MWRA's assessments. The rates MWRA charges to local members are exempt from Proposition 2½ tax limits. Notably, MWRA has achieved an impeccable collection rate at 100% on charges assessed to the local communities since the authority's inception in 1985.

MWRA is governed by an 11-member board appointed by the governor of Massachusetts, Boston's mayor, and an advisory board of member community representatives. MWRA uses its autonomous rate-setting authority to raise rates as required. Legal provisions are stronger than average, and a tested state aid intercept that collects charges from municipal customers provides a powerful and effective backup mechanism. Bond covenants also establish conservative liquidity requirements.

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. 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.

Amendments to Bond Indenture: The 2007 series A and B general revenue bonds were the first series to be issued under the amended bond indenture. In fall 2006, the board approved amendments to the current bond indenture that will take effect once two-thirds of MWRA's outstanding bonds are issued under the amended indenture, expected to occur no earlier than 2015. The amendments primarily affect restricted cash, and as liquidity remains strong and unaffected, it is Fitch's opinion that the amended indenture is still consistent with the current rating level.

The amendment that has the largest monetary effect on restricted reserves is the change to the debt service reserve requirement. Under the amended indenture, the debt service reserve requirement effectively will change to 50% of MADS from the current requirement of the standard three-prong lesser of test.

Amendments to the indenture also include the elimination of 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 elimination of this fund will result in a release of $20 million in restricted assets.

The renewal and replacement (R&R) fund requirement does 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. The size of MWRA's commercial paper program is $350 million, and at no time is more than $250 million expected to be outstanding, leaving ample capacity to supplement the R&R fund, if needed.

Finances

Financial performance remains sound and reserves for fiscal 2007 were considerable, totaling $183 million, including $20 million in the CORE fund. Liquidity was good, with unrestricted cash and investments for fiscal 2007 equaling a strong 134 days of operating expenditures. Including amounts in the revenue fund ($66 million), the insurance fund ($19 million), and the R&R fund ($35 million), all of which could be used for operating purposes if needed, liquidity rises to a solid 327 days cash on hand.

MWRA's reliance on commonwealth debt service assistance has been reduced over the years. From fiscal years 2000–2002, commonwealth debt service assistance accounted for roughly 10% of MWRA revenues, averaging $50 million annually, or 11% of revenues in fiscal 2002. Due to statewide fiscal stress, this assistance was eliminated for fiscal 2003. The prompt remedial actions taken by the MWRA board to ensure financial coverage margins included a balanced three-tiered approach consisting of a rate increase, use of surplus funds, and work force reductions, with each approach generating approximately $15 million in savings or revenues. These actions preserved fiscal 2003 debt service coverage margins at 1.7x for senior lien bonds and 1.2x for combined senior and subordinate lien debt, including CORE fund deposits.

After a one-year halt in fiscal 2003, commonwealth debt service assistance resumed in fiscal 2004 and has continued annually through fiscal 2008, albeit at a reduced level.

Commonwealth debt service assistance amounted to $18.9 million and $17.3 million for fiscal years 2007 and 2008, respectively, or approximately 3% of revenues. Both amounts were included in the respective budgets, leaving MWRA vulnerable to future reductions in such aid given that further operating efficiencies will be difficult to achieve. However, current aid levels have a significantly smaller impact on the budget when compared with fiscal 2002, lessening credit concerns of possible exposure if these revenues are eliminated in any given year.

Financial Summary (by General Resolution)

($000, Fiscal Years Ended June 30)

	2003	2004	2005	2006	2007
Operating Revenue	429,047	446,877	456,595	490,984	510,476
Interest Income	36,708	29,422	34,925	43,762	40,262
Rate Stabilization Withdrawals	14,691	—	—	10,740	—
Total Revenues	**480,446**	**476,299**	**491,520**	**545,486**	**550,738**
Operating Expenses	191,971	188,857	191,678	205,354	209,282
Net Revenues	**288,475**	**287,442**	**299,842**	**340,132**	**341,456**
Less: Provision for Transfer to Rate Stabilization Fund	—	—	(2,000)	(8,840)	(2,192)
Net Revenues Available for Debt Service	**288,475**	**287,442**	**297,842**	**331,292**	**339,264**
CORE Fund Balance	20,125	20,125	20,125	20,125	20,125
Debt Service					
Senior Lien	171,764	150,563	155,564	184,751	161,189
Subordinate Lien	90,482	99,080	108,474	116,423	119,262
Total Debt Service	**262,246**	**249,643**	**264,038**	**301,174**	**280,451**
Debt Service Coverage by Net Revenues Available (x)					
Senior Lien	1.7	1.9	1.9	1.8	2.1
Senior and Subordinate Lien Combined	1.1	1.2	1.1	1.1	1.2
Senior and Subordinate Lien, Including CORE Balance	1.2	1.2	1.2	1.2	1.3

CORE – Community Obligation and Revenue Enhancement.

Audited fiscal 2007 results showed a budget surplus of approximately $2.2 million, primarily because of strong cost control measures. Debt service coverage levels for the year remained strong at 2.1x for senior debt and 1.2x for combined senior and subordinate debt. Fiscal 2008 results are expected to be equally favourable with the authority anticipating a surplus in the range of $10 million–$12 million and similar debt service coverage levels. The anticipated surplus is bolstered by an $8 million entrance fee from a new customer; the actual operating surplus is forecast at between $2 million–$4 million.

MWRA's proposed fiscal 2009 current expense budget totals $587 million, or approximately 4% more than the approved budget for fiscal 2008. User charges constitute over 93% of all revenues and incorporate a 5.9% rate increase over fiscal 2008 levels as well as the use of $5.2 million in rate stabilization funds. Rate increases for fiscal years 2009–2013 are projected at 6% annually, including anticipated debt service assistance from the commonwealth of $11.3 million annually. Debt service coverage on senior lien bonds through this period is forecast to range from 2.0x–2.1x, while subordinate lien bonds are expected at 1.1x. The projections include the use of rate stabilization fund moneys, with the result that the fund will be nearly depleted by fiscal 2013. However, given MWRA consistently ends each fiscal year with surplus operations, Fitch expects that the actual balance of the rate stabilization fund will exceed the minimum level projected.

Financial Projections (by General Resolution)

($000, Fiscal Years Ending June 30)

	2008	2009	2010	2011	2012	2013
Operating Revenue	517,798	548,555	581,371	616,028	652,976	692,059
Interest Income	29,328	18,032	28,249	28,684	29,110	30,000
Rate Stabilization Withdrawals	—	5,179	15,806	11,752	785	6,817
Other Revenue	17,352	15,011	15,570	14,713	15,385	15,628
Total Revenues	**564,478**	**586,777**	**640,996**	**671,177**	**698,256**	**744,504**
Operating Expenses	251,100	261,820	272,359	285,066	296,348	308,583
Net Revenues	**313,378**	**324,957**	**368,637**	**386,111**	**401,908**	**435,921**
Plus: Reserve Deposits	1,655	1,674	1,677	1,643	1,769	1,922
Plus: Commonwealth Obligations	23,207	23,868	24,341	27,227	27,767	28,321
Net Revenues Available for Debt Service	**338,240**	**350,499**	**394,655**	**414,981**	**431,444**	**466,164**
CORE Fund Balance	20,125	20,125	20,125	20,125	20,125	20,125
Debt Service						
Senior Lien	164,100	172,222	183,789	212,360	202,834	237,610
Subordinate Lien	141,561	145,017	176,131	182,398	190,257	198,027
Less: Bond Redemption Account	—	—	—	(18,364)	(1,900)	(13,000)
Total Debt Service	**305,661**	**317,239**	**359,920**	**376,394**	**391,191**	**422,637**
Debt Service Coverage by Net Revenues Available (x)						
Senior Lien	2.1	2.0	2.1	2.1	2.1	2.1
Senior and Subordinate Lien Combined	1.1	1.1	1.1	1.1	1.1	1.1
Senior and Subordinate Lien, Including CORE Balance	1.2	1.2	1.2	1.2	1.2	1.2

CORE – Community Obligation and Revenue Enhancement.

Capital Program, Litigation, and Regulation

Historical Overview

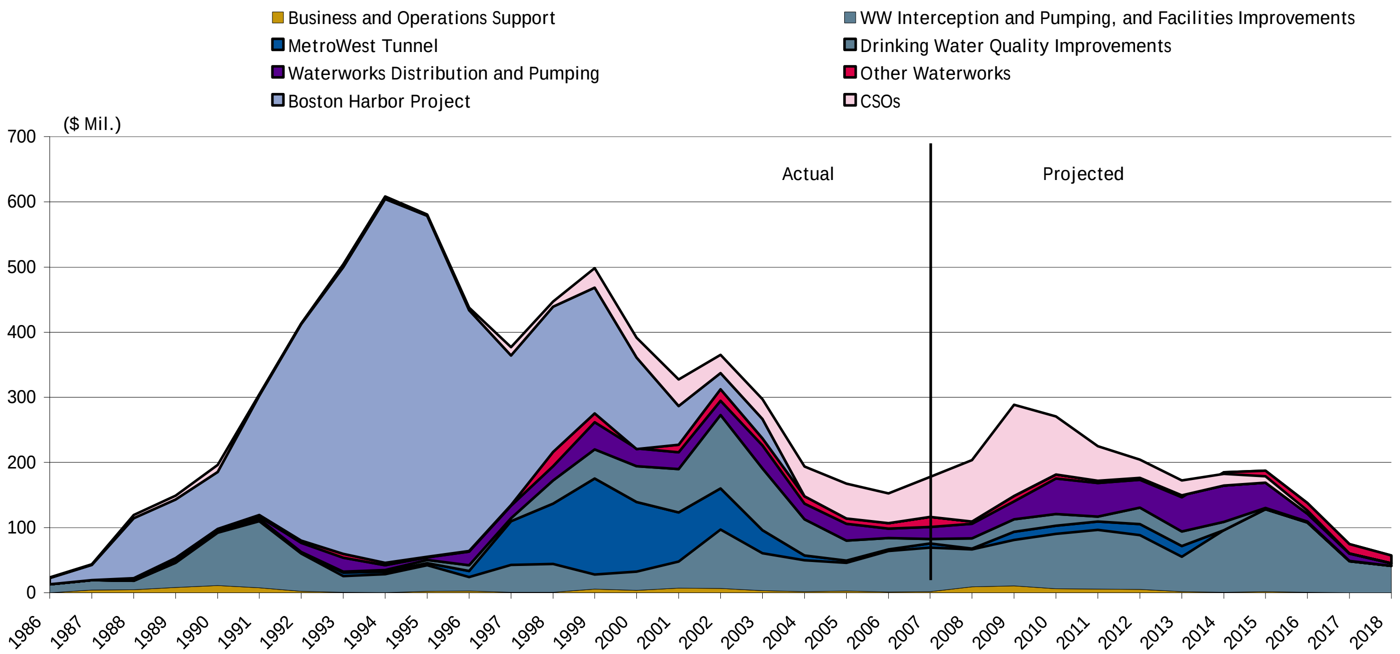
MWRA's CIP has been dominated historically by court-ordered spending to clean up Boston Harbor. Annual rate increases between fiscal years 1986–1993 averaged 27%. Adjusted for inflation, the Boston Harbor project dwarfs all other Boston area water and sewer works projects initiated in the 20th century. Only time-adjusted spending for developing the Wachusett Reservoir, begun in the 1890s, came close. Through fiscal 2007, MWRA had completed more than $6.8 billion in wastewater and water network upgrades, including $3.6 billion alone for the Deer Island wastewater treatment facility.

Because of the size of historical capital needs and the resulting borrowing costs, the authority's leverage levels have been, and will remain, a primary credit concern over the long-term. For fiscal 2007, the amount of debt to net plant assets was 85%. However, as the authority's CIP transitions from mandated projects to those focusing on rehabilitation of existing assets, the rate of ongoing leveraging is expected to slow. Also, the authority prudently prioritizes projects and adheres to adopted five-year spending caps to limit the financial impact to customers; the next spending cap will be adopted with the fiscal 2009 CIP.

Capital Improvement Plan

The fiscal years 2008–2013 CIP totals $1.3 billion and continues MWRA's efforts in meeting regulatory requirements through CSO remediation, as well as funding asset protection/maintenance efforts. Funding is expected to be derived almost exclusively from additional borrowing, which will be in the form of open market financings and state revolving fund loans. Major project areas of the CIP include the CSO program (29% of CIP expenditures); water transmission, distribution, and pumping (27%); wastewater treatment (12%); drinking water quality improvements (9%); and sewer interception and pumping (8%). The CIP also includes contingency amounts, which account for 9% of anticipated expenditures. The proposed fiscal years 2009–2013 CIP totals $1.16 billion, which is the amount of the proposed five-year spending cap, and reflects the inclusion of 18 new water and wastewater projects from the fiscal 2008 CIP deemed necessary to improve system reliability.

Capital Improvement Program



WW – Wastewater.

Planned Combined Sewer Overflow Upgrades

At times of heavy precipitation, discharges of combined wastewater and rainwater runoff from CSO outfalls in the authority's system and in the Boston, Cambridge, Chelsea, and Somerville community systems affect water quality. MWRA's $840 million CSO control plan, approved by the federal government in April 2006, has dominated and will continue to dominate capital spending for the next couple of years. Of the 35 CSO projects, 22 are complete, totaling $421 million in spending through fiscal 2007. Four CSO projects are in construction and six are in design, while the remaining four projects are expected to be in the design phase later this year. Officials expect the CSO control plan to be largely complete by fiscal 2017.

Upon completion of the CSO upgrades, the authority anticipates that a total of 34 CSO outfalls will have been eliminated, with total discharges reduced by about 90% from 1987 levels. In addition, 95% of remaining CSO discharges will receive treatment as a result of the authority's CSO control plan.

The authority operates its wastewater system, including the Deer Island treatment plant and CSO outfalls, under a national pollutant discharge elimination system (NPDES) permit, which expired in August 2005. The permit has not been renewed, and officials have no estimate as to when this might occur. Until the new permit is issued, the authority's existing but expired NPDES permit remains in effect.