MOODY'S INVESTORS SERVICE

CREDIT OPINION

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Raleigh (City of) NC Water and Sewer Ent.

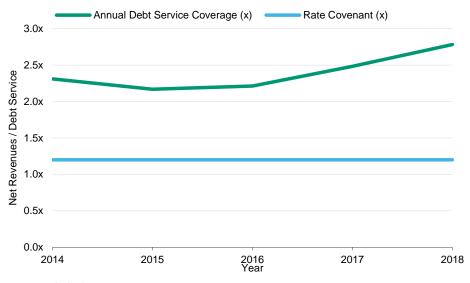
Update to analysis

Summary

City of Raleigh's Water and Sewer Enterprise, NC (Aaa) will continue to benefit from its favorable location and dynamic service area. The system's debt service coverage and liquidity levels continue to improve (see Exhibit 1), helping to mitigate a somewhat elevated yet manageable debt ratio.

Exhibit 1

Solid, improving debt service coverage a key credit consideration



Source: City of Raleigh, NC

Projections indicate continued sound financial performance and solid coverage and liquidity over the medium term driven by continued revenue growth.

On October 24th, we assigned a Aaa to the city's \$171.1 million Combined Enterprise System Revenue Refunding Bonds, Series 2019 (Federally Taxable Interest).

Credit strengths

- » Robust, diverse, growing service area benefiting from state capital, state university and role as regional economic center
- » Long-range financial planning and codified policies

» Strong financial metrics with ample reserves and improved debt service coverage levels

Credit challenges

- » Somewhat elevated debt ratio
- » Modest exposure to variable rate debt

Rating outlook

The stable outlook is based on sound financial ratios as a result of the implementation and strict adherence to formalized policies and long-term planning and expected stability in the robust service area poised for further growth.

Factors that could lead to an upgrade

» Not applicable

Factors that could lead to a downgrade

- » Weakening operating performance resulting in material reduction in debt service coverage
- » Erosion of liquidity

Key indicators

Exhibit 2

Raleigh (City of) Water and Sewer Enterprise, NC					
System Characteristics					
Asset Condition (Net Fixed Assets / Annual Depreciation)	38 years				
System Size - O&M (\$000)	\$104,712				
Service Area Wealth: MFI % of US median	109.86%				
Legal Provisions					
Rate Covenant (x)	1.20x				
Debt Service Reserve Requirement	None				
Management					
Rate Management	Aaa				
Regulatory Compliance and Capital Planning	Aaa				
Financial Strength					
	2014	2015	2016	2017	2018
Operating Revenue (\$000)	\$197,232	\$212,640	\$226,996	\$239,774	\$252,043
System Size - O&M (\$000)	\$90,589	\$97,077	\$99,311	\$100,622	\$104,712
Net Revenues (\$000)	\$110,117	\$117,837	\$131,936	\$142,359	\$154,990
Net Funded Debt (\$000)	\$731,377	\$725,168	\$717,638	\$760,122	\$735,308
Annual Debt Service (\$000)	\$47,673	\$54,339	\$59,602	\$57,365	\$55,716
Annual Debt Service Coverage (x)	2.3x	2.2x	2.2x	2.5x	2.8x
Cash on Hand	764 days	885 days	1088 days	1228 days	1253 days
Debt to Operating Revenues (x)	3.7x	3.4x	3.2x	3.2x	2.9x

Source: Moody's Investors Service, City of Raleigh NC, US Census

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Profile

Raleigh is the capital of North Carolina (Aaa stable) located in Wake County (Aaa stable). The land area of Raleigh is 142.8 square miles but the combined enterprise system service area is 299 square miles and includes the towns of Wake Forest (Aa1), Garner (Aa1), Zebulon (Aa3), Knightdale, Rolesville and Wendell.

Detailed credit considerations

Robust service area

Located at the center of the robust triangle region along Interstate 40, the City of Raleigh (Aaa stable) and greater Wake County (Aaa stable) are home to a sizable and diverse economy that includes the state capital (state government employs over 24,000) and several educational entities, including North Carolina State University at Raleigh (NCSU - revenue bonds rated Aa1 stable) employing over 8,000. A healthy private sector benefits from the neighboring Research Triangle Park, which continues to diversify to include technology and financial firms such as IBM Corporation (Aa3 negative) with 10,000 employees. The mix of public and private sector employment positioned the city favorably.

The system provides service to 182,834 customer accounts in a population of 582,835 in a large segment (55%) of Wake County and serves additional customers through wholesale contracts with various municipalities and an adjoining county. The customer base of both the water and sewer systems is nearly 90% residential but account for 60% of total consumptions, and customer growth remains strong. The 10 largest customers remain primarily stable given the strong institutional presence in the city. Three of the top five customers include NCSU and the state and county governments, contributing stability to the growing customer base.

Customer account growth has remained steady (see Exhibit 3) and system capacity remains sufficient to handle expected continued growth in the customer base.

Exhibit 3

Modest customer account growth trends expected to continue over medium-term

Fiscal Year	Number of Accounts	% Growth
2015	170,958	
2016	173,550	1.52%
2017	176,598	1.76%
2018	179,886	1.86%
2019	182,834	1.64%

Source: City of Raleigh, NC

The North Carolina Capital Area Metropolitan Planning Organization projects that the population of the Combined Enterprise System service area will nearly double by 2040, approaching 1 million residents.

Solid debt service coverage and strengthened liquidity

The system's financial operations are expected to remain sound, supported by proactive management, regular rate increases as well as debt service and liquidity levels that are guided by formal policies. Senior lien debt service coverage has stayed above 2 times since fiscal 2013. Debt service coverage improved to 2.8 times in fiscal 2018 and city officials report unaudited fiscal 2019 results to be 2.59 times.

The city's current conservative forecast calls for senior lien coverage to remain over 2.5 times coverage through fiscal 2024. Several years ago the city modified its financial policies to increase the minimum senior lien debt service level to 2.0 times from 1.75 times, based on net revenues alone. Going forward officials anticipate 3% rate increases on average residential customers in the out-years, however, actual rate increases may depend on actual system performance which continues to outperform projections.

LIQUIDITY

The system's liquidity position is strong with 1253 days cash on hand in fiscal 2018 up from 958 days cash on hand in fiscal 2015. Projections indicate strong DCOH coverage going forward with a portion of these reserves being used for pay-go financing of capital needs.

Manageable debt levels, additional borrowing plans in CIP

The system's debt ratio is somewhat elevated at 40.2% for the rating category but is affordable given future growth projections and a strategic approach to asset management. The debt ratio is declining partially due to the implementation of more pay-go financed projects. These factors somewhat offset the system's additional borrowing plans and its currently slow rate of principal retirement (42% in ten years). The fiscal 2020 CIP adopted a \$1.68 billion ten-year CIP with approximately \$836 million of additional utility debt.

DEBT STRUCTURE

All of the system's debt is fixed rate except for the Series 2008A and Series 2008B which comprise less than 20% of total system debt outstanding. Bank of America, NA (A1 stable) serves as the liquidity provider.

DEBT-RELATED DERIVATIVES

The city is party to swap agreements with Citibank, NA (A1 stable) and Wells Fargo Bank, NA related to the system's Series 2008A and 2008B bonds. The swap agreement has a total notional amount of \$118.2 million (matching principal currently outstanding) and will expire on March 2, 2035, upon maturity of the bonds. The combined fair value of the swaps is currently negative \$22.7 million.

PENSIONS AND OPEB

The city contributes to the North Carolina Local Government Employees Retirement System (NCLGERS), defined benefit retirement plan administered by the State of North Carolina. Moody's adjusted net pension liability (ANPL) for the city is a low 1.1 times operating revenues and 0.60% of full value.

Comprehensive policies and proactive management drive sound operating results

Water and sewer rates are governed by the City Council and can be adjusted at any time during the year but generally are approved annually for July 1 implementation. Officials have adopted the practice of utilizing a 10-year financial planning model with conservative assumptions built in. Formal policies include a minimum 2.0 times for senior lien debt coverage; maintenance of operating fund balance levels at a range of 50%-75% while managing to 100% of operating cost, and variable rate debt not to exceed 25% of total debt. No new variable rate debt is anticipated in the current 10-year forecast. © 2019 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. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS 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 OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATINGS. 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 ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS AND 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.

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