FITCH RATES MASSACHUSETTS CLEAN WATER TRUST'S \$310MM SRF BONDS 'AAA'; OUTLOOK STABLE

Fitch Ratings-Austin-23 March 2017: Fitch Ratings has assigned a 'AAA' rating to the following bonds issued by the Massachusetts Clean Water Trust (MCWT):

- --Approximately \$207.8 million state revolving fund bonds series 20 (green bonds);
- --Approximately \$97.2 million state revolving fund refunding bonds series 2017.

Bond proceeds will be used to finance or refinance costs related to certain wastewater and drinking water projects within the state, refund bonds previously issued by MCWT, and pay for the costs of issuance.

In addition, Fitch has affirmed the 'AAA' rating on the following outstanding parity bonds:

--\$3 billion in outstanding state revolving fund bonds.

The Rating Outlook is Stable.

SECURITY

The bonds are secured by pledged loan repayments, Commonwealth of Massachusetts (the commonwealth) contract assistance payments (CAP), rights and interest of the master trust agreement, and certain other funds including the equity fund.

KEY RATING DRIVERS

SOUND FINANCIAL STRUCTURE: Fitch's cash flow modeling demonstrates that the MCWT's combined pool SRF bond programs (the pool program) can continue to pay bond debt service even with loan defaults in excess of Fitch's 'AAA' liability rating stress hurdle, as produced using Fitch's Portfolio Stress Calculator (PSC).

HIGHLY RATED BORROWER POOL: Approximately 94% of the pool program 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: Single borrower concentration is high, with the Massachusetts Water Resources Authority (MWRA) representing 27% of total outstanding loan principal.

STRONG PROGRAM MANAGEMENT: MCWT manages one of the largest SRF programs in the nation. To date, there have been no pledged loan defaults in any of the MCWT's SRF programs.

RATING SENSITIVITIES

REDUCTION IN MODELED STRESS CUSHION: Significant deterioration in aggregate borrower credit quality, increased pool concentration, or increased leveraging resulting in the program's inability to pass Fitch's 'AAA' liability rating stress hurdle would put downward pressure on the rating. The Stable Outlook reflects Fitch's view that these events are unlikely to occur.

CREDIT PROFILE

MCWT provides subsidized financial assistance to local governments and other eligible borrowers in the commonwealth under its SRF programs. The series 20 bonds will be the third series of bonds issued under the 2015 master trust agreement (2015 MTA). MCWT also administers two outstanding SRF programs (one single-borrower program and the previous pool program) under a prior program resolution that is now closed.

The 2015 MTA program pledges amounts available in the equity fund to all SRF program bondholders on a parity basis. In light of this feature, Fitch combines all of MCWT's SRF programs in its cash flow model analysis.

SOUND FINANCIAL STRUCTURE

Fitch measures financial strength of the pool program by calculating the program's asset strength ratio (PASR). The PASR includes total scheduled pledged loan repayments, CAP payments, excess releases from the standalone SRF programs, plus any reserve balances and account earnings divided by total scheduled bond debt service. MCWT's pool program PASR is 1.4x, which is below Fitch's 2016 'AAA' median level of 1.9x but still considered sound. Minimum annual debt service coverage is also calculated to be somewhat low at about 1.1x, though lower minimum annual coverage is typical for SRF structures enhanced with large reserve fund balances.

Cash flow modeling demonstrates that the program can continue to pay bond debt service even with hypothetical loan defaults of 100% in any four-year period of the outstanding bonds' expected life (per Fitch criteria, a 90% recovery is also applied in its cash flow model when determining default tolerance). This result is in excess of Fitch's 'AAA' liability stress hurdle of 22%, as produced by the PSC. The liability rating stress hurdle is calculated based on overall pool credit quality as measured by the rating of underlying borrowers, loan size and term, and concentration.

CAPS AND DEALLOCATIONS SUPPORT BOND DEBT SERVICE

CAPs provide approximately 9% and 5% of support to the prior pool and the 2015 MTA programs' bond debt service, respectively, on behalf of certain borrowers. CAPs constitute a general obligation of the commonwealth (GOs rated 'AA+'/ Stable Outlook), for which its full faith and credit are pledged. Additional enhancement equal to approximately 10% of total pool program debt service is provided by scheduled releases from the single-borrower SRF program. Both the CAPs and the releases from the standalone program were stressed in Fitch's cash flow model analysis.

HIGH-QUALITY LOAN POOL WITH SIGNIFICANT SINGLE-BORROWER CONCENTRATION

Fitch estimates that at least 94% of pool program participants exhibit investment-grade credit quality, with the large majority rated 'A' or higher. In aggregate, pool credit quality is strong versus similar municipal pools as reflected by the low 'AAA' liability stress of 22%, which compares favorably to Fitch's median of 32% (lower liability stresses correlate to stronger credit quality). Loan security is also solid as the loan portfolio is secured by general obligation pledges of cities and towns, local utility revenue pledges, or a combination of the two.

The pool program consists of approximately 290 borrowers, the top 10 of which contribute to about 50% of total outstanding loan obligations. After MWRA's 27% (senior and subordinate lien revenue bonds rated 'AA+' and 'AA', respectively, with a Stable Outlook), the remaining top 10 borrowers range in more manageable sizes of 1.9% - 4%. Fitch's concern with MCWT's high single-borrower concentration is somewhat mitigated by the high rating of MWRA. Overall,

MCWT's pool program composition is mostly in line with what Fitch observed in its previous few reviews.

ENHANCEMENT PROVIDED BY OVERCOLLATERALIZATION AND RESERVES

The series 20 and certain prior series of bonds are primarily protected from losses by surplus pledged direct loan repayments funded from program equity made in excess of bond debt service. Enhancement (or overcollateralization) provided by such direct loans typically ranges from 33% to 50% of the supported bonds. As bonds enhanced by overcollateralization amortize, excess amounts are eventually released to the MTA's pledged equity fund and are therefore available to other SRF program borrowers.

Certain other prior series of SRF bonds in both the prior pool program and single-borrower programs have been enhanced by reserves initially funded by MCWT (from federal and state grants) in amounts typically ranging from 33% to 50% of the related borrower loans. As bonds secured by reserve funds amortize, such reserves are also eventually released to the pledged equity fund and thereafter available to all SRF program borrowers. Although no reserves are being funded with this issue, combined series' reserves from the previous pool program issues equal approximately \$748 million, or 25% of outstanding bonds.

STRONG PROGRAM MANAGEMENT

MCWT is an interagency management team composed of officials from the commonwealth treasurer's office, the executive office of administration and finance. The commonwealth's Department of Environmental Protection (DEP) administers Massachusetts' SRFs in an arrangement typical of such programs nationwide. DEP staff members review and monitor projects for several water and wastewater programs, including the pool program. MCWT has never experienced a pledged and leveraged loan default across any of its SRF programs.

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Applicable Criteria

Revenue-Supported Rating Criteria (pub. 16 Jun 2014)

https://www.fitchratings.com/site/re/750012

State Revolving Fund and Leveraged Municipal Loan Pool Criteria (pub. 20 Oct 2016)

https://www.fitchratings.com/site/re/888966

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