

New Issue: Moody's assigns Aa2 ratings to \$435 million of New York City Municipal Water Finance Authority second resolution water and sewer revenue bonds

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\$8.2 billion of first resolution and \$20.1 billion of second resolution bonds outstanding; outlook is stable

NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY, NY
Combined Water & Sewer Enterprise
NY

Moody's Rating

ISSUE	RATING
Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2013 Series BB	Aa2
Sale Amount	\$435,000,000
Expected Sale Date	12/04/12
Rating Description	Revenue: Government Enterprise

Moody's Outlook

Opinion

NEW YORK, November 28, 2012 --Moody's Investors Service has assigned a Aa2 rating to the New York City Municipal Water Finance Authority's \$435 million Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2013 Series BB. Proceeds of the bonds, scheduled to price on December 4, will be used to take out maturing commercial paper and to finance capital costs of New York City's water and sewer system.

SUMMARY RATING RATIONALE

The authority's Aa1 first resolution and Aa2 second resolution ratings reflect strong bondholder protections provided by a strong legal structure; healthy debt service coverage provided by a gross lien on the system's revenues and enhanced by independent rate-setting ability; the essential nature of New York City's water and sewer system and the monopoly the city and the authority have in providing that service; the challenges of operating and maintaining the system given its size, age and density of the population it serves; a high debt burden; and continued need for sizeable rate increases. The outlook is stable.

STRENGTHS

- Legal structure that provides strong bondholder protections, including: bankruptcy protection and legal separation from the fiscal condition of New York City; autonomous rate-setting authority; and a gross revenue pledge
- A long history of regular, independently-set rate increases that maintain financial stability, support a substantial capital program, and provide healthy debt service coverage
- Ample water supplied from the city's own extensive reservoir network; low transmission costs relative to other large systems; water rates that currently are moderate compared to other large cities; and authority to sell liens to monetize unpaid bills and provide incentive to delinquent customers to pay

CHALLENGES

- The water and sewer system's size, age and density pose operating and maintenance management challenges

-- Substantial debt issuance estimated going forward and the projected need for continued sizeable rate increases to support it and maintain adequate debt service coverage

-- A history of state and federal regulatory mandates which drive approximately 20% of the system's capital improvement program, and could substantially increase the authority's future borrowing needs

DETAILED CREDIT DISCUSSION

DEBT SERVICE COVERAGE INCREASES BASED ON STRONG FISCAL 2012 RESULTS

Regular rate increases (7.0% for fiscal 2013, lower than originally expected to be required) provide strong debt service coverage. Based on our adjusted audited fiscal 2012 results, gross revenues (operating revenues plus investment and subsidy income) provide 7.99 times coverage of first resolution debt service and 3.23 times aggregate debt service coverage. On a net basis, coverage is 4.67 times for first resolution bonds and 1.89 times in aggregate. The authority estimates that aggregate gross coverage will average 3.4 times through fiscal 2017 and net coverage will average 2.1 times. The authority's estimates are usually conservative and we expect that trend to continue. Its budgeted debt service assumes short-term rates of 3.0% in fiscal 2013, and 4.25% in fiscal 2014 and going forward, and long-term rates of 6% and greater, both higher than current rates on its outstanding debt. Additionally, through fiscal 2017 the authority has budgeted cash funded capital expenditures of between \$150 million and \$250 million annually that can act as an additional cushion against lower revenues or higher expenses, or be used to defease bonds to lower its debt service costs.

Future rate increases are forecast to be 7.9% in fiscal 2014, 8.7% in each of fiscal 2015 and 2016 and 7.5% in fiscal 2017. The history of willingness to increase rates is a strong management feature and an important component of the ratings. At the same time, the system has endeavored to reduce its operating expenses and mitigate the size of future rate increases, which help to increase its flexibility to adjust as necessary.

The authority has approximately \$3.5 billion of Build America Bonds outstanding, and reports that it receives an average of \$75 million annually in federal interest subsidy payments on those bonds and Recovery Zone Economic Development Bonds. In September, the White House announced that subsidy payments will be subject to a 7.6% reduction if sequestration is implemented in January 2013 as current law requires. That would amount to a \$2.9 million reduction in the current fiscal year and \$5.7 million thereafter, small amounts that the authority could absorb easily.

HURRICANE SANDY-RELATED COSTS MANAGEABLE AND MOST EXPECTED TO BE REIMBURSED

Portions of the water and sewer system sustained damage from Hurricane Sandy, three wastewater treatment plants in Brooklyn and Queens in particular, although those facilities were back in operation less than a week after the storm. The authority's current estimate of its storm-related costs is \$95 million, which reflects \$56 million of additional operating and maintenance costs and \$39 million of capital costs. The authority expects that much of those costs will be reimbursed by the Federal Emergency Management Agency (FEMA). Shortly after the storm, FEMA determined that most eligible reimbursements for affected governments would be not less than 75% of their costs and that certain emergency response costs incurred between October 31 and November 14 would be eligible for 100% reimbursement. While the FEMA reimbursement process can be long, the authority has sufficient resources, including available cash, its \$800 million commercial paper program, and its regular bonding to meet those needs in the interim. Service has been terminated to several hundred destroyed and condemned properties, accrual of late payments charges were suspended for November, and billing to nearly 9,900 storm-affected properties (approximately 1.2% of all system accounts) has been suspended until spring. It does not expect system revenues to be materially affected by those changes. The storm caused no disruption in the flow of funds for debt service, based on the authority's strong legal structure and the flow of funds (see below).

LEGAL STRUCTURE PROVIDES STRONG BONDHOLDER PROTECTIONS, REFLECTS STRONG RATINGS

The authority's Aa1-rated first resolution bonds are secured by a first lien on gross revenues of the water and sewer system, and the Aa2-rated second resolution bonds are secured by a subordinate claim on the gross revenues. Additional security provisions provide strong legal protections beyond those found in most municipal water and sewer revenue bonds. These include insulation from potential New York City fiscal stress, independent rate-setting, and (for first resolution bonds only) covenanted reserves, in addition to traditional revenue bond covenants. Neither the New York City Water Board (which sets rates) nor the authority has the ability to file for bankruptcy. A lease agreement between the board and the city establishes the board's ownership of system revenues, while a financing agreement between the board and the authority pledges those revenues first to bondholders, further protecting them from potential weakness in the city's financial position. Additionally, bond

counsel has opined that system revenues could not be combined with New York City (general obligations rated Aa2 with a stable outlook) should the city file for bankruptcy protection. The lease with the city limits the annual rental payment to the greater of principal and interest on city general obligation debt issued for water and sewer purposes due in the fiscal year of the payment, or 15% of principal and interest due on the authority's bonds in that fiscal year. Importantly, the lease requires the city to operate and maintain the water and sewer system to its consulting engineer's recommendation regardless of whether or not it receives the board's rental payment.

The first resolution rate covenant requires net revenues to equal 115% of first resolution debt service, plus 100% of the sum of second resolution debt service, operating and maintenance expenses, and the city lease payment. First resolution bonds also benefit from a cash-funded debt service reserve equal to maximum annual debt service. First resolution issuance is subject to an additional bonds test that requires net revenues to equal 115% of maximum annual senior debt service for the next succeeding five years and 100% of second resolution debt service and operating and maintenance expenditures.

The second resolution rate covenant requires that net revenues on a cash basis be sum sufficient to cover combined debt service, operations and maintenance expenses and city lease payments. There is no debt service reserve on the second resolution bonds. The second resolution additional bonds test requires revenues to equal 110% of aggregate debt service for both first and second resolution bonds in either of the prior two fiscal years.

The authority pledges the gross system revenues to repayment of its debt obligations; revenues flow to the city (which operates the system through its Department of Environmental Protection) for operations and maintenance expenses only after debt service is funded monthly on a one-fifth of interest, one-eleventh of principal basis. In the event that revenues are insufficient to cover monthly debt service requirements, bondholders have the right to claim all revenues of the system until debt service obligations are met. As of July 1, 2012, 100% of funds for fiscal 2013 first resolution debt service was on deposit with the bond trustee and all funds for this December's second resolution interest payment was on deposit by the end of that month. The authority reports that as of the end of last month, 83% of fiscal 2013 debt service had either been paid to bond holders or was held by the trustee. The strength of this gross revenue pledge and the system's legal protections are key considerations reflected in the credit rating.

FINANCIAL OPERATIONS CONTINUE TO BE HEALTHY

Based on audited fiscal 2012 results, the authority's financial position is healthy. Operating revenues increased by 5.5% compared to fiscal 2011 based on audited figures, an amount that includes payments on accounts in arrears. Through fiscal 2017, the authority estimates that operating income will increase by an average of 5.4% annually.

A trend of decreased consumption, in part related to the economic downturn, has reversed itself in the near term. For fiscal 2011 consumption was 2.5% greater than during fiscal 2010, but in fiscal 2012 it decreased by 2.3%. For the first four months of fiscal 2013 (July through October), consumption decreased by 0.7% compared to the same period in the prior year. For the same period, however, payments were 0.6% greater. The authority's forecast reflects decreased consumption of 1.5% annually from fiscal 2013 through fiscal 2015 and a 2.0% decrease in fiscal 2016. We view these estimates as prudent considering slower economic growth forecasts going forward and increasing water conservation.

In response to decreased consumption trends, the city's Department of Environmental Protection (DEP), which operates the water and sewer system, has cut expenditures, including reductions in operating expenses. Fiscal 2011 operating expenses decreased by a substantial 24% compared to the prior year, although fiscal 2010 expenses were skewed upwards by retroactive wage settlement payments made to sewer workers that were absorbed by lower-than-budgeted short-term debt service costs, use of one-time funds, and by the rate increase. Operating expenditures increased by 3.5% in fiscal 2012, and are forecast to increase by 2.2% annually through fiscal 2017.

Regulations currently being considered by the state would permanently ban high volume natural gas drilling in the city's upstate watershed. Because the upstate water is not required to be filtered, potential contamination related to drilling would likely result in substantial costs for the system. The city has recommended that the state also create substantial exclusion zones around the upstate water infrastructure to further protect it from potential drilling damage. Making the drilling ban permanent and creating the exclusion zones would be a credit positive development for the authority, while permitting drilling close to the watershed infrastructure could raise credit challenges.

The authority has had the ability to sell liens for unpaid water and sewer charges since 2007. The first lien sale was held in June 2008 and its current lien sale authorization extends through 2014. The November 2011 lien sale

netted \$13 million. Besides the lien sales, the authority is in the process of installing automated meter reading equipment throughout the city which is expected to help historically challenged collection rates going forward: to date, 94% of all metered accounts have the automated meter reading system installed.

The system's cash position has historically been stable, with a fiscal 2012 cash-basis surplus of \$497.5 million. Cash surpluses are carried forward and applied to second resolution debt service in the following year. Given the current and projected rise in capital costs and annual debt service requirements, the maintenance of solid liquidity levels and ongoing annual financial margins will remain important credit factors supporting the strong ratings.

CAPITAL PROGRAM: EXTENSIVE CIP REFLECTS SIZE, AGE AND DENSITY OF THE SYSTEM; MANDATED PROJECTS A SECTOR-WIDE RISK BUT REFLECT SMALLER PORTION OF PLAN

The city's Department of Environmental Protection's updated CIP includes an estimated \$11.8 billion of capital improvements for fiscal years 2013 through 2021 and reflects smaller annual capital commitments than in recent years, in part as the result of actions taken by New York City that include reducing city-funded capital commitments and stretching its capital plan across a longer period as it works to balance its budget amid the economic downturn. Bond issuance in the current version of the CIP averages \$1.4 billion annually from fiscal 2013 through 2017, with total debt service forecasted to grow from \$1.1 billion in the current fiscal year to \$1.7 billion in fiscal 2017.

The total program includes \$4.4 billion of water supply and water distribution projects, \$4.5 billion for water pollution control, including \$66 million for consent decree projects, and \$1.7 billion for sewers. While conservation remains a component of the system's strategy, DEP is identifying alternate water sources to ensure reliability during future droughts and the maintenance of the existing supply system. Authority officials report the system is in compliance with lead regulations and no material capital costs are expected in this area. Notably, the percentage of the capital plan that reflects mandated projects has decreased significantly, which provides significant flexibility to adjust to fluctuations in revenues and expenses. According to the board, while mandated capital spending was 89.7% of the total in fiscal 2007, it declined to 17.9% in fiscal 2012 and will average about 18.0% through fiscal 2016. However, the water and sewer sector is a highly regulated one and mandated capital projects and related uncontrollable costs are always possible. In particular, the New York system benefits significantly from a determination by the federal government that it does not have to filter its upstate drinking water supply. That ruling expires in 2017 and if it is not renewed or if the renewal includes additional conditions beyond those currently in force, the systems' capital costs could be increased substantially.

VARIABLE RATE DEBT AND INTEREST RATE DERIVATIVES

The authority has \$3.6 billion of variable rate obligations outstanding (both hedged and unhedged), as well as an \$800 million commercial paper program (\$400 million of which is extendible commercial paper without external liquidity support); including the full amount of authorized commercial paper, the variable rate portfolio reflects 15.5% of the authority's total outstanding debt. The variable rate debt is not insured, and standby bond purchase agreements with a diverse portfolio of liquidity providers contain favorable legal provisions, most notably a lack of term-out requirements that would accelerate principal in the event that any bond becomes a bank bond. Of its standby bond purchase agreements, 74% are provided by banks with P-1 short-term ratings and 5% are from banks with short-term ratings of P-2. None of the bonds have become bank bonds and continue to trade at rates favorable to the authority, especially considering its approach to budgeting for debt service on its variable rate bonds.

The authority has entered into four swap agreements with four different counterparties in an aggregate notional amount of \$621 million; as of September 30, 2012 the mark-to-market value was -\$119 million. Termination of the swaps by the counterparties is limited to highly unlikely events. In the event that the authority should owe a termination payment, the swaps include provisions that allow the rate setting process to occur before the payment is due.

OUTLOOK

The outlook for the New York City Municipal Water Finance Authority is stable. Implementing the authority's capital plan requires substantial issuance of new debt, which in turn requires sizeable rate increase to support. Additionally, like water and sewer systems throughout the nation, regulatory mandates also could drive future capital costs upwards and create other uncontrollable spending needs.

WHAT COULD MAKE THE RATING GO UP

- A stronger additional bonds test or other stronger limitations on leveraging the pledged revenues
- A significant and sustained improvement in collection rates and sustained stability in consumption levels

WHAT COULD MAKE THE RATING GO DOWN

- Failure to continue to set rates at levels needed to afford the system's sizeable capital program, large debt load and the water and sewer system's significant operating costs that result in weakened financial ratios or debt service coverage
- New state or federal regulations that require especially large capital expenditures or that create uncontrollable costs for the authority

RATING METHODOLOGY

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.moody.com for a copy of this methodology.

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Analysts

Nicholas Samuels
Lead Analyst
Public Finance Group
Moody's Investors Service

Emily Raimes
Additional Contact
Public Finance Group
Moody's Investors Service

Contacts

Journalists: (212) 553-0376
Research Clients: (212) 553-1653

Moody's Investors Service, Inc.
250 Greenwich Street
New York, NY 10007
USA



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