

CREDIT OPINION

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Contacts

James Kelley +1.415.274.1716
 Associate Lead Analyst
 james.kelley@moodys.com

David Strungis +1.312.706.9970
 VP-Senior Analyst
 david.strungis@moodys.com

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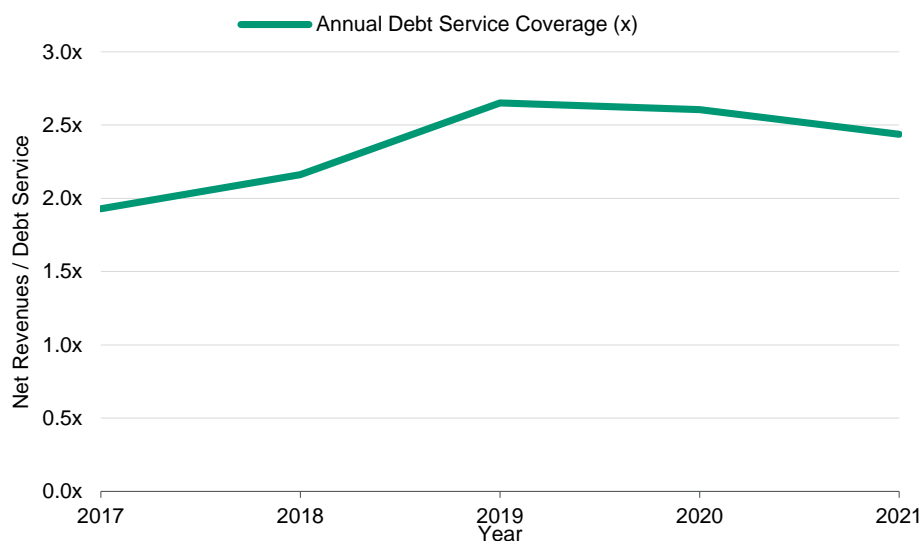
Seattle (City of) Sewer Enterprise, WA

Update to credit analysis

Summary

[The City of Seattle, Washington's sewer enterprise](#) (Aa1 stable) benefits from a large and wealthy service area, which essentially matches the boundaries of the City of Seattle [City of Seattle](#) (Aaa stable). The utility is further supported by healthy financial operations. While debt service coverage is expected to decline slightly, it will remain satisfactory because the system plans to raise rates to meet growing operating and debt service expenses. Solid liquidity is bolstered by access to the city's shared liquidity pool. Regulatory compliance and capital planning are overseen by a strong management staff. Affordability will be a long-term challenge for the city as water consumption remains stable and rates are increased to pay for system operations, maintenance and improvements.

Exhibit 1

Debt service coverage remains stable and reflects prudent fiscal management


Source: Audited financial statements, Moody's Investors Service

Credit strengths

- » Stable, established customer base and service area
- » Demonstrated willingness to increase utility rates
- » Access to citywide cash pool for liquidity purposes

- » Solid coverage levels

Credit challenges

- » Significant capital needs related to combined sewer overflow projects
- » High customer utility bills relative to regional and national peers

Rating outlook

The rating outlook is stable and reflects healthy debt service coverage that is expected to remain at satisfactory levels. The utility has sufficient cash and ample access to additional liquidity that offers financial flexibility.

Factors that could lead to an upgrade

- » Material increase in debt service coverage levels
- » Reduction in future capital needs related to environmental compliance issues

Factors that could lead to a downgrade

- » Deterioration in pledged revenue and coverage
- » Substantial increase in debt levels to address environmental compliance issues

Key indicators

Exhibit 2

Seattle (City of) Sewer Enterprise, WA					
System Characteristics					
Asset Condition (Net Fixed Assets / Annual Depreciation)	35 years				
System Size - O&M (\$000)	\$353,905				
Service Area Wealth: MFI % of US median	172.00%				
Legal Provisions					
Rate Covenant (x)	1.25x				
Debt Service Reserve Requirement	DSRF funded at lesser of standard 3-prong test (Aa)				
Management					
Rate Management	Aa				
Regulatory Compliance and Capital Planning	Aa				
Financial Strength					
	2017	2018	2019	2020	2021
Operating Revenue (\$000)	\$400,284	\$419,876	\$454,382	\$460,295	\$502,517
System Size - O&M (\$000)	\$310,186	\$317,601	\$330,092	\$349,925	\$353,905
Net Revenues (\$000)	\$100,209	\$113,271	\$141,196	\$123,354	\$153,746
Net Funded Debt (\$000)	\$867,354	\$843,409	\$814,620	\$798,085	\$871,234
Annual Debt Service (\$000)	\$51,944	\$52,370	\$53,252	\$47,360	\$63,055
Annual Debt Service Coverage (x)	1.9x	2.2x	2.7x	2.6x	2.4x
Cash on Hand	194 days	212 days	255 days	228 days	226 days
Debt to Operating Revenues (x)	2.2x	2.0x	1.8x	1.7x	1.7x

Financial figures reflect non-cash adjustments for pension and OPEB.

Source: *Seattle Public Utilities and Moody's Investors Service*

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Profile

The combined drainage and wastewater system serves the City of Seattle and its rapidly growing urban population of roughly 760,000. The drainage system conveys stormwater runoff through various modes, including storm drains, a combined stormwater and wastewater system and a ditch, culvert and creek system. The wastewater system is responsible for the collection and transmission of wastewater to regional treatment facilities that are operated by [King County](#) (Aaa stable).

Detailed credit considerations

Service area and system characteristics: key utility service provider to Seattle

The utility system's robust service area economy is a significant credit strength. Seattle is the commercial and tourism hub of the Puget Sound region and the economic center of the [State of Washington](#) (Aaa stable). Software development and aircraft manufacturing are key components of the local economy, and the area serves as the headquarters or major operating base to some of the world's best-known international corporations, including [Amazon](#) (A1 stable), [Boeing](#) (Baa2 negative), [Microsoft](#) (Aaa stable), and [Starbucks](#) (Baa1 stable). Positively, business and leisure travel to the region has begun to rebound following the pandemic and general economic activity has improved significantly. As of March 2022, the city's unemployment rate is very low at 2.1%.

Income measures are strong and will continue to be a positive component of the utility's credit profile. Median family income of 172% of the US level is among the highest for large urban areas. This will continue to be supported by the city's high educational attainment rate.

The drainage system conveys stormwater runoff through various modes, including storm drains, a combined stormwater and wastewater system and a ditch, culvert and creek system. The drainage system's roughly 222,500 accounts are principally residential (70%), though revenue generation is more evenly split with commercial activities as drainage fees are based on a property's estimated impact on the drainage system. Single family and duplex properties under 10,000 square feet pay an annual flat fee based on the size of the property while charges for all other properties are based on the percent of impervious surface area and lot size. The largest customer of the drainage system is the city (6.5% of revenue in 2021) and the top 10 customers generated 16.5% of 2021 revenue, similar to figures from prior years.

The wastewater system is responsible for the collection and transmission of wastewater to regional treatment facilities that are operated by King County. Like the drainage system, the wastewater system's roughly 176,000 accounts are principally residential (89%). However, wastewater revenue is more heavily driven by commercial accounts (63%). The largest customer of the wastewater system in 2021 was the University of Washington (2.8%) and the top 10 customers generated 9.7% of revenue.

Unlike the drainage system, wastewater system revenue is subject to some monthly variability. Residential customers are charged based on actual water consumption from November through April and the lesser of actual consumption or average winter water consumption from May through October. Commercial customers are charged based on actual water consumption throughout the year unless they install wastewater submeters. The city anticipates conservation efforts and slower population growth will result in stable demand of over the next several decades.

Debt service coverage and liquidity: coverage is strong and expected to remain healthy; liquidity bolstered by access to city's consolidated cash pool

Debt service coverage is healthy despite increasing annual debt service for bond issuances to finance CSO projects, flood prevention and sewer pipe rehabilitation. Top-line revenue for 2021 reached \$502.5 million, a 9.2% increase from 2020 that was driven by recovery from the pandemic. By ordinance, city utility taxes are remitted to the city after the payment of debt service, though in practice are remitted monthly. Net revenue available for debt service in 2021 was \$153.7 million, sufficient to provide 2.4 times debt service. Debt service coverage is likely to decline slightly while remaining at satisfactory levels as rates increase to meet growing operating and debt service expenses.

Liquidity

Seattle's utilities have historically maintained lower levels of cash on their own balance sheets because of their access to liquidity in the city's \$2.8 billion consolidated cash pool. Short-term liquidity (up to 90 days) can be accessed with approval of the city's finance director. For long-term liquidity, the enterprise must receive approval of the city council. The loans bear interest at the yield

of the investment pool, which is low given the short-term investment nature. This cash management approach has demonstrated as successful with the city's electric enterprise borrowing in excess of \$100 million from the cash pool during the 2001 power crisis.

The combined drainage and wastewater system generates satisfactory operating cash flow. The enterprise ended 2021 with \$219.2 million of cash in working capital, or 226 days of cash on hand. The forward projection for the enterprise shows significantly declining cash balances through 2024, though the city has historically outperformed similar projections by considerable margins. The impact of the pandemic to the enterprise's liquidity has been modest as delinquencies of 90+ days increased to \$17.2 million across the wastewater, drainage, water and solid waste systems, equal to about 2% of annual sales.

Debt and legal covenants: debt to increase with CSO program; legal protections satisfactory

The drainage and wastewater enterprise is modestly leveraged with \$770 million in revenue bonds outstanding and an additional \$192 million WIFIA loan that has not yet been drawn upon. Inclusive of the WIFIA loan, the enterprise's debt to operating revenue ratio is a manageable 2.1x. The utility's capital program through 2027 calls for \$1.2 billion in projects, including \$409 million for CSO projects. The city expects to pay for these using \$431 million of operating cash and \$765 million in debt, including the WIFIA loan. The increase in leverage is material but manageable given currently strong margins and expected rate-driven revenue increases.

Legal security

The bonds are payable from the combined net revenues of the drainage and wastewater system, which has a rate covenant that requires the system to set rates to maintain at least 1.25 times annual debt service coverage on a pre-city tax basis. The additional bonds test similarly requires that rates be set to maintain at least 1.25 times annual debt service coverage on a pre-city tax basis. Furthermore, the bonds are backed by a common debt service reserve sized at the lesser of the standard three-prong test.

Debt structure

The combined drainage and wastewater debt is structured with declining debt service to allow for layering of additional bond issuances in the future. The city will not begin making principal payments on the WIFIA loan until 2026.

Debt-related derivatives

The drainage and water system does not have any debt-related derivatives.

Pensions and OPEB

Pensions and other post-employment benefits (OPEB) are not a material driver for the drainage and wastewater utility. As of fiscal 2020, the utility has an adjusted net pension liability (ANPL) of \$223.8 million based on a discount rate of 3.22%, which is manageable at 0.5x operating revenue. The enterprise uses a discount of 7.25% and therefore has a lower reported pension liability. Contributions have historically been modestly below its "tread water" mark, or the contribution level required to keep pension liabilities from growing given plan assumptions.

Reported OPEB liabilities were just \$3.1 million at the end of 2020. The city funds its OPEB expenses on a pay-as-you-go basis and the utility's share is limited to the implicit subsidy associated with retiree healthcare.

ESG considerations

Environmental

Environmental considerations are important to the utility's overall credit quality. According to Moody's ESG Solutions, the city has medium risk exposure to water stress, sea level rise, heat stress and wildfires.

Some of the city's sewage and stormwater flows move through a single set of pipes, so extreme rainfall events have led to significant sewer overflows into local waterways. In 2013, the city entered into a consent decree related to its combined sewer overflow (CSO) reduction program and management of its wastewater system with the Department of Justice on behalf of the EPA and DOE. The Final Plan to Protect Seattle's Waterways was approved by the EPA and Ecology in August 2015 in accordance with the city's consent decree requirements. The plan requires the construction of a large combined sewage storage facility, several smaller storage and sewer system improvement projects and three projects to remove pollutants from stormwater. Under the consent decree, the construction of all CSO control measures is to be completed no later than the end of 2030.

Social

Social considerations are an important factor in the sewer enterprise's overall credit quality. Resident income measures are among the highest in the nation for a large urban area. While the pandemic is also a factor under our ESG framework given its impact on public health and safety, the city and its utilities have demonstrated significant financial stability.

The average monthly sewer bill in Seattle is high relative to regional peers, contributing to high composite utility rate for users. By 2026, the utility's strategic plan projects the typical monthly single-family residence to have a combined utility bill (excluding electricity) of \$275. This will potentially constrain long-term flexibility for individual utility rates.

To help with affordability, the city offers a discount program for qualifying low-income customers. The city has also waived interest on delinquent accounts through the end of 2023 and provided bill assistance via flexible payment plans for residential and small business customers. In addition to direct customer assistance, the utility is aiming to reduce costs by making improvements to capital planning and delivery, expanding partnership opportunities and improving regulatory alignment. The city's ability to manage affordability while satisfying regulatory and service-level needs will continue to be a focus of future reviews.

Governance

Seattle's Public Utility governance is a credit strength. The city's management team has demonstrated the willingness and ability to generate additional revenue. Rates are set by the city council and are not subject to state oversight. Under the utility's current strategic plan, combined utility rates (including water, wastewater, drainage and solid waste) are expected to increase by an average of 4.2% annually through 2026. Wastewater rates are projected to increase by an average of 4.7% and drainage by an average of 6.7%.

The structure of Seattle's utility billing is a credit strength for the wastewater and drainage systems. Wastewater customers are billed on a combined utility statement, with partial payments applied first to solid waste, then to wastewater and lastly to water. The city has the authority to shut off water to enforce collections, limiting delinquent or unpaid bills. Drainage fees are billed by King County on behalf of the city on the county's property tax statement. A lien is applied to properties for nonpayment of drainage bills. The largest operating expense for the drainage and wastewater systems is the wastewater treatment contract with King County. City ordinance allows the wastewater system to pass on to its customers the county's charges for capital and other operating costs of sewage treatment and disposal.

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Contacts

James Kelley
Associate Lead Analyst
james.kelley@moodys.com

+1.415.274.1716

David Strungis
VP-Senior Analyst
david.strungis@moodys.com

+1.312.706.9970

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