

Massachusetts Water Pollution Abatement Trust

Pool SRF Bond Program New Issue Report

Ratings

New Issues

Massachusetts Water Pollution Abatement Trust State Revolving Fund Bonds, Subseries 17A AAA

Massachusetts Water Pollution Abatement Trust State Revolving Fund Bonds, Subseries 17B (Federally Taxable) AAA

Outstanding Debt

Pool State Revolving Fund Bond Program AAA

Rating Outlook

Stable

New Issue Details

Sale Information: Approximately \$198,195,000 Massachusetts Water Pollution Abatement Trust State Revolving Fund Bonds, Subseries 17A, and \$16,705,000 Massachusetts Water Pollution Abatement Trust State Revolving Fund Bonds, Subseries 17B (Federally Taxable), via competitive bid on May 8.

Security: Pledged borrower loan repayments, commonwealth of Massachusetts (the commonwealth) contract assistance payments (CAP), debt service reserve funds, interest earnings from the reserve funds, and de-allocated reserves deposited into the deficiency fund.

Purpose: To finance or refinance certain eligible water pollution abatement and drinking water projects.

Final Maturity: Series 17A, Feb. 1, 2043; series 17B, Feb. 1, 2033.

Key Rating Drivers

Sound Financial Structure: Fitch Ratings' cash flow modeling demonstrates that the program can continue to pay bond debt service even with loan defaults equal to Fitch's 'AAA' liability default hurdle, as produced using Fitch's Portfolio Stress Calculator (PSC).

Highly Rated Borrower Pool: More than 96% of Massachusetts Water Pollution Abatement Trust's (MWPAT) loan pool consists of borrowers exhibiting investment-grade ratings. Loan security is also strong as borrowers are secured by general obligation pledges of city and towns, local utility revenue pledges, or a combination of both.

High Single Borrower Concentration: The loan portfolio has high borrower concentration, with the Massachusetts Water Resources Authority (MWRA) comprising 28% of total outstanding loan principal. Additionally, the top 10 borrowers represent about 50% of the total loan principal. Programs with higher concentration are assessed at higher stress levels in Fitch's PSC.

Cross-Collateralization Strengthens Program: The clean water SRF (CWSRF) and drinking water (DWSRF) are cross-collateralized with one another, which allow shortfalls in one fund to be covered by surpluses in the other, further enhancing bondholder security.

Rating Sensitivities

Reduction of Structural Enhancement: A measurable decline in program enhancement such as a significant reduction in reserves or other pledged resources could pressure the rating. The Stable Rating Outlook reflects Fitch's view that structural enhancement and program credit quality will be sufficiently maintained.

Related Research

[2013 Water and Sewer Medians \(December 2012\)](#)

[2013 Outlook: Water and Sewer Sector \(December 2012\)](#)

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Rating History

Rating	Action	Outlook/ Watch	Date
AAA	Affirmed	Stable	4/22/13
AAA	Affirmed	Stable	11/28/12
AAA	Affirmed	Stable	9/25/03
AAA	Affirmed	—	11/6/98
AAA	Upgraded	—	3/31/97
AA+	Assigned	—	4/28/95

Credit Profile

MWPAT issues bonds to provide subsidized financing to municipalities throughout Massachusetts for water pollution abatement and drinking water projects. The bonds are issued pursuant to a master program resolution and separate series resolutions. MWPAT has historically used a bond series-based reserve fund model but, like many other SRFs, has since transferred to a hybrid-style model due to the current interest rate environment.

Financial Structure Exhibits Sufficient Default Tolerance

Program-level semiannual debt service coverage, which excludes amounts held in the reserve funds, is projected to be 1.0x. However, all-in coverage, which includes aggregate scheduled loan repayments, CAP amounts, debt service reserve funds, interest earnings, and de-allocated reserves divided by debt service, is approximately 1.2x.

Due to this enhancement, cash flow modeling demonstrates that the program can continue to pay bond debt service even with hypothetical loan defaults of 100.0% over any four year period (as per Fitch criteria, a 90% recovery is also applied in its cash flow model when determining default tolerance). This is in excess of Fitch’s ‘AAA’ liability default hurdle (24%) as produced by the PSC, which is derived based on the overall pool credit quality as measured by the rating of underlying borrowers, size, loan term, and concentration. Fitch notes that it conservatively did not consider Build America Bonds subsidy amounts in its cash flow analysis.

Solid Mix of Resources Support Program

Loan repayments, combined with reserve fund investment earnings and the CAP, are used to pay SRF bond debt service. Use of the reserve earnings, the interest portion of direct loan repayments and contract assistance makes possible a below-market interest rate loan subsidy that is set by commonwealth statute.

CAPs, which are used to cover a portion of debt service on behalf of certain borrowers, constitute a general obligation of the commonwealth (GOs rated ‘AA+’ with a Stable Rating Outlook by Fitch), for which its full faith and credit are pledged. The assistance payments are pledged under the program resolution to the program trustee for the benefit of all holders of the MWPAT SRF bonds.

Reserves and Deficiency Fund Significantly Enhance Bonds

The program’s reserves, which equal approximately \$966 million, or 29% of outstanding bonds, provide additional bond enhancement. As a series of bonds amortize, series reserves will be released to the program reserve, so that the original reserve level is maintained relative to outstanding bond principal. Released reserves for each series of bonds become available for deficiencies in payments of other statewide loan pool borrowers as well as for deficiencies on pool program refunding bonds. Any excess funds are then transferred to the deficiency fund.

Amounts in the deficiency fund may be used to prevent bond defaults resulting from loan repayment interruptions in the other MWPAT SRF programs, including standalone programs for MWRA, South Essex Sewer District, and the city of New Bedford (each program rated ‘AAA’ by Fitch). The MWPAT financed large loans to these borrowers historically through separately secured programs to reduce concentration risk in the statewide pool. If not needed by the statewide loan pool or the standalone programs, all released reserves are eventually recycled and used to secure additional SRF loans.

Related Criteria

- [Revenue-Supported Rating Criteria \(June 2012\)](#)
- [State Revolving Fund and Leveraged Municipal Loan Pool Criteria \(May 2012\)](#)

Prudent Investment Practices

Assets are invested in U.S. Treasury and agency securities and in investment agreements, with providers that are highly rated and/or fully collateralized by direct U.S. Treasury or agency securities with third-party custodians. The sustained credit quality of the reserve investments is important to maintaining the current 'AAA' rating.

Recent Transition to Hybrid Model

With the series 16-bond issuance in May 2012, MWPAT transitioned to a hybrid model, where program equity was used to fund approximately 30 direct loans, which were pledged to bondholders. Under this structure, the interest portion of pledged direct loan repayments subsidize portions of bond debt service, while the principal portion of the direct loan repayments are pledged as further security to the related SRF bonds. Previous issuances under the reserve fund model utilized enhancement provided by reserves which were initially funded with federal capitalization grants.

The series 17 bonds are being issued under the hybrid model, with debt service coverage provided by both direct loans, made from program equity, and leveraged loans, which are funded using bond proceeds.

Loan Portfolio

Borrower Pool Large, Somewhat Concentrated

The loan pool consists of approximately 290 borrowers. MWRA (senior and subordinate lien revenue bonds rated 'AA+' and 'AA', respectively, with a Stable Rating Outlook by Fitch) remains the largest borrower in the pool program's portfolio, making up approximately 28% of outstanding loan principal, up

from 22% during Fitch's last review in November 2012. The top 10 borrowers comprise over 50% of outstanding obligations. Concentration risk is largely mitigated by the high ratings of the portfolio. Additionally, programs with higher concentration are assessed at higher stress levels in Fitch's PSC.

Pledged revenue sources exhibit strong credit quality. Fitch estimates that at least 96% of program participants exhibit investment-grade credit quality, with the large majority rated 'A' or higher. Loan security is also strong as the loan portfolio is secured by general obligation pledges of city and towns, local utility revenue pledges or a combination of both.

Underlying loans are also subject to a state intercept mechanism in the event of delinquent repayments. Fitch conservatively does not consider the use of the intercept in its analysis as evidence of each borrower's interceptable aid was not provided.

Largest Borrowers

Borrower	% of Portfolio
Massachusetts Water Resources Authority	28.2
Upper Blackstone Water Pollution Abatement District	4.1
City of Fall River	3.7
City of New Bedford	3.2
City of Brockton	2.6
City of Lowell	2.2
City of Taunton	2.0
City of Chicopee	1.6
Town of Nantucket	1.5
Lynn Water and Sewer Commission	1.4
Total	50.5

Proven Program Management

As a result of strong loan underwriting and monitoring, the program has never experienced a default. Borrowers considered to comprise a material portion (1.5% of loan pool and rated lower than 'AA-') of the loan portfolio are monitored and reviewed on an annual basis.

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