Summary:
Raleigh, North Carolina; Water/Sewer

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Credit Profile

US$171.13 mil comb enterprise sys rev rfdg bnds (federally taxable) ser 2019 due 03/01/2043

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<td>Raleigh comb enterprise Long Term Rating</td>
<td>AAA/Stable</td>
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Rationale

S&P Global Ratings has assigned its 'AAA' rating to Raleigh, N.C.'s series 2019 combined enterprise system revenue refunding bonds. At the same time, we affirmed our 'AAA' rating on the system's parity debt. We also affirmed our 'AAA' long-term rating on the system's series 2008A and B bonds, which reflects the credit quality of the city's combined water and sewer systems, and our 'A-1' short-term rating on the series 2008A and B bonds, which relate to bank liquidity facilities. The outlook is stable.

The enterprise risk profile reflects our view of the system's:

- Service area economy's strength and diversity;
- Very low industry risk;
- Affordable rates as combined water and sewer rates represent 1.93% median household effective buying income (MHHEBI);
- Strong operational management highlighted by sufficient capacity to serve an expanding customer base and;
- Well-embedded rate-setting practices.

The financial risk profile reflects the system's:

- Strong all-in debt service coverage (DSC) levels,
- Extremely strong liquidity levels,
- Moderate debt burden, as the debt-to-capitalization ratio is 42.5%, and
- Strong financial management practices and policies.

A pledge of net revenues of the city's combined enterprise system secures the bonds. The combined enterprise system consists of city's water, sanitary sewer, and reuse systems. It does not include the city's solid waste facilities and stormwater utilities. Raleigh will use the series 2019 bonds to advance refund all or a portion of its series 2012A and 2013A bonds and to pay certain costs of issuance. Neither a parity nor a special reserve account will be established for these bonds.
Due to Raleigh's limited exposure to federal revenues, we believe the 'AAA' rating on the city's combined enterprise system revenue bonds, which exceeds the U.S. sovereign credit rating, is warranted per our "Ratings Above the Sovereign" criteria (published Nov. 19, 2013, on RatingsDirect). The city's combined enterprise system's operating expense flexibility and locally derived revenue base from local water and sewer charges (that are derived through an autonomous rate-setting process), which represent virtually all of the combined enterprise system's revenues, support the higher rating.

**Enterprise risk**

For fiscal 2019 (year ended June 30), Raleigh's water and sewer system served about 182,834 water and 179,724 sewer customers in a service area that spans 299 square miles. About 77% of the customer base resides within the city limits, with the balance in the surrounding towns. There remains little concentration in the customer base, with the leading 10 users representing about 15% and 16% of annual water and wastewater revenues, respectively, in fiscal 2019. We consider these levels diverse. Raleigh continues to expand due to a combination of natural growth and ongoing land annexations. The total population of the service area is estimated at 582,835 and the North Carolina Capital Area Metropolitan Planning Organization estimates that the population in the service area will reach 1 million by 2040. In addition to being the state capital and county seat, Raleigh is an important economic center for the region because it forms one point of Research Triangle Park, with Chapel Hill and Durham at the other two points. The metropolitan area--Wake, Durham, Orange, Franklin, Chatham, and Johnston counties--fares relatively well due to its continued population growth and the stabilizing benefits of government and higher education employment in the region. City unemployment, at 3.6% for 2018, has been historically lower than the state and U.S. Income, measured through MHHEBI, was 101% of the national average in 2018, which we consider good. The state capital, North Carolina State University, Wake County government, and the city government help stabilize the local economy, which we consider broad and diverse.

Consistent with our criteria, titled "Methodology: Industry Risk" (published Nov. 19, 2013), we consider industry risk for the system very low, the most favorable assessment possible on a '1' to '6' scale, with '1' being the best.

The good market assessment reflects that management has demonstrated a willingness to adjust rates, raising water or sewer rates once or twice per year from fiscal years 2009 to 2019. These increases ranged from 2% to 20%. Based on 6,000 gallons of usage and rates that took effect July 1, 2019, residents pay $36.30 per month for water and $48.35 for sewer. Despite the annual increases, the system's rates are still affordable relative to service area wealth levels. By fiscal 2021, if rates are adjusted as assumed in the forecast, residents will pay $37.39 per month for water and $49.80 for sewer. We consider current rates affordable, representing 1.98% of Raleigh's MHHEBI for 2018. We expect management to continue to adjust rates as needed.

Based on our operational management assessment (OMA), we view Raleigh to be a '1' on a scale of '1' to '6', with '1' being the strongest. This indicates, in our view, that operational and organizational goals are generally well aligned, even if some challenges exist. The OMA of strong includes Raleigh's well-embedded asset adequacy identification program and a comprehensive operational risk reduction plan. The water system includes two water treatment plants that have a combined reliable treatment capacity of 102 million gallons per day (mgd). For fiscal 2019, management reported average daily water demand of 49 mgd, well below the plants' capacity.
The main source of supply for drinking water is Falls Lake, a surface water supply, multipurpose reservoir owned and operated by the U.S. Army Corps of Engineers, which provides water to the Johnson Water Plant. The city retains the sole contract right with the corps for this source as a water supply and is entitled to a maximum withdrawal capacity of 100 mgd. Raleigh owns two other surface water supplies: Lakes Benson and Wheeler. These two have a combined maximum withdrawal capacity of 20 mgd and provide water supply to the Benton Water Plant, near Lake Benson. The combined safe yield of all current water supplies is approximately 97.9 mgd, which we expect will meet water supply needs through 2050. The city has identified several potential future water supply sources, including the long-planned Little River Reservoir. All options under consideration could potentially meet its regional water supply needs until at least 2040. Once the most promising option was the reallocation of storage volume in Falls Lake. The corps completed a multiyear process to consider such a reallocation, which would transfer an additional 17,300 acre-foot of storage that equates to approximately 23.3 million gallons per day of reliable yield to the city. In January 2019, the city and the corps signed a sales contract making this a reality. The sewer system includes three wastewater treatment plants that have a combined treatment capacity of approximately 80.2 mgd of average daily capacity. For fiscal 2019, the average daily sewer flow was 48.96 mgd and the recorded peak day usage was 101.08 mgd due to a wet weather event.

Raleigh Water has been strong in its Environmental, Social and Governance efforts. Among the programs that it runs is the Raleigh Water freeFILL program, which aims to promote the use of reusable bottles. Another program is the Urban Redevelopment Main Replacement Reimbursement Program, where Raleigh Water will reimburse developers a fair and reasonable amount for any mains that the developer replaces and upsizes for the development of their site. The city is constructing a new process to deal with biosolids by combining state-of-the-art conditioning steps (thermal hydrolysis process) with old technology (anaerobic digesters) to make the old technology much more effective and efficient. The end result will be a class A biosolid that can have land-use applications and enough by-product gas to power up to 50 city buses per day.

**Financial risk**

System debt service coverage (DSC), not including the allotted 15% of unrestricted net assets (UNA) from the last day of the previous fiscal year, has been strong, ranging from about 2.2x to 2.6x from fiscal years 2012 to 2018, on a senior basis, and from about 2.0x to 2.56x on all debt. For fiscal 2018, the system's DSC (not including the 15%) was about 2.49x for all debt. Unaudited fiscal 2019 results indicate coverage of senior debt at 2.97x and coverage of all debt at 2.59x. We expect DSC to remain strong. The city's current financial planning model shows projected DSC (not including the allotted 15%) for fiscal years 2020-2024 ranging from about 2.42x to 2.75x based on senior debt and from about 2.12x to 2.35x based on all debt. These forecast DSC levels include added debt service from new-money bond issues in fiscal years 2022, 2024, and 2026. They also reflect some potential savings from refunding scenarios.

Liquidity has been historically strong, in our view, and improving, due in part to annual rate increases, and we expect it to remain strong. The fiscal year-end unrestricted cash balance for fiscal 2018 provided 1,257 days' cash on hand. Fiscal-year-end audited unrestricted cash balances steadily increased from about $61.9 million in 2010 to about $359.6 million in fiscal 2018. Management reports an unaudited unrestricted cash balance of approximately $415 million as June 30, 2019.

Management reports there is no unhedged variable-rate debt associated with the city's utility system. The utility system has two swaps outstanding: A Citibank N.A. swap relates to the 2008A bonds, while a Wells Fargo Bank N.A.
swap relates to the 2008B bonds. As of June 30, 2018, the swaps had a combined negative fair value to the city of $19.3 million. We consider the contingent liability risk related to these swaps low because of the wide differential between the current rating on the bonds and the rating that would trigger a collateral posting or swap termination events.

Raleigh's five-year (fiscal years 2020-2024) capital expenditure projections total approximately $984.7 million, $660 million of which management plans to fund with debt. We consider system leverage moderate, with a debt-to-capitalization ratio of nearly 42.5%, based on fiscal 2018 results. Management reports that the city's water and wastewater systems comply with all federal and state environmental legislation and regulations, and we expect management will take necessary measures to ensure that the systems meet the state's division of water quality standards.

Based on our financial management assessment (FMA), we view Raleigh to be a '1' on a scale of '1' to '6', with '1' being the strongest. We believe that the financial management practices are strong, comprehensive, and supportive of high credit quality. Revenue and expenses assumptions are reasonable, and interim financial reporting is provided to the city council through periodic budget reports. The long-term planning process is rigorous, and the ten-year plan is annually updated and made publicly available. The reserve target is robust and articulates a rationale for maintaining a strong liquidity position. Financial planning and operational data are easily obtained, as the budget, financial statements, and projections are readily available on the authority's website.

We consider legal provisions credit neutral. The rate covenant with the trust agreement requires net revenues, together with the allocated 15%, to cover at least 1.2x annual debt service on parity debt. Raleigh will also need net revenues without the 15% to cover all debt at a minimum of 1.0x. Formal financial policies (adopted as part of the 2012 budgeting process) specifically related to the enterprise system provide additional strength to these provisions. These include maintaining senior DSC (excluding the 15%) at a minimum of 2.00x and maintaining UNA of the operating and debt service funds at 50%-75% of annual operating expenses. Management intends to operate the utility such that results exceed these levels. More specifically, management intends to maintain UNA of the operating and debt service funds at 100% of annual operating expenses and maintain DSC above 2.00x. The policies also call for an additional bonds test at a minimum of 1.2x. In our view, the adoption of these thresholds for DSC and liquidity and the system's historically strong DSC and high liquidity mitigate the lack of a debt service reserve.

Outlook

The stable outlook reflects our view of the local area economy's strength and stability and sufficient capacity to meet the system's increasing demand. We expect management will continue to raise rates as needed to maintain strong DSC on both the system's senior-lien debt and all debt outstanding. If liquidity and DSC results are not in line with management policies and projections, we could revise the outlook to negative or lower the rating during our two-year outlook period.

Downside scenario

Should financial metrics fall and remain below management's 2.0x policy target, coupled with a significant reduction in liquidity, the rating could be lowered.
Ratings Detail (As Of October 24, 2019)

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Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.