FitchRatings

RATING ACTION COMMENTARY

Fitch Rates New York City Muni Water Fin Auth's Water and Sewer Revs 'AA+'; Outlook Stable

Fri 11 Sep, 2020 - 2:20 PM ET

Fitch Ratings - New York - 11 Sep 2020: Fitch Ratings has assigned a 'AA+' rating to the following New York City Municipal Water Finance Authority's (NYW, or the authority) revenue bonds:

--Approximately $255.1 million water and sewer system second general resolution (SGR) revenue bonds, fiscal 2021 Series AA-1;

-- Approximately $275 million water and sewer system SGR revenue refunding bonds, fiscal 2021 series AA-2.

The bonds are scheduled to sell via negotiation the week of Sept. 21. Proceeds of the fiscal 2021 series AA-1 will be used to finance capital projects and pay costs of issuance. certain Proceeds of the fiscal 2020 series AA-2 will be used to refund outstanding SGR bonds for interest savings and pay costs of issuance.

The Rating Outlook is Stable.

ANALYTICAL CONCLUSION

The 'AA+' rating reflects the combined credit quality of the authority and the New York City Water Board (the water board), as well as the authority's role as an issuer of revenue bonds on behalf and in support of the city water and sewer system (the system). The rating further reflects the benefit of the gross pledge of system revenues to pay FGR and SGR debt service before system operating expenses and any lease payment to the city. Fitch does not distinguish its ratings between the FGR and SGR as both liens remain open and active. The 'F1+' short-term rating primarily reflects the authority's 'AA+' long-term rating and adequate liquidity.

The combined credit quality and financial profile are very strong and assessed at 'aa', in the context of the service area's very strong revenue defensibility assessment and the system's very strong operating risks profile. Rates are considered affordable for most customers, and operating costs have trended low over time. The service area exhibits strong economic diversity and resiliency.

The financial profile reflects the authority's very low leverage ratio, as measured by net adjusted debt/adjusted funds available for debt service (FADS) on a gross revenue basis, which has averaged 7.3x since fiscal 2015. When incorporating the system's consolidated cost of operations and maintenance (O&M), which are reimbursed to the system and legally paid after satisfying all debt service payments, leverage is higher, averaging 11.7x. The rating incorporates Fitch's near-term expectation for financial metrics to weaken somewhat, stemming from the outbreak of the coronavirus and related local government containment measures. However, fiscal 2020 closed with a stronger cash position than previously projected (nearly $88 million higher than projections), and fiscal 2021 is currently tracking at just over 6% stronger than budget. Fitch expects that the system's consistent trend of strong annual surplus revenues and only modest anticipated annual rate increases should provide the authority substantial financial flexibility and capacity to withstand temporary revenue declines while maintaining rating stability.

Fitch's ratings are forward-looking in nature. As such, Fitch will monitor developments in the sector as a result of the outbreak as they relate to severity and duration and incorporate revised expectations for future performance and assessment of key risks as needed.

CREDIT PROFILE

The authority was created as a public benefit corporation in 1984 in order to issue bonds, notes and other financing instruments to fund capital improvements to the NYC system. Fitch considers the authority to be an issuer that benefits from a contractual framework in which revenues and costs are largely balanced. The water board leases the system from the city and is responsible for setting, levying, and collecting customer rates and system revenues to transfer to the authority for bond repayment and O&M reimbursement. Further, the authority has the power to require the water board to charge and collect sufficient rates to pay the costs of operating and financing the system, as well as to enforce that the city adequately operate and maintain the system. The authority may not file for bankruptcy without state legislative approval and Fitch views the authority as bankruptcy-remote from the city. Fitch also views the water board as bankruptcy-remote from the city.

The system is the country's largest municipally owned water and sewer utility. It is operated by the NYC Department of Environmental Protection (DEP, a city agency) and provides retail water and sewer service to over 8.3 million residents within NYC and wholesale service to an additional one million residents in communities north of the city. The service area includes over 300 square miles across NYC's five boroughs (the Bronx, Brooklyn, Manhattan, Queens and Staten Island) as well as communities within Westchester, Putnam, Orange and Ulster counties. The DEP performs day-to-day system O&M, and is responsible for executing the system's multi-billion-dollar capital program. Capital and maintenance needs are expected to remain large over time given the demand placed on system assets in an expansive urban setting. Roughly one third of capital spending is mandated by state and federal regulators and completion of these programs is fully funded in the current capital improvement program (CIP).

The water system provides an average of approximately 1 billion gallons per day (bgd) from three upstate aqueducts that span as far as 125 miles north of the city. Demand has steadily declined over time due to water efficiency measures, but has represented a stable 75% of available yield from three city-owned upstate reservoir systems. The sewer system collects and treats an average of approximately 1.2 bgd of wastewater at fourteen in-city wastewater treatment plants for virtually the entire city. Average annual flows approximate a stable 69% of the 1,805 mgd treatment capacity.

Fitch believes NYW bondholders further benefit from strong legal protections that include the statutorily defined nature of the authority, bankruptcy remoteness and the gross pledge of system revenues.

While these layers of legal protection do not completely shield FGR and SGR bondholders from the operational risks of the city's massive water and sewer enterprise, they limit

diversion of revenues to general city operations.

A large portion of annual debt service obligations are consistently funded well in advance of scheduled payment dates by the system's revenue fund, which consists of both current year revenues and carry-forward surplus cash. At the beginning of fiscal 2019, the revenue fund contained an estimated $1,072.0 million, enough to pre-pay roughly two thirds of that year's combined gross FGR and SGR debt service. At year-end fiscal 2020, the authority estimates it will carry forward $1,067.9 million in surplus revenues, or nearly 67% of the projected subsequent fiscal 2021 combined debt service.

Only after monthly required deposits under the SGR are satisfied and held by NYW's trustee will funds be released for other purposes, including the cash-defeasance of additional debt service and to reimburse the city for O&M expenses.

KEY RATING DRIVERS

Revenue Defensibility 'aa'

Very Strong Rate Flexibility, Economically Diverse Service Area

Revenue defensibility is supported by the system's role as an essential service provider to an exceptionally large, diverse and economically important service area. The water board has independent rate-setting authority and rates are considered affordable for over three quarters of the NYC service area population. Bondholders are further afforded a gross lien on system revenues and strong legal protections.

Operating Risks 'aa'

Very Low Cost Burden, Elevated Capital Needs

The authority reimburses the system for operating expenses, which are very low and are expected to remain stable for the foreseeable future. Sustained and elevated capital

investment funded by the authority and executed by the city has resulted in a low lifecycle ratio that should also remain stable based on forward looking capital spending.

Financial Profile 'aa'

Generally Stable Leverage Expected to Continue

The authority's leverage ratio, measured as net adjusted debt to adjusted funds available for debt service on a gross lien basis, was very low at 7.2x in fiscal 2019 and is representative of historical and future performance. Ongoing rate adjustments over the next five years should allow FADS to increase at a rate commensurate with increasing carrying costs, and should keep leverage within an acceptable range for the current rating.

ASYMMETRIC ADDITIVE RISK CONSIDERATIONS

No asymmetric additive risk considerations affected this rating determination.

RATING SENSITIVITIES

Factors that could, individually or collectively, lead to positive rating action/upgrade:

-- A sustained decrease in net leverage to below 5x within the current revenue defensibility and operating risks assessments.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

--Economic contraction extending well into the second half of the 2020 or beyond, consistent with Fitch's coronavirus downside scenario, that results in a sustained slowdown in historically strong revenue growth;

--An increase in the authority's leverage ratio that trends above 8x on a sustained basis;

--A delay in rate-setting that jeopardizes the authority's strong ongoing operating margins;

--Coverage of full obligations (COFO) that generally falls below 1.0x.

BEST/WORST CASE RATING SCENARIO

International scale credit ratings of Sovereigns, Public Finance and Infrastructure issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit [https://www.fitchratings.com/site/re/10111579].

SECURITY

The fiscal 2021 series AA bonds are special obligations of NYW issued under the SGR and payable solely from and secured by a subordinate lien on gross revenues of NYW. Outstanding water and sewer system FGR bonds are payable solely from and secured by a first lien on gross revenues of NYW. The SGR bonds currently being issued will not have a debt service reserve fund.

REVENUE DEFENSIBILITY

The authority's revenue defensibility is very strong and assessed at 'aa'. All revenues are derived from monopolistic businesses and the system serves an expansive and diverse customer base with midrange demographic factors. Rate flexibility is also very strong as the board has independent in-city rate-setting authority and customer charges are affordable for about 77% of the population using Fitch's standard bill calculation of 7,500 gallons of water consumption and 6,000 gallons of sewer flows per month. Fitch notes that affordability is likely even higher given the large number of multi-family housing units where utility bills are incorporated into the rental agreements and/or where utility and housing assistance is provided to economically disadvantaged tenants. Water and sewer

rates were held flat in 2021, and anticipated rate increases of 6.1% in fiscal 2022 and 6.2% in each of fiscals 2023 and 2024 are not expected to impair existing affordability levels.

The city's broad customer base and strong service area characteristics are expected to support solid demand. Although unemployment exceeds the national average by around 7%, income metrics approximate state and national averages. Poverty levels, consistent with the large urban nature of the city, are somewhat elevated at nearly 19% of the population. NYC's general obligation Issuer Default Rating (IDR) of 'AA' remains on Negative Outlook by Fitch since April 21, 2020 due to the expectation that longer-term economic and revenue growth may slow from historically robust levels, triggered in part by the coronavirus pandemic. Any related reduction in water demand is expected to be manageable.

OPERATING RISKS

The authority's operating risks profile is very strong and assessed at 'aa'. The system's operating cost burden has approximated a low $3,000 per million gallons of water productions/sewer flows over the last five years and the lifecycle ratio reflects solid historical system reinvestment. This low cost of service is representative of a mature system with well-defined cost centers. The system benefits from a substantial volume of the billion-plus gallons of annual water flows facilitated by gravity and the avoidance of operating a water filtration process for over 90% of the system's potable drinking supply. O&M costs are paid as incurred by the city then reimbursed by the authority on a monthly basis following required deposits for FGR and SGR debt service.

Regarding the latter program, were the system to have to filter water from its Catskill-Delaware watershed system, construction costs are estimated to exceed $6 billion to build a filtration plant. Instead, the system operates under a filtration avoidance determination (FAD), last authorized for 10 years in 2017, that requires land acquisition, updated wastewater infrastructure and stream banks stabilization in the watershed in lieu of filtration. The 10-year capital costs associated with the 2017 FAD are $479 million.

Average annual capital spending has exceeded annual depreciation costs for at least ten years, leading to a moderate lifecycle ratio of around 33%. The lifecycle ratio has been on an upward trajectory over the last five years as the rate of annual capital spending has come down from previous years of heavy spending, including regulatory-driven programming. However, the average system lifecycle still remains well below Fitch's 45% threshold. Furthermore, although elevated facility age is common among large urban systems, the

system is evaluated annually by a third-party engineering consultant and deemed to be in adequate condition, the highest of rankings.

The five-year fiscal 2020-2024 CIP was adopted in April 2020 and totals $10.9 billion, or an average $2.2 billion per year. The CIP focuses on extensive renewal and replacement as well as major repairs to vital infrastructure, ongoing extension of the city's third water tunnel, the repair of an upstate aqueduct, and ongoing upgrades to treatment plants. As has been the case historically, the CIP will be nearly 100% funded by additional issuances of long-term debt and bond anticipation notes.

FINANCIAL PROFILE

The authority's financial profile remains very strong and is assessed at 'aa'. Since 2015, the authority's leverage ratio has remained relatively stable ranging from 7.0x to 7.7x, and averaging 7.3x over the period. In calculating the authority's leverage ratio, Fitch employs an alternative calculation whereby FADS is calculated on the basis of gross revenues which excludes O&M costs from the calculation, compared with a net revenue basis, which is typically used in Fitch's leverage calculation. This alternative calculation reflects the protection afforded bondholders through a statutory framework providing a gross lien on pledged water and sewer revenues, along with Fitch's expectation of the remoteness of either the authority or board filing for bankruptcy protection, or being included in a city bankruptcy proceeding if one were to ever occur. Calculating FADS based on a standard net revenue pledge, the authority's leverage ratio would increase to 11.9x for fiscal 2019's and an average of 11.7x since fiscal 2015.

Fitch expects the authority's performance to remain relatively stable and consistent with the current rating even through a series of stress scenarios. Fitch's Analytical Stress Tool (FAST) considers the potential trend of key ratios in a base case and a rating case. The rating case is designed to impose capital costs 10% above expected levels and evaluate potential variability in projected key ratios.

The FAST cases point to a modest increase in leverage given the ongoing issuance of additional debt and reduced operating revenues. Leverage is expected to peak at 8.3x in fiscal 2021 under Fitch's base case scenario, and 8.4x in the rating case. Fitch's base case is informed by the authority's forecast, which was most recently updated on Sept. 9, 2020, and includes coronavirus-led revenue stresses that extend through 2023. The stresses are reasonable and reflective of revenue loss expectations.

The authority's forecast also includes payments of $128 million and $137 million to the city in fiscals 2020 and 2021, respectively, as permitted through a formal lease agreement between the city and the water board for possession of the NYC system for the duration of outstanding FGR debt. The lease agreement allows for the city to collect rent of the system assets from the water board of up to 15% of the annual debt service on the authority-issued bonds. The city has not requested a lease payment since fiscal 2017 and the current payments approximate half of the level of historical payments and a low approximate 3.3%-3.6% of anticipated year-end fiscal revenues. No additional payments beyond fiscal 2021 are currently budgeted by management, nor included in Fitch's scenario analysis. Management intends to apply the surplus cash generated in fiscal 2020 relative to budget to substantially offset the fiscal 2021 rental payment.

Under the additional downside scenario, leverage is slightly higher, peaking at 8.4x in the base case and 8.5x under the rating case, nearing the upper range of Fitch's 'aa' leverage assessment. However, under these stress scenarios, operating expenses would likely be scaled back and capex could decline below assumed levels. The authority's leverage ratio only exceeds 8.0x for a single year in any of the scenario outputs, moderating in subsequent years to levels consistent with the rating. Any change to this expected trend could pressure the leverage profile assessment and rating.

The system's liquidity profile is considered neutral to the rating. The authority typically carries only minimal unrestricted assets each year; however, it generates an average $1 billion in surplus revenues that are restricted to pre-pay around two thirds of a subsequent year's debt service costs. This practice results in stronger ongoing average daily cash flow available to pay for remaining debt service costs, O&M payments and unforeseen emergency costs than indicated by the Fitch's liquidity metrics. Coverage of full obligations (COFO) is also considered neutral to the rating. The calculation, which includes prior year's principal payment plus current year interest expense for debt service costs, yielded 1.6x in fiscal 2019. Both liquidity and COFO are expected to remain neutral to the rating in the upcoming years.

DATE OF RELEVANT COMMITTEE

27 May 2020

SOURCES OF INFORMATION

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG CONSIDERATIONS

The highest level of ESG credit relevance, if present, is a score of 3. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity(ies), either due to their nature or to the way in which they are being managed by the entity(ies). For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

RATING ACTIONS

ENTITY/DEBT	RATING			PRIOR
New York City Municipal Water Finance Authority (NY)				
• New York City Municipal Water Finance Authority (NY) /Water & Sewer Revenues (2nd Lien)/1 LT	LT	AA+ Rating Outlook Stable	Affirmed	AA+ Rating Outlook Stable

VIEW ADDITIONAL RATING DETAILS

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APPLICABLE CRITERIA

Public Sector, Revenue-Supported Entities Rating Criteria (pub. 27 Mar 2020) (including rating assumption sensitivity)

U.S. Water and Sewer Rating Criteria (pub. 03 Apr 2020) (including rating assumption sensitivity)

ADDITIONAL DISCLOSURES

Solicitation Status

Endorsement Policy

ENDORSEMENT STATUS

New York City Municipal Water Finance Authority (NY)	EU Endorsed

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