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New Issue

Contacts

Nicholas Samuels 212-553-7121
VP-Sr Credit Officer
nicholas.samuels@moodys.com

Baye B. Larsen 212-553-0818
VP-Senior Analyst
baye.larsen@moodys.com

New York City Municipal Water Fin. Auth., NY

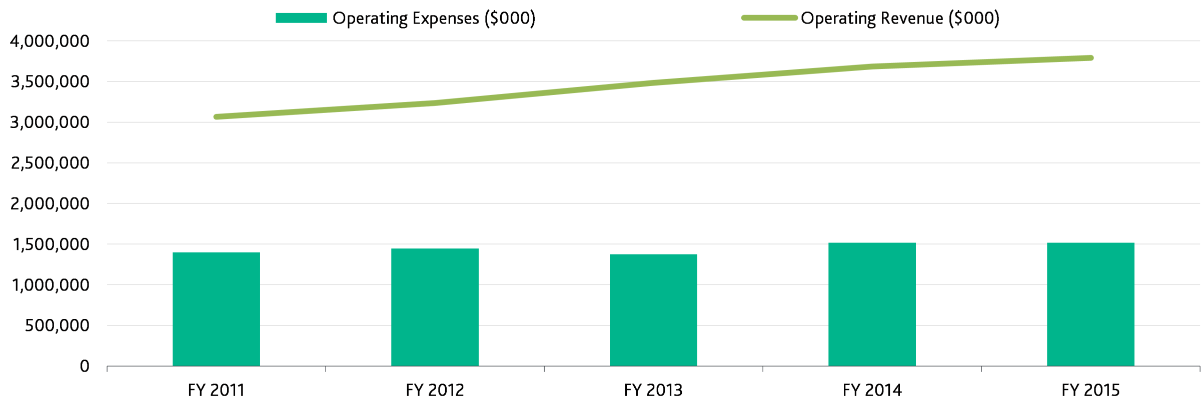
New Issue - Moody's assigns Aa1 to New York Muni Water's $611.3M Water and Sewer System Rev. Bonds

Summary Rating Rationale

Moody's Investors Service has assigned Aa1 ratings to the New York City Municipal Water Finance Authority's $191.6 million first resolution Water and Sewer System Revenue Bonds, Fiscal 2016 Series A, its $335 million second resolution Fiscal 2016 Series CC Subseries CC-1 and its $84.7 million Subseries CC-2. The Series A bonds are scheduled to price February 25 and the Series CC bonds are expected to price March 1. The Subseries CC-2 bond will be directly purchased by Citibank, N.A. (A1/P-1).

The Aa1 ratings on both the first and second resolutions reflect a strong legal structure that provides significant bondholder protections including a gross lien on system revenues; independent rate setting and a long history of setting rates as needed; and bankruptcy-remoteness that insulates bondholders from potential fiscal strain of the City of New York (Aa2 stable). The strength of that structure, overall strong management of the system and its capital needs, and completion of the bulk of large mandated capital projects has led to increasingly strong debt service coverage for both liens in recent years. Coverage is expected to narrow during the next five years but remain at levels that support Aa1 ratings. The strong legal structure and fact that 87% of outstanding debt was issued through the second resolution narrows the rating differential between the two. While the first resolution has a senior claim to the system revenues and benefits from a strong flow of funds, the rating is constrained by the open lien and ongoing need for sizeable capital reinvestment in a system of the size and age as New York's.

Exhibit 1
Operating Revenues Increase While Expenses Remain Level



Source: Moody's Investors Service

Credit Strengths

» Legal structure that provides strong bondholder protections including: a gross revenue pledge that insulates bondholders from operating pressure of the water and sewer system operated by New York City; autonomous rate-setting authority; and bankruptcy protection and legal separation from the fiscal condition of the city

» A long history of regular, independently-set rate increases that provide strong gross and net debt service coverage while supporting a substantial capital program

» 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

Credit Challenges

» The overall leverage of the system, although debt service coverage is strong

» The water and sewer system's size, age and density poses large renewal and replacement costs

» A history of state and federal regulatory mandates that now average 23% of the system's 10-year capital improvement plan but that in recent years have been much higher. The water and sewer sector is heavily regulated and future mandates could drive the authority's borrowing needs to an extent greater than in current forecasts

Rating Outlook

The outlook for the New York City Municipal Water Finance Authority is stable. A strong legal structure and conservative budgeting are expected to continue to provide healthy debt service coverage during the next five years. While mandated projects are a smaller portion of the capital plan than in recent years, like water and sewer systems throughout the nation, regulatory mandates could also drive future capital costs upwards. New York City's water and sewer system also has significant renewal and replacement needs that will continue to drive capital spending.

Factors that Could Lead to an Upgrade

» Stronger limitations on leveraging the pledged revenues

Factors that Could Lead to a Downgrade

» Weaker debt service coverage or financial ratios

» Failure to continue to set rates at levels needed to afford the system's 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

Key Indicators

Exhibit 2

New York City Municipal Water Finance Authority	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Asset Condition (Remaining Useful Life)	39.8	38.2	40.5	38.3	28.0
System Size (O&M in 000's)	1,397,867	1,446,852	1,375,740	1,518,424	1,517,132
Service Area Wealth (Median Family Income)	106.1%	106.5%	108.3%	106.7%	N/A
Operating Revenue ($000)	3,068,306	3,236,474	3,483,976	3,684,274	3,791,135
Long-Term Debt ($000)	26,908,869	28,378,279	29,493,385	30,195,919	30,933,343
Annual Debt Service Coverage (Aggregate)	1.7x	1.9x	2.4x	3.1x	5.5x
Days Cash on Hand	151	179	255	290	298
Debt to Operating Revenues	8.8x	8.8x	8.5x	8.2x	8.2x

Source: Moody's Investors Service

Recent Developments

Recent developments are incorporated into the sections below.

Detailed Rating Considerations

Service Area and System Characteristics

New York City's water and sewer system provides service to a population of 8.5 million people in the five boroughs of New York City, a service area of more than 300 square miles. It also provides water to an additional 1 million people in the counties where its water supply facilities are located. The system is notably large: its watershed area is 1.2 million acres; there are 19 water reservoirs and 3 controlled lakes; 6,500 miles of water mains; 7,500 miles of sewers; and 14 wastewater treatment plants.

Debt Service Coverage and Liquidity

Debt service coverage continues to strengthen based on strong revenue performance and debt service costs lower than forecast, partly as the authority continues to cash defease outstanding bonds. Based on fiscal 2015 audited results, Moody's adjusted coverage by gross revenues (operating revenues plus investment and subsidy income) increased to 21.2 times for the first resolution and 8.9 times for all bonds outstanding, compared to fiscal 2014 coverage of 13.2 times and 5.1 times, respectively. Fiscal 2015 coverage by net revenues on Moody's adjusted basis also improved to 13.1 times for first resolution bonds and 5.5 times in aggregate, compared to 8.1 times and 3.1 times in the prior year. For seven months of fiscal 2016 (July-January), positive revenue performance continues, with revenues 3.6% greater than projected,.

The authority typically forecasts revenues conservatively and uses similarly conservative assumptions for debt service, both strong management practices. Long-term bonds are budgeted to bear interest between 5.0% and 6.8% and short-term bonds between 3% and 4.25%. Reflecting its conservative budgeting, the authority ended fiscal 2015 with a $1.0 billion surplus which was carried forward and applied to fiscal 2016 debt service as required by the bond resolution. That requirement provides significant bondholder protections: for each fiscal year since fiscal 2013, 100% of funds for first resolution debt service has been on deposit with the bond trustee on the first day of the fiscal year. Since fiscal 2012, 100% of debt service funds for both the first and second resolution have been with the trustee by the end of December.

In another strong management practice, the authority continues to budget significant amounts for either cash defeasance or cash funded capital expenditures., these amounts act as an additional cushion against lower revenues or higher expenses, and can be used to defease bonds to lower its debt service costs. Indeed, the authority has mostly been using the funds to defease debt. It used $803 million to cash defease bonds in fiscal 2015 and the current forecast averages $265 million through fiscal 2020. Overall, the authority has cash defeased $1.9 billion of debt since fiscal 2011.

Reflecting both strong revenues and debt defeasances, already strong coverage will strengthen more. Based on projections released in May 2015 and including the effects of the city's fiscal 2016-2025 capital strategy, first resolution gross coverage is expected to increase to 21.9 times in the current fiscal year and then lower 17.0 times in fiscal 2017. Aggregate gross coverage is expected to decrease to 4.7 times in fiscal 2016 and then average 4.5 times through fiscal 2020. Similarly, net first lien coverage would drop to 12.9 times in fiscal 2016 and average 8.6 times through fiscal 2020, while aggregate net coverage averages 2.6 times.

The history of willingness to increase rates is a strong management feature and an important component of the ratings. Rate increases in recent years have been large, in part due to the high proportion of the authority's capital plan that reflected mandated projects. While four of the rate increases in the last nine years were in the double-digits, the fiscal 2016 rate increase is the lowest in fifteen years at 2.97%, compared to the originally projected 4.9%. Going forward, rate increases are also expected to remain relatively low, in part reflecting lower debt service needs and partly reductions in the annual rental payment the water and sewer system makes to the city (see Legal Security below). Projected rate increases equal 2.6% in each of fiscal 2017 and 2018, and 2.7% in fiscal 2019 and 2020.

The update to the ten-year capital strategy (2016-2025), also released last May, includes $16.9 billion of capital improvements for the water and sewer system, more than a $4 billion increase compared to the prior version of the plan. The amount of debt expected to be issued to help finance that totals $1.6 billion annually through fiscal 2020. Notably, the percentage of the capital plan that reflects mandated projects has decreased significantly in recent years, which provides significant flexibility to adjust to fluctuations in revenues and expenses. 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 23% through fiscal 2025. However, the water and sewer sector is a highly regulated one and mandated capital projects and related uncontrollable costs are always possible. For example, the New York system benefits significantly from a determination by the federal government that it does not have to filter its upstate Catskill and Delaware drinking water supplies. 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.

LIQUIDITY

The authority's cash position is healthy and provides an adequate cushion to deal with unforseen events. Based on Moody's calculations, the authority had 298 days cash on hand at the end of fiscal 2015.

Debt and Legal Covenants

DEBT STRUCTURE

The authority has $5.1 billion of variable rate obligations outstanding (both hedged and unhedged), which includes $200 million of bank-supported commercial paper. It also has a $400 million extendible commercial paper program without external liquidity support. Including the full amount of authorized commercial paper, the variable rate portfolio reflects 18% of the authority's total outstanding debt. 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.

DEBT-RELATED DERIVATIVES

The authority has two outstanding swap agreements with two different counterparties in an aggregate notional amount of $401 million. As of December 31, 2015 the mark-to-market value was -$117.7 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.

PENSIONS AND OPEB

The New York water and sewer system is operated by the New York City Department of Environmental Protection. Pension liabilities related to those employees are included in our calculations of the city's pension burden. Reflecting the three major plans in the city system, our fiscal 2014 adjusted net pension liability (ANPL) is $98.5 billion, or 1.36 times the city's operating revenues. While the city's three-year adjusted ANPL as a percentage of full value is the fourth largest of the 50 largest local governments, at 10%, the burden is more moderate as percentage of operating revenue: 122%, ranking 34th. Moody's adjustments improve comparability of reported pension liabilities, but the adjustments are not intended to replace the city's reported liability information. In 2012, the New York City Retirement Systems reduced the assumed investment rate of return to 7.0% from 8.0% and replaced the frozen initial liability actuarial funding method with the more commonly used entry age normal method. The change increases the city's pension expense, but over the long run will lead to greater stability, since using the 7% rate in its actuarial calculations will help to mitigate market-related volatility in asset performance.

Management and Governance

The authority's seven member board includes four ex officio members who, by statute, are the city commissioner of environmental protection; the city finance commissioner; the city director of office of management and budget; and the state commissioner of environmental conservation. The mayor appoints two of the remaining members, the governor appoints one.

Legal Security

The first resolution bonds are secured by a first lien on gross revenues of the water and sewer system, and the 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 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. The strength of this gross revenue pledge and the system's legal protections are key considerations in the ratings.

Use of Proceeds

Proceeds of the bonds will be used to refund outstanding first and second resolution bonds.

Obligor Profile

See Legal Security above.

Methodology

The principal methodology used in this rating was US Municipal Utility Revenue Debt published in December 2014. Please see the Ratings Methodologies page on www.moodys.com for a copy of this methodology.

Ratings

Exhibit 3

NEW YORK CITY MUNICIPAL WATER FINANCE AUTHORITY, NY

Issue	Rating
Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2016 Series CC, Subseries CC-1	Aa1
Rating Type	Underlying LT
Sale Amount	$335,010,000
Expected Sale Date	03/01/2016
Rating Description	Revenue: Government Enterprise
Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2016 Series CC, Subseries CC-2	Aa1
Rating Type	Underlying LT
Sale Amount	$84,665,000
Expected Sale Date	03/01/2016
Rating Description	Revenue: Government Enterprise
Water and Sewer System Revenue Bonds, Fiscal 2016 Series A	Aa1
Rating Type	Underlying LT
Sale Amount	$191,600,000
Expected Sale Date	02/25/2016
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

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Contacts

Nicholas Samuels 212-553-7121
VP-Sr Credit Officer
nicholas.samuels@moodys.com

Baye B. Larsen 212-553-0818
VP-Senior Analyst
baye.larsen@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

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