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Massachusetts Water Resources Authority Retirement System; Water/Sewer

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Credit Profile

Massachusetts Wtr Res Auth Retirement Sys ICR

Long Term Rating

AAA/Stable

Affirmed

Rationale

Standard & Poor's Ratings Services affirmed its 'AAA' issuer credit rating (ICR), with a stable outlook, on Massachusetts Water Resources Authority Retirement System.

The ICR is supported by what we view as the following credit characteristics:

- The creditworthiness of the retirement system's sponsor, the Massachusetts Water Resources Authority (MWRA; AA+/Stable);
- The retirement system's independent nature from the MWRA;
- Good funded levels as of the most recent actuarial valuation date;
- Annual pension contributions by MWRA in fiscal years 2008 and 2012 above actuarially required levels; and
- MWRA's amortization of the pension system's unfunded actuarial liability over what we view as a relatively short 12-year schedule ending in fiscal 2024.

Created by enabling legislation in January 1985, the MWRA provides wholesale water and wastewater service to 61 communities, concentrated mostly in eastern Massachusetts and the greater Boston metropolitan statistical area (MSA). We rate MWRA's senior-lien revenue bonds 'AA+' based on our view of the authority's strong management, strong collections rate, sound underlying member credit quality, and healthy historical debt service coverage (DSC), as well as rising debt service costs and above-average rates.

The MWRA Retirement System is a single-employer system effective since 1985 as a contributory, defined-benefit plan, and participation is mandatory for all of MWRA's eligible permanent full-time employees. We believe the retirement system's governing statutes and memorandum of understanding with the MWRA provide a good degree of independence. The retirement board has five members.

In 2007, the retirement system elected to change its actuarial funding method from the aggregate funding method to the individual entry age normal cost method, which is a funding method commonly used for public pension systems. Although the system had been 100% funded using the aggregate cost method, the change to the entry age normal cost method significantly altered the funded status in our view. Actuarial assets went from 100% of actuarial liabilities (using the old method) to 82.7% as of Jan. 1, 2007 (under the new method). The MWRA made an extra \$10.4 million lump sum payment above the actuarial annual pension cost (APC) in 2008 to address the new unfunded liability, when it funded 296% of its APC. The actuarial funded ratio, which had declined further to 73.8% as of Jan. 1, 2009, rebounded to 86.4% in 2010, and stood at what we view as a good 87.6% of actuarial liabilities as of the most recent Jan. 1, 2011, actuarial valuation date. The market value of pension plan assets was \$296 million as of Jan. 1, 2011, producing an 86.7% funded ratio by market value, only slightly less than the

actuarial funded ratio.

Key actuarial assumptions include an 8% assumed investment rate of return and asset smoothing that adjusts for the difference between actual investment returns and expected rates of return over a five-year period, but not allowed to differ from the market value of assets by more than 10%. As of Jan. 1, 2011, the actuarial value of the assets was 101.1% of market value, or nearly market value of \$296.0 million. The market rate of return on pension assets was 22.5% in calendar 2009, 13.3% in 2010, and 1.3% in 2011. Other actuarial assumptions include 4.75% per year salary increases and 3.0% for cost of living adjustments, with cost of living adjustments limited to no more than \$12,000 per year.

The unfunded actuarial liability decreased 3.3% in 2011, compared with the year before, which MWRA actuaries attribute mostly to the effect of salary gains above actuarial assumptions. The total unfunded actuarial pension liability in 2011 was \$42.2 million, or 50.9% of covered payroll. MWRA has fully funded its APC since it changed its funding methodology. In the fiscal year ended June 30, 2010, MWRA funded 101% of its APC, and 100% of it in fiscal 2011. In 2012, MWRA has budgeted to make a \$1.9 million payment above APC. The system has scheduled to make necessary payments to fully fund the pension system by 2024, ahead of its statutory requirement under state law.

Members of the retirement system become fully vested after 10 years of employment. Retirement system benefits consist of an annuity and a pension, which are two distinct funds within the system's financial structure. The number of employees within the system has been relatively stable--the active members in the retirement system declined to 1,109, as of Feb. 1, 2012, down from 1,205 in 2003. However, the number of pensioners/beneficiaries increased to 364, up from 173 in 2003, due in part to early retirement incentive programs offered in earlier years.

(For more information on MWRA's general water and sewer revenue bonds, see the rationale published March 20, 2012, on RatingsDirect on the Global Credit Portal.)

Outlook

The stable outlook on the retirement system primarily reflects the stable outlook on MWRA's senior-lien revenue bonds (as pension fund sponsor). The outlook also reflects what we consider the system's good and improving actuarial funded levels, as well as the relatively rapid scheduled amortization of its unfunded actuarial liability. At the current rating level, the positive trends in pension funding levels are, we believe, important considerations. In this regard, the periodic payments by MWRA above actuarially required levels demonstrate a level of commitment by MWRA to bringing the system up to fully funded levels.

MWRA (Pension Fund Sponsor) Credit Quality

The MWRA's senior-lien revenue bonds have an underlying senior-lien bond rating of 'AA+' with a stable outlook.

The revenue bond rating reflects what we view as:

- A large and diverse service base that serves the Boston MSA;
- 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 largely depends 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;
- A capital improvement program (CIP) we consider manageable given the size of the system; and
- Bond provisions we consider adequate, following modifications to the general bond resolution, including a senior-lien DSC ratio of 1.2x.

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 MSA. 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 the rating on Boston Water and Sewer Commission's bonds.

Pension Fund Background And Independence

The MWRA Retirement System, effective July 1, 1985, is a contributory, defined-benefit plan, and participation is mandatory for all of the MWRA's eligible permanent full-time employees. Chapter 32 of Massachusetts General Laws, which establish benefits, contribution requirements, and an accounting and funds structure for the fund, ultimately governs the retirement system. A three-member retirement board, which acted solely in the interest of members and beneficiaries, formerly administered the retirement system. However, the retirement system has increased the size of its board to five members to more equally represent all major interests and further strengthen the system's independence. The five-board member structure consists of one ex-officio individual (the secretary of the MWRA), one MWRA appointee (with a three-year term), two members who are elected by MWRA employees (each with three-year terms), and a fifth member (with a three-year term) who is elected by the four other board members and who cannot be an employee, retiree, or government unit official.

Under a 1997 memorandum of understanding between the retirement system and the MWRA, the retirement system is recognized as separate and distinct from the MWRA, with separate and distinct assets, liabilities, and fiduciary obligations. The memorandum explicitly outlines the retirement system's responsibilities and segregated functions. Although the system's management team reports of no significant interference from the MWRA, the authority is involved with the actuarial and contribution process. The Commonwealth's Public Employee Retirement Administration Commission (PERAC) provides additional oversight and guidance to the retirement system. The contributions required to fund the system are determined by the actuary and the retirement system board, with additional approval by PERAC. According to existing laws, contributions made to the retirement system by the MWRA shall cease to be funds of the MWRA, and must be used exclusively for the purposes of the retirement system. In 2012, the system reports that MWRA has budgeted for a contribution to the retirement system that is \$1.9 million above its actuarial annual pension contribution. The retirement system has indicated that contributions above APC are considered by MWRA on a year-to-year basis to advance full funding of its unfunded pension liability, depending on MWRA's availability of funds.

Pension Fund Investments

The retirement system's current investment allocation targets are: 24% U.S. equities, 14% non-U.S. equities, 28% fixed income, 24% alternative investments, and 10% global asset allocation. The retirement system uses numerous private investment managers.

Massachusetts Water Resources Authority Retirement System Schedule of Funding Progress					
	--Actuarial valuation as of Jan. 1--				
(\$000s)	2011	2010	2009	2007	2005
Actuarial value of assets	299,331	276,270	222,477	211,716	172,512
Actuarial accrued liability	341,521	319,876	301,652	255,962	172,512
Unfunded actuarial accrued liability	42,190	43,606	79,175	44,346	0.0
Funded ratio (%)	87.6	86.4	73.8	82.7	100.0
Covered payroll	82,870	81,962	82,314	75,444	65,790
Unfunded actuarial accrued liability as % of covered payroll	50.9	53.2	96.2	58.6	0.0

Related Criteria And Research

USPF Criteria: Public Pension Funds, June 27, 2007

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