

CREDIT OPINION

22 May 2017

New Issue

Rate this Research >>

Contacts

William Oh 415-274-1739
AVP-Analyst
 william.oh@moodys.com

Patrick Liberatore 415-274-1709
AVP-Analyst
 patrick.liberatore@moodys.com

Seattle Drainage and Wastewater Utility, WA

New Issue - Moody's Assigns Aa1 to Seattle (WA) Drainage and Wastewater Revenue Bonds

Summary Rating Rationale

Moody's Investors Service has assigned an Aa1 rating to the City of Seattle, Washington's \$240.0 million Drainage and Wastewater System Improvement and Refunding Revenue Bonds, 2017. Moody's maintains Aa1 ratings on the city's parity senior lien obligations. The ratings outlook is stable.

The Aa1 rating reflects the utility's large size and strong service area, which covers the City of Seattle, healthy financial operations that include sound debt service coverage and access to the city's shared liquidity pool, strong history of rate management as well as regulatory compliance and capital planning, and satisfactory legal provisions.

Credit Strengths

- » Stable, established customer base and service area
- » Demonstrated willingness to increase utility rates
- » Access to city-wide 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 ratings outlook is stable, based on Moody's expectation that the city will continue to raise utility rates as necessary to maintain sound coverage levels in light of sizeable capital needs.

NOTE: On May 23, 2017, the press release was corrected as follows: In the description of issuance, the expected sale date was changed to June 6, 2017. Revised release follows.

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 revenues and coverage
- » Substantial increase in debt levels to address environmental compliance issues

Key Indicators

Seattle Drainage and Wastewater					
System Characteristics					
Asset Condition (Net Fixed Assets / Annual Depreciation)	39 years				
System Size - O&M (in \$000s)	293,003				
Service Area Wealth: MFI % of USmedian	155.8%				
Legal Provisions					
Rate Covenant (x)	1.25				
Debt Service Reserve Requirement	DSRF funded at				
Financial Strength					
	2012	2013	2014	2015	2016
Operating Revenue (\$000)	304,002	333,760	342,000	363,779	375,041
O&M (\$000)	237,362	255,721	262,031	278,669	293,003
Net Funded Debt (\$000)	564,542	574,321	646,693	600,680	673,920
Annual Debt Service Coverage (x)	3.47	4.06	2.98	2.83	2.71
Cash on Hand	93 days	106 days	141 days	132 days	151 days
Debt to Operating Revenues (x)	1.9x	1.7x	1.9x	1.7x	1.8x

Source: Moody's Investors Service

Recent Developments

Recent developments are incorporated in the detailed rating considerations below.

Detailed Rating Considerations

Service Area and System Characteristics: Service Provider to the Growing City of Seattle

The combined drainage and wastewater system serves the City of Seattle and its rapidly growing urban population of roughly 687,000. The city is the commercial and tourist hub of the Puget Sound region and the economic center of the State of Washington. Software development and aircraft manufacturing are key components of the local economy, and the area serves as the headquarters of or major operating base to some of the world's most well-known international corporations, including Amazon, Boeing, Microsoft, and Starbucks. Online retailer Amazon, in particular, continues to expand its footprint in Seattle, acquiring and developing substantial downtown office space to house its growing workforce.

Median family income in the city is amongst the highest among large urban areas in the United States at 155.8% of the national average. Full value per capita, a proxy measure of wealth, is robust at \$284,259. Price appreciation and new construction are continuing to drive the city's assessed value higher. In 2017, assessed value hit a new high of \$185.6 billion, up 13.7% from 2016. Median home

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

prices are up 8.9% year-over year, and commercial office vacancy rates continue to decline. The city is forecasting continue economic growth into 2018, albeit at slower rates than in recent years.

The drainage system conveys stormwater run-off through various modes, including storm drains, a combined stormwater and wastewater system, and a ditch, culvert, and creek system. The drainage system's 215,400 accounts are principally residential (69%), though revenue generation is evenly split with commercial, 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 all other properties are charged 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 2016), with the top ten customers generating 16.6% of revenue in 2016, similar to figures from 2015.

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 accounts are also principally residential (87.9% of 177,800), but unlike the drainage system wastewater revenue is more heavily driven by commercial accounts (65.1%). The largest customer of the wastewater system is the University of Washington (3.0%), with the top ten customers generating 10.1% of revenue in 2016.

In 2013, a consent decree was entered into between the Department of Justice and the City, on behalf of EPA and DOE, related to the City's combined sewer overflow (CSO) reduction program and management of its wastewater system. 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. The stormwater projects are expected to be completed by the end of 2025 and the CSO outfalls are expected to be controlled by the end of 2030. Utility managers do not anticipate any significant challenges with meeting the requirements of the decree.

Financial and Operating Performance: Strong Ability to Generate Revenue

The city's management team has demonstrated its willingness and ability to generate additional revenues. Under the city's current strategic plan adopted by the city council in 2014, the drainage system expected to raise rates by an average of 8.6% annually through 2020, including a 7.8% increase for 2018; the wastewater system expected to raise rates by an average of 4.1% annually through 2020, including a 2.8% increase for 2018. For the wastewater system, city ordinance allows the utility to pass through county wastewater treatment charges based on adopted wholesale rates and projected bill consumption. The county council is expected to review a 2019 rate increase in the summer of 2018.

While the willingness to raise rates is strong, average monthly bill is high relative to many of its regional peers. This is similarly the case with the city's water and solid waste utilities, the result of which is a high composite utility rate for users and potentially constrained flexibility for individual utilities rates. For 2017, the projected combined monthly residential bill for a single family house is \$178.33, growing to \$207.02 by 2020. The city's ability to implement these rate increases will be an important credit factor that Moody's will continue to monitor moving forward. An updated strategic business plan is expected to be submitted to the city council by the end of May for the period covering 2018-2023.

Unlike the drainage system, the wastewater system revenues is subject to some monthly variability. Residential customers are 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. After average declines of 1.7% per year in water consumption between 2005-2011, water consumption increased an average of 1.1% annually from 2012-2016 due to the aforementioned population growth and construction activity. The city anticipates conservation efforts will offset the impacts of population growth resulting in flat water consumption through 2022.

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 wastewater, and lastly to water. The city has the authority to shut off water to enforce collections, limiting delinquent or unpaid bills. The 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 non-payment of drainage bills.

The largest operating expense for the drainage and wastewater systems is the wastewater treatment contract with King County. As noted previously, the wastewater system can pass on to its customers the county's charges for capital and other operating costs of sewage treatment and disposal. In 2016, the wastewater treatment contract expense for the city was \$154.0 million. For 2017, the treatment contract expense is projected to grow to \$161.7 million, based on a 5.2% rate increase from the county and a 0.1% increase by the city.

LIQUIDITY

Seattle's utilities have historically maintained low levels of cash on their own balance sheets. This is mitigated by their ability to access liquidity in the city's \$1.8 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 been tested and demonstrated 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 healthy operating cash flow. The enterprise ended 2016 with \$121.1 million of cash in working capital, or more than 150 days of cash on hand, a level Moody's views as satisfactory.

Debt Service Coverage: Declining But Satisfactory Coverage

Debt service coverage by the drainage and wastewater system has declined over the past five years, driven principally by increasing annual debt service for bond issuances to finance CSO projects, flooding, and sewer pipe rehabilitation. Top line revenue grew from \$304.0 million in 2012 to \$375.0 million in 2016, inclusive of the city utility tax. By ordinance, these city utility taxes are remitted to the city after the payment of debt service. Net revenue available for debt service in 2016 was \$128.6 million, sufficient to provide 2.71 times debt service. This is down from 4.06 times debt service coverage in 2013, but on par with coverage in 2011. Despite projected revenue growth in 2017 and 2018, the city is projecting debt service coverage to decline as both operating expenses and debt service increase. The city is currently projecting debt service coverage of 2.37 times and 1.86 times in 2017 and 2018, respectively. Given past outperformance, Moody's views these projections as conservative, though still indicative of the general coverage trend. Positively, coverage is expected to increase in 2019 to 2.35 times with more aggressive rate increases.

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 adopted capital improvement plan for the six year period through 2022 includes \$952.7 million in projects, with substantial combined sewer overflow program items, as well as sewer pipe rehabilitation and flood mitigation. At this time, approximately 69.7% of these projects will be financed with debt, with the bulk of the remaining amounts paid through internally generated funds.

DEBT-RELATED DERIVATIVES

The drainage and wastewater system has no debt-related derivatives.

Legal Security

The bonds are secured by a pledge of the combined net revenues of the drainage and wastewater systems, which has a rate covenant that requires the systems 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 secured by a common debt service reserve sized at the lessor of the standard three-prong test. Currently, the debt service reserve is backed by \$23.6 million in surety bonds from MBIA/NPFG, AMBAC, and FGIC, as well as \$32.9 million of cash, inclusive of \$11.6 million to be deposited from current bond proceeds.

Use of Proceeds

Bond proceeds will be used to pay for part of the costs of various projects of the city's drainage and wastewater system, as well as refund for savings certain of the city's outstanding drainage and wastewater revenue bonds.

Obligor Profile

The combined drainage and wastewater system serves the City of Seattle and its rapidly growing urban population of roughly 687,000. The drainage system conveys stormwater run-off 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.

Methodology

The principal methodology used in this rating was US Municipal Utility Revenue Debt published in December 2014. Please see the Rating Methodologies page on www.moody.com for a copy of this methodology.

Ratings

Exhibit 2

Seattle (City of) Sewer Enterprise, WA

Issue	Rating
Drainage and Wastewater System Improvement and Refunding Revenue Bonds, 2017	Aa1
Rating Type	Underlying LT
Sale Amount	\$240,015,000
Expected Sale Date	06/06/2017
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

© 2017 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. 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 PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY 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 ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR 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.

MOODY'S CREDIT RATINGS AND MOODY'S 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 OR MOODY'S 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.

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 rating process or in preparing the Moody's 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 indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use 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 SUCH RATING OR 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 rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — 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 61 003 399 657 AFSL 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. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

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 rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

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

REPORT NUMBER 1073593

Contacts

William Oh
AVP-Analyst
william.oh@moodys.com

415-274-1739

Patrick Liberatore
AVP-Analyst
patrick.liberatore@moodys.com

415-274-1709

CLIENT SERVICES

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