Moody's
INVESTORS SERVICE

New Issue: Moody's assigns Aa1 to MWRA (MA)'s $283.6M senior lien revenue bonds; outlook stable

Global Credit Research - 22 Oct 2014

Subordinate debt affirmed at Aa2; authority has $4.47 billion in total rated debt

MASSACHUSETTS WATER RESOURCES AUTHORITY
Combined Water & Sewer Enterprise
MA

Moody's Rating

ISSUE	RATING
General Revenue Refunding Bonds, 2014 Series F	Aa1
Sale Amount $160,200,000	
Expected Sale Date 11/04/14	
Rating Description Revenue: Government Enterprise	
General Revenue Bonds, 2014 Series D	Aa1
Sale Amount $85,000,000	
Expected Sale Date 11/04/14	
Rating Description Revenue: Government Enterprise	
General Revenue Refunding Bonds, 2014 Series E	Aa1
Sale Amount $38,400,000	
Expected Sale Date 11/04/14	
Rating Description Revenue: Government Enterprise	

Moody's Outlook STA

Opinion

NEW YORK, October 22, 2014 --Moody's Investors Service has assigned a Aa1 rating to the Massachusetts Water Resources Authority's (MWRA) $85 million General Revenue Bonds, 2014 Series D, $38.4 million General Revenue Refunding Bonds, 2014 Series E, and $160.2 million General Revenue Refunding Bonds, 2014 Series F. Concurrently, Moody's has affirmed the Aa1 rating assigned to the authority's $3.5 billion of outstanding senior lien general revenue bonds and the Aa2 rating assigned to the authority's $970.1 million of outstanding subordinate general revenue bonds. The outlook is stable.

Proceeds from the 2014 Series D bonds are will permanently finance $47 million in outstanding commercial paper and provide new money for ongoing capital needs. The Series E bonds will currently refund the authority's 2004 Series B bonds, for a net present value savings of $12 million, or 34.6% of refunded principal. The Series F bonds will advance refund the authority's outstanding 2005 A, 2006 A, 2006 B, 2009 A, 2010 A, and 2011 B bonds for an estimated net present value savings of $10.5 million, or 6.6% of refunded principal. The bonds are secured by a senior lien pledge of net system revenues and benefit from satisfactory legal provisions including a 1.2 times rate covenant on senior debt (1.1 times for combined senior and subordinate debt). Additional security for roughly two-thirds of MWRA's revenues is provided by a general obligation pledge of the member communities to make timely assessment payments to the authority, as well as a tested state intercept program.

SUMMARY RATINGS RATIONALE

The Aa1 senior lien rating recognizes the historically strong credit strength of the authority's service area, a high but manageable debt position with significant variable rate exposure, and satisfactory debt service coverage levels. Also factored into the rating are the authority's reliance on regular rate increases to support debt service and anticipated capital needs. Significant additional credit strength is provided by the authority's tested ability to intercept member municipalities' state aid in the event of non-payment to the district.

The Aa2 subordinate lien rating incorporates the bonds' secondary position relative to MWRA's senior lien debt and the weaker rate covenant requiring revenue coverage of 1.1 times on combined senior and subordinate debt service. This includes subordinate fixed-rate loans issued to the authority by the State Revolving Fund (Massachusetts Clean Water Trust).

The stable outlook reflects our expectation that the MWRA will maintain stable financial operations as a result of historically prudent budgetary control, comprehensive long-term planning for both operations and capital needs, and a strong professional management team. Also incorporated in the stable outlook is the expected maintenance of sound reserve levels after the upcoming release of debt service reserve funds under the amended bond resolution, expected on June 30, 2015. Further, progress made towards full funding of the pension and OPEB liabilities, as well as the authority's prudent practice of appropriating surplus revenues to early debt defeasance will continue to provide credit strength moving forward.

STRENGTHS

– Strong credit quality and payment history of local government members

– Availability of intercept of members' state aid to cure delinquencies

– Strong management of financial performance, capital needs and debt profile

– Practice of appropriating surplus revenues to early debt defeasance

– Satisfactory and stable debt service coverage

– Ample water supply and well-maintained treatment facilities

– Well funded pension plan

CHALLENGES

– Highly leveraged debt position

– Exposure to risks associated with variable-rate debt and swap agreements

– Pending resolution changes allowing reductions in debt service and other reserves

– Reliance on regular rate increases for the foreseeable future

– Limited ability to expand service area

DETAILED CREDIT DISCUSSION

HIGHLY LEVERAGED SYSTEM WITH VARIABLE RATE RISK

MWRA's outstanding debt totals a sizeable $5.60 billion, slightly below its legislatively-established debt limit of $6.45 billion, and is largely attributed to the completion in the last decade of $7.8 billion in upgrades to the water and wastewater treatment facilities. The authority's fiscal 2014 debt ratio of 81.5% is well above average for Moody's-rated utilities, but not unusual for systems providing wholesale operations and with capital requirements associated with environmental consent decrees. The authority's debt burden is expected to remain elevated as principal is amortized slowly, at approximately 43% within ten years (82% within 20 years), reflecting the long useful life of the system's recently completed treatment plants.

The authority plans to issue up to $180 million of debt annually in support of its $769 million, five-year capital improvement program. The majority of projects focus on wastewater treatment improvements, including combined sewer projects (57%), as well as water transmission and distribution. The amount of MWRA's CIP that is mandated by regulatory agency deadlines has fallen to approximately 36% from over 80% in the previous decade.

In the near term, MWRA plans to issue approximately $85.6 million of subordinated fixed rate SRF loans to provide financing for capital projects and the retirement of commercial paper. Future refunding to achieve debt service savings, reduce variable rate exposure and mitigate future rate increases are likely as market conditions allow savings exceeding 4% of refunded principal.

Variable-rate debt currently represents a significant 20.9% of total outstanding debt, and includes commercial paper ($170 million, 3% of total debt) and variable rate demand bonds (VRDBs, $970.1 million, 17.3%). Authority officials remain conservative in budgeting for debt service, including an assumption for unhedged variable-rate interest that was maintained at 3.25% for fiscal 2015. This rate is based on a 20-year historical average and has been reduced gradually since fiscal 2007 from the peak of 4.75%.

Of the $1.14 billion of outstanding variable rate debt, a sizeable $485.9 million (50% of variable-rate debt) is hedged with interest rate swaps while the remaining $654.2 million, including $170 million of outstanding commercial paper, is unhedged. The September 30, 2014 aggregate mark-to-market value of MWRA's swaps is a negative $128.5 million. MWRA's current debt profile is structured and actively managed so that inherent variable rate risks are somewhat mitigated by the diversity in swap counterparties and standby bond purchase agreement (SBPA) providers, as well as the authority's solid cash position, ability to borrow temporarily from various reserve funds, and the authority to issue long-term debt for swap termination payments. Also offsetting the debt structure risk is management's demonstrated ability to monitor its debt portfolio performance and to replace or reassign swap and credit enhancement providers, generate additional assessment revenue through timely interim assessments and curtail operating expenditures to maintain the authority's sound financial position and debt service coverage.

VARIABLE RATE DEBT SUPPORTED BY DIVERSE LIQUIDITY PROVIDER AND SWAP COUNTERPARTY MIX

The authority has entered into five floating-to-fixed swap agreements covering several series of outstanding variable rate bonds with a total notional amount of $485.9 million. All of the agreements are structured to match maturity of hedged debt issuances. Swap payments are on parity with subordinated debt service payments and termination payments are subordinate to all debt service. Recent mark-to-market valuations (September 30, 2014) indicate an aggregate liability to MWRA of approximately $128.5 million. Early termination events are triggered if MWRA's underlying senior lien rating falls below Baa3. Although we consider that risk to be remote at this time, payments could be bonded or partially funded with capacity in MWRA's commercial paper program, which has $130 million available, net of its $50 million required environmental emergency reserve.

Six SBPAs provide credit support for the authority's Series 2008 A, C, E, and F bonds totaling $583.2 million in outstanding variable rate obligations. Expiration dates are well staggered with various maturity dates occurring between May 2015 and November 2017.

Letters of Credit (LOC) issued by Landesbank Hessen-Thüringen GZ (A2 negative) support the remaining $93.7 million of VRDBs and expire in December 2015. The authority's 1994 commercial paper program is supported by an LOC with Bayerische Landesbank (BayernLB, A3 negative) and the agreement is scheduled to expire on November 30, 2015. The authority's 1999 commercial paper program is supported by an LOC with State Street Bank and Trust Company (Aa3 stable) with an agreement expiration of September 2015.

The 2012 Series E, 2012 Series F, and 2012 Series G bonds were all issued through negotiated direct purchase agreements with Citibank, N.A. (A2 stable), RBC Capital Markets, LLC (RBC, A2 stable), and Wells Fargo Bank, N.A. (Aa3 stable), respectively. The Citibank agreement covering $62.83 million of 2012 Series E bonds has a three-year term, and will bear interest at a variable rate based on SIFMA plus 55 basis points. Citibank can terminate the agreement with all outstanding debt being immediately accelerated if any number of covenants are violated, including if the authority is downgraded below A3. The RBC agreement covering $60.3 million of 2012 Series F bonds has a three-year term, and will bear interest at a variable rate based on SIFMA plus 60 basis points, although this may be increased should the MWRA's rating be downgraded. RBC also has rights of termination if one of several covenants are violated and may accelerate all outstanding debt within seven days if the authority is downgraded below Baa3, or 180 days if the authority is downgraded below A3. The Wells Fargo agreement covering $55.3 million in 2012 Series G bonds has a five year term, and will bear interest at an variable rate based on SIFMA plus 70 basis points, and this may be increased should the MWRA's rating be downgraded. Wells Fargo may terminate with all outstanding debt being immediately accelerated, if any number of covenants are violated, including downgrade of the authority below A3.

The 2014 Series A and B bonds were issued through a negotiated direct purchase agreement with Banc of America Preferred Funding Corporation (a subsidiary of Bank of America, N.A., A2 stable). The 2014 Series A bonds covering $50 million have a three-year term, and bear interest at an variable rate of 70% of one-month

LIBOR plus 34 basis points. The 2014 series B bonds covering $64.8 million have a five-year term and will also bear interest at an variable rate of 70% of one-month LIBOR plus 48 basis points.

FINANCIAL FLEXIBILITY RELIES ON MODERATE RATE INCREASES

Financial performance is expected to remain stable, although the adoption of regular rate increases is critical to generating annual surpluses and strong debt service coverage. Annual operations and hefty debt service obligations have historically been sustained by annual rate increases averaging 4% since 2000, with much of the annual surpluses being transferred to augment various reserves, to increase optional contributions toward long-term liabilities, and to defease outstanding debt. The authority's primary revenue source is comprised of charges assessed on 61 member communities (weighted average GO rating is Aa2); assessments account for a 96.4% of fiscal 2015 revenues. Senior debt service coverage has comfortably exceeded the authority's senior lien rate covenant and additional bonds test of 1.2 times debt service, although total debt service coverage hovers closer to the total rate covenant and additional bonds test of 1.1 times debt service.

The authority's debt service coverage, as defined by its bond resolution, allows for the recognition of annual transfers from reserves in net revenues, which MWRA commonly uses. Consequently, coverage as defined by the resolution is generally higher than Moody's net revenue calculation, which does not include reserve transfers. Senior lien coverage, based on Moody's definition of net revenues, was healthy at 2.0 times in fiscal 2014. Total net revenue debt service coverage was more narrow at 1.1 times in fiscal 2014. Coverage in fiscal 2014 from pledged revenues, as defined by MWRA's resolution, was strong at 2.1 times and 1.2 times for senior lien and total debt service, respectively.

Operations typically generate sizeable annual surpluses which are usually employed to defease outstanding debt related to future spikes in debt service which can mitigate the need for large rate increases. Between fiscal 2006 and 2014, these defeasances have totaled $314.5 million, or an average of $35 million annually.

Reflecting a 3.5% rate increase, fiscal 2014 operations produced a sizeable $30.4 million surplus, $26.2 of which was used for debt defeasance. The remaining 2014 surplus will be used during fiscal 2015 for additional defeasance.

The fiscal 2015 CEB is based on a rate increase of 3.43%, and future rate increases are projected to range from 4.3% to 6.5% through fiscal 2020. While MWRA's total coverage remains generally lower than that of comparably-rated utilities, the authority's credit profile is strengthened by historical 100% collection rates and the availability of the commonwealth's local aid intercept program for assessments.

AMENDED GENERAL RESOLUTION RELEASES DEBT SERVICE AND OTHER RESERVES IN FY2016

The authority maintains several reserve accounts which totaled roughly $411.1 million in fiscal 2014, including an unrestricted operating reserve of $40 million, equivalent to roughly two months' of expenses. MWRA's cash position is satisfactory, representing roughly 45.9% of O&M or 168 days of operations. Moody's expects that MWRA will maintain its solid financial position given its conservative budgeting, planned regular rate increases and the anticipated maintenance of satisfactory reserve levels.

While historically the authority has not needed to significantly reduce its rate stabilization and bond redemption funds, the authority continues to project depletion of both funds by 2022 to smooth future rate increases and reduce outstanding debt associated with the highly-leveraged system. The authority's amended bond resolution, adopted in 2007 and now projected to take effect on June 30, 2015, permits the release of substantial reserves which were largely pledged exclusively to senior-lien debt service. Management plans to use the released cash primarily to defease debt and will set aside reserves to smooth future spikes in debt service. Exhaustion of rate stabilization and bond redemption funds, combined with the anticipated release of up to $111 million in debt service and other reserve funds under MWRA's amended resolution, could result in diminished flexibility and capacity to absorb future financial pressures and may have a negative impact on long-term credit strength.

LARGE REGIONAL SYSTEM PROVIDE ESSENTIAL SERVICE TO EASTERN MASSACHUSETTS

The authority provides wholesale water and wastewater services to 61 communities in eastern Massachusetts (Aa1 stable), serving approximately 2.8 million people, or 43% of the commonwealth's population. Incorporated in the long-term ratings are the authority's strong historical collection of assessments supported by historical receipt of 100% of assessments within the levy year, 31% of which come from the Boston Water and Sewer Commission (Aa1 stable). Additional credit strength is provided by: MWRA's ability to intercept the majority of the members' quarterly state aid payments; the authority's stable membership with lack of alternative sources; independent ratesetting authority; and the essential nature of the services provided. Water is supplied to 53 communities and is primarily derived from the Quabbin Reservoir, located 65 miles west of Boston (Aaa stable) and the Wachusett Reservoir, located 35 miles west of Boston, with a combined capacity of 477 billion gallons. Demand consistently falls below the safe yield level of 300 million gallons per day and capacity is expected to be sufficient for at least 20 years. Treatment of much of the system's water by ozonation and chlorination is provided at the system's John J. Carroll Treatment Plant.

Transmission and covered storage facilities include the 17.6-mile MetroWest Water Supply Tunnel and the 155 million gallon Norumbega Covered Storage Facility. Completion of these projects improved the system's security and compliance with the federal Safe Drinking Water Act. The authority's capital improvement plan (CIP) has shifted focus to maintenance and rehabilitation of pipelines, pumping facilities, and expansion of the system's central monitoring system.

Wastewater collection and treatment are provided to 43 communities, with a major treatment facility located on Deer Island in Boston Harbor. The $3.8 billion Deer Island plant and 9.5-mile effluent outfall tunnel were phased into service beginning between 1996 and 2000, and allow for average flow of 310 million gallons per day (with peak capacity of 1,270 MGD). Sludge is piped to the authority's pelletization plant in the City of Quincy (Aa3) where it is processed into commercially available fertilizer.

Outlook

The stable outlook reflects our expectation that the authority will maintain positive financial operations, sound reserve levels, active management of its variable rate portfolio, healthy debt service coverage and steady progress toward funding long-term pension and OPEB liabilities. Critical to maintaining the stable outlook will be authority's ability to maintain financial flexibility after the amended bond resolution and release of reserves takes effect.

WHAT COULD MAKE THE RATING GO UP

– Decrease in debt ratio

– Improved coverage for senior and total debt service

– Reduced exposure to risks associated with variable rate debt and derivative agreements

– Substantial enhancement of service area's composite credit strength

WHAT COULD MAKE THE RATING GO DOWN

– Significant reduction of cash reserves and financial flexibility

– A prolonged period of minimal rate increases, shifting funding of capital needs and long-term liabilities to the future

– Higher debt ratio or significantly increased exposure to variable rate debt

– Acceleration of debt amortization due to failed remarketings

– Deterioration of service area's composite credit strength

– Reduction in debt service coverage

– Failure to effect mid-year rate adjustments or expenditure controls when necessary

KEY DATA AND RATIOS

Type of System: Water and Sewer Treatment and Transmission

Population of Service Area: 2.8 million

Local Bodies assessed wholesale rates and charges (fiscal 2014): 61

Rate Revenue Collections within 30 days of due dates (fiscal 2014): 100%

Total Operating Revenues (fiscal 2014): $650.3 million

Debt Ratio (fiscal 2014): 81.5%

Amortization of Principal:

10 years 43%

20 years 82%

30 years 98%

Coverage of Senior Debt, per resolution (fiscal 2014): 2.11 times

Coverage of Senior & Subordinated Debt, per resolution (fiscal 2014): 1.18 times

Operating Ratio (fiscal 2014): 42%

Post-Sale Senior Lien Debt Outstanding: $3.54 billion

Variable Rate Subordinated Debt Outstanding: $970.1 million

Subordinated State Revolving Fund Loans Outstanding: $1.01 billion million

Post Sale Commercial Paper Outstanding: $123 million

The principal methodology used in this rating was Analytical Framework For Water And Sewer System Ratings published in August 1999. Please see the Credit Policy page on www.moodys.com for a copy of this methodology.

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