

CREDIT OPINION

12 May 2023



CLIENT SERVICES

Americas 1-212-553-1653
Asia Pacific 852-3551-3077
Japan 81-3-5408-4100
EMEA 44-20-7772-5454

Seattle (City of) Sewer Enterprise, WA

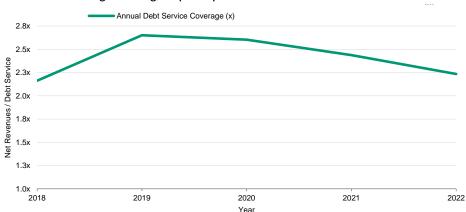
Update to Credit Analysis

Summary

The <u>City of Seattle</u>, <u>Washington's sewer enterprise</u> (Aa1 stable) benefits from a large and wealthy service area, which is mostly coterminous with the boundaries of the <u>City of Seattle</u>, <u>WA</u> (Aaa stable). The utility is further supported by healthy financial operations and strong liquidity levels, enhanced by access to the city's shared liquidity pool. While debt service coverage is expected to decline slightly, it will remain satisfactory as the system continues to raise rates to meet growing operational and debt service expenses. Regulatory compliance and capital planning are overseen by a strong management team. Rate affordability will be a long-term challenge for the city as water consumption remains stable and rates are increasing.

Exhibit 1

Debt Service coverage is strong, despite expected declines



Source: Audited Financial Statements, Moody's Investor 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 debt service coverage

Credit challenges

- » Significant capital needs related to sewer overflow project and consent decree
- » High customer utility bill relative to regional peers

Rating outlook

The rating outlook is stable based on the expectation that the city will maintain sound coverage levels considering its sizable capital needs. Affordability may be a long-term challenge for the city as water consumption continues to decline and rates are increased to pay for system operations, maintenance and improvements.

Factors that could lead to an upgrade

- » Material increase in debt service coverage
- » 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 and consent degree

Key indicators

Exhibit 2

EXHIBIT 2					
Seattle (City of) Sewer Enterprise, WA					
System Characteristics					
Asset Condition (Net Fixed Assets / Annual Depreciation)	37 years				
System Size - O&M (in \$000s)	\$358,990.05				
Service Area Wealth: MFI % of US median	176.00%				
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					
	2018	2019	2020	2021	2022
Operating Revenue (\$000)	\$419,876	\$454,382	\$460,295	\$502,517	\$519,029
System Size - O&M (\$000)	\$317,601	\$330,092	\$349,925	\$353,905	\$358,990
Net Revenues (\$000)	\$113,271	\$141,196	\$123,354	\$153,746	\$152,947
Net Funded Debt (\$000)	\$843,409	\$814,620	\$798,085	\$871,234	\$873,092
Annual Debt Service (\$000)	\$52,370	\$53,252	\$47,360	\$63,055	\$68,450
Annual Debt Service Coverage (x)	2.2x	2.7x	2.6x	2.4x	2.2x
Cash on Hand	212 days	255 days	228 days	226 days	275 days
Debt to Operating Revenues (x)	2.0x	1.8x	1.7x	1.7x	1.7x

Sources: US Census Bureau, Seattle (City of) Sewer Enterprise, WA's financial statements and Moody's Investors Service

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

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, WA (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). Income measures are strong and will continue to be a positive component of the utility's credit profile. Median family income of 176% of the US level is among the highest for large urban areas.

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 is 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. The largest customer of the drainage system is the city of Seattle (6.6% of revenue in 2022) and the top 10 customers generated 16.8% of 2022 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 is principally residential (89%). However, wastewater revenue is more heavily driven by commercial accounts (63%). The largest customer of the wastewater system in 2022 was the University of Washington (3.2%) and the top 10 customers generated 10.4% of revenue.

The city anticipates conservation efforts and slower population growth will result in stable, rather than growing, demand of over the next several decades. The utility has also been working toward resolution of a Consent Decree by the Environmental Projection Agency (EPA) related to sewer overflows since 2013. They have made significant progress, however, it remains an ongoing project and they have delayed milestones until 2024 as they have expanded the original scope while partnering with King County on major initiatives.

Debt service and Liquidity: Strong debt service, liquidity bolstered by city's consolidated cash pool

Debt service coverage is healthy despite increasing annual debt service for bond issuances to finance regulatory, renewal and optimization of existing infrastructure, and transportation projects. Top-line revenue for 2022 reached \$519 million, a 3.2% increase from 2021. 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 2022 was \$152 million, sufficient to provide 2.2 times all in 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 \$3.5 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 combined drainage and wastewater system generates satisfactory operating cash flow. The enterprise ended 2022 with \$219.2 million of cash in working capital, or 275 days of cash on hand. The forward projection for the enterprise shows declining cash balances through 2024, closer to historical levels, though the city has historically outperformed similar projections by considerable margins.

Debt and Legal Covenants: debt to increase with sizable CPI

The drainage and wastewater enterprise is modestly leveraged with \$730 million in revenue bonds outstanding and an additional \$192 million WIFIA loan that they are drawing on incrementally. The City made its first draw on the WIFIA Bond on January 15, 2023, in the amount of \$4.6 million, and made a second draw of \$4 million on March 14, 2023. The city plans to continue making draws throughout 2023 and expects to have fully drawn the WIFIA loan by the end of 2025. Inclusive of the WIFIA loan, the enterprise's debt to operating revenue ratio is a manageable 1.7x. The utility's capital program through 2026 calls for \$1.28 billion in projects, including \$133 million for combined sewer overflow (CSO) projects.

The city expects to pay for these using \$333.2 million of operating cash and \$942.5 million in debt financing, 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 2021, the utility has an adjusted net pension liability (ANPL) of \$245.1 million based on a discount rate of 2.52%, which is manageable at 0.44x operating revenue. The enterprise uses a discount of 6.75% and therefore has a lower reported pension liability. Contributions have in the last two years have been above its "tread water" mark, or the contribution level required to keep pension liabilities from growing given plan assumptions.

Reported OPEB liabilities were just \$2.8 million at the end of 2022. 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

The utility's credit exposure to environmental risks is moderately negative (E-3). Wastewater utilities have moderately negative exposure to water management considerations given the risk of potential regulatory violations associated with wastewater disposal. Wastewater operations face risks of increased operating costs or capital requirements in addressing any future violations. In addition, Seattle Sewer has neutral-to-low exposure to carbon transition, natural capital, waste and pollution, and physical climate risks. Long-term environmental challenges include sea level rise and the greater frequency of extreme rainfall, which increases the risk of severe flooding.

Social

The system's credit exposure to social considerations is neutral-to-low (S-2), reflecting neutral-to-low exposure to customer relations, human capital, health and safety, and responsible production considerations. While rate affordability is a potential challenge, the enterprise benefits from positive exposure to demographic and societal trends, such as positive population trends and a highly education workforce.

Governance

Seattle Sewer's governance considerations are positive (G-1). The system benefits from positive financial strategy and risk management considerations. Management credibility and track record considerations are also positive. Exposure to organizational structure and compliance and reporting considerations are neutral-to-low. Exposure to board structure, policies and procedures risk is moderately negative, reflecting the concentrated control of the system's operations by Seattle's city council.

© 2023 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 CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. 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 APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS 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,

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1367735

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

