

# MOODY'S

## INVESTORS SERVICE

### New Issue: Moody's assigns Aa2 to \$480M NYC Muni Water second resolution bonds; outlook stable

---

Global Credit Research - 20 Mar 2014

#### **\$7.3B of first resolution and \$23.1B of second resolution bonds outstanding**

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 2014 Series DD	Aa2
<b>Sale Amount</b>	\$480,000,000
<b>Expected Sale Date</b>	03/25/14
<b>Rating Description</b>	Revenue: Government Enterprise

**Moody's Outlook** STA

#### Opinion

NEW YORK, March 20, 2014 --Moody's Investors Service has assigned a Aa2 rating to the New York City Municipal Water Finance Authority's \$480 million Water and Sewer System Second General Resolution Revenue Bonds, Fiscal 2014 Series DD. Proceeds of the bonds, scheduled to price the week of March 24, will be used to refund outstanding first resolution bonds.

#### 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 the ongoing need for rate increases although at lower levels than in recent years. 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
- The overall leverage of the system and additional planned issuance, although debt service coverage remains

sound

-- A history of state and federal regulatory mandates which on average total approximately 18% of the system's 10-year capital improvement program. While smaller than in recent years, the water and sewer sector is heavily regulated and new mandates could substantially increase the authority's future borrowing needs

#### DETAILED CREDIT DISCUSSION

#### STRONG PERFORMANCE IN FISCAL 2013 BOOSTS DEBT SERVICE COVERAGE; HEALTHY OPERATIONS

The authority posted strong financial results in fiscal 2013 following similar performance in fiscal 2012. Based on Moody's adjusted fiscal 2013 audited results, gross revenues (operating revenues plus investment and subsidy income) provide 10.87 times coverage of first resolution debt service and 3.83 times aggregate debt service coverage. Coverage by net revenues on Moody's adjusted basis is 6.85 times for first resolution bonds and 2.42 times in aggregate. The authority's forward forecasts show continued strong gross coverage at slightly lower levels in fiscal 2014 (the current fiscal year), with first resolution coverage falling to just less than 10 times and aggregate coverage to 3.47 times. By fiscal 2018, the last year of the authority's current multi-year forecast, first resolution coverage remains very strong at 9.80 times while aggregate coverage declines to 2.75 times. We note, however, the authority's pattern of conservative forecasts and that final results are often stronger than originally projected. Based on conservative forecasts, its rate increases and efforts to hold costs down, fiscal 2013 ended with a \$750 million surplus which was carried forward to be applied to fiscal 2014 debt service (see discussion below of the revenue retention mechanism). Another strong management practice is reflected in its financial planning: its budgeted debt service assumes short-term rates of 3.0% in fiscal 2014 and 4.25% in 2015 and going forward, and long-term rates of 6.8%, both higher than current rates on its outstanding debt.

Another strong management practice, the authority has budgeted cash funded capital expenditures of \$225 million annually through fiscal 2017 and \$250 million in fiscal 2018. This can act as an additional cushion against lower revenues or higher expenses, or be used to defease bonds to lower its debt service costs. Indeed, in the past three fiscal years the authority has cash defeased approximately \$250 million of bonds each year and expects to continue this practice.

The history of willingness to increase rates is a strong management feature and an important component of the ratings. Following a 5.6% fiscal 2014 rate increase, future rate increases are forecast to be 7.8% in fiscal 2015, 7.9% in fiscal 2016 and 7.5% in fiscal 2017 and 5.0% in fiscal 2018, although the authority expects that given its recent strong financial performance the level of the forecasted rate hikes may be revisited. 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.

Based on audited fiscal 2013 results, the authority's financial position is healthy. Operating revenues increased by 7.6% compared to fiscal 2012 based on audited figures. Through fiscal 2018, the authority estimates that operating income will increase by an average of 4.7% annually.

While consumption decreased during the economic downturn, that has reversed somewhat. Fiscal 2013 consumption was up by 0.2% compared to fiscal 2012 although through the first eight months of fiscal 2014 it is down, but better than the authority's forecast. The authority's projections assume 1.5% consumption declines through fiscal 2015, 2.0% declines in fiscal years 2016 and 2017 and a 1.0% decline in fiscal 2018. At the same time, operating revenues are 5.7% greater than forecasted for this eight month period.

In February 2014 the city reached a labor settlement with the Law Enforcement Employees Benevolent Association which represents the environmental police officers of the city's Department of Environmental Protection. This settlement will result in costs to the authority of approximately \$16.8 million in fiscal 2014 and \$2.1 million in each fiscal year thereafter. These increased costs are manageable in our opinion and were already included in the authority's May 2013 financial plan. 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.

#### 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. The strength of this gross revenue pledge and the system's legal protections are key considerations reflected in the credit rating. Indeed, by November the authority reports that 100% of aggregate debt service for fiscal 2014 is held by the bond trustee or has been paid as interest on its bonds.

### 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 November 2013 ten-year capital improvement program (CIP) includes an estimated \$13 billion of capital improvements to the water and wastewater system between fiscal years 2013 and 2023. Bond issuance in the current version of the CIP averages \$1.3 billion annually from fiscal 2014 through 2018, with aggregate debt service forecasted to grow from nearly \$1.7 billion in the current fiscal year to \$2.1 billion in fiscal 2018. After carryforward revenues, those amounts are \$1 billion in the current fiscal year to \$1.6 billion in fiscal 2018.

The CIP includes \$5.2 billion of water supply and water distribution projects, \$4.7 billion for water pollution control, and \$2.3 billion for sewers. 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 17% through fiscal 2023. 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 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.

### VARIABLE RATE DEBT AND INTEREST RATE DERIVATIVES

The authority has \$4.3 billion of variable rate obligations outstanding (both hedged and unhedged), as well as a

\$600 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 16% 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.

The authority has three outstanding swap agreements with three different counterparties in an aggregate notional amount of \$601 million; as of December 31, 2013 the mark-to-market value was -\$55.6 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.moodys.com](http://www.moodys.com) for a copy of this methodology.

## REGULATORY DISCLOSURES

For ratings issued on a program, series or category/class of debt, this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series or category/class of debt or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the rating action on the support provider and in relation to each particular rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on [www.moodys.com](http://www.moodys.com).

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Please see [www.moodys.com](http://www.moodys.com) for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

Please see the ratings tab on the issuer/entity page on [www.moodys.com](http://www.moodys.com) for additional regulatory disclosures for each credit rating.

## Analysts

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

Baye Larsen  
Backup Analyst  
Public Finance Group  
Moody's Investors Service

Brien Wigand  
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



© 2014 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

**CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. ("MIS") AND ITS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATION") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.**

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS FOR RETAIL INVESTORS TO CONSIDER MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS IN MAKING ANY INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moodys.com](http://www.moodys.com) under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

For Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail clients. It would be dangerous for "retail clients" to make any investment decision based on MOODY'S credit rating. If in doubt you should contact your financial or other professional adviser.