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CREDIT OPINION
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King (County of) WA Sewer Enterprise

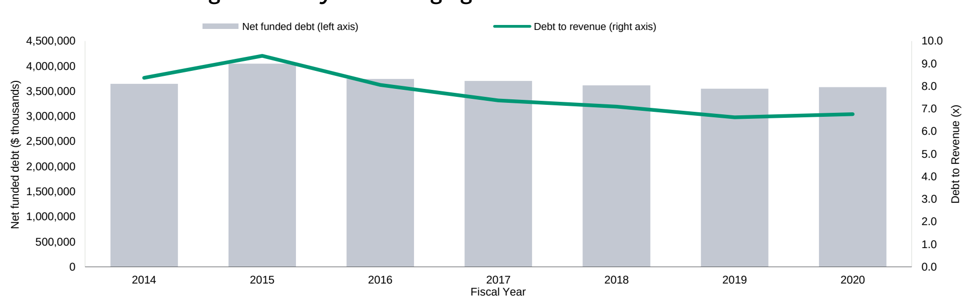
Update to credit analysis

Summary

King County, Washington's Sewer Enterprise (Aa1 stable) benefits from its large service territory that includes the cities of Seattle (Aaa stable) and Bellevue (Aaa stable) and various wastewater municipalities in the Puget Sound region. The sewer system's financial performance remains sound despite challenges arising from the coronavirus pandemic, given the mandatory service provision for its municipal wholesale customers and the delayed and smoothed structure of its primary revenue stream, as well as a willingness by management to adjust rates as necessary. The system's combined debt service coverage and liquidity are solid for its large system size and will likely remain stable supported by a rate increase in 2022 and prudent expenditure management. However, credit constraints include the system's high debt leverage that will likely remain elevated given substantial future capital needs and planned debt issuances. Mitigating factors include the system's position in the flow of funds relative to a typical municipal retail service provider, where revenue payments are considered an operations and maintenance (O&M) expense of wholesale customers and are senior to each system's revenue debt. Legal provisions of the bonds are satisfactory.

Exhibit 1

Elevated debt leverage will likely remain high given substantial future debt load



Source: King County, WA Sewer Enterprise, Moody's Investors Service

Credit strengths

» Stable debt service coverage and liquidity with minor deviations from historical levels

» Long term contracts with wholesale customers where revenue payments to the sewer system are treated as an O&M expense of participants which are senior to each system's revenue debt

» Strong governance framework spearheaded by an experienced management team and prudent system planning

Credit challenges

» Elevated debt leverage relative to peers

» Large capital improvement plan and rising costs to ensure compliance with disposal permits that will require significant additional debt

Rating outlook

The stable outlook incorporates our expectation that the system will continue to maintain solid debt service coverage and liquidity levels supported by strong financial management despite modest operational disruptions from the coronavirus pandemic. The outlook also reflects the expectation of prudent rate increases to support operations and its large capital plan.

Factors that could lead to an upgrade

» Sustained improvement in the system's revenue and expenditures including strengthened debt service coverage levels and liquidity

» Significant reduction in debt leverage

Factors that could lead to a downgrade

» Prolonged economic recovery in the region resulting in lower than projected water use

» Deterioration in financial position, including a sustained period of weaker debt service coverage or material declines in liquidity

» Unwillingness to implement service rate increase

Key indicators

Exhibit 2

King (County of) WA Sewer Enterprise					
System Characteristics					
Asset Condition (Net Fixed Assets / Annual Depreciation)	24 years				
System Size - O&M (in $000s)	$177,752				
Service Area Wealth: MFI % of US median	153.1%				
Legal Provisions					
Rate Covenant (x)	1.15				
Debt Service Reserve Requirement	DSRF funded at MADS (Aaa)				
Management					
Rate Management	Aa				
Regulatory Compliance and Capital Planning	Aa				
Financial Strength					
	2016	2017	2018	2019	2020
Operating Revenue ($000)	$464,541	$502,573	$509,550	$536,449	$529,939
System Size - O&M ($000)	$136,528	$147,981	$152,381	$154,307	$177,752
Net Revenues ($000)	$332,082	$360,910	$367,407	$398,851	$366,860
Net Funded Debt ($000)	$3,675,911	$3,637,206	$3,550,234	$3,484,471	$3,516,607
Annual Debt Service ($000)	$235,437	$238,688	$246,227	$242,413	$237,036
Annual Debt Service Coverage (x)	1.4x	1.5x	1.5x	1.7x	1.6x
Cash on Hand	1025 days	903 days	576 days	766 days	725 days
Debt to Operating Revenues (x)	7.9x	7.2x	7.0x	6.5x	6.6x

Operations and Maintenance (O&M) is adjusted to reconcile actual changes in cash related to contributions for pensions and OPEB, consistent with our cross-sector Adjustments to Pension and OPEB Data Reported by GASB Issuers, including State and Local Governments Methodology.

Source: Audited financial statements, US Census Bureau, Moody's Investors Service

Profile

The King County Sewer Enterprise is a division of King County's Department of Natural Resources and Parks. The enterprise provides wastewater treatment services to 34 municipal participants and three non-municipal participants that collectively serve 2 million residents in the Puget Sound region. The county is responsible for construction, operation and maintenance of main trunk, interceptor sewers, pumping stations and treatment plants on behalf of its participants, while collection is managed by each participant's system. The sewer enterprise operations include three major secondary treatment plants, 397 miles of conveyance lines, 48 pump stations and 25 regulator stations. The enterprise also manages four combined sewer overflow (CSO) treatment plants, four CSO storage facilities, 39 CSO outfall locations and secondary treatment plants on Vashon Island and in Carnation.

Detailed credit considerations

Service area and system characteristics: large system size with established long term contracts with municipal wholesale customers

The system's long-term credit strength is stabilized by its large Puget Sound service territory that continues to exhibit strong economic fundamentals despite economic disruption from the coronavirus pandemic. The county's robust and diverse economy is supported by market leading corporations in technology, retail and aircraft manufacturing sectors that supports a highly educated and well paid labor force. The median family income (MFI) is particularly strong for a large urban area at 153% of the US based on the 2019 American Community Survey, and has improved from an MFI of 138% of the US in 2010.

Modest sewer system customer growth will continue as the Puget Sound economy rebounds from the pandemic. Single-family residences (SFR) and residential customer equivalents (RCE) have grown an average of 2% annually over the last decade, though recent growth has slowed to under 1% annually. The SFR customer class represents about 58% of the total customer base and pays a fixed monthly sewer rate while the remaining 42% RCE class (multifamily, commercial and industrial) is billed based on flow driven consumption. The system provides wastewater treatment and disposal services to municipal participants in King County (Aaa stable), Pierce County (Aa1 positive) and Snohomish County (Aa1 stable). Seattle Sewer Enterprise (Aa1 stable) and the City of Bellevue's sewer enterprise are the two largest participants of the system, representing 38.5% and 8.2%, respectively, of total customer accounts as of December 31, 2020.

The system's five treatment plants have a combined maximum capacity to treat 868 million gallons per day (MGD). The average treated flow in 2020 at the system's largest treatment plant was 95 MGD with a peak daily flow of 351 MGD, and is well within its maximum treatment capacity of 440 MGD during peak rainfall events.

By ordinance, municipal wholesale participants from within the county are required to continue as agency customers (wholesale customers not subject to a service agreement) even in the absence of a service agreement and must continue as a customer so long as bonds issued to finance the capital projects in the Regional Wastewater Services Plan (RWSP) remain outstanding. A municipal participant cannot deliver sewage to another agency without the consent of the county. Municipal participants account for 92.8% of sewage disposal revenue in the fiscal year ended December 31, 2020. Favorably, the system's revenue is an O&M expense of the participants and are therefore paid before the debt of their respective wastewater enterprises. Service agreements are in place with each entity through at least fiscal 2036 and several small off-takers already signed extensions to fiscal 2056.

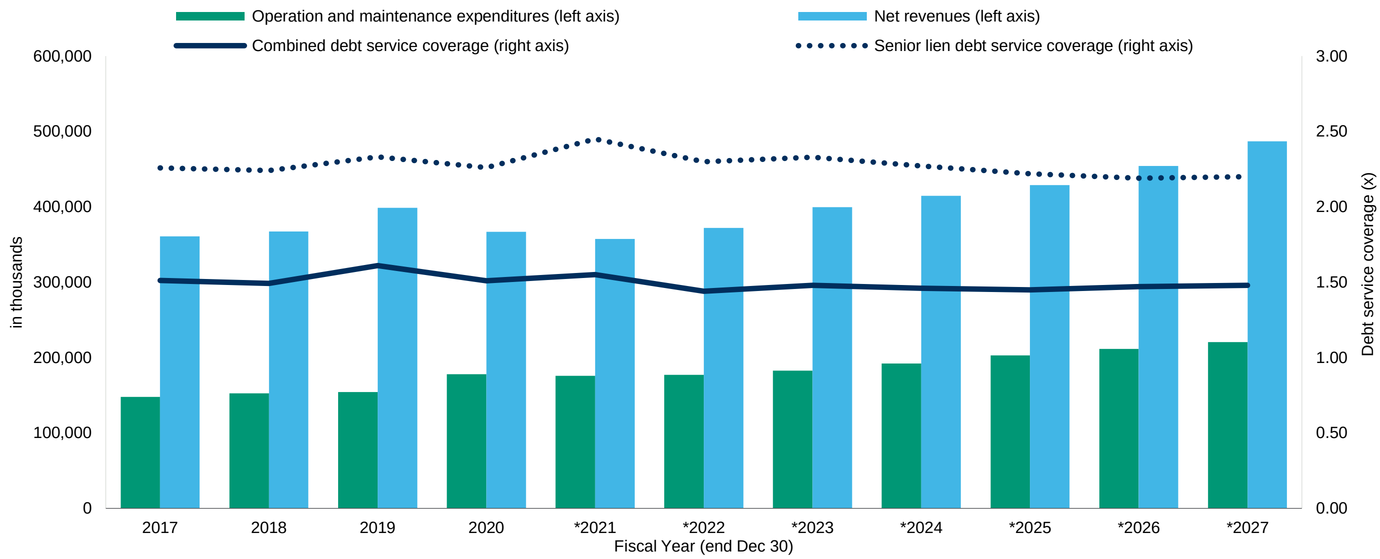
Debt service coverage and liquidity: stable debt service coverage and solid liquidity

The sewer system's stable debt service coverage will remain solid for its large system size, supported by strong financial management, adopted sewer rate increases in fiscal 2022, prudent expenditure control and modest customer growth. However, rising costs from ongoing CSO projects are credit challenges.

Fiscal 2020 operating revenue softened slightly because of a 52% reduction in new customer connections to the sewer system which reduced capacity charges as a result of slowed construction activities from the pandemic. New customer connections in 2020 of 6,522 were markedly lower than average annual connections of 12,000 from 2016 to 2019. Still, the overall effect is muted, as capacity charges represent just 17.5% of total top-line operating revenue of $530 million. Sewage disposal charges, which is the system's largest source of revenue at 78.7% of the total ($417.3 million) held steady compared to 2019 because of modest growth in overall customer accounts, which helped offset the 0% rate increase and reduction in RCE commercial water use at the onset of the pandemic.

The system recorded a solid senior lien debt service coverage of 2.26x, above the average coverage of 2.15x over the last five years, while combined debt service coverage (including subordinate lien obligations) was stable at 1.5x, in line with its five-year average of 1.48x. While combined coverage compares below the Moody's rated wastewater sector median of 2.1x, we view it as satisfactory, given the substantial size of the system ($177.7 million 2020 O&M) compared to the national median of $11.6 million.

Exhibit 4
Stable debt service coverage on senior and combined basis projected through 2027



Projections for 2021 based on unaudited results through May 2021 and the county's estimated results through December.
Combined debt service coverage reflects the system's senior, parity lien and other system obligations
2022 to 2027 reflects the county's projections
Source: King County, WA Sewer Enterprise, Moody's Investors Service

While fiscal 2021 will reflect most of the pandemic driven revenue deviation, combined debt service coverage will likely remain stable because actual consumption in fourth quarter 2020 and first quarter 2021 were less negative than initially projected, coupled with proactive expenditure management and an adopted 4.5% rate increase.

As of June 30, 2021 about 97% of 2021 sewer rate revenue is already known because of the billing structure which both delays and smooths the effects of any material economic volatility. RCEs are billed based on a four-quarter rolling average while SFRs are billed in the quarter before the prior one. This allows the system significant lead time to adjust expenditures and maintain stable finances. As a result, the revenue loss is muted through 2022 and the county projects a full recovery to pre-pandemic 2019 levels beginning 2023.

County adopted sewer rate and capacity charge increases of 4% and 3% respectively in fiscal 2022 will further stabilize finances. Current projections incorporate consecutive annual rate increases of between 4%-6% annually through 2027, a change in its previous biennial rate planning. Rates are designed to provide 40% funding for capital projects which will become more substantial in 2026 and 2027 to support the system's Clean Water Plan that will serve as the successor to the current RWSP. Still, county projections indicate senior and combined debt service coverage (see Exhibit 2) will remain stable at 2.2x and 1.5x respectively, exceeding the county's policy coverage minimum of 1.25x. Projections does not include retirement and defeasance debt service savings which if realized should help improve coverage.

Liquidity

The sewer system has a strong cash position. As of fiscal 2020, liquidity stood at $353 million in unrestricted cash and cash equivalents, equal to a strong 725 days of cash on hand. A substantial portion are identified as bond funds ($139.8 million) and unallocated insurance recoveries ($78 million). Excluding these moneys, the system would still have an adequate 278 days cash on hand. The system also held $46.3 million in a rate stabilization reserve, categorized as restricted cash, and have no plans to draw on the reserves in the foreseeable future.

In addition to unrestricted cash, the countywide investment pool is potentially available to all of the county's various funds on a borrowable basis and any such loans are not required to be repaid within the same fiscal year. The system currently does not have authorization to borrow from the pool, but this could be provided if needed with approval from the county's Executive Finance Committee. As of March 31, 2021, the pool holds assets with a fair value averaging approximately $7.5 billion which largely comprises low-risk and relatively liquid US government and federal agency securities.

Debt and legal covenants: high leverage that will remain elevated; substantial future debt plans

The system's debt leverage is elevated at 6.8x 2020 operating revenue and will remain high given substantial future borrowing plans. The county has identified over $2.3 billion in capital projects through 2027. Projects are for various capital improvements including mitigating CSOs and asset maintenance. The system projects to borrow over $1.4 billion (60% of capital budget) over the next seven years to support the capital program most of which will likely be issued as senior lien bonds ("parity bonds") and parity lien obligations that includes loans through WIFIA. Rates and cash reserves will fund the remaining $935 million (40%).

The sewer system currently has about $3.6 billion in debt outstanding, comprising $2.2 billion of senior lien parity bonds, $549.6 million of parity lien obligations (secured by a limited tax general obligation pledge of the county), $200.6 million in junior lien obligations, $423.7 million in multi-modal LTGO/sewer revenue bonds (inclusive of $179.2 million drawn under the county's commercial paper program) and about $246.8 million in state loans (supported by net revenues remaining at the bottom flow of funds).

Legal security

Legal provisions for the parity bonds (the senior revenue pledge) are satisfactory. The additional bonds test requires net revenue coverage of 1.25x annual debt service. The rate covenants requires 1.15x coverage annually of debt service by net revenue after the payment of operating expenses. The parity bonds are also secured by a shared reserve fund that is relatively strong as it is sized at least equal to maximum annual debt service subject to springing amendments, and is satisfied with a mix of cash and sureties.

Legal provisions for parity lien obligations, including limited tax general obligation bonds that are additionally secured by a lien on sewer revenues, are also considered satisfactory. For parity lien obligations, the rate covenant requires 1.15x coverage of combined annual debt service on parity bonds and parity lien obligations. The additional bonds test requires net revenue of at least 1.25x combined annual debt service on parity bonds and parity lien obligations. Parity lien obligations do not have a reserve fund requirement, but benefit from the county's full faith and credit pledge.

For junior lien obligations, the rate covenant is that net revenue must be at least 1.1x junior lien debt service after satisfying annual debt service requirements for parity bonds and parity lien obligations. The junior lien does not have reserve fund requirements. The additional bonds test is 1.1x junior debt service.

The "Multi-Modal LTGO/Sewer Revenue" bonds have a pledge that has a subordinate lien on net revenue after the junior lien. This lien does not have a reserve fund requirement, but has the county's full faith and credit pledge. The rate covenant for the multimodal GOLT bonds is 1.1x debt service for combined junior and multi-modal GOLT bonds' debt service. The additional bonds test is also 1.1x debt service for combined junior and multi-modal GOLT debt service. The system's commercial paper program falls under this lien and are supported by extremely highly liquid holdings of $5.5 billion, providing coverage of 19.6x.

Debt structure

Most of the sewer system's debt is fixed rate sewer revenue bonds maturing by 2053, though all junior lien obligations and the multi-modal LTGO revenue bonds are variable rate obligations. Inclusive of debt drawn under the commercial paper facility, the system has $624.4 million of variable rate debt or 17% of total outstanding debt. By policy, the county limits variable rate debt to 20% of total outstanding sewer obligations. For planning purposes, the county targets its outstanding variable rate debt, less the portion utilized for interim financing, to 15% of outstanding sewer obligations.

All variable rate bonds have long term bullet maturities, though the sewer enterprise has begun optional redemptions 10 years before their final maturity dates. Each series either has a different credit facility or is in an alternative form that all have expiration dates and will require remarketing between January 2022 and January 2026.

Debt-related derivatives

The sewer system has no debt-related derivatives.

Pensions and OPEB

Pension and OPEB liabilities are relatively modest. At the end of 2020, the enterprise had an adjusted net pension liability of about $202.5 million based on an assumed discount rate of 2.7% (versus the reported 7.40%, which would result in a reported unfunded liability of just $282.3 million). This is a modest 0.5x operating revenue, with total contributions equaling just 1.7% of revenue. Total reported OPEB liabilities in 2020 was just $1.5 million.

ESG considerations

Environmental

Environmental considerations are not material drivers to the credit at this time though they are important to the system's overall credit quality given its primary purpose to provide regional wastewater treatment services. At the forefront of its capital program are projects to address its combined sewer overflow issues. In 2013, the system entered into a consent decree with the EPA to reduce CSO overflows to meet regulatory standards by 2030. The agreement entails the construction of 9 CSO control projects totaling $441 million all of which are incorporated in the CIP program. In 2020, the county requested and began negotiations to modify the consent decree given substantially higher cost estimates and anticipated future increases in regulatory requirements. Additional costs may also arise from the Puget Sound Nutrient General Permit which will inform nutrient removal target and limits that are scheduled to be outlined in 2022. While rising costs pose a credit challenge, management's proactive and forward looking planning for capital through its development of the Clean Water Plan and review of alternative cost-effective control measures will enable the system to capably manage these risks.

Social

Social considerations include the system's rate affordability for wastewater treatment and disposal services. Rates and charges paid by end users ultimately reflect those passed on by participants. Under each wholesale customer's service agreement, the entity is required to set its own rates and charges at a level sufficient to cover local costs and the county's rates. Using Seattle as proxy for the system, utility rates are high compared to others across the country, a factor that is partially mitigated by high median wealth measures and its local affordability programs.

Additionally, the county updated its capacity charge rate structure and introduced flexible payment options for economically disadvantaged customers that were financially impacted by the pandemic. Measures include suspending notice of delinquent payments, interest and late fee penalties and deferral of a capacity charge. The deferrals did not materially hamper revenue and instead enabled greater equity in water use and charges.

Governance

The system's governing framework and management team is strong. The system is operated as the Wastewater Treatment Division and is managed by several appointed experienced officials within the division and are directed by the elected county council and the County Executive. The county, along with the system, produces long-range financial forecasts that are conservative and achievable, with ongoing evaluations of economic conditions resulting to adjustments of revenue and expenditure. Strong management is exemplified by the system's history of solid financial performance that are supported by internal financial reserve policies for liquidity, capital, rate stabilization and debt service reserves for parity and state loans. Additionally the system has full rate-setting authority and is not subject to regulatory approval by any outside body and are viewed annually by the council.

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