

November 19, 2007

Massachusetts Water Pollution Abatement Trusts; State Revolving Funds/Pools

Primary Credit Analyst:

Colin A MacNaught, Boston (1) 617-530-8312; colin_macnaught@standardandpoors.com

Secondary Credit Analyst:

Karl Jacob, New York (1) 212-438-2111; karl_jacob@standardandpoors.com

Table Of Contents

Rationale

Outlook

Legal Structure

Debt Derivative Profile

Modifications To The Bond Resolution

Massachusetts Water Pollution Abatement Trusts; State Revolving Funds/ Pools

Credit Profile		
US\$354.175 mil pool prog bnds ser 13 due 08/01/2027		
Long Term Rating	AAA/Stable	New
Massachusetts Wtr Poll Abatement Tr (Pool Ln Prog)		
Long Term Rating	AAA/Stable	Affirmed

Rationale

Standard & Poor's Ratings Services assigned its 'AAA' rating, and stable outlook, to Massachusetts Water Pollution Abatement Trust's (MWPAT) series 13 pool program bonds based on MWPAT's ability, as demonstrated through cash flows, to more than meet Standard & Poor's default tolerance criteria for its state revolving fund program at the 'AAA' level.

Additional credit characteristics that support the rating include:

- The very strong structural security features, including substantial debt service reserves and, in the event of nonpayment by a borrower, a state aid intercept, as well as access to the program debt service reserve fund, the deficiency fund, and a pool program reserve;
- A very large pool size, considerable diversity, and strong credit quality of the pool of borrowers;
- The commonwealth's 'AA' rated GO pledge to make significant contract assistance payments on behalf of the borrowers; and
- The trust's long and positive history of program management.

MWPAT officials will use bond proceeds to provide program loans to 76 municipalities or water/sewer authorities:

- \$223 million will be applied to clean water program loans with maturities of between two and 30 years.
- \$105.8 million will be applied for drinking water program loans of 20 years or less.

All program participants' individual pledges to repay their obligations to MWPAT, the state revolving fund reserve investment earnings, and commonwealth contract-assistance payments secure the bonds.

MWPAT is an active program, providing funding for more than 274 different entities throughout Massachusetts. More than 235 of the commonwealth's 351 cities and towns have participated in MWPAT programs in the trust's 17-year history with 28 other water and sewer districts also using the program. Following this issuance, 265 borrowers will have roughly \$2.7 billion in loans outstanding through the clean water and drinking water programs; a GO pledge backs roughly 75% of the portfolio and a revenue pledge backs the remaining 25%. Default tolerances indicate the high program debt service reserve, totaling \$1.04 billion, including the series 13 debt service reserve (sized at approximately 40% of par); this transaction provides significant coverage under a variety of scenarios. Assuming the receipt of all subsidies, debt service reserve investment earnings will account for roughly 12% of debt service; contract assistance and related interest earnings will pay about 16% of debt service, including this issuance, with the balance derived from borrower repayments. To date, the Trust has entered into two interest rate swap transactions. The swaps have been assigned a Standard & Poor's Debt Derivative Profile score of '1.5', indicating

that they pose a low risk to the Trust's overall credit. Pool 13's single leading borrower is Massachusetts Water Resources Authority ('AA'/Stable), which is receiving \$81.7 million in clean water program loans. With this issue, loans to the Authority will represent approximately 23% of all pool loans outstanding. This is not a credit concern, given the Authority's own credit strength, as well as the credit strength of its member cities and towns for both water and sewer services.

The trust administers the commonwealth's state revolving fund programs to provide financial assistance to local governments, public authorities, and certain private entities for water pollution abatement and drinking water projects. The trust is actively administered and has a proven history of originating and servicing loans to many Massachusetts communities. MWPAT works jointly with Massachusetts Department of Environmental Management and Massachusetts Department of Health to identify projects for state revolving fund loans. Due to regularly performed borrower monitoring and strong security provisions backing each loan agreement, loan defaults or delinquencies have not existed to date. Historically, MWPAT officials issue new-money bonds for the pool program annually.

Outlook

The stable outlook reflects the borrowers' strong and diverse credit profile and Standard & Poor's expectation that the system's strong operating and financial performance will continue, coupled with the maintenance of the sizable reserves required by the program's structure.

Legal Structure

MWPAT's pooled program uses a master-financing indenture that provides various levels of protection. For the pooled program, under loan agreements, each borrower makes repayments sufficient to pay its relevant share of debt service on MWPAT bonds. Legal covenants mandate that each borrower's debt service reserve account, which is funded by commonwealth and federal grants, be maintained at a level equal to at least 33% of the amount of principal outstanding on each of their loans. Depending on the type of project being financed and the length of the loan maturity, debt service reserve levels could be 40% or 50%. As individual borrowers make loan payments, reserves or corpus can be released in several stages, starting on the same business day as the payment dates for MWPAT bonds. Initially, corpus releases from nondefaulting borrowers are deposited into the master-financing indenture general reserve fund on the bond payment date. This money is available to make up existing shortfalls stemming from other loans in the debt service funds for all borrower bonds before money can be released from the account. When the general reserve fund requirement is met, on the same date, released funds will, at first, flow to the deallocated reserve account under the master trust agreement. MWPAT officials can use funds in the deallocated account to cure deficiencies in other pools, as well as any deficiency in Massachusetts Water Resource Authority's accounts.

Debt Derivative Profile

The MWPAT is one of the first state revolving fund programs in the country to enter into interest rate swaps. To date, the Trust has entered into two such agreements. Based on a review and analysis of the transactions, the swap portfolio has been scored a Standard & Poor's Debt Derivative Profile (DDP) score of '1.5' on a scale of '1' to '4',

with a score of '1' representing the lowest risk and a '4' representing the highest risk. A score of '1.5' indicates that the swaps pose a very low risk to the Trust's credit quality.

The DDP is based on the following:

- Strong Trust management and the reliance on the Commonwealth of Massachusetts' swap management policy;
- Low risk of early termination given the wide rating trigger between the Trust's current rating and the early termination provisions in the swap documents;
- Limited basis risk because of the cost-of-funds structure of the floating rate payments to bondholders and to the counterparties; and
- The strong economic viability of the swap structures over stressful economic cycles.

As part of the 2006 series 12 refunding issue, debt service to bondholders on the 2021 and 2022 maturities were not fixed but were instead based on the Consumer Price Index (CPI). To hedge this floating rate, the Trust entered into a floating- to fixed-rate swap with Bear Stearns Capital Markets (with a guarantee from the Bear Stearns Co., 'A'/Negative), in which it would receive the same floating rate on the two maturities of the bonds (the CPI index) in return for a fixed payment of 3.9%. According to the Trust, this was structured to take advantage of market demand for CPI bonds and the net result was a projected present value savings of \$1 million.

The second swap is a rate lock entered into in May 2007 with Merrill Lynch Capital Services (MLCS), with a guarantee from Merrill Lynch & Co. ('A+'/Negative). This delayed forward starting the swap that allows the Trust to lock in a synthetic fixed rate on a future refunding that the Trust expects to issue in 2009. The rate lock may entail a single settlement payment to occur when the refunding bonds are issued. The Trust has the option to terminate the agreement at any time before the effective date, as well as the right to not terminate the swap when the bonds are issued. Under the terms of the agreement, the Trust will pay MLCS a fixed rate of 4.102% in return for a floating-rate payment based on the SIFMA index (formerly known as the BMA index).

Hedge payments under both agreements are secured by certain revenues of the Trust on parity with debt service on its outstanding bonds. Settlement payments are secured by legally available funds, which are defined as funds held in the Clean Water and Drinking Water Revolving Funds at the time of settlement. However, the legal payment from such funds has not yet been authorized by the EPA. Although both counterparties have recently been downgraded themselves by Standard & Poor's, provisions in the agreements provide some measure of protection against an early termination event, which would expose the Trust to the risks of replacing the swap and could trigger a payment depending on the mark-to-market. This includes provisions for one-way, full collateralization at early termination rating events and one-way options to terminate the agreement at any time.

Modifications To The Bond Resolution

Management amended the bond resolution for the series 11 issue, issued in 2005, associated with the interest rate subsidy to the borrowers, as well as the resolution for the series 12 bonds issued in 2006. The series 11 resolution differed from the previous bonds in that MWPAT assumed responsibility for the subsidy component. The commonwealth capped the program's interest rate at 2% in 2000, but MWPAT continued to tie the interest rate subsidy to borrower-specific reserve set-aside earnings and contract assistance payments. In the series 1 through 10 bonds, the local borrower provided a GO or net revenue pledge to cover the total presubsidy principal and interest amount, regardless of whether the 2% interest rate cap existed.

Under the pool 11 resolution, borrowers would still provide the GO or net revenue pledge on the net of subsidy principal and 2% interest rate; but MWPAT would aggregate the reserves in a nonborrower specific pool and guarantee a subsidy to provide a 2% interest rate. This nonspecific pool is expected to provide efficiency opportunities for portfolio management. The local aid intercept remains unchanged in the series 11 and 12 resolutions. Legal requirements of bonds outstanding remain as when issued, but MWPAT officials plan to issue additional series using the series 11 model as they did with the series 12 and series 13 issue. The series 11, 12 and 13 bonds remain on parity due to the flow of funds that still pools reserve free-ups from all series into a common pool program reserve fund and subsequent deficiency fund before being recycled into the equity fund used to fund loans.

Management amended the bond resolution for the Pool 12 issue pertaining to the trust's investment provisions. Beginning with the Pool 12 bonds, investment agreements with providers, or a guarantor of such provider's obligations rated 'AA-', with certain collateral provisions, can be used for the investment of debt service reserve funds. To the extent investment agreements call for the posting of collateral as remedy for a downgrade event, the amount of collateral posted at the time of posting and the type of collateral posted will be reviewed by Standard & Poor's on a case-by-case basis.

The reserve must be invested in a guaranteed investment contract that meets Standard & Poor's 'AAA' investment criteria over the bonds' life. Subject to the availability of commonwealth contract-assistance payments, water-pollution-abatement projects permanently financed after Oct. 1, 1995, are eligible to receive 50% grant equivalency. Drinking water projects funded by the trust also receive financial assistance at 50% grant equivalency. Legislation passed in 2000 amended these provisions, and new projects for pollution abatement and drinking water first appeared in 2002. Intended use plans filed with the EPA to qualify for capitalization grants will receive financial assistance, resulting in the financial equivalent of a loan made at a 2% interest rate.

Copyright © 2007, Standard & Poors, a division of The McGraw-Hill Companies, Inc. (S&P). S&P and/or its third party licensors have exclusive proprietary rights in the data or information provided herein. This data/information may only be used internally for business purposes and shall not be used for any unlawful or unauthorized purposes. Dissemination, distribution or reproduction of this data/information in any form is strictly prohibited except with the prior written permission of S&P. Because of the possibility of human or mechanical error by S&P, its affiliates or its third party licensors, S&P, its affiliates and its third party licensors do not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. S&P GIVES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. In no event shall S&P, its affiliates and its third party licensors be liable for any direct, indirect, special or consequential damages in connection with subscribers or others use of the data/information contained herein. Access to the data or information contained herein is subject to termination in the event any agreement with a third-party of information or software is terminated.

Analytic services provided by Standard & Poor's Ratings Services (Ratings Services) are the result of separate activities designed to preserve the independence and objectivity of ratings opinions. The credit ratings and observations contained herein are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Accordingly, any user of the information contained herein should not rely on any credit rating or other opinion contained herein in making any investment decision. Ratings are based on information received by Ratings Services. Other divisions of Standard & Poor's may have information that is not available to Ratings Services. Standard & Poor's has established policies and procedures to maintain the confidentiality of non-public information received during the ratings process.

Ratings Services receives compensation for its ratings. Such compensation is normally paid either by the issuers of such securities or third parties participating in marketing the securities. While Standard & Poor's reserves the right to disseminate the rating, it receives no payment for doing so, except for subscriptions to its publications. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

Any Passwords/user IDs issued by S&P to users are single user-dedicated and may ONLY be used by the individual to whom they have been assigned. No sharing of passwords/user IDs and no simultaneous access via the same password/user ID is permitted. To reprint, translate, or use the data or information other than as provided herein, contact Client Services, 55 Water Street, New York, NY 10041; (1)212.438.9823 or by e-mail to: research_request@standardandpoors.com.