

OFFICIAL STATEMENT

RATINGS

Moody's: Aa1

S&P: AA+

New Issue, Book-Entry Only

(See "Other Bond Information—Ratings.")

In the opinion of Pacifica Law Group LLP, Seattle, Washington, Bond Counsel, under existing law and subject to certain qualifications described herein, the interest on the Bonds is excludable from gross income for federal income tax purposes. In addition, interest on the Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. See "Tax Matters" herein.

\$124,455,000

KING COUNTY, WASHINGTON SEWER REVENUE BONDS, 2018, SERIES B

DATED: Date of Initial Delivery

DUE: July 1, as shown on page i

King County, Washington (the "County"), is issuing its Sewer Revenue Bonds, 2018, Series B (the "Bonds"), as fully registered obligations. The Bonds will be dated the date of their initial delivery. The Bonds will be issued only in fully registered form as to both principal and interest, will be in the denomination of \$5,000 or any integral multiple thereof within a single maturity and interest rate, and initially will be registered in the name of Cede & Co., as the nominee of The Depository Trust Company ("DTC"). DTC will act as initial Securities Depository for the Bonds. Each Bond registered in the name of DTC or its nominee will be held fully immobilized in book-entry only form by DTC in accordance with the provisions of the Letter of Representations. Purchasers will not receive certificates representing their interest in the Bonds purchased. For so long as Cede & Co. is the Registered Owner of the Bonds, as nominee of DTC, references herein to the Registered Owners will mean Cede & Co. and will not mean the Beneficial Owners of the Bonds.

The Bonds will bear interest payable semiannually on each January 1 and July 1, beginning January 1, 2019, to their maturities or prior redemption. The Bonds will mature on July 1 in the years and amounts and bear interest at the rates set forth on page i of this Official Statement. The principal of and interest on the Bonds are payable by the fiscal agent of the State of Washington (the "State"), currently U.S. Bank National Association (the "Registrar"). Principal of and premium, if any, and interest on each Bond registered in the name of the Securities Depository are payable in the manner set forth in the Letter of Representations between the County and DTC. As described in Appendix F—Book-Entry System, DTC, as the initial Securities Depository, is obligated to remit such principal and interest to DTC participants for subsequent disbursement to the Beneficial Owners of the Bonds.

The Bonds are being issued to provide funds for acquiring and constructing improvements to the County's sewer system (the "Sewer System") and to pay the costs of issuing the Bonds.

The Bonds are subject to redemption prior to maturity as described herein. See "The Bonds—Redemption of the Bonds."

The amounts covenanted to be paid out revenues of the Sewer System ("Revenue of the System") constitute a lien and charge on Revenue of the System superior to all other charges of any kind or nature except Operating and Maintenance Expenses, and of equal lien to any charges heretofore or hereafter made on Revenue of the System for the payment of the principal of and interest on any other Parity Bonds (as such capitalized terms are defined herein). The Bonds are special limited obligations of the County, and are not obligations of the State or any political subdivision thereof other than the County. Neither the full faith and credit nor the taxing power of the County or the State or any political subdivision thereof is pledged to the payment of the Bonds.

The Bonds are offered when, as, and if issued, subject to approval of their legality by Pacifica Law Group LLP, Seattle, Washington, Bond Counsel, and certain other conditions. The form of legal opinion of Bond Counsel is attached hereto as Appendix B. Certain other legal matters will be passed upon for the County by Pacifica Law Group LLP as Disclosure Counsel to the County. It is anticipated that the Bonds will be ready for delivery through the facilities of DTC in New York, New York, or to the Registrar on behalf of DTC by Fast Automated Securities Transfer, on or about November 15, 2018.

This cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

Dated: November 5, 2018

No dealer, broker, sales representative or other person has been authorized by the County to give any information or to make any representations with respect to the Bonds other than those contained in this Official Statement and, if given or made, such other information or representations must not be relied upon as having been authorized by the County. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation, or sale.

The information set forth herein has been obtained by the County from County records and from other sources that the County believes to be reliable, but the County does not guarantee the accuracy or completeness of such information. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale of the Bonds shall, under any circumstances, create any implication that there has been no change in the affairs of the County since the date hereof.

The County makes no representation regarding the accuracy or completeness of the information provided in Appendix F—Book-Entry System, which has been furnished by DTC.

This Official Statement is not to be construed as a contract or agreement between the County and purchasers or owners of any of the Bonds.

Certain statements contained in this Official Statement, including the appendices, reflect not historical facts but forecasts and “forward-looking statements.” No assurance can be given that the future results discussed herein will be achieved, and actual results may differ materially from the forecasts described herein. In this respect, the words “estimate,” “project,” “anticipate,” “expect,” “intend,” “believe,” and similar expressions are intended to identify forward-looking statements. All projections, forecasts, assumptions, and other forward-looking statements are expressly qualified in their entirety by the cautionary statements set forth in this Official Statement. The County has prepared certain forecasted financial information included in this Official Statement. The prospective financial information was not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information but, in the view of the County, was prepared based on reasonable assumptions. However, this prospective financial information is not fact and should not be relied upon as indicative of future results. Readers of this Official Statement are cautioned not to place undue reliance on the forecasted or prospective financial information. No independent accountant (i) has compiled, examined, or performed any procedures with respect to the forecasted or prospective financial information contained in this Official Statement, (ii) has expressed any opinion or any form of assurance on such information or its achievability, or (iii) assumes any responsibility for or any association with the prospective or forecasted financial information.

The website of the County or any County department or agency is not part of this Official Statement, and investors should not rely on information presented on the County’s website, or any other website referenced herein, in determining whether to purchase the Bonds. Information appearing on any such website is not incorporated by reference in this Official Statement.

CUSIP is a registered trademark of the American Bankers Association. The CUSIP numbers herein are provided by CUSIP Global Services, which is managed on behalf of the American Bankers Association by S&P Global Market Intelligence. CUSIP numbers are provided for convenience of reference only. CUSIP numbers are subject to change. The County takes no responsibility for the accuracy of such CUSIP numbers.

MATURITY SCHEDULE

\$124,455,000

KING COUNTY, WASHINGTON

SEWER REVENUE BONDS, 2018, SERIES B

Due July 1	Amounts	Interest Rates	Yields	Prices	CUSIP Numbers
2021	\$ 1,810,000	5.00%	2.22%	107.055	495290 AL2
2022	10,680,000	5.00%	2.30%	109.343	495290 AM0
2023	14,980,000	5.00%	2.38%	111.413	495290 AN8
2024	18,250,000	5.00%	2.47%	113.214	495290 AP3
2025	9,970,000	5.00%	2.56%	114.784	495290 AQ1
2026	10,620,000	5.00%	2.68%	115.905	495290 AR9
2027	11,165,000	5.00%	2.78%	116.922	495290 AS7
2028	11,775,000	5.00%	2.90%	117.527	495290 AT5
2029	12,415,000	5.00%	2.99%	116.704 ⁽¹⁾	495290 AU2
2030	11,290,000	5.00%	3.11%	115.617 ⁽¹⁾	495290 AV0
2031	8,880,000	5.00%	3.17%	115.078 ⁽¹⁾	495290 AW8
2032	2,620,000	5.00%	3.23%	114.542 ⁽¹⁾	495290 AX6

(1) Priced to the July 1, 2028, first par call date.

**KING COUNTY, WASHINGTON
500 FOURTH AVENUE
SEATTLE, WASHINGTON 98104**

KING COUNTY EXECUTIVE
Dow Constantine

METROPOLITAN KING COUNTY COUNCIL

Joe McDermott	Chair
Rod Dembowski	Vice Chair
Reagan Dunn	Vice Chair
Claudia Balducci	Councilmember
Larry Gossett	Councilmember
Jeanne Kohl-Welles	Councilmember
Kathy Lambert	Councilmember
Dave Upthegrove	Councilmember
Pete von Reichbauer	Councilmember

OTHER ELECTED OFFICIALS

Dan Satterberg	Prosecuting Attorney
John Wilson	Assessor
Mitzi Johanknecht	Sheriff
Julie Wise	Director of Elections

**DIRECTOR OF FINANCE AND BUSINESS OPERATIONS DIVISION
DEPARTMENT OF EXECUTIVE SERVICES**

Ken Guy

CLERK OF THE METROPOLITAN KING COUNTY COUNCIL

Melani Pedroza

BOND COUNSEL/DISCLOSURE COUNSEL

Pacifica Law Group LLP

MUNICIPAL ADVISOR TO THE COUNTY

Piper Jaffray & Co.

REGISTRAR

Washington State Fiscal Agent
(currently U.S. Bank National Association)

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OFFICIAL STATEMENT

\$124,455,000
KING COUNTY, WASHINGTON
SEWER REVENUE BONDS, 2018, SERIES B

INTRODUCTION

This Official Statement contains certain information concerning the issuance by King County, Washington (the “County”), of its Sewer Revenue Bonds, 2018, Series B (the “Bonds”). The Bonds are issued under and in accordance with the provisions of chapters 35.58, 36.67, and 39.46 of the Revised Code of Washington (“RCW”) and the County Charter, and are authorized under the provisions of County Ordinance 18588, passed on October 23, 2017 (the “Bond Ordinance”), and Motion 15243 of the Metropolitan King County Council (the “County Council”) passed on November 5, 2018 (the “Sale Motion”). A summary of the Bond Ordinance is attached as Appendix A.

Quotations, summaries, and explanations of constitutional provisions, statutes, ordinances, resolutions, motions, and other documents in this Official Statement do not purport to be complete and are qualified by reference to the complete text of such documents, which may be obtained from the Finance and Business Operations Division of the King County Department of Executive Services, 500 Fourth Avenue, Room 600, Seattle, Washington 98104. Capitalized terms that are not defined herein have the same meanings as set forth in the Bond Ordinance. See Appendix A—Summary of Bond Ordinance.

THE BONDS

Description

The Bonds will be issued only in fully registered form as to both principal and interest and will be in the denomination of \$5,000 or any integral multiple thereof within a single maturity and interest rate. The Bonds initially will be registered in the name of Cede & Co., as the nominee of The Depository Trust Company (“DTC”). See “Book-Entry System.”

The Bonds will bear interest payable semiannually on each January 1 and July 1, beginning January 1, 2019, to their maturities or prior redemption. The Bonds will bear interest (computed on the basis of a 360-day year of twelve 30-day months) from the issue date or from the most recent interest payment date for which interest has been paid or duly provided for, whichever is later. The Bonds will mature on July 1 in the years and amounts and bear interest at the rates set forth on page i of this Official Statement.

DTC will act as initial Securities Depository for the Bonds. Individual purchases may be made in book-entry form only, and purchasers will not receive certificates representing their interest in the Bonds purchased. For so long as Cede & Co. is the Registered Owner of the Bonds, as nominee of DTC, references herein to the Registered Owners will mean Cede & Co. and will not mean the Beneficial Owners of the Bonds.

The principal of and interest on the Bonds are payable by the fiscal agent of the State of Washington (the “State”), currently U.S. Bank National Association (the “Registrar”). Principal of and premium, if any, and interest on each Bond registered in the name of the Securities Depository are payable in the manner set forth in the Letter of Representations between the County and DTC. As described in Appendix F—Book-Entry System, DTC, as the initial Securities Depository, is obligated to remit such principal and interest to DTC participants for subsequent disbursement to the Beneficial Owners of the Bonds.

Interest on each Bond not registered in the name of the Securities Depository is payable by electronic transfer on the interest payment date, or by check or draft of the Registrar mailed on the interest payment date to the Registered Owner of the Bond at the address appearing on the Bond Register on the Record Date. “Record Date,” for this purpose, means the Registrar’s close of business on the 15th day of the month preceding an interest payment date. The County is not required to make electronic transfers except pursuant to a request by a Registered Owner in writing received on or prior to the Record Date and at the sole expense of that Registered Owner. Principal of and premium, if any, on each Bond not registered in the name of the Securities Depository are payable upon presentation and surrender of the Bond by the Registered Owner to the Registrar at maturity or upon prior redemption in full.

Redemption of the Bonds

Optional Redemption. The Bonds maturing on and after July 1, 2029, are subject to redemption prior to their stated maturities at the option of the County in whole or in part, at any time on or after July 1, 2028, at the price of par plus accrued interest, if any, to the date fixed for redemption.

Partial Redemption. Whenever less than all of the Bonds of a single maturity are to be redeemed, the Securities Depository will select the Bonds registered in the name of the Securities Depository to be redeemed in accordance with the Letter of Representations, and the Registrar will select all other Bonds to be redeemed randomly, or in such other manner as the Registrar determines.

Notice of Redemption. Notice of redemption of each Bond registered in the name of the Securities Depository or its nominee will be given in accordance with the Letter of Representations. Notice of redemption of each other Bond, unless waived by the Registered Owner, will be given by the Registrar not less than 20 nor more than 60 days prior to the date fixed for redemption by first-class mail, postage prepaid, to the Registered Owner at the address appearing on the Bond Register on the Record Date. “Record Date,” for this purpose, means the Registrar's close of business on the date on which the Registrar sends notice of the redemption. The requirements of the preceding sentences will be deemed to have been fulfilled when notice has been mailed as so provided, whether or not it is actually received by any Owner.

Rescission of Notice of Redemption. In the case of an optional redemption, the notice of redemption may state that the County retains the right to rescind the redemption notice and the redemption by giving a notice of rescission to the affected Registered Owners at any time on or prior to the date fixed for redemption. Any notice of optional redemption that is so rescinded will be of no effect, and each Bond for which a notice of optional redemption has been rescinded will remain outstanding.

Effect of Redemption. Interest on each Bond called for redemption will cease to accrue on the date fixed for redemption, unless either the notice of optional redemption is rescinded as described

above, or money sufficient to effect such redemption is not on deposit in the Parity Bond Fund (as defined below under “Security and Sources of Payment for the Bonds—Lien and Charge on Revenues of the System”) or in a trust account established to refund or defease the Bond.

Book-Entry System

Book-Entry Bonds. The Bonds initially will be registered in the name of Cede & Co., as the nominee of DTC. Each Bond registered in the name of DTC or its nominee will be held fully immobilized in book-entry only form by DTC in accordance with the provisions of the Letter of Representations. Neither the County nor the Registrar has any obligation to DTC participants or the persons for whom they act as nominees regarding accuracy of any records maintained by DTC or its participants. Neither the County nor the Registrar will be responsible for any notice that is permitted or required to be given to the Registered Owner of any Bond registered in the name of DTC, except such notice as is required to be given by the Registrar to DTC or its nominee.

For so long as the Bonds are registered in the name of DTC or its nominee, DTC or its nominee will be deemed to be the Registered Owner for all purposes, and all references to Registered Owners will mean DTC or its nominee and not the Beneficial Owners. Registered ownership of any Bond registered in the name of DTC or its nominee may not be transferred except (i) to any successor Securities Depository, (ii) to any substitute Securities Depository appointed by the County, or (iii) to any person if the Bond is no longer to be held by a Securities Depository.

The County makes no representation as to the accuracy or completeness of information in Appendix F provided by DTC. Purchasers of the Bonds should confirm its contents with DTC or its participants.

Termination of Book-Entry System. Upon the resignation of the Securities Depository, or upon a termination of the services of the Securities Depository by the County, the County may appoint a substitute Securities Depository. If (i) the Securities Depository resigns and the County does not appoint a substitute Securities Depository, or (ii) the County terminates the services of the Securities Depository, the Bonds no longer will be held in book-entry only form and the registered ownership of each Bond may be transferred to any person as provided in the Bond Ordinance.

Purchase of Bonds

The County reserves the right and option to purchase any or all of the Bonds offered to the County or in the open market at any time at any price acceptable to the County, plus accrued interest to the date of purchase.

Refunding or Defeasance of Bonds

The County may issue refunding obligations pursuant to State law or use money available from any other lawful source to carry out a refunding or defeasance plan, which may include (i) paying when due the principal of and interest on any or all of the Bonds (the “Defeased Bonds”), (ii) redeeming the Defeased Bonds prior to their maturity, and (iii) paying the costs of the refunding or defeasance.

If the County sets aside in a special trust fund or escrow account irrevocably pledged to that redemption or defeasance (the “Trust Account”) money and/or Government Obligations maturing at a time or times and bearing interest in amounts sufficient to redeem, refund, or defease the Defeased Bonds in accordance with their terms, then all right and interest of the Owners of the

Defeased Bonds in the covenants of the Bond Ordinance and in the funds and accounts obligated to the payment of the Defeased Bonds will cease and become void. Thereafter, the Registered Owners of Defeased Bonds will have the right to receive payment of the principal of and premium, if any, and interest on the Defeased Bonds solely from the Trust Account, and the Defeased Bonds will be deemed no longer outstanding. In that event, the County may apply money remaining in any fund or account (other than the Trust Account) established for the payment or redemption of the Defeased Bonds to any lawful purpose.

Unless otherwise specified by the County in a refunding or defeasance plan, notice of refunding or defeasance will be given, and selection of Bonds for any partial refunding or defeasance will be conducted, in the manner prescribed in the Bond Ordinance for the redemption of Bonds.

For purposes of the Bonds, “Government Obligations” is defined in the Bond Ordinance to mean direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America.

USE OF PROCEEDS

Purpose

The Bonds are being issued to provide funds for acquiring and constructing improvements to the Sewer System of the County (as defined below under “Security and Sources of Payment for the Bonds—Lien and Charge on Revenue of the System”) and to pay the costs of issuing the Bonds.

Sources and Uses of Funds

The proceeds from the sale of the Bonds will be applied as follows (rounded to the nearest dollar):

**TABLE 1
SOURCES AND USES OF FUNDS**

SOURCES OF FUNDS	
Par Amount of Bonds	\$ 124,455,000
Reoffering Premium	<u>17,919,859</u>
Total Sources of Funds	\$ 142,374,859
USES OF FUNDS	
Deposit to Construction Account	\$ 142,037,390
Costs of Issuance ⁽¹⁾	<u>337,469</u>
Total Uses of Funds	\$ 142,374,859

(1) Includes rating agency fees, financial advisory fees, underwriter’s discount, legal fees, printing costs, other costs of issuing the Bonds, and additional proceeds.

SECURITY AND SOURCES OF PAYMENT FOR THE BONDS

Limited Obligations

The Bonds are special limited obligations of the County, and are not obligations of the State or any political subdivision thereof other than the County. Neither the full faith and credit nor the

taxing power of the County or the State or any political subdivision thereof is pledged to the payment of the Bonds.

Lien and Charge on Revenue of the System

The amounts covenanted to be paid out of Revenue of the System, as defined below, into a special fund of the County known as the Water Quality Revenue Bond Account (the “Parity Bond Fund”) constitute a lien and charge on Revenue of the System superior to all other charges of any kind or nature except Operating and Maintenance Expenses, and of equal lien to any charges heretofore or hereafter made on Revenue of the System for the payment of the principal of and interest on any other Parity Bonds.

State law provides that the owner of a bond such as the Bonds, the payment of which is pledged from a special fund, has a claim only against that fund and proportionate amounts of revenue pledged to that fund. Under State law, any bond owner may bring an action to compel a county to set aside and pay into the special fund, such as the Parity Bond Fund, the amount that a county is obligated to set aside and pay therein.

“Sewer System” is defined as “System” in the Bond Ordinance and means the sewers and sewage disposal facilities now or hereafter acquired, constructed, used, or operated by the County for the purpose of carrying out the County’s comprehensive water pollution abatement plan authorized by RCW 35.58.200 and defined in Section 28.82.150 of the King County Code as the Comprehensive Sewage Disposal Plan adopted by Resolution No. 23 of the Metro Council on April 22, 1959, and all amendments thereto, together with any amendments hereafter approved by ordinance of the County (the “Comprehensive Plan”).

“Revenue of the System” means all the earnings, revenues, and money received by the County from or on account of the operations of the Sewer System and the income from the investment of money in the Water Quality Operating Account (the “Revenue Fund”) or any account within such fund, but does not include any money collected pursuant to the Service Agreements applicable to administrative costs of the County other than costs of administration of the Sewer System. For certain purposes described in the Bond Ordinance, as summarized in Appendix A, deposits from the Rate Stabilization Fund into the Revenue Fund may be included in calculations of “Revenue of the System.”

“Operating and Maintenance Expenses” means all normal expenses incurred by the County in causing the Sewer System to be maintained in good repair, working order, and condition, and includes payments to any private or governmental agency for the operation or maintenance of facilities or for the disposal of sewage but excludes any allowance for depreciation.

The liens on Revenue of the System that secure the Parity Lien Obligations, the Junior Lien Obligations, the Multi-Modal LTGO/Sewer Revenue Bonds, the Subordinate Lien Obligations, and the State Revolving Fund (“SRF”) Loans and Public Works Trust Fund (“PWTF”) Loans, all of which are defined in the Bond Ordinance and described below under “Outstanding Sewer System Obligations,” are junior, subordinate, and inferior to the lien and charge on Revenue of the System that secures the Parity Bonds. For information on the Sewer System, including the sources of Revenue of the System, see “The Sewer System,” particularly the information therein under the subheadings “The Participants” and “Sewer Rates.” The payment of principal of and interest on the Bonds is further secured by the Parity Bond Reserve Account.

Flow of Funds

So long as any Bond is outstanding, all Revenue of the System will be deposited into the Revenue Fund and used and applied in the following order of priority:

- (i) to pay all Operating and Maintenance Expenses;
- (ii) to make all required deposits into the Debt Service Account in the Parity Bond Fund to provide for the payment of principal of and interest on Parity Bonds, including the Bonds, as the same become due and payable and to make any Payment Agreement Payments with respect to any Parity Payment Agreements;
- (iii) to make all payments required to be made pursuant to a reimbursement agreement or agreements (or other equivalent documents) in connection with Qualified Insurance or a Qualified Letter of Credit; provided, that if there is not sufficient money to make all payments under such reimbursement agreements, the payments will be made on a pro rata basis;
- (iv) to establish and maintain the Parity Bond Reserve Account (including making deposits into such account and paying the costs of obtaining Qualified Insurance or a Qualified Letter of Credit therefor);
- (v) to make all required payments of principal of and interest on the Parity Lien Obligations and to make any Payment Agreement Payments with respect to any Parity Lien Obligation Payment Agreements;
- (vi) to make all required payments of principal of and interest on the Junior Lien Obligations as the same become due and payable, to make all Payment Agreement Payments with respect to any Payment Agreements entered into with respect to Junior Lien Obligations, and to make any payments required to be made to providers of any credit enhancements or liquidity facilities for Junior Lien Obligations;
- (vii) to make all required payments of principal of and interest on the Multi-Modal LTGO/Sewer Revenue Bonds as the same become due and payable, to make all Payment Agreement Payments for any Payment Agreements entered into with respect to Multi-Modal LTGO/Sewer Revenue Bonds, and to make any payments required to be made to providers of credit enhancements or liquidity facilities for any Multi-Modal LTGO/Sewer Revenue Bonds;
- (viii) to make all required payments of principal of and interest on the Subordinate Lien Obligations as the same become due and payable (the County currently has no Subordinate Lien Obligations outstanding);
- (ix) to make all required payments of principal of and interest on bonds, notes, warrants, and other evidences of indebtedness, the lien and charge on Revenue of the System of which are junior and inferior to the Subordinate Lien Obligations, as the same become due and payable; and
- (x) to make all required payments of principal of and interest due on the SRF Loans and the PWTF Loans.

Any surplus money that the County may have on hand in the Revenue Fund after making the required payments set forth above may be used by the County:

- (i) to make necessary improvements, additions, and repairs to, and extensions and replacements of, the Sewer System;
- (ii) to purchase or redeem and retire outstanding sewer revenue bonds of the County;
- (iii) to make deposits into the Rate Stabilization Fund (see “—Rate and Coverage Covenants—Rate Stabilization Fund”); or
- (iv) for any other lawful purposes of the County related to the Sewer System.

Parity Bond Reserve Account

The Parity Bond Reserve Account of the Parity Bond Fund secures all Parity Bonds, including the Bonds. The Bond Ordinance provides that the County will pay into and maintain in the Parity Bond Reserve Account an amount that together with other funds in the Parity Bond Reserve Account will be at least equal to the maximum Annual Parity Debt Service with respect to any calendar year (the “Reserve Requirement”). The County may substitute Qualified Insurance or a Qualified Letter of Credit for amounts required to be paid into or maintained in the Parity Bond Reserve Account.

In connection with the prior issuance of Parity Bonds, the County obtained debt service reserve surety bonds (the “Surety Bonds”) in the amount of \$29,581,040. The Surety Bonds currently include policies issued by Assured Guaranty Municipal Corp. (previously Financial Security Assurance Inc.) and by National Public Finance Guaranty Corp. (previously Financial Guaranty Insurance Company), as shown below.

**TABLE 2
PARITY BOND RESERVE ACCOUNT**

	Provider	Amount	Rating⁽¹⁾	Expiration
Surety Bonds	National Public Finance Guaranty Corp.	\$ 5,010,273	A3/A	2035
	Assured Guaranty Municipal Corp.	4,880,916	A3/AA	2036
	Assured Guaranty Municipal Corp.	7,189,850	A3/AA	2036
	Assured Guaranty Municipal Corp.	<u>12,500,001</u>	A3/AA	2047
	Subtotal	\$ 29,581,040		
Cash and Investments		<u>149,391,775</u>		
Total		<u>\$ 178,972,815</u>		

- (1) These ratings reflect only the views of the rating agencies, and an explanation of the significance of the ratings may be obtained from each rating agency. There is no assurance that the ratings will be retained for any given period of time or that the ratings will not be revised downward or withdrawn entirely by the rating agencies if, in their judgment, circumstances so warrant.

Following the issuance of the Bonds, the Reserve Requirement will be \$171,583,900. Money in the Parity Bond Reserve Account, along with all other monies of the Sewer System, currently is held in the Investment Pool described in Appendix D. As of September 30, 2018, the market value of investments and the policy amount of the Surety Bonds in the Parity Bond Reserve Account is \$178,972,815. The Wastewater Treatment Division (“WTD”) anticipates withdrawing excess monies in the Parity Bond Reserve Account over the next two years.

The investments in the Parity Bond Reserve Account include Treasury securities with a market value of \$14,755,233 invested in the Pool-Plus option described in Appendix D. The Pool-Plus option allows for investment in a ladder of eligible securities with maturities of up to ten years and an average maturity of four to six years. WTD anticipates investing additional portions of the Parity Bond Reserve Account in the Pool-Plus option over the next two years.

In the event of a withdrawal from the Parity Bond Reserve Account to pay debt service on the Parity Bonds, any deficiency created in the Parity Bond Reserve Account by reason of such withdrawal must be made up from Revenue of the System that is available in accordance with the order of priority described above in “Flow of Funds.”

By their purchase of the Bonds, the Registered Owners of the Bonds are deemed to have consented to the adoption of an ordinance supplemental to the Bond Ordinance to amend, reduce, or eliminate the Reserve Requirement as follows. A supplemental Bond Ordinance may:

- (i) establish one or more separate Reserve Requirements for one or more series of Parity Bonds, including the Bonds;
- (ii) reduce any Reserve Requirement, including the Reserve Requirement for the Bonds, to an amount less than maximum Annual Parity Debt Service in any calendar year, including to zero; and
- (iii) establish one or more separate subaccounts within the Parity Bond Reserve Account to secure one or more series of Parity Bonds, including the Bonds, with other series of Parity Bonds not being secured by such separate subaccounts.

See Appendix A—Summary of Bond Ordinance. The above provisions permitting the adoption of a supplemental ordinance to amend, reduce, or eliminate the Reserve Requirement will become effective if and when Parity Bonds issued after October 23, 2017, represent at least 51% of outstanding Parity Bonds. The adoption of such supplemental ordinance may result in the Bonds not being secured by any amounts in the Parity Bond Reserve Account. See Appendix A—Summary of Bond Ordinance.

Outstanding Sewer System Obligations

Table 3 presents information on the outstanding obligations of the County’s Sewer System (“Sewer System Obligations”) as of October 29, 2018. See Table 11—“Scheduled Debt Service on All Obligations of the Sewer System” under “The Sewer System—Debt Service Requirements Payable From Revenue of the System.”

TABLE 3
OUTSTANDING SEWER SYSTEM OBLIGATIONS

Sewer System Obligations	Principal Amount of Sewer System Obligations	
	Outstanding	Final Maturity
Parity Bonds ⁽¹⁾	\$ 2,358,430,000	2052
Parity Lien Obligations	573,605,000	2039
Junior Lien Obligations	449,080,000	2048
Multi-Modal LTGO/Sewer Revenue Bonds	100,000,000	2040
Subordinate Lien Obligations	-	N/A
SRF Loans and PWTF Loans ⁽²⁾	<u>228,323,427</u>	2038
Total Sewer System Obligations Outstanding ⁽³⁾	<u><u>\$ 3,709,438,427</u></u>	

- (1) Includes the Bonds. Excludes Parity Bonds that were defeased from proceeds of the Brightwater litigation judgment. See “—Brightwater Litigation Judgment Funds.” Excludes \$134.5 million in undrawn loan commitments from the U.S. Environmental Protection Agency (“EPA”) through its Water Infrastructure Finance and Innovation Act (“WIFIA”) loan program. See “The Sewer System—Future Sewer System Financing Plans—WIFIA Bond.”
- (2) Does not include \$4.5 million in undrawn loan commitments from the Washington State Departments of Ecology (“Ecology”) and Commerce. See “The Sewer System—Future Sewer System Financing Plans.”
- (3) Excludes \$3,010,000 of Limited Tax General Obligation Bonds (Federally Taxable Qualified Energy Conservation Bonds), Series 2012F (the “QECB Bonds”). Although debt service on the QECB Bonds is paid from Revenue of the System, the County has not pledged Revenue of the System to the payment of the QECB Bonds. Debt service payments on the QECB Bonds will be made from Revenue of the System remaining at the bottom of the flow of funds described above under “Flow of Funds” as a lawful purpose of the County related to the Sewer System.

Source: King County Finance and Business Operations Division

PARITY BONDS. With the issuance of the Bonds and including the WIFIA Bond, which is yet to be drawn upon, the County has outstanding 18 series of Parity Bonds, which are sewer revenue bonds that are payable from and secured solely by a lien and charge on Revenue of the System. The lien on Revenue of the System that secures the Parity Bonds is subordinate to the payment of Operating and Maintenance Expenses and senior to the liens that secure all other Sewer System Obligations.

PARITY LIEN OBLIGATIONS. The County has outstanding seven series of Parity Lien Obligations, which are limited tax general obligation bonds of the County that are additionally secured by a lien and charge on Revenue of the System. The lien on Revenue of the System that secures the Parity Lien Obligations is subordinate to the lien that secures the Parity Bonds, but senior to the liens that secure the Junior Lien Obligations, the Multi-Modal LTGO/Sewer Revenue Bonds, any Subordinate Lien Obligations, and the SRF Loans and PWTF Loans.

JUNIOR LIEN OBLIGATIONS. The County has outstanding seven series of Junior Lien Obligations, which are sewer revenue bonds that are secured solely by a lien and charge on

Revenue of the System. The lien on Revenue of the System that secures the Junior Lien Obligations is subordinate to the liens that secure the Parity Bonds and the Parity Lien Obligations, but senior to the liens that secure the Multi-Modal LTGO/Sewer Revenue Bonds, any Subordinate Lien Obligations, and the SRF Loans and PWTF Loans.

MULTI-MODAL LTGO/SEWER REVENUE BONDS. The County has outstanding two series of Multi-Modal LTGO/Sewer Revenue Bonds, which are limited tax general obligation bonds of the County that are additionally secured by a lien and charge on Revenue of the System. The lien on Revenue of the System that secures the Multi-Modal LTGO/Sewer Revenue Bonds is subordinate to the liens that secure the Parity Bonds, the Parity Lien Obligations, and the Junior Lien Obligations, but senior to the liens that secure any Subordinate Lien Obligations and the SRF Loans and PWTF Loans.

SUBORDINATE LIEN OBLIGATIONS. The County currently has no Subordinate Lien Obligations outstanding.

SRF LOANS AND PWTF LOANS. The County has received loans from the State (administered by various State agencies) that are secured solely by a lien and charge on Revenue of the System. The lien on Revenue of the System that secures these loans (the SRF Loans and the PWTF Loans) is subordinate to the liens that secure all other Sewer System Obligations.

See “The Sewer System—Debt Service Requirements Payable from Revenue of the System.”

Brightwater Litigation Judgment Funds. On October 25, 2018, the County utilized \$142.0 million of funds received in a litigation judgment arising from the construction of the conveyance system for the Brightwater treatment plant and \$2.2 million of other System funds to defease \$135.8 million in outstanding Series 2010, Series 2011B, and Series 2012 Parity Bonds. The total Parity Bonds outstanding shown in Table 3 excludes the defeased bonds. WTD expects to use the remaining \$2.9 million of Brightwater litigation judgment funds to pay for capital expenditures in 2018.

Variable Rate Debt. The Junior Lien Obligations and the Multi-Modal LTGO/Sewer Revenue Bonds (together, the “Variable Rate Bonds”) currently collectively comprise the outstanding variable rate debt of the Sewer System.

County financial policies limit variable rate debt to no more than 20% of total Outstanding Sewer System Obligations. In practice, variable rate debt has been limited to approximately 15% of total Outstanding Sewer System Obligations.

Although all Variable Rate Bonds have bullet maturities, the financial plans supporting the adopted 2017 and 2018 Sewer Rates provide for the amortization of outstanding Variable Rate Bonds through optional redemptions that began in 2017 for the Series 2015A and 2015B Junior Lien Bonds and ten years prior to their final maturity dates for the other series of Variable Rate Bonds. Such planned optional redemptions are excluded from Table 11—“Scheduled Debt Service on All Outstanding Obligations of the Sewer System” under “The Sewer System.”

Credit Agreements. The County has entered into various agreements establishing liquidity or credit facilities to support certain Variable Rate Bonds. The County has also entered into various

agreements for the direct purchase of certain other Variable Rate Bonds. Each such agreement terminates prior to the final maturity of the related obligations.

If the County is unable to extend or replace any such agreement, or if certain Variable Rate Bonds cannot be remarketed, the County will be obligated to repay all principal of such bonds during a “term-out” period prior to the stated final maturity date. In addition, if the pricing for extensions or replacements of any such agreement increases substantially or such extensions or replacements otherwise cease to benefit the County, the County may refund or retire the obligations or convert the obligations to fixed rate bonds. In any such circumstances, debt service associated with those obligations may exceed the amount that is currently projected by the County.

Each of the credit agreements includes events of default (or events of termination) and remedies. Events of default include certain cross defaults, judgments against the County, involuntary acceleration of debt secured by Revenue of the System, and the downgrade below certain thresholds of ratings of limited tax or general obligations of the County or debt secured by Revenue of the System. Remedies include acceleration or a requirement that the County immediately pay the outstanding principal amount of bank bonds as well as other available legal and equitable remedies, including the right of mandamus against the County and its officials. The Bonds are not subject to acceleration.

A summary of the relevant Sewer System Obligations and terms of each related credit agreement is shown in Table 4. The County has selected a remarketing agent in connection with the proposed remarketing in December 2018 of the Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2011 (the “2011 Bonds”), and the Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2012 (the “2012 Bonds”). The County is proposing to remarket the 2011 Bonds and 2012 Bonds as fixed-rate put bonds for a two-to-three year term. Upon such remarketing, expected to occur on December 3, 2018, the Bondholder’s Agreement and Continuing Covenant Agreements, respectively, for the 2011 Bonds and 2012 Bonds shown below would terminate.

**TABLE 4
SUMMARY OF CREDIT FACILITIES**

Series	Type of Sewer System Obligations	Amount Outstanding as of 10/29/18	Type of Facility	Provider	Expiration	Term-Out Provision	Maturity
Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2001A and B	Junior Lien Obligations	\$100,000,000	Letter of Credit	Landesbank Hessen-Thüringen Girozentrale (Helaba)	9/30/2020	Three Years	1/1/2032
Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2011 ⁽¹⁾	Junior Lien Obligations	\$100,000,000	Bondholder's Agreement	U.S. Bank National Association	5/1/2020	Three Years	1/1/2042
Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2012 ⁽²⁾	Junior Lien Obligations	\$100,000,000	Continuing Covenant Agreement	Wells Fargo Municipal Capital Strategies, LLC	12/2/2019	Three Years	1/1/2043
Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2015A and B	Junior Lien Obligations	\$99,080,000	Continuing Covenant Agreement	State Street Public Lending Corporation	11/15/2019	Three Years	1/1/2046
Multi-Modal Limited Tax General Obligation Refunding Bonds (Payable from Sewer Revenue), Series 2017 A and B	Multi-Modal LTGO/Sewer Revenue Bonds	\$100,000,000	Continuing Covenant Agreement	State Street Public Lending Corporation	4/5/2021	Three Years	1/1/2040
Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2017	Junior Lien Obligations	\$50,000,000	Continuing Covenant Agreement	State Street Public Lending Corporation	12/18/2020	Three Years	1/1/2048

- (1) The Bondholder's Agreement for the 2011 Junior Lien Bonds will terminate upon the proposed remarketing of the 2011 Bonds, expected to occur on December 3, 2018.
- (2) The Continuing Covenant Agreement for the 2012 Junior Lien Bonds will terminate upon the proposed remarketing of the 2012 Bonds, expected to occur on December 3, 2018.

Agreements With Participants

As the successor to the Municipality of Metropolitan Seattle (“Metro”), the County has assumed by operation of law Metro’s rights and obligations under its Service Agreements with 34 Municipal Participants and three non-Municipal Participants (each, a “Participant”). See “The Sewer System—The Participants.”

Service Agreements. The Service Agreements with the Municipal Participants (described below under “The Sewer System—The Participants”) are essentially the same with respect to the facilities to be provided, terms for delivery and acceptance of sewage, and payment for sewage disposal. The Service Agreements with the non-Municipal Participants, which accounted for approximately 0.58% of sewage disposal revenues in the year ended December 31, 2017, do not differ substantially from the Service Agreements with the Municipal Participants. The rates set by Municipal Participants for sewer service to their customers are not subject to the jurisdiction of the Washington Utilities and Transportation Commission. Under Washington law, the Municipal Participants have various remedies for the enforcement of delinquent bills, including placing liens on the property of delinquent customers.

The Service Agreements uniformly provide that the County will receive all sewage collected by the Participants in the service area of the Sewer System and will treat and dispose of such sewage. In return, the Participants are to deliver their sewage to the Sewer System and pay the County Sewage Disposal Charges to cover all costs incurred in providing sewage disposal services. Although the Participants’ payment obligations are sized to reflect operations and maintenance, reserves, repair and replacement costs, and debt service on all obligations secured by Revenue of the System, the Participants are not directly obligated to pay the principal of or interest on the Bonds or other obligations payable from Revenue of the System.

All of the Service Agreements with the Municipal Participants extend to at least July 1, 2036. Since 2002, the County has been in the process of negotiating extensions of the Service Agreements with the Participants. These negotiations continue. Extensions through July 1, 2056, have been signed by the cities of Carnation, Issaquah, Kirkland, Pacific, Renton, and Tukwila, the Alderwood Water & Wastewater District, the Vashon Sewer District, and the Muckleshoot Indian Tribe, which collectively provided 15.73% of sewage disposal revenues in the year ended December 31, 2017. The requirement for Municipal Participants within the County to remain customers of the Sewer System beyond the expiration of existing Service Agreements is described below under “Agency Customer Continuation Requirement.”

Validity and Enforceability. The common provisions of the Service Agreements (i) provide for the delivery of sewage to the Sewer System by each Participant and the acceptance of such sewage by the County for treatment and disposal, and (ii) establish the method for determining Sewage Disposal Charges (described below under “The Sewer System—Sewer Rates”) and for making payment thereof. In 1960, the Service Agreement with the City of Seattle (“Seattle”) (containing the essential common provisions of all the Service Agreements) was held valid by the Supreme Court of the State of Washington (*Municipality of Metropolitan Seattle v. City of Seattle*, 57 Wn.2d 446, 357 P.2d 863 (1960)).

Agency Customer Continuation Requirement. By Ordinance 15757 of the County, passed on May 7, 2007, the County Council invoked its authority under RCW 35.58.200(3) to require that each current Municipal Participant within the County continue as an “Agency Customer” (a

wholesale customer of the Sewer System not subject to a Service Agreement) following expiration of its Service Agreement so long as bonds issued to finance the capital projects in the Regional Wastewater Services Plan (“RWSP”), which include the Bonds, remain outstanding. See “The Sewer System—The Participants.” In accordance with RCW 35.58.200(4), Ordinance 15757 also established a monthly sewer rate for Agency Customers, including Municipal Participants within the County, which are required to connect to the Sewer System, and Municipal Participants outside the County and non-Municipal Participants, which are not required to connect to the Sewer System unless a Service Agreement is in effect. Municipal Participants outside the County and Non-Municipal Participants contributed 7.2% of sewage disposal revenues in the year ending December 31, 2017. The formula for the monthly rate charged Agency Customers under Ordinance 15757 is identical to the formula set forth in the Service Agreements.

Rate and Coverage Covenants

The County has covenanted in the Bond Ordinance that, at all times and in any event, rates and charges for sewage disposal service will be sufficient to provide funds adequate to operate and maintain the Sewer System, to make all payments and to establish and maintain all reserves required by the Bond Ordinance or any other ordinance authorizing obligations of the County payable from Revenue of the System, to make up any deficit in such payments remaining from prior years, and to pay all costs incurred in the construction or acquisition of any portion of the Comprehensive Plan that may be ordered by the County and for the payment of which sewer revenue bonds (or other obligations payable from Revenue of the System) are not issued.

The County has further covenanted in the Bond Ordinance to establish, maintain, and collect rates and charges for sewage disposal service that will provide in each calendar year Revenue of the System less Operating and Maintenance Expenses (“Net Revenue”) in an amount that, together with the interest earned during that calendar year on investments of money in the Parity Bond Fund, Parity Bond Reserve Account, and Construction Account, will equal or exceed 1.15 times the amount required to pay the Annual Parity Debt Service for such calendar year. “Annual Parity Debt Service” is defined in the Bond Ordinance and generally describes, for any calendar year, the principal and interest due for all outstanding Parity Bonds in such calendar year. See Appendix A—Summary of Bond Ordinance.

Rate Stabilization Fund. The County established the Sewer Rate Stabilization Fund (the “Rate Stabilization Fund”) in 2005. The County may from time to time appropriate or budget amounts in the Revenue Fund for deposit in the Rate Stabilization Fund in accordance with the order of priority described above in “Flow of Funds,” and may from time to time withdraw amounts therefrom for deposit in the Revenue Fund to prevent or mitigate sewer rate increases or for any other lawful purposes of the County related to the Sewer System.

For any fiscal year, (i) amounts withdrawn from the Revenue Fund and deposited into the Rate Stabilization Fund for that fiscal year must be subtracted from Net Revenue for that fiscal year, and (ii) amounts withdrawn from the Rate Stabilization Fund and deposited in the Revenue Fund for that fiscal year may be added to Revenue of the System for that fiscal year.

The County made deposits into the Rate Stabilization Fund between 2005 and 2011. From 2012 to 2014, the County withdrew \$42.25 million from the Rate Stabilization Fund to mitigate sewer rate increases. In 2015, the County contributed \$12 million to the Rate Stabilization Fund as a result of favorable operating performance and savings achieved through debt refundings. As of

September 30, 2018, the balance in the Rate Stabilization Fund was \$46.25 million; the County expects to make additional withdrawals in 2022 and 2023. See Table 11—Projected Financial Statements” under “The Sewer System—Projected Customers, Revenues, and Expenses.”

Future Parity Bonds

The County has covenanted and agreed, for as long as Parity Bonds are outstanding, that it will not create any special fund for the payment of the principal of and interest on any revenue bonds that will rank on a parity with or have any priority over the payments out of Revenue of the System required to be made into the Parity Bond Fund and the accounts therein to pay or secure the payment of the outstanding Parity Bonds.

The County reserves the right for the purpose of (i) acquiring, constructing, and installing any portion of the Comprehensive Plan, (ii) acquiring, constructing, and installing any necessary renewals or replacements of the Sewer System, or (iii) refunding or purchasing or retiring at or prior to their maturity any outstanding obligations of the County payable from Revenue of the System to issue additional or refunding Parity Bonds (including Variable Rate Parity Bonds), and to make payments into the Parity Bond Fund out of the Revenue Fund that will be sufficient to pay the principal of and interest on those additional or refunding Parity Bonds and to maintain required reserves, such payments out of the Revenue Fund to rank equally with the payments out of the Revenue Fund required to be made into the Parity Bond Fund and the accounts therein for the payment of the principal of and interest on outstanding Parity Bonds, but only upon compliance with the following conditions below.

- (i) At the time of the issuance of any Future Parity Bonds there is no deficiency in the Parity Bond Fund or any account therein.
- (ii) Each ordinance providing for the issuance of any Future Parity Bonds that are refunding bonds must require that all money held in any fund or account of the County created for the purpose of paying the principal of and interest on the bonds being refunded either be used to pay the principal of and interest on such bonds or be transferred or paid into the Parity Bond Fund.
- (iii) Each ordinance providing for the issuance of Future Parity Bonds must provide for the payment of the principal thereof and interest thereon out of the Parity Bond Fund. Each such ordinance will further provide that, upon the issuance of any Future Parity Bonds, the County will pay into the Parity Bond Reserve Account an amount that will be sufficient to satisfy the Reserve Requirement then applicable or provide Qualified Insurance or a Qualified Letter of Credit to satisfy the Reserve Requirement.
- (iv) At the time of the issuance of any Future Parity Bonds, the County must have on file a certificate from a Professional Utility Consultant (the certificate may not be dated more than 90 days prior to the date of delivery of such Future Parity Bonds), showing that in his or her professional opinion the “annual income available for debt service on Parity Bonds” for each year during the life of such Future Parity Bonds will be at least equal to 1.25 times the amount required in each such year to pay the Annual Parity Debt Service for such year. Such “annual income available for debt service on Parity Bonds” must be determined as follows for each year following the proposed date of issue of such Future Parity Bonds:
 - (a) The Revenue of the System must be determined for a period of any 12 consecutive months out of the 18 months immediately preceding the delivery of the Future Parity Bonds being issued.

- (b) Such revenue may be adjusted to give effect on a 12-month basis to the rates in effect on the date of such certificate.
- (c) If there were any Customers added to the Sewer System during such 12-month period or thereafter and prior to the date of the Professional Utility Consultant's certificate, such revenue may be further adjusted on the basis that added Customers were Customers of the Sewer System during the entire 12-month period.
- (d) There is to be deducted from such revenue the amount expended for Operating and Maintenance Expenses during such period.
- (e) For each year following the proposed date of issuance of such Future Parity Bonds, the Professional Utility Consultant may add to the annual revenue determined as described in the preceding four paragraphs an estimate of the income to be received in each such year from the investment of money in the Parity Bond Fund and any account therein and the Construction Account, which is to be determined by and in the sole discretion of a firm of nationally recognized financial consultants selected by the County.
- (f) Beginning with the second year following the proposed date of issue of such Future Parity Bonds and for each year thereafter, the Professional Utility Consultant may add to the annual revenue determined as described in the preceding five paragraphs his or her estimate of any additional annual revenue to be received from anticipated growth in the number of Customers within the area served by the Sewer System on the date of such certificate, after deducting therefrom any increased Operating and Maintenance Expenses estimated to be incurred as a result of such growth; provided, that the Professional Utility Consultant's estimate of the number of Customers served may not assume growth of more than 0.25% over and above the number of Customers served or estimated to be served during the preceding year.
- (g) If extensions of or additions to the Sewer System are in the process of construction at the time of such certificate, or if the proceeds of the Future Parity Bonds being issued are to be used to acquire or construct extensions of or additions to the Sewer System, there may be added to the annual net revenue determined as described above any revenue not included as described in the preceding six paragraphs that will be derived from such additions and extensions after deducting therefrom the estimated additional Operating and Maintenance Expenses to be incurred as a result of such additions and extensions; provided, that such estimated annual revenue will be based upon 75% of any estimated Customer growth in the four years following the first full year in which such additional revenue is to be collected and thereafter the estimated Customer growth may not exceed 0.25% per year over and above such reduced estimate.
- (v) Instead of the certificate described in paragraph (iv) above, the County may elect to have on file a certificate of the Finance Director demonstrating that, during any 12 consecutive calendar months out of the immediately preceding 18 calendar months, Net Revenue was at least equal to 1.25 times the amount required to pay, in each year that such Future Parity Bonds would be outstanding, the Annual Parity Debt Service for such year.
- (vi) For the purpose of refunding at or prior to their maturity any outstanding Parity Bonds or any bonds or other obligations of the County payable from Revenue of the System, the County may at any time issue Future Parity Bonds without complying with the provisions described in paragraphs (iv) or (v) above; provided, that the County may not issue Future

Parity Bonds for such purpose unless the Finance Director certifies that upon the issuance of such Future Parity Bonds, (a) total debt service required for all Parity Bonds (including the refunding bonds and not including the bonds to be refunded thereby) will decrease, and (b) the Annual Parity Debt Service for each year that any Parity Bonds (including the refunding bonds and not including the bonds to be refunded thereby) are then outstanding will not be increased by more than \$5,000 by reason of the issuance of such Future Parity Bonds.

To satisfy the Future Parity Bonds test applicable to issuance of the Bonds, the County will provide a parity certificate of the type described in paragraph (v) above.

Nothing contained in the Bond Ordinance prevents the County from issuing revenue bonds that are a charge on Revenue of the System and money in the Revenue Fund junior or inferior to the payments required to be made therefrom into the Parity Bond Fund and any account therein, nor does anything in the Bond Ordinance prevent the County from issuing Future Parity Bonds to refund maturing Parity Bonds for the payment of which money is not otherwise available.

THE SEWER SYSTEM

The sewerage system provided by the County is wholesale in character, covering construction, operation, and maintenance of main trunk and interceptor sewers, pumping stations, and treatment plants. In 1994, the County assumed the rights, powers, functions, and obligations of Metro, which had developed and operated a regional system for the collection and treatment of sewage. Metro's sewer utility function was integrated as a division into the County's Department of Natural Resources, now known as the Department of Natural Resources and Parks ("DNRP").

WTD is one of four divisions in the DNRP. The four divisions in DNRP perform tasks ranging from improving water quality to enhancing parks and trails, protecting citizens from flooding, restoring crucial fish and wildlife habitat, and recycling and reusing wastewater and solid waste byproducts. The DNRP's overall mission is to safeguard the environment, ensure public safety, and preserve the region's quality of life. Brief biographies of key officials in DNRP and WTD are provided below.

Christie True, Director, DNRP. Ms. True was appointed to this position in 2010. She previously served as WTD's Division Director and is a 29-year veteran of the County, where she started her career as a water quality technician. In 2006, she was named Local Official of the Year by the National Home Builders for her work on the County's Brightwater treatment plant project. Ms. True received her bachelor's degree in Environmental Studies from Western Washington University's Huxley College.

Mark Isaacson, WTD Division Director. Mr. Isaacson was appointed to this position in October 2016, having previously served as Director of the Department's Water and Lands Resources Division ("WLRD") for 11 years and as its Assistant Director for three years. Prior to serving at WLRD, he worked at WTD and began his career with the County in 1993. Mr. Isaacson has an M.A. in Public Administration from the University of Washington and a Bachelor of Environmental Studies from the University of California at Santa Barbara.

Bruce Kessler, P.E., WTD Assistant Division Director. Mr. Kessler was appointed to this position in May 2017. He has been with WTD for more than 11 years in various capacities, including Assistant Manager at the Brightwater treatment plant and Engineering Unit Manager. He negotiated with Ecology revisions to the Brightwater discharge permit and with Seattle the 2016 Joint Project Agreement for the Ship Canal Water Quality Combined Sewer Overflow Project. He has been actively involved in the Division's asset management and resiliency and recovery programs. Mr. Kessler is a licensed Professional Engineer and has a B.S. in Civil Engineering from North Carolina State University.

Hiedi Popochock, WTD Finance Manager. Ms. Popochock was appointed to this position in September 2018. She has been with the County for three years, working as part of the central staff for the County Council. She served as the committee lead for the Council's Government Accountability and Oversight Committee and was the lead for the Council's 2017-2018 Physical Environment Budget Panel. Prior to working with the County, she served as a senior budget analyst for Snohomish County and held finance positions at the cities of Bellevue and Kirkland. Ms. Popochock has B.A. degrees in Law, Societies and Justice, and Sociology from the University of Washington and a M.A. in Public Administration from Seattle University. She is succeeding Tim Aratani as WTD Finance Manager. Mr. Aratani was appointed to this position in 2000 and will be retiring from the County at the end of December 2018 after 30 years of service. Prior to joining WTD, he served as Finance Manager for the Solid Waste Division in DNRP.

The Facilities

The Sewer System has been designated by the County as its Water Quality Enterprise. Distributed over a 424-square-mile service area, the Sewer System collected and treated an average of 197 million gallons of sewage per day ("mgd") from approximately 1.7 million residents in 2017. The major wastewater facilities include three major secondary treatment plants (West Point in Seattle, South in Renton, and Brightwater in south Snohomish County), 391 miles of conveyance lines, 47 pump stations, and 25 regulator stations. Other facilities include four combined sewer overflow ("CSO") treatment plants, three CSO storage facilities, 39 CSO outfall locations, and secondary treatment plants on Vashon Island and in Carnation.

The Participants

As the successor to Metro, the County has assumed by operation of law Metro's rights and obligations under its Service Agreements with 34 Municipal Participants and three non-Municipal Participants (each, a "Participant"). The Municipal Participants accounted for approximately 99.42% of sewage disposal revenues in the year ended December 31, 2017, and the non-Municipal Participants accounted for 0.58%.

Municipal Participants. The 34 Municipal Participants (33 cities and sewer districts in King County, south Snohomish County and northern Pierce County, and the Muckleshoot Indian Tribe) contract with the County for sewage treatment services. Pursuant to Ordinance 15757, the Municipal Participants within King County are required to continue as Agency Customers in the absence of a Service Agreement. The division of responsibility between the County and the Municipal Participants and their respective obligations are set forth in the Service Agreements. See "Security and Sources of Payment for the Bonds—Agreements with Participants."

Each Municipal Participant and each current Municipal Participant within the County that would be required to continue as an Agency Customer is required to deliver to the Sewer System all of

the sewage and industrial wastes collected by it from its service area. The County is required to accept such sewage and wastes for treatment subject to reasonable rules and regulations. The County may not directly accept sewage or wastes from any person, firm, corporation, or governmental agency that is within the boundaries of, or is delivering sewage into, the local sewerage facilities of any Municipal Participant without the consent of such Municipal Participant. A Municipal Participant or current Municipal Participant within the County that would be required to continue as an Agency Customer cannot deliver sewage to another agency without the consent of the County.

Non-Municipal Participants. The County also provides sewage treatment and disposal services to three small non-Municipal Participants, pursuant to Service Agreements that do not differ substantially from the Service Agreements with the Municipal Participants, and to certain other small customers.

Customers and Residential Customer Equivalents. The number of single family residences (“Residential Customers”) and Residential Customer Equivalents (“RCEs”) (together, the “Customers”) reported by each Participant as of December 31, 2017, is presented in Table 5.

TABLE 5
SEWER SYSTEM PARTICIPANTS AS OF DECEMBER 31, 2017

	Single Family Residential Customers	RCE ⁽¹⁾	Total Customers	Percentage of Total (%)
Municipal Participants-Cities				
Algona	1,019	231	1,250	0.17
Auburn	13,104	17,795	30,899	4.10
Bellevue	32,580	27,195	59,775	7.93
Black Diamond	787	269	1,056	0.14
Bothell	4,922	4,176	9,098	1.21
Brier ⁽²⁾	1,546	243	1,789	0.24
Carnation	825	201	1,026	0.14
Issaquah	6,605	5,457	12,062	1.60
Kent	12,811	21,781	34,592	4.59
Kirkland	9,663	7,154	16,817	2.23
Lake Forest Park	3,551	518	4,069	0.54
Mercer Island	7,117	1,229	8,346	1.11
Pacific	1,515	1,037	2,552	0.34
Redmond	14,875	17,034	31,909	4.23
Renton	15,751	14,838	30,589	4.06
Seattle ⁽³⁾	146,647	150,259	296,906	39.39
Tukwila	1,010	6,960	7,970	1.06
Subtotal	274,328	276,377	550,705	73.06
Municipal Participants-Sewer Districts and Tribe				
Alderwood Water & Wastewater District ⁽²⁾	32,159	14,461	46,620	6.18
Cedar River Water & Sewer District	4,054	1,512	5,566	0.74
Coal Creek Utility District	2,928	1,372	4,300	0.57
Cross Valley Water District ⁽²⁾	-	190	190	0.03
Highlands Sewer District	104	1	105	0.01
Lakehaven Utility District	960	10	970	0.13
Muckleshoot Indian Tribe	285	107	392	0.05
NE Sammamish Sewer & Water District	4,678	140	4,818	0.64
Northshore Utility District	19,629	12,735	32,364	4.29
Olympic View Water & Sewer District ⁽²⁾	202	-	202	0.03
Ronald Wastewater District	15,123	4,561	19,684	2.61
Sammamish Plateau Water & Sewer District	10,492	5,555	16,047	2.13
Skyway Water & Sewer District	3,875	855	4,730	0.63
Soos Creek Water & Sewer District	31,416	7,081	38,497	5.11
Valley View Sewer District	6,898	10,380	17,278	2.29
Vashon Sewer District	407	527	934	0.12
Woodinville Water District	2,531	2,388	4,919	0.65
Subtotal	135,741	61,875	197,616	26.22
Non-Municipal Participants and Other Customers	-	5,489	5,489	0.73
Total	410,069	343,741	753,810	100.00

NOTES TO TABLE:

- (1) RCEs include multifamily, commercial, and industrial customers and are customer units based on water consumption.
- (2) These Participants are outside the County and, unless a Service Agreement is in effect, are not required to connect to the Sewer System. See “Security and Sources of Payment for the Bonds—Agreements with Participants—Agency Customer Continuation Requirement.”
- (3) Financial and operating information about Seattle’s drainage and wastewater system may be found in Seattle’s most recent official statement and continuing disclosure filings for its drainage and wastewater revenue bonds, on file with the MSRB at www.emma.msrb.org. Seattle’s comprehensive annual financial reports may also be obtained on its web site at www.seattle.gov/cafrs.

Source: King County Wastewater Treatment Division

Sewer Rates

The County annually adopts a monthly charge (the “Sewer Rate”), which is used to calculate Sewage Disposal Charges (defined below), for sewage disposal. The Sewer Rates established by the County Council do not require the approval of the Washington Utilities and Transportation Commission or the Participants or Agency Customers.

The Sewer Rate is set by the County at a level that is intended, at a minimum, to provide the County with money sufficient, together with other sources of Revenue of the System, to pay all costs of the Sewer System, including debt service on all obligations payable from Revenue of the System, and to satisfy the County’s debt service coverage policies for all obligations payable from Revenue of the System. The Service Agreements specify that the Sewer Rate for the next succeeding calendar year must be determined prior to July 1 of each year.

The monthly Sewer Rate is applied to each Residential Customer and to an RCE value of each 750 cubic feet of water consumption by all other customers such as multifamily, commercial, and industrial properties. Each Participant and Agency Customer is billed monthly an amount based upon the adopted Sewer Rate and the number of Residential Customers at the end of the second previous calendar quarter and the average number of RCEs for multifamily, commercial, and industrial accounts for the four calendar quarters beginning five quarters prior to the current quarter. Monthly billings in the first quarter of 2018, for example, were based on the number of Residential Customers as of September 30, 2017, and the average number of RCEs beginning with the fourth quarter of 2016 through the third quarter of 2017.

Each Municipal Participant irrevocably obligates and binds itself to pay its sewage disposal charge (the “Sewage Disposal Charge”) out of the gross revenues of its sewerage utility. Each Municipal Participant further binds itself to establish, maintain, and collect sewerage charges that will at all times be sufficient to pay all costs of maintenance and operation of its sewerage utility, including the Sewage Disposal Charge payable to the County under the Service Agreement, and sufficient to pay the principal of and interest on any revenue bonds of such Municipal Participant that will constitute a charge upon such gross revenue. The Sewage Disposal Charge paid by such Municipal Participant to the County must constitute an expense of maintenance and operation of such Municipal Participant’s sewerage utility. Each of the Service Agreements requires that the Municipal Participant provide in the issuance of its sewer revenue bonds that expenses of maintenance and operation of its sewerage utility be paid before payment of principal of and interest on its sewer revenue bonds.

The payment by each Participant and Agency Customer is due on the last day of the month. The County may charge interest at 6% on any amount remaining unpaid for 15 days after the due date and may enforce payment by any remedy available by law or equity.

Adopted Sewer Rates. The adopted monthly Sewer Rates for each Residential Customer and RCE for the years 2010 through 2019 are set forth in Table 6.

**TABLE 6
SEWER RATES FOR
RESIDENTIAL CUSTOMERS AND
RESIDENTIAL CUSTOMER EQUIVALENTS**

Effective Date (January 1)	Rate (\$/month)	Percentage Change (%)
2010	\$ 31.90	--
2011	36.10	13.2
2012	36.10	--
2013	39.79	10.2
2014	39.79	--
2015	42.03	5.6
2016	42.03	--
2017	44.22	5.2
2018	44.22	--
2019	45.33	2.5

Source: King County Wastewater Treatment Division

Projected Sewer Rates. Table 7 shows the County’s current Sewer Rate projections for the years 2020 through 2024. The projections are for planning purposes only and subject to County Council approval. See “—Financial Policies” and “—Projected Customers, Revenues, and Expenses” for further discussion regarding these projections.

**TABLE 7
PROJECTED SEWER RATES
FOR RESIDENTIAL CUSTOMERS
OR RESIDENTIAL CUSTOMER EQUIVALENTS**

Effective Date (January 1)	Rate (\$/month)	Percentage Change (%)
2020	\$ 45.33	0.0
2021	47.37	4.5
2022	47.37	0.0
2023	48.45	2.3
2024	49.56	2.3

Source: King County Wastewater Treatment Division

Sewer System Operating Revenues

Sewage Disposal Charges, based on the adopted Sewer Rates described above, contributed on average 82% of Sewer System operating revenues between 2013 and 2017.

The next-largest single source of Sewer System operating revenues is the capacity charge, which has been imposed by County ordinance since 1990 on Customers who establish new connections to the Sewer System. Annual capacity charge revenues have averaged 15% of total Sewer System operating revenues between 2013 and 2017. Table 8 shows the number of new capacity charge connections for the past five years.

**TABLE 8
HISTORICAL NEW CAPACITY CHARGE CONNECTIONS**

<u>Year</u>	<u>Connections</u>
2013	8,467
2014	10,767
2015	11,676
2016	10,743
2017	12,484

Capacity charges are based upon the year that service commences and remain fixed for a term of 15 years. The capacity charge assessed for Customers who establish new connections to the Sewer System in 2018 is \$62.60 per month, compared to \$60.80 for Customers who established service in 2017. In June 2018, the County Council adopted a capacity charge of \$64.50, a 3.0% increase, for 2019. State law imposes limitations on the calculation of capacity charges, but capacity charges do not require the approval of the Washington State Utilities and Transportation Commission or the Participants or Agency Customers.

The County allows the capacity charge to be prepaid on a discounted basis at the customer's option. From 2005 through 2013, the discount rate was 5.5%. To provide a more stable, long-term revenue stream, the County established new code provisions in 2013 in which an annual discount rate is set that reflects the 15-year mortgage and 10- and 20-year investment rates. These changes became effective on January 1, 2014. The discount rate is 2.9% in 2018, the same rate as 2017.

A number of other charges, including fees paid by septage haulers for treatment, payments for the by-products of the sewage treatment process, and surcharges imposed for high strength and heavy metal discharges into the Sewer System, collectively have accounted for approximately 3% of operating revenue between 2013 and 2017.

Financial Policies

Coverage Policy. The County Council is obligated by applicable bond covenants to set rates and charges for sewage disposal service at a level adequate to provide Net Revenue equal to at least 1.15 times the amounts required, together with certain interest earnings, to pay debt service on both Parity Bonds and Parity Lien Obligations as defined in the Bond Ordinance. See "Security and Sources of Payment for the Bonds—Rate and Coverage Covenants." The County Council's policy is to achieve debt service coverage of at least 1.25 times, which is higher than what is required by the bond covenants, on both Parity Bonds and Parity Lien Obligations.

To further strengthen the financial position of the Sewer System, the County established in 2001 the policy of setting Sewer Rates and other charges at a level that would achieve an overall debt service coverage target of at least 1.15 times coverage on all Sewer System Obligations (see "Security and Sources of Payment for the Bonds—Outstanding Sewer System Obligations"), in

addition to continuing to satisfy the existing policy of providing at least 1.25 times coverage on Parity Bonds and Parity Lien Obligations.

In proceedings for the adoption of the 2019 Sewer Rate, the County Council was presented with projected Sewer Rates that, after payment of operating expenses and debt service, were projected to be sufficient to fund out of Net Revenue on average 40% of projected capital expenditures from 2019 through 2024, thereby increasing projected coverage ratios on all Sewer System Obligations to between 1.29 and 1.38 times. These Sewer Rates appear in Table 7—“Projected Sewer Rates for Residential Customers or Residential Customer Equivalents” (and are based on rate increases that are subject to County Council approval) and have been used to determine operating revenues from Sewage Disposal Charges in “Projected Customers, Revenues, and Expenses.”

Reserve Policy. In 2001, the County Council established an operating liquidity reserve, equal to \$5.0 million plus 10% of annual operating expenses, and an emergency capital reserve equal to \$15 million. These policies were reviewed and affirmed by the County Council in 2012. As of September 30, 2018, these reserves were fully funded, with balances of \$19.8 million and \$15 million, respectively.

Sewer System Interfund Borrowing

The Sewer System periodically uses interfund borrowing from other County funds held in the King County Investment Pool (the “Investment Pool”) to provide interim financing for its capital improvement program pending the issuance of long-term bonds or the receipt of SRF Loan funds. (See “King County–King County Investment Pool.”) Such borrowings are to be fully repaid upon the receipt of the subsequent bond proceeds or SRF Loan funds. There are currently no such loans outstanding. In 2015, the Sewer System borrowed \$40.1 million from the Investment Pool, fully repaying the principal with proceeds of the County’s Sewer Improvement and Refunding Revenue Bonds, 2015, Series B.

Historical Customers, Revenues, and Expenses

Table 9 sets forth a summary of customers, revenues and expenses, and debt service coverage of the Sewer System. The debt service coverage calculations shown in Table 9 are based on provisions of the applicable bond ordinances, incorporating data from the audited financial statements and financial records of the Sewer System.

TABLE 9
HISTORICAL FINANCIAL STATEMENTS
(\$ EXPRESSED IN THOUSANDS) (FISCAL YEAR ENDING DECEMBER 31)

	2013	2014	2015	2016	2017
Residential Customer and Residential Customer					
Equivalents (RCEs) (Annual Average, Rounded)	718,160	725,844	736,090	756,430	756,919
Percentage Annual Increase	1.31%	1.07%	1.41%	2.76%	0.06%
Operating Revenues					
Sewage Disposal Charges	\$ 342,850	\$ 346,591	\$ 371,253	\$ 381,513	\$ 401,650
Capacity Charge Revenues	58,660	59,522	62,479	71,200	82,615
Other Operating Revenues	10,126	11,675	11,673	11,828	18,308
Total Operating Revenues	\$ 411,636	\$ 417,788	\$ 445,405	\$ 464,541	\$ 502,573
Operating Expenses ⁽¹⁾	(117,183)	(124,201)	(128,926)	(136,321)	(148,199)
Net Operating Revenue	\$ 294,453	\$ 293,587	\$ 316,479	\$ 328,220	\$ 354,374
Interest Income ⁽²⁾	2,682	2,822	2,863	4,549	6,055
Rate Stabilization ⁽³⁾	10,350	18,000	(12,000)	-	-
Net Revenue Available for Debt Service	\$ 307,485	\$ 314,409	\$ 307,342	\$ 332,769	\$ 360,429
Debt Service					
Parity Bonds	\$ 172,959	\$ 175,463	\$ 167,694	\$ 160,957	\$ 159,761
Parity Lien Obligations	43,064	42,876	40,348	53,164	52,650
Subordinate Debt Service ⁽⁴⁾	15,039	17,477	18,318	21,316	26,277
Total Debt Service	\$ 231,062	\$ 235,816	\$ 226,360	\$ 235,437	\$ 238,688
Debt Service Coverage					
Parity Bonds	1.78	1.79	1.83	2.07	2.26
Parity Bonds and Parity Lien Obligations	1.42	1.44	1.48	1.55	1.70
All Sewer System Obligations	1.33	1.33	1.36	1.41	1.51

NOTES TO TABLE:

- (1) Excludes depreciation and amortization expense along with non-cash accounting adjustments for pension and other employee benefit costs.
- (2) Excludes unrealized gains and losses that are included in the audited financial statements.
- (3) Withdrawals from (deposits into) the Rate Stabilization Fund.
- (4) Subordinate Debt Service consists of debt service on the Junior Lien Obligations, Multi-Modal LTGO/Sewer Revenue Bonds, Subordinate Lien Obligations, and SRF Loans and PWTF Loans. The amount shown in Table 9 for 2016 excludes \$1.4 million for Subordinate Debt Service, representing excess premium on the Junior Lien Sewer Revenue Bonds, Series 2015A and 2015B, that was deposited in the Bond Fund.

Source: Audited Financial Statements and financial records of the Water Quality Enterprise Fund 2013-2017, Finance and Business Operations Division

Management Discussion of 2017 Sewer System Financial Results

The Sewer System's net operating revenue (excluding depreciation expense) in 2017 was \$354.4 million, an 8.0%, or \$26.2 million, increase from the \$328.2 million of net operating revenue in 2016. Total operating revenues increased by \$38.0 million, or 8.2%, to \$502.6 million from \$464.6 million, while operating expenses (excluding depreciation) increased by \$11.9 million, or 8.7%, to \$148.2 million from \$136.3 million in 2016.

Revenues. The \$38.0 million, 8.2% increase in operating revenue in 2017 from 2016 was due to the 5.2% increase in the monthly Sewer Rate and increases in capacity charge and other operating revenues. Sewage Disposal Charges increased by \$20.1 million, or 5.3%, compared to 2016, with most of the increase due to the 5.2%, \$2.19 increase in the monthly Sewer Rate for 2017. Billable RCEs were largely unchanged between 2016 and 2017. Non-recurring adjustments to Sewage Disposal Charges relating to prior periods decreased revenues by \$2.0 million in 2017 but increased revenues by \$1.9 million in 2016. When billable RCEs are adjusted for these prior period changes, total RCEs increased by 0.6%, to 757,240 in 2017 from 752,710 in 2016.

Capacity charge revenues increased by 16.0%, or \$11.4 million, to \$82.6 million in 2017. Billings increased by \$5.7 million, or 10.9%, from 2016 while revenues from early payoffs increased by \$5.7 million, or 30.8%. Other operating revenues increased by \$6.5 million, or 54.8%, to \$18.3 million in 2017. Most of the increase, \$5.6 million, was due to revenues received from the County's contract with IGI Resources, Inc. to sell the environmental benefits of bio-methane gas (known as Renewable Identification Numbers, or RINs) generated at the South Treatment Plant pursuant to a program created by the Energy Independence Security Act of 2007 and subsequent rulemaking by the EPA. The contract to sell RINs to IGI Resources, Inc. extends through July 2022

Expenses. Operating expenses of the Sewer System, excluding depreciation and adjusted for non-cash accounting adjustments associated with employee benefits, increased \$11.9 million to \$148.2 million in 2017, an increase of 8.7%. Labor expenses increased by \$3.0 million, or 5.8%. Utility and service costs increased by \$4.2 million, or 13.2%, primarily due to consultant and engineering fees. Intergovernmental and other expenses increased \$3.4 million, \$3.2 million of which represents expenses for WaterWorks grants that were awarded in 2016. Operating expenses in 2017 included \$10 million of expenses that were associated with repairs at the West Point

treatment plant, but which were offset by \$10.0 million of proceeds received from the County's insurer. See "—West Point Flooding Accident."

Interest Income. Interest income increased by \$1.5 million to \$6.1 million in 2017 due to higher average yields in the Investment Pool (1.12% in 2017 compared to 0.79% in 2016), offset by a lower average monthly balance (\$515 million in 2017 compared to \$559 million in 2016).

Debt Service Coverage. The Sewer System achieved a coverage ratio of 1.70x on the combined debt service of Parity Bonds and Parity Lien Obligations in 2017, exceeding the 1.25x minimum coverage target stipulated by the County's adopted financial policies. The debt service coverage ratio of 1.51x on all Sewer System Obligations in 2017 exceeded the 1.15x minimum coverage target stipulated by the County's adopted financial policies.

West Point Flooding Accident

On February 9, 2017, during heavy rainfall in the Seattle area, the West Point treatment plant was operating at peak hydraulic capacity when a partial interruption of power supply occurred. The ensuing cascade of events caused several elements of the treatment plant to fail, culminating in flooding of the plant and leading to the emergency bypass of the treatment system and the discharge into Puget Sound of an estimated 180 million gallons of stormwater mixed with untreated sewage. An additional 55 million gallons was discharged during a subsequent heavy rain event a week later. Although there were no emergency bypasses after February 16, 2017, WTD was unable to meet the discharge limits required by West Point's National Pollutant Discharge Elimination System ("NPDES") permit until May 11, 2017, when biological treatment processes were fully restored.

On September 12, 2017, Ecology issued a Notice of Penalty against WTD in the amount of \$361,000 for permit violations stemming from the incident. Ecology also issued an Administrative Order requiring that six corrective actions be implemented by WTD. Given the remedial actions already taken and planned by WTD, including those set forth in the Administrative Order, the County filed a Notice of Appeal with the Pollution Control Hearings Board (the "Board") regarding the Notice of Penalty, but did not appeal the Administrative Order. In June 2018, the County and the Board reached a settlement in which the County paid a penalty of \$73,721 and agreed to contribute \$287,279 to fund a survey of eelgrass and kelp distribution in the County and to restore ecologically significant habitats in areas where they historically grew. The survey and restoration are required to be completed by the end of 2022.

WTD restored the plant's critical mechanical and electrical systems and returned the plant to its full hydraulic and treatment capacity by April 26, 2017. Substantially all work on long-term equipment repair was completed by the end of 2017 at a cost of \$20.0 million. WTD expects to incur an additional \$6.4 million in remediation costs in 2018 for non-critical facilities damaged during the accident.

The County has commercial insurance coverage on its properties, which, at the time of the West Point accident had a \$250,000 deductible and a maximum loss recovery of \$500 million per occurrence. WTD filed a \$26.4 million claim with its primary insurance carrier in September 2018, and has also opened a claim with the Federal Emergency Management Agency ("FEMA"). WTD has received \$12.5 million in advances from its primary insurance carrier to date and expects

a final claim settlement by the end of 2018 for substantially all of its claim. WTD intends to submit to FEMA remediation costs that will not be paid by its insurance carrier.

The County Council commissioned the consulting engineering firm AECOM to provide an independent review of the West Point accident, which was received on July 18, 2017. A major finding of the AECOM report was that West Point lacks sufficient redundancy in its systems, such that the failure of one or more system components can significantly reduce the plant's peak capacity (440 mgd) over a very brief period. Given the complexity of operating West Point during peak wet weather events, additional redundancy for flow management is critical at the plant.

The AECOM report made 98 recommendations to improve redundancy and minimize the likelihood of future flooding and performance issues at the plant. These included implementation of a Life Safety Management System, development of more comprehensive emergency wet weather training, and the assessment of strategies and prioritization of capital improvements to address plant constraints, improve redundancy, and minimize the risk of flooding. In addition to the AECOM recommendations, Ecology issued an Amended Administrative Order in November 2017 requesting six corrective actions pertaining to training, emergency planning, and evaluation of plant facilities and certain procedures.

As of July 2018, WTD had completed 41 of the 98 recommendations and was in the process of implementing another 37. WTD had also completed or was implementing the six corrective actions in the Amended Administrative Order. Of the 20 AECOM recommendations that were not being implemented, more effective solutions have been found for nine of the recommendations, while the others were reviewed as impractical based on the configuration and control of the collection system and plant hydraulics. WTD will continue to make reports to the County Council on the status of the AECOM recommendations through November 2019.

The County Council also requested WTD to engage an outside consultant to review the past half-century of West Point operations and provide recommendations on how well positioned West Point is to meet potential future growth, regulatory, and environmental challenges given its current and projected capacity, changes in treatment technology, and constraints acting upon the plant.

WTD commissioned the engineering firm Brown and Caldwell, which presented its report in December 2017. The report noted that, with minor exceptions prior to February 2017, West Point had met permit conditions since it first began operations in 1966. The major finding of the report was that physical and administrative constraints limit the ability of the plant's current technology within the site to provide additional capacity or to meet potential regulatory changes. The report noted that, in the near term, due to higher than projected population growth, the organic loading capacity of the digesters may be constrained earlier than the 2030 period indicated in the 2007-2013 Regional Wastewater Services Plan Comprehensive Review. As a long-term challenge, it noted land-based limitations at the site would present a significant engineering challenge should Ecology chose to impose nitrogen removal limits in future NPDES permits for West Point. See “—Environmental Regulation—Nutrient Removal Standards.”

The current capital improvement plan for West Point includes 18 projects totaling \$321 million, including \$216 million from 2018 to 2024 that is included in the “Other Improvements and Asset Management” category in Table 12—“Capital Improvement Plan—Projected Expenditures.” Three of these projects, increasing the capacity of the plant's raw sewage pumps from 330 to 440

MGD, constructing a passive weir for emergency bypass, and upgrading power monitoring equipment, were capital projects recommended in the AECOM report.

As described under “Regional Wastewater Services Plan,” WTD is also undertaking planning processes that are intended to result in a new system-wide comprehensive plan by mid-2022. The new system-wide plan is expected to provide further guidance on how the County will make the most effective use of past and future investments at West Point to increase system-wide redundancy while increasing water quality benefits to the region.

Projected Customers, Revenues, and Expenses

Table 10 sets forth a summary of WTD’s projections of the Sewer System’s Customers, Revenue of the System, and Operating and Maintenance Expenses for the fiscal years ending December 31, 2018, through December 31, 2024. Notes for Table 10 are provided on the page following the table.

The revenues that are projected in Table 10 reflect the assumed monthly Sewer Rates presented in Table 7—“Projected Sewer Rates for Residential Customers or Residential Customer Equivalents.” These projected Sewer Rates are designed to produce Net Revenue sufficient to satisfy the debt service coverage targets stipulated by the County’s adopted financial policies and the 40% average cash-funding target for the capital improvement plan (“CIP”) presented to the County Council in proceedings for the adoption of the 2019 Sewer Rates.

Estimates for 2018 are based on year-to-date unaudited revenues and expenses through September and WTD’s projections for the remainder of the year. The Sewer System is expected to generate net operating revenue of \$342.2 million in 2018, a decrease of \$12.2 million, or 3.4%, from \$354.4 million in 2017. Total operating revenues are projected to decrease by \$0.8 million, or 0.2%, to \$501.8 million in 2018 from \$502.6 million in 2017, while operating expenses are projected to increase by \$11.4 million, or 7.7%, to \$159.6 million in 2018 from \$148.2 million in 2017. Operating revenues in 2018 exclude insurance payments that WTD expects to receive from its carriers for West Point remediation claims. See “—West Point Flooding Accident.”

Revenues from Sewage Disposal Charges are projected to increase by \$2.1 million, or 0.5%, from 2017 due to growth in the number of Customers as determined by billings through September and the number of Customers reported by Municipal Participants for billings for the fourth quarter of 2018. WTD periodically conducts audits of the billing records of its Municipal Participants and is currently conducting one of Seattle. The audit of Seattle is expected to be completed in early 2019 and may result in adjustments to 2018 Sewage Disposal Charges relating to prior year and 2018 billings to Seattle.

A 3.0% increase in the 2018 capacity charge rate for new customers and continued growth in new connections, offset by a lower level of early payoffs, is expected to result in a decrease in Capacity Charge Revenues of \$1.2 million or 1.4%, from 2017. The \$1.8 million, or 9.4%, projected decrease in Other Operating Revenues for 2018 reflects lower projected sales of RINs from WTD’s contract with IGI Resources, Inc. Annual revenues from the sale of RINs are projected to be approximately \$3.2 million in 2018, approximately \$2.0 million thereafter through 2021, and \$1.0 million in the final half-year of the contract in 2022.

Operating expenses of the Sewer System, excluding depreciation, are projected to increase by \$11.4 million to \$159.6 million in 2018 from \$148.2 million in 2017, a 7.7% increase. Approximately \$5.4 million of the increase is attributed to previously committed but unexpended WaterWorks Grant funds from previous years. An additional \$2.7 million is attributed to increased labor costs, while the remaining \$3.3 million is due to fuel, chemical, and utility rate increases and projected general inflation.

Interest income is expected to be \$8.2 million in 2018, an increase of \$2.1 million from 2017, due to the higher expected average interest rate on WTD funds in the Investment Pool (1.70% in 2018, 1.10% in 2017).

WTD does not expect to make any additions to or withdrawals from the Rate Stabilization Fund in 2018 but does project withdrawals of \$14.4 million in 2022 and \$19.85 million in 2023.

TABLE 10
PROJECTED FINANCIAL STATEMENTS
(\$ EXPRESSED IN THOUSANDS) (FISCAL YEAR ENDING DECEMBER 31)⁽¹⁾

	2018 ⁽²⁾	2019	2020	2021	2022	2023	2024
Residential Customer and Residential Customer Equivalents (Average for Year, Rounded)	760,846	765,031	769,774	774,546	779,349	784,181	789,043
Percentage Annual Increase	0.48%	0.55%	0.62%	0.62%	0.62%	0.62%	0.62%
Operating Revenues							
Sewage Disposal Charges ⁽³⁾	\$403,735	\$416,660	\$419,244	\$440,247	\$443,059	\$455,894	\$469,328
Capacity Charge Revenues	81,457	81,204	87,187	93,513	100,266	104,868	109,614
Other Operating Revenues	16,589	16,343	16,239	16,664	16,068	15,484	15,949
Total Operating Revenues	\$501,781	\$514,207	\$522,670	\$550,424	\$559,393	\$576,246	\$594,891
Operating Expenses ⁽⁴⁾	(159,620)	(167,366)	(168,134)	(176,800)	(185,640)	(194,922)	(207,468)
Net Operating Revenue	\$342,161	\$346,841	\$354,536	\$373,624	\$373,753	\$381,324	\$387,423
Interest Income ⁽⁵⁾	\$ 8,203	\$ 8,133	\$ 7,578	\$ 9,651	\$ 11,151	\$ 11,912	\$ 12,643
Rate Stabilization ⁽⁶⁾	-	-	-	-	14,400	19,850	-
Net Revenue Available for Debt Service	\$350,364	\$354,974	\$362,114	\$383,275	\$399,304	\$413,086	\$400,066
Debt Service							
Parity Bonds ⁽⁷⁾	\$163,967	\$171,584	\$166,958	\$171,824	\$184,691	\$196,065	\$205,132
Parity Lien Obligations	50,310	42,672	50,238	52,408	52,343	50,017	49,942
Subordinate Debt Service ⁽⁸⁾	37,588	52,034	51,784	51,381	54,578	50,351	49,580
Total Debt Service	\$251,865	\$266,290	\$268,980	\$275,613	\$291,612	\$296,433	\$304,654
Debt Service Coverage							
On Parity Bonds	2.14	2.07	2.17	2.23	2.16	2.11	1.95
On Parity Bonds and Parity Lien Obligations	1.64	1.66	1.67	1.70	1.68	1.68	1.57
On All Sewer System Obligations	1.39	1.33	1.35	1.39	1.37	1.39	1.31

NOTES TO TABLE:

- (1) Totals may not add due to rounding.
- (2) Projections for 2018 are based on unaudited financial statements for the nine months ending September, 2018, and estimated results through December. Projections for 2018 exclude insurance payments that WTD expects to receive from its insurance carrier for the balance of its claim on West Point. See “—West Point Flooding Accident.”
- (3) Based on adopted and projected Sewer Rates and rates for capacity charges. See “—Sewer Rates—Adopted Sewer Rates” and “—Projected Sewer Rates.”
- (4) Operating expenses in 2018 are based on the Sewer System’s operating budget, as amended by the County Council, and include the balance of remedial operating expense for West Point. Operating expenses after 2018 are based on the proposed biennium budget for 2019 and 2020 submitted to the County Council and are assumed to increase at an annual rate of 5% through 2024.
- (5) Based on the Investment Pool earning at projected annual rates of 1.70% in 2018, 2.20% in 2019, 2.50% in 2020, 2.72% in 2021, 2.95% in 2022, 3.14% in 2023, and 3.26% in 2024. Projected Investment Pool earnings rates are from the County’s Office of Economic and Financial Analysis.
- (6) Withdrawals from the Rate Stabilization Fund.
- (7) Projections assume draws on the \$134.5 million WIFIA Bond of \$119.7 million in 2020 and \$14.8 million in 2021 at its 3.06% interest rate and issuance of additional Parity Bonds at a 6% interest rate with 30-year terms of \$144 million in 2021, \$177 million in 2022, \$157 million in 2023, and \$125 million in 2024. Debt service on the Bonds is based on a true interest cost of 2.92%.
- (8) Subordinate Debt Service consists of debt service on the Variable Rate Bonds and the SRF Loans and PWTF Loans. Subordinate Debt Service excludes, beginning in 2018, \$43.8 million of planned optional redemptions of outstanding and additional Variable Rate Bonds. See “Security and Sources of Payment for the Bonds—Outstanding Sewer System Obligations—Variable Rate Debt.”

Projections assume the issuance of \$36 million of Variable Rate Bonds between 2022 and 2024. See “—Future Sewer System Financing Plans.” The projections assume interest rates on Variable Rate Bonds of 2.57% in 2018 and 5.40% thereafter, which is equal to 90% of the assumed long-term rate for additional Parity Bonds. See Table 11—“Scheduled Debt Service on All Obligations of the Sewer System,” footnote 4.

Projections include debt service on \$49.6 million of current and pending loan commitments from Ecology and the Public Works Trust Fund, of which \$20.1 million has been drawn through the date of this Preliminary Official Statement. The \$49.6 million total comprises an executed agreement with Ecology for a \$21.1 million, 20-year loan at a rate of 2.0%, an executed agreement with the Public Works Trust Fund for a \$3.5 million loan at a rate of 1.66%, and funding offers totaling \$25 million from Ecology for two loans with 30-year terms and a rate of 2.6%. See “—Future Sewer System Financing Plans.”

Source: King County Wastewater Treatment Division

Debt Service Requirements Payable from Revenue of the System

Table 11 sets forth the scheduled amounts required to be paid from Revenue of the System in each year for all the Sewer System Obligations. Notes to Table 11 are found on the following page.

TABLE 11
SCHEDULED DEBT SERVICE ON ALL OBLIGATIONS OF THE SEWER SYSTEM⁽¹⁾
(Fiscal Year Ending December 31)

Year Ending December 31 ⁽¹⁾	Parity Bonds					Multi-Modal					Total
	Outstanding ⁽²⁾	The Bonds		Total	Parity Lien Obligations	Junior Lien Obligations ⁽³⁾	LTGO/Sewer Revenue Bonds ⁽³⁾	SRF Loans and PWTF Loans ⁽⁴⁾	QECB Bonds ⁽⁵⁾		
		Principal	Interest								
2018	\$ 163,171,517	\$ -	\$ 795,129	\$ 163,966,646	\$ 49,121,300	\$ 11,541,356	\$ 2,570,000	\$ 21,545,784	66,220	\$ 248,811,306	
2019	165,361,150	-	6,222,750	171,583,900	41,342,550	24,250,320	5,400,000	21,485,482	66,220	264,128,472	
2020	157,782,600	-	6,222,750	164,005,350	48,934,300	24,250,320	5,400,000	21,603,679	66,220	264,259,869	
2021	149,248,975	1,810,000	6,177,500	157,236,475	51,144,975	24,250,320	5,400,000	21,191,797	66,220	259,289,787	
2022	140,694,600	10,680,000	5,865,250	157,239,850	51,126,250	24,250,320	5,400,000	20,139,014	3,076,220	261,231,654	
2023	137,035,875	14,980,000	5,223,750	157,239,625	48,849,025	24,250,320	5,400,000	19,143,709	-	254,882,679	
2024	134,589,875	18,250,000	4,393,000	157,232,875	48,822,025	24,250,320	5,400,000	19,134,415	-	254,839,635	
2025	143,577,375	9,970,000	3,687,500	157,234,875	48,860,025	24,250,320	5,400,000	17,762,760	-	253,507,980	
2026	143,445,125	10,620,000	3,172,750	157,237,875	48,821,150	24,250,320	5,400,000	14,511,974	-	250,221,319	
2027	138,595,375	11,165,000	2,628,125	152,388,500	48,786,525	24,250,320	5,400,000	14,086,578	-	244,911,923	
2028	138,499,325	11,775,000	2,054,625	152,328,950	48,746,325	24,250,320	5,400,000	13,646,070	-	244,371,665	
2029	138,485,500	12,415,000	1,449,875	152,350,375	48,781,900	24,250,320	5,400,000	12,683,199	-	243,465,794	
2030	144,883,050	11,290,000	857,250	157,030,300	48,712,175	24,250,320	5,400,000	12,679,705	-	248,072,500	
2031	148,165,450	8,880,000	353,000	157,398,450	49,355,350	124,250,320	5,400,000	11,535,744	-	347,939,864	
2032	155,138,325	2,620,000	65,500	157,823,825	49,306,325	18,850,320	5,400,000	11,467,190	-	242,847,660	
2033	157,844,950	-	-	157,844,950	41,295,050	18,850,320	5,400,000	11,463,969	-	234,854,289	
2034	158,353,625	-	-	158,353,625	19,892,600	18,850,320	5,400,000	9,145,594	-	211,642,139	
2035	134,664,850	-	-	134,664,850	19,916,225	18,850,320	5,400,000	8,065,023	-	186,896,418	
2036	133,153,975	-	-	133,153,975	19,950,725	18,850,320	5,400,000	5,729,642	-	183,084,662	
2037	133,229,200	-	-	133,229,200	19,970,400	18,850,320	5,400,000	2,078,564	-	179,528,484	
2038	133,406,575	-	-	133,406,575	19,997,100	18,850,320	5,400,000	1,254,765	-	178,908,760	
2039	133,410,525	-	-	133,410,525	-	18,850,320	105,400,000	-	-	257,660,845	
2040	123,807,500	-	-	123,807,500	-	18,850,320	-	-	-	142,657,820	
2041	108,865,625	-	-	108,865,625	-	118,850,320	-	-	-	227,715,945	
2042	86,519,400	-	-	86,519,400	-	113,450,320	-	-	-	199,969,720	
2043	86,362,550	-	-	86,362,550	-	8,050,320	-	-	-	94,412,870	
2044	83,101,200	-	-	83,101,200	-	8,050,320	-	-	-	91,151,520	
2045	83,047,350	-	-	83,047,350	-	107,130,320	-	-	-	190,177,670	
2046	79,040,250	-	-	79,040,250	-	2,700,000	-	-	-	81,740,250	
2047	55,781,875	-	-	55,781,875	-	52,700,000	-	-	-	108,481,875	
2048	26,799,875	-	-	26,799,875	-	-	-	-	-	26,799,875	
2049	26,796,375	-	-	26,796,375	-	-	-	-	-	26,796,375	
2050	10,358,000	-	-	10,358,000	-	-	-	-	-	10,358,000	
2051	10,358,250	-	-	10,358,250	-	-	-	-	-	10,358,250	
Total	\$ 3,963,576,067	\$ 124,455,000	\$ 49,168,754	\$ 4,137,199,821	\$ 871,732,300	\$ 1,007,379,996	\$ 215,970,000	\$ 290,354,657	\$ 3,341,100	\$ 6,525,977,874	

NOTES TO TABLE:

- (1) January 1 payments shown in the prior year.
- (2) Excludes debt service on bonds that were defeased by the County on October 25, 2018. See “Outstanding Sewer System Obligations—Brightwater Litigation Judgment Funds.”
- (3) The projections assume interest rates on Variable Rate Bonds of 2.57% in 2018 and 5.40% thereafter, which is equal to 90% of the assumed long-term rate for additional Parity Bonds. The Junior Lien Obligations have bullet maturities in 2032, 2040, 2042, 2043, and 2046. The Multi-Modal LTGO/Sewer Revenue Bonds have a bullet maturity in 2042. Projections exclude planned optional redemptions of Variable Rate Bonds prior to their final maturity dates. See “—Financial Policies—Variable Rate Debt” and “Security and Sources of Payment for the Bonds—Outstanding Sewer System Obligations—Summary of Credit Facilities.”
- (4) Does not include debt service on \$4.5 million of existing loan commitments from Ecology and the Department of Commerce that are expected to be drawn upon through 2018. See “The Sewer System—Future Sewer System Financing Plans.”
- (5) Although debt service on the QECB Bonds is paid from Revenue of the System, the County has not pledged Revenue of the System to the payment of the QECB Bonds. See “Security and Sources of Payment for the Bonds—Outstanding Sewer System Obligations.” Annual interest expense does not include the federal subsidy that is expected to be received.

Regional Wastewater Services Plan

The RWSP guides improvements to the regional wastewater system to ensure the continuation of high quality wastewater treatment services in the future. The RWSP was adopted in 1999 establishing a number of programs to guide long-term planning and investments in wastewater infrastructure. RWSP Program Updates and periodic reviews are carried out to ensure that wastewater infrastructure planning and investments are based on current data.

The 2013 RWSP Comprehensive Review evaluated the capacity of the three major treatment plants to treat the wastewater stream components of solids (organic and inorganic material) and flow (liquid stream). The comprehensive review found that the treatment plants have sufficient capacity until around 2060 to treat average wet weather flows. WTD is currently undertaking a Treatment Plant Flows and Loadings Study that is reviewing in detail the flows, loadings, and limitations of the treatment processes at each of its plants, including the adequacy of West Point’s digesters. See “—West Point Flooding Accident.” The report is scheduled for completion in early 2019 and will help inform future capital plans for the System.

The Conveyance System Improvement (“CSI”) program focuses on guiding major upgrades and improvements to County-owned regional wastewater conveyance facilities. The facilities consist of the pumping stations and pipes that transport wastewater from the local systems to the regional treatment facilities. The current CIP includes nine CSI construction and design projects with estimated spending of \$326 million through 2024. See “—Capital Improvement Plan.”

In May 2017, WTD completed an assessment of the County’s separated sewer system (located outside of Seattle) and identified components of the system that, through 2060, were projected to fall below the County’s 20-year peak flow planning standard. Forty-one conveyance system improvements were identified, one of which is in the current CIP. Decisions on when specific CSI improvements will be included in future CIPs will be made as part of WTD’s planning and capital budgeting activities.

Over the next four years, WTD will be undertaking planning processes that are expected to result in a new system-wide comprehensive plan that will define regional water quality priorities over both near- (up to ten years) and long-term time horizons (ten to 40 years). The need to begin developing a comprehensive plan at this time reflects the complicated and expensive demands that WTD is facing, which include regional growth, aging infrastructure, current and potential regulatory regimes, affordability of service, natural disasters, and climate change. The new plan is intended to provide a prioritized list of activities for WTD to undertake to achieve the best water quality benefits for the investments that will be made.

Development of the system-wide plan is expected to be completed by the middle of 2022, with adoption by the Council later that year or in 2023. The final plan will serve as a guide to near- and long-term investments in the regional wastewater system.

Combined Sewer Overflow Projects

CSOs are untreated discharges of mixed stormwater and diluted wastewater into water bodies during heavy rainfall events when the capacity of the existing sewer system is full. Combined sewers, which carry both wastewater and stormwater, exist in many parts of older cities across the nation, including Seattle. Stormwater can cause extreme variations in wastewater flows, resulting in the need for large wastewater facilities and in challenges to the treatment process. To avoid damage to the regional sewer system and treatment plants during heavy rainfall events, combined sewers in Seattle sometimes overflow into Puget Sound, the Duwamish Waterway, Elliott Bay, Lake Union, the Lake Washington Ship Canal, and Lake Washington. Within the County wastewater service area, CSOs exist only within a portion of Seattle. Based on agreements made at the start of the regional system in 1958, depending on the size of the drainage basin, either the County or Seattle is responsible for CSOs, and both entities are working to control them under separate long-term CSO control plans.

The County currently has 39 CSO outfall locations and four CSO treatment facilities which control overflows that still occur in some older parts of Seattle during heavy rains. Past investments have resulted in a reduction in untreated CSOs from a baseline of 2.3 billion gallons per year (based on data from 1980 to 1983) to 800 million gallons in a typical year of rainfall (based on long-term averages). Weather conditions resulted in 1.7 billion gallons of untreated CSO discharges in 2017 and 1.1 billion gallons in 2016. During the last five years, Seattle has experienced higher than average rainfall. The 2017 discharge quantity includes the effect of the February 9, 2017, equipment failure incident at West Point Treatment Plant, which shut down the plant and resulted in additional CSO discharges at locations other than the treatment plant outfall.

In 2013, the United States District Court for the Western District of Washington (the “Court”) approved a consent decree (the “2013 Consent Decree”) between the County, the U.S. Department of Justice, EPA, and Ecology to undertake and construct nine capital projects to control 14 uncontrolled overflow locations in the system by 2030. The 2013 Consent Decree is consistent with a Long-Term Control Plan (“LTCP”) approved by the County Council in 2012.

All milestones required by the 2013 Consent Decree have been met to date, with the exception of the South Magnolia Wet Weather Storage project not achieving controlled status within one year of construction completion. Construction on South Magnolia was completed in December 2015, and the facility was operating correctly until an unexpected conveyance pipe break in the fall of 2016 prevented storm flows from reaching the storage tank. WTD submitted a Supplemental

Compliance Plan to Ecology and EPA in January 2017 (with an addendum containing the specific plan and schedule submitted in April 2018) outlining plans to bring the facility back into service and compliance. The remedial action undertaken was the replacement of the damaged pipe using a pipe bursting method that simultaneously pulled a new pipe into the space occupied by the damaged pipe. It is anticipated the facility will be back online by the end of 2018 in time for a portion of the 2018-2019 wet weather season. The pipe break investigation, remedial construction, and the County's internal costs will cost approximately \$18.6 million. The County and its contractor are pursuing coverage through the project builders risk insurance for those costs. The insurer is reviewing the claim and the County has not received a coverage determination as yet.

On July 27, 2016, the County and Seattle signed a Joint Project Agreement ("JPA") to implement a project to control County overflows at its 3rd Avenue West and 11th Avenue Northwest locations (see Figure 1) and four of Seattle's overflow locations designated in its consent decree. Seattle is the lead agency for design and construction of a 2.7-mile, approximately 18-foot, 10-inch-inside-diameter storage tunnel (the "Joint Project") to capture and store a minimum of 15.24 million gallons of stormwater mixed with sewage from the six CSO sites during a storm event. The Joint Project is expected to reduce the total of uncontrolled current CSO discharges by approximately 50 million gallons and eliminate an average of 130 CSO events per year. The Joint Project is being implemented to reduce community and environmental impacts in the project area relative to separate individual agency projects and provide operational efficiencies.

On October 25, 2016, the Court approved an "Agreed Non-Material Consent Decree Modification" filed by EPA, Ecology, the U.S. Department of Justice, and the County to incorporate the Joint Project as part of the original 2013 Consent Decree.

The current capital cost estimate for the County's 35% financial share of the agreed shared elements of the Joint Project's total cost is \$176.2 million through 2025, an increase of \$33.7 million from last year. Seattle completed new cost estimates for the Joint Project in May 2018. The higher cost estimate reflects the current conditions in the construction market in Seattle and incorporates more complete design estimates, scope additions, higher contingency reserves, increases in construction management services, and, to meet future impacts from climate change, an increase in the size of the tunnel by four feet ten inches from the 14-foot diameter that was proposed in the 2016 JPA. Joint Project costs are tracked and reported each month. A reassessment of total project costs may occur towards the end of 2019, when tunnel construction bids are scheduled to be received.

The County is required to update its LTCP every five years; its next update will be submitted to Ecology and the EPA with its NPDES permit renewal application for West Point, which is due in January 2019. WTD conducted analyses and alternatives assessments for those CSOs where projects are not already being implemented (Hanford No. 2, King, Kingdome, Montlake, and University), incorporating new modeling and flow information since the last update. The 2019 program update will include refined cost estimates, schedule and project priorities, and sizing assumptions for recommended projects to address each of these CSOs.

Figure 1 shows the approximate locations of the nine CSO control projects included in the LTCP as well as the four "Beach" CSO projects, consisting of North Beach, South Magnolia, Murray, and Barton, which were underway prior to the LTCP development. Except as noted for South Magnolia, the Beach projects have been completed and are operating. The Rainier Valley Wet Weather Storage Project achieved substantial completion on June 9, 2018, and is ready for

operations, which will be monitored to ensure that it achieves the required regulatory performance standard for the next year. Construction on the Georgetown Wet Weather Treatment Station began in January 2018 and is expected to be completed in early 2022. As allowed in the 2013 Consent Decree, the County is evaluating the use of green stormwater infrastructure for the sizing of facilities for the CSOs at University and Montlake.

Projected CSO expenditures have been included in Table 12—“Capital Improvement Plan—Projected Expenditures” and total \$669 million for the period 2018 through 2024. Expenditures for the two largest projects currently in design and construction are \$189.0 million for Georgetown and \$120.1 million for the Joint Project.

FIGURE 1: CURRENT AND FUTURE PROJECTS OF THE CSO SYSTEM



Diagram is not to scale.

Source: King County Wastewater Treatment Division

Capital Improvement Plan

As shown in Table 12, the Sewer System's CIP for the period 2018-2024 includes three distinct elements. In addition to CSO control and CSI projects, the Sewer System expects to spend significant amounts annually for other capital improvements and the replacement of existing assets pursuant to its capital asset management plans.

TABLE 12
CAPITAL IMPROVEMENT PLAN—PROJECTED EXPENDITURES⁽¹⁾
(\$000)

Year	RWSP		Other Improvements and	Total
	CSO	CSI	Asset Management	
2018	\$ 80,457	\$ 55,440	\$ 75,237	\$ 211,135
2019	79,179	30,614	109,741	219,535
2020	106,600	35,311	123,706	265,617
2021	118,618	39,153	111,168	268,939
2022	119,074	60,960	97,468	277,503
2023	95,003	62,218	110,735	267,956
2024	70,224	42,622	104,459	217,305
Total	\$ 669,156	\$ 326,319	\$ 732,514	\$ 1,727,989

(1) Expenditures in 2018-2024 are in nominal dollars. The capital expenditures shown above were used to develop projected Sewer Rates and the projections shown in Table 10—"Projected Financial Statements" and are based on an expected accomplishment rate of 86% of total budgeted expenditures for the period.

Note: totals may not add due to rounding.

Source: King County Wastewater Treatment Division

Future Sewer System Financing Plans

The current financial plan for the Sewer System projects that approximately 42% of the CIP will be funded from Net Revenue from 2019 through 2024. It also anticipates the issuance of approximately \$799 million of additional debt (excluding the Bonds) to fund the CIP: \$737 million of additional Parity Bonds (including draws on the WIFIA Bond described below), \$36 million of additional variable rate Junior Lien Obligations, and \$25 million from loan commitments received from Ecology which are expected to be executed in the second quarter of 2019. Offsetting this anticipated issuance of \$799 million of additional debt are scheduled principal payments on outstanding obligations and the Bonds of \$618 million.

Other than such new money issuances and draws on the WIFIA Bond described below, when and if market conditions allow refunding of any outstanding bonds for the purpose of realizing debt service savings, the County may issue additional obligations to pursue such refundings.

WIFIA Bond. On April 19, 2018, the County entered into a WIFIA Loan Agreement for up to \$134.5 million (the "WIFIA Loan") with EPA (the "WIFIA Lender") to provide financing for the Georgetown Wet Weather Treatment Station. The WIFIA Loan is evidenced by the County's Sewer Revenue Bond, 2018 (WIFIA—N17107WA) (the "WIFIA Bond").

The WIFIA Bond is available to be drawn from time to time in an aggregate principal amount not to exceed \$134.5 million solely to pay project costs for the Georgetown Wet Weather Treatment Station. The County expects to draw on the WIFIA Bond in 2020 and 2021. No draws are permitted after the date that is one year after substantial completion of the project, which is estimated to occur at the end of 2022. The WIFIA Bond has a final maturity date of January 1, 2051, unless earlier paid, with principal payment dates beginning on January 1, 2033. Amounts drawn bear interest at a fixed rate of 3.06%, except as described below. The WIFIA Bond is subject to prepayment at the option of the County at any time at par plus accrued interest to the date of prepayment.

The WIFIA Bond is a Parity Bond, entitled to all of the benefits of a Parity Bond, and payable solely from Net System Revenues and amounts in the Parity Bond Fund. In addition, draws on the WIFIA Bond are subject to conditions precedent (such as minimum ratings, no material adverse effect, and no default requirements). The County has covenanted for the benefit of the WIFIA Lender to engage a professional utility consultant to review and analyze the operations of the System and make recommendations in certain circumstances. The County has further agreed to apply project insurance in the event of a loss to repair or replace the project and, in some circumstances, to prepay the WIFIA Bond. If an event of default has occurred and is continuing, WIFIA Lender consent is required for the issuance of additional bonds payable from System revenues. The County has agreed not to provide holders of Parity Bond obligations with the right to accelerate such obligations, or require mandatory prepayment in full of such obligations, unless the WIFIA Lender is provided the same rights with respect to the WIFIA Loan. The County also has agreed not to adopt any supplemental ordinances that amend the pledge of revenues, the priority of payment, the rate covenant, or the requirements for future parity bonds without WIFIA Lender consent. Events of default under the WIFIA Loan include payment defaults, covenant and misrepresentation defaults, the acceleration of any Parity Bond obligations, cross default of any Parity Bond obligation, materially adverse judgments, failure to maintain existence, the occurrence of a bankruptcy-related event, project defaults, and invalidity. Remedies include suspension or termination of rights to draw on the WIFIA Bond, mandamus and suspension and disbarment from federal programs in addition to the rights and remedies of Parity Bond owners. In the event of a payment default or project abandonment, the default interest rate applies.

Environmental Regulation

Federal Clean Water Act. The Clean Water Act requires that discharges of pollutants be permitted under the NPDES program administered by EPA, which has delegated to Ecology authority to administer NPDES permits in Washington. The NPDES permits cover the treatment plants, their conveyance systems, and related CSO facilities and extend for a period of five years. The status of these permits is shown below:

TABLE 13
NPDES PERMITS

Facility	Expiration Date
Brightwater	February 2023
Brightwater-Reclaimed Water	July 2016
Carnation (Includes Reclaimed Water)	December 2018
South Plant	July 2020
Vashon	February 2022
West Point	January 2020

Source: King County Wastewater Treatment Division

In February 2018, the Brightwater permit was renewed with secondary treatment effluent limits and requirements that generally remained the same as in the previous permit. A final permit for Brightwater-Reclaimed Water is expected by the end of 2018; under Ecology’s administrative rules, the current permit is extended until such time as the renewal process is completed. The Carnation permit is in the process of being renewed; no significant changes are expected.

All five of the regional wastewater treatment plants have met their permit effluent limits through October 26, 2018.

The South Plant, Vashon, and Carnation treatment plants met their permit limits in the period 2013 through 2017. Brightwater, which began discharging into Puget Sound in November 2012, routinely complies with its effluent limitations; however, the effluent failed to meet the minimum pH level for several hours on one day in 2014, and chlorine levels exceeded the permitted maximum for the week of October 9, 2016. West Point, in addition to what is described under “West Point Flooding Accident,” had two other exceptions for exceeding the weekly average limit for effluent total suspended solids concentration. In late October 2017, a failed flap gate located at a relief point in the collection system resulted in exceedances of a weekly effluent limit in October and November 2017. Replacement of the flap gate was completed in December 2017.

Nutrient Removal Standards. The reduction of nutrient discharges from point and non-point sources has been identified as a major policy initiative by Ecology, EPA, and the Puget Sound Partnership’s Action Agenda for Puget Sound (a National Estuary Program). A significant number of water bodies nationwide, including some Puget Sound locations, experience low dissolved oxygen that at times fails to meet water quality standards. In early 2017, Ecology launched the Puget Sound Nutrient Source Reduction Project (the “Nutrient Reduction Project”) aimed at reducing sources of nutrient loads that are contributing to decreased dissolved oxygen in Puget Sound. The Nutrient Reduction Project is a multi-year undertaking and will involve collaboration between many stakeholders, including the County, to both understand the impacts of nutrients on Puget Sound and develop strategies to manage the problem. By early 2019, the Nutrient Reduction Project expects to have completed a baseline assessment and problem definition and modeling of nutrient levels in Puget Sound. By late 2021, through a collaborative process of stakeholder coordination and modeling, Ecology expects to develop its nutrient reduction plan.

If the result of the Nutrient Reduction Project indicates that County treatment plants cause or contribute to water quality impairment, the County may be required to identify how nitrogen levels in treatment plant effluent can be reduced. It is anticipated that a significant period of time will be

required to develop and promulgate regulations based on, and implement actions identified in, the Nutrient Reduction Project.

Superfund Liability. The Comprehensive Environmental Response, Compensation and Liability Act of 1980 created the federal Superfund, the program administered by EPA that addresses abandoned hazardous waste sites. The two basic kinds of liability described under the Superfund law are liability related to historic contamination and liability related to damages to natural resource values.

In 2001, EPA listed the Lower Duwamish Waterway south of downtown Seattle as a Superfund site. EPA issued an administrative order that required the County, Seattle, the Boeing Company, and the Port of Seattle to conduct studies to determine the nature and extent of contamination in the Lower Duwamish Waterway. The County and the other three parties agreed with EPA to amend the administrative order on a number of occasions to conduct additional studies, and are in the process of negotiating a further amendment to design the remedy for one portion of the river. The Feasibility Study, which discusses the remediation alternatives, has been issued in final form by EPA. EPA issued a Record of Decision (“ROD”) in the latter part of 2014. The ROD contains EPA’s final plan for cleanup of the Lower Duwamish Waterway. In the ROD, EPA provided an order-of-magnitude engineering cost estimate of \$395 million (in 2011 dollars) for the total clean-up costs (capital and operating) for the entire project with a range for actual costs of between 30% lower and 50% greater. EPA estimated that there would be seven years of active clean-up and ten or more years of monitoring.

The County and a number of other parties are participating in an alternative dispute resolution process, called an allocation, to determine shares of liability for the costs of the cleanup. If parties that participate in the allocation accept their allotted shares, they then expect to enter into a settlement agreement and to negotiate a consent decree with EPA to implement the cleanup. Since the parties do not yet know their shares of cleanup costs and no consent decree has been negotiated with EPA, the County is unable to determine the schedule or cost of any remediation. In addition, the County is unable to determine the extent to which the County and WTD will be responsible for the cost of such remediation. Under the terms of the resolution process, the County anticipates that its share of ongoing costs is likely to be reduced for the portion of costs it has incurred and will continue to incur through the date that a settlement agreement becomes effective.

The County has participated in discussions with the National Oceanic and Atmospheric Administration (“NOAA”) regarding alleged natural resource damages (“NRD”) in the Lower Duwamish Waterway and around Harbor Island. These discussions have included NOAA’s determination that the County may be a potentially liable party that has contributed to the release of hazardous substances that have injured natural resources. NOAA notified the County in February 2016 that the Natural Resources Trustees will proceed with an NRD assessment and invited the County to participate in the development of the assessment. The County notified NOAA in March 2016 that the County desires to conduct settlement discussions with NOAA regarding the NRD liability that NOAA attributes to the County. The County’s intent in past discussions with NOAA has been to minimize the County’s alleged liability relative to the other liable parties. The County will maintain that intent in future discussions with NOAA.

Further information regarding existing and potential environmental remediation liabilities is contained in Appendix C—King County Water Quality Enterprise Fund 2017 Audited Financial Statements—Notes 7 and 12.

Endangered Species Act. The federal Endangered Species Act (“ESA”) includes requirements that the County consult with the National Marine Fisheries Service or the United States Fish and Wildlife Service (together, the “Services”) about Sewer System capital projects that receive federal funding or federal permits. Since Chinook salmon from rivers and streams flowing into Puget Sound were listed as threatened in 1999, the consultation process has changed significantly and become more complicated, time-consuming, and expensive.

Initially, the County sought to obtain long-term programmatic agreements with the Services covering ESA compliance for all Sewer System capital projects. After more than five years spent pursuing these long-term programmatic agreements, the County determined that completing ESA consultations on individual projects was preferable to pursuing long-term programmatic agreements such as a habitat conservation plan or programmatic biological assessment. Since that time other species have also been listed as threatened. The County continues to comply with ESA through the traditional consultation process on a project-by-project basis.

The orca population in Puget Sound was placed on the list of endangered species in 2005. The Southern Resident Killer Whale Task Force (“Task Force”) convened by Governor Jay Inslee issued its draft recommendations on October 24, 2018, which included recommendations for public review and comment. A report with recommendations is expected on November 16, 2018. The Task Force will continue its work in 2019 which will include discussing additional potential actions relating to habitat, salmon hatcheries, salmon harvest, hydropower, vessels, and contaminants, including actions that could be potentially controlled by wastewater treatment facilities. A final report from the Task Force is due October 1, 2019.

The October draft recommendations include two recommendations of note. Recommendation 25 directs Ecology to (i) develop a list of chemicals of emerging concern (“CECs”) that threaten the health of orcas and their prey by March 2019 and pursue policy requests in the 2019 legislative session to prevent the use and release of CECs into Puget Sound; and (ii) convene discussions and develop a plan to address pharmaceuticals, identifying priorities, source control, and wastewater treatment methods. Recommendation 27 directs Ecology to use its existing authority to update aquatic life water quality standards in the NPDES permits for wastewater treatment facilities through improved industrial pretreatment and deployment of improved treatment technologies. At this time, the County cannot predict the impact on its operations of any changes in its NPDES permits that Ecology may initiate based on recommendations made by the Task Force.

Revisions to State Water Quality Standards. On November 15, 2016, EPA published in the Federal Register a final rule for human health water quality criteria applicable to the State that incorporates a combination of Ecology and EPA criteria. The rule sets applicable human health standards to adequately protect State residents from exposure to toxic pollutants. The adopted water quality standards include substantial revisions to previous assumptions, including the fish consumption rate used in the criteria derivation process used to calculate the criterion for each regulated contaminant. These newly adopted criteria are more stringent than the previously version of the State’s applicable human health water quality standards. The Sewer System’s secondary and CSO treatment facilities must operate in compliance with all standards that apply to those discharges. The County continues to monitor Ecology’s implementation of the new water quality standards and the potential effects of any proposed changes on effluent limitations of the Sewer System’s discharges. The NPDES permits for both the Vashon and Brightwater treatment plants were

renewed in consideration of the revised human health criteria and resulted in no changes to the effluent limitations for these facilities.

Earthquakes and Climate Change

The Sewer System is located above or near a number of geological faults capable of generating significant earthquakes. The Puget Sound region is characterized by geotechnical conditions that could result in areas of liquefaction and landslide in an earthquake. In anticipation of such potential disasters, the County designs and constructs Sewer System facilities to the seismic codes in effect at the time the projects are designed. Although the County has implemented disaster preparedness plans, there can be no assurance that these or any additional measures will be adequate in the event a natural disaster occurs, nor that costs of preparedness measures will be as currently anticipated. Damage to components of the Sewer System could cause a material increase in costs for repairs and a material adverse impact on Revenue of the System. The County is not obligated under the Bond Ordinance to maintain earthquake insurance on the Sewer System, and the County does not now and does not plan to maintain earthquake insurance sufficient to replace all components of the Sewer System.

Rising sea levels and changing regional rainfall patterns, such as an increase in winter rainstorm frequency or intensity, are potential climate change impacts for the Sewer System. See “—West Point Flooding Accident.” Sea level rise has been incorporated as a factor in the siting and planning of new facilities since 2008, when WTD evaluated the potential for sea level rise to flood existing coastal facilities and found that the risk of flooding at WTD facilities is expected to remain low until at least after 2050.

WTD and WLRD contracted with researchers at the University of Washington to develop new projections for precipitation in the region. Results from the May 2018 report show the potential for large increases in future rain intensity, but with results differing substantially among seasons and across climate scenarios. WTD staff will be using the results of this research to complete studies in 2019 that will model the possible impacts of these changes on wastewater conveyance and treatment.

Strategic Climate Action Plan

In 2015, the County updated its existing Strategic Climate Action Plan (“SCAP”) and strengthened initiatives to reduce greenhouse gas (“GHG”) emissions and prepare for the impacts of climate change in County operations and throughout the community. The goals of the SCAP are to increase the use and efficiency of transit, provide land use planning and community design supporting transportation choices, reduce non-renewable energy use and increase production of renewable energy, support healthy and productive farms and forests, minimize consumption and waste of materials, and safeguard facilities and infrastructure from anticipated environmental change. The SCAP requires County divisions to analyze capital improvement projects for opportunities to reduce energy use and GHG emissions and to incorporate building efficiency standards into capital improvement planning.

In furtherance of the SCAP, the County required WTD to achieve carbon neutrality in its operations by 2025. WTD has estimated that, as of 2017, 64% of its total GHG emissions were being offset through the application of biosolids as a soil amendment on farms and forests (which stores carbon in the soil, promotes plant growth that further removes carbon from the atmosphere, and replaces commercial fertilizer that is fossil-fuel intensive to produce). The fuel mix of WTD’s

energy suppliers has a significant impact on the quantity of WTD's GHG emissions. Based on emissions data from its energy suppliers, WTD estimates that, due to the emissions offset by the land application of biosolids as well as its tree planting efforts, WTD has been carbon-neutral since 2016. In 2017 and 2018, WTD paid WLRD for tree planting and tree maintenance to offset additional emissions. In 2017, WTD offset 22,960 metric tons of carbon dioxide equivalent. The 2018 offset is still to be determined.

WTD's proposed biennium budget for 2019 and 2020 includes \$1.0 million of capital projects to reduce GHG emissions associated with transporting biosolids by optimizing truck fleet routes. Another \$3.0 million will be used to support two projects that will help meet green building goals in the SCAP for initiating, across all County departments, ten Living Building Challenge (a green building certification program) projects by 2020.

As stated in "Management Discussion of 2017 Sewer Revenue Financial Results," WTD has a five-year contract to sell RINs (the environmental attributes of bio-methane gas) to IGI Resources, Inc. WTD expects to use RINs revenue to fund projects that increase energy efficiency or further reduce WTD's GHG emissions. Example projects include optimizing the use of biogas at the West Point Treatment Plant by adding an additional cogeneration engine and adding solar panels to the Georgetown Wet Weather Treatment Station currently under construction.

Beginning in January 2019, electric energy requirements for the South Plant and other WTD facilities in the service territory of Puget Sound Energy will be provided under a ten-year contract for green energy from a wind facility in western Washington. The cost of these purchases has been included as operating expenses in the "Projected Financial Statements" herein.

WTD evaluates the energy savings and GHG emission reductions from changes in its operations and its capital improvement program and is identifying programs and projects that are needed to achieve carbon neutrality by 2025. Although the costs of current carbon reduction initiatives are reflected in the CIP, additional costs that may be incurred to achieve carbon neutrality by 2025 cannot be determined at this time.

KING COUNTY

General

As a general purpose government, the County provides roads, solid waste disposal, flood control, certain airport facilities, public health and other human services, park and recreation facilities, courts, law enforcement, agricultural services, property tax assessment and collection, fire inspection, planning, zoning, animal control, and criminal detention and rehabilitative services. In addition, with its assumption of the Municipality of Metropolitan Seattle in 1994, the County provides transit and wastewater treatment services (collectively, the "metropolitan functions"). Certain of these services are provided on a County-wide basis and certain others only to unincorporated areas or by intergovernmental contract.

Organization of the County

The County is organized under the executive-council form of government and operates under a Home Rule Charter adopted by a vote of the electorate in 1968. The County Executive, the

members of the County Council, the Prosecuting Attorney, the County Assessor (the “Assessor”), the Director of Elections, and the Sheriff are all elected to four-year terms.

County Executive. The County Executive serves as the chief executive officer of the County. The County Executive presents to the County Council annual statements of the financial and governmental affairs of the County, budgets, and capital improvement plans. The County Executive signs, or causes to be signed on behalf of the County, all deeds, contracts, and other instruments. All County employees report to the County Executive except those appointed by the County Council, Superior and District Courts, Prosecuting Attorney, Assessor, Director of Elections, or Sheriff.

County Council. The County Council is the policy-making legislative body of the County. The nine Councilmembers are elected by district to four-year staggered terms and serve on a full-time basis. The County Council sets tax levies, makes appropriations, and adopts and approves the operating and capital budgets for the County.

Superior and District Courts. The State Constitution provides for county superior courts as the courts of general jurisdiction. The County currently has 53 superior court judges who are elected to four-year terms and 21 district court judges who are elected to four-year terms.

County’s Budget Process

Revenue forecasts are developed by the County’s independent Office of Economic and Financial Analysis and submitted to the King County Forecast Council for approval. The Forecast Council consists of the County Executive, two Councilmembers, and the Director of the Office of Performance, Strategy and Budget.

The County’s Office of Performance, Strategy and Budget, under the direction of the County Executive, is responsible for (i) preparation and management of the operating and capital budgets, (ii) expenditure and revenue policy, and (iii) planning and growth management. Since the 2015/2016 biennium, the County has implemented the adoption of biennial budgets for all agencies.

These budgets must be presented to the County Council on or before September 27 of each year. The County Council holds public hearings and may increase or decrease proposed appropriations. Any changes in the budget must be within the revenues and reserves estimated as available, or the revenue estimates must be changed by an affirmative vote of at least six Councilmembers. The County Executive has general and line-item veto power over appropriation ordinances approved by the County Council. Each appropriation ordinance establishes a budgeted level of authorized expenditures that may not be exceeded without County Council approval of supplemental appropriation ordinances. The County Executive, within the restrictions of any provisos of the appropriation ordinances, may establish and amend line-item budgets as long as the total budget for each appropriation unit does not exceed the budgeted level of authorized expenditures. By an affirmative vote of at least six Councilmembers, the County Council may override any general or line-item veto by the County Executive.

Finance and Business Operations Division

The Finance and Business Operations Division includes five sections. The Treasury Operations Section manages the receipt and investment of assigned revenues due to the County or to other

agencies for which the section performs the duties of treasurer and is responsible for the issuance and administration of the County's debt. The Financial Management Section is responsible for the accounting and disbursing of assigned public funds. The other sections are responsible for administering the County's payroll and benefits and for managing the County's procurement and contracting practices.

Auditing

Legal compliance and fiscal audits of all County agencies are conducted by examiners from the State Auditor's office. The County is audited annually. The most recent State Auditor's Report is for the year ended December 31, 2017, and is incorporated into the County's Comprehensive Annual Financial Report ("CAFR") for 2017.

The County's 2017 CAFR in its entirety may be accessed on the internet at the following link:

<https://www.kingcounty.gov/depts/finance-business-operations/financial-management/CAFR.aspx>

or obtained from the Financial Management Section at the King County Finance and Business Operations Division, 500 Fourth Avenue, Room 600, Seattle, Washington 98104.

The financial statements of the Water Quality Enterprise Fund as of and for the fiscal year ended December 31, 2017, included herein as Appendix C, have been audited by Moss Adams LLP, independent auditors, as stated in its report appearing therein. The County has not requested that Moss Adams LLP provide permission for inclusion of its report on the audited financial statements included in this Official Statement, and Moss Adams LLP has not performed, since the date of its report included therein, any procedures on the financial statements addressed in that report. Further, Moss Adams LLP has not participated in any way in the preparation or review of this Official Statement.

King County Investment Pool

The Investment Pool invests cash reserves for all County agencies and approximately 100 other public entities such as fire, school, sewer, and water districts. It is one of the largest investment pools in the State, with an average asset balance of more than \$6.7 billion during 2017. Assets of County agencies in 2017 comprised between 40% and 45% of the Investment Pool.

The Executive Finance Committee establishes the County's investment policy and oversees the portfolio to ensure that specific holdings comply with both the investment policy and State law. The Investment Pool is allowed to invest only in certain types of highly-rated securities, including certificates of deposit, U.S. Treasury obligations, federal agency obligations, municipal obligations, repurchase agreements, bankers' acceptances, corporate notes, and commercial paper. A summary of the current investment policy is attached as Appendix D.

The County has commissioned an outside financial consultant, Public Financial Management ("PFM"), to conduct quarterly reviews of all assets in the Investment Pool. In its most recent assessment, as of September 30, 2018, PFM concluded that "the County's Investment Pool appears to provide ample liquidity, is well diversified, and is of sound credit quality." The most recent portfolio review can be obtained at the following website:

<https://kingcounty.gov/depts/finance-business-operations/treasury/investment-pool.aspx>

County Employees

The number of full- and part-time employees of the County at year-end is shown below:

TABLE 14
COUNTY EMPLOYEES

Year	Full-time	Part-time
2013	13,540	894
2014	13,319	866
2015	13,614	929
2016	13,821	883
2017	14,395	872

Source: King County Finance and Business Operations Division—Benefits, Payroll, and Retirement Operations Section

The County's Office of Labor Relations negotiates, implements, and administers 81 collective bargaining agreements with 33 unions covering the terms of employment for the County's approximately 12,000 represented employees.

A two-year agreement with a coalition of County unions from January 1, 2017, through December 31, 2018, covered the majority of labor contracts and a total of 5,900 employees (approximately 45% of total employees). The agreement called for a fixed cost-of-living wage increase of 2.25% in 2017 and 3.25% in 2018. A majority of other unions not part of the coalition agreed to similar, generally slightly lower, terms.

Although not yet ratified by either party, a tentative agreement has been reached with the same coalition of unions that calls for a 4.00% wage increase for 2019 and for two subsequent increases of 1.50% each on January 1, 2020, and July 1, 2020, respectively.

Negotiations with other unions not part of the coalition are ongoing. The County is still in negotiations with two of the larger unions in the County, the Police Officers Guild, and the King County Corrections Guild.

The Amalgamated Transit Union (the "ATU"), the largest union in the County, representing approximately 4,200 employees, has a three-year agreement which calls for a 2% wage increase in 2017, a 3% increase in 2018, and a 4% increase in 2019.

Aside from the negotiation of a new ATU agreement in 2019, no major and very few minor agreements have been set for the 2019-2020 biennium.

All ratified agreements are submitted to the County Council for adoption.

There have been no strikes or work stoppages by County employees during the last ten years.

Retirement Systems

Substantially all full-time and qualifying part-time employees of the County are covered by one of the following retirement systems:

**TABLE 15
RETIREMENT SYSTEMS**

Number of Employees As of December 31, 2017	Retirement System
12,776	State of Washington—Public Employees Retirement System (“PERS”)
793	State of Washington—Law Enforcement Officers and Fire Fighters Retirement System (“LEOFF”)
422	State of Washington—Public Safety Employees Retirement System (“PSERS”)

Source: King County Finance and Business Operations Division—Benefits, Payroll, and Retirement Operations Section

These retirement systems are State-wide governmental cost-sharing, multiple-employer retirement systems administered by the State’s Department of Retirement Systems (“WSDRS”). The County administers payroll deductions and remits the deductions together with County contributions to the respective retirement systems annually.

**TABLE 16
OVERVIEW OF RETIREMENT PLANS**

Retirement System/Plan	Benefit Type	Plan Status
PERS - Plan 1	Defined Benefit	Closed in 1977
PERS - Plan 2	Defined Benefit	Open
PERS - Plan 3	Defined Benefit/Defined Contribution Hybrid	Open
LEOFF - Plan 1	Defined Benefit	Closed in 1977
LEOFF - Plan 2	Defined Benefit	Open
PSERS - Plan 2	Defined Benefit	Open

Source: State Department of Retirement Systems

In addition to these programs, approximately 36 County employees who were employees of Seattle’s Health Department and Seattle Transit, both of which were taken over by the County, participate in the Seattle City Employees Retirement System Plan 1.

In 2012, GASB approved Statement Nos. 67 and 68 (“GASB 67” and “GASB 68,” respectively), which modify the accounting and financial reporting of pensions by state and local governments and pension plans. GASB 67, Financial Reporting for Pension Plans, addresses financial reporting for state and local government pension plans. GASB 68, Accounting and Financial Reporting for Pensions, established new accounting and financial reporting requirements for governments that provide their employees with pensions. The guidance contained in these statements changed how governments calculate and report the costs and obligations associated with pensions. The

WSDRS-administered plans are subject to GASB 67; the County is subject to GASB 68. GASB 67 was effective in Fiscal Year 2014; GASB 68 was effective in Fiscal Year 2015.

Each biennium, the State establishes contribution rates for the WSDRS-administered retirement plans. The actuarial assumptions used in the most recent rate calculations are summarized in Table 17.

TABLE 17
ACTUARIAL ASSUMPTIONS FOR FUNDING CALCULATIONS

Investment return	7.50% ⁽¹⁾
General salary increases	3.50
Consumer Price Index increase	2.75
Annual growth in membership	0.95

(1) Assumed rate of 7.40% for LEOFF Plan 2.

Source: 2017 Actuarial Valuation Report from the Office of the State Actuary

The County's employer and employee contribution rates and contribution amounts for all WSDRS-administered plans for the fiscal year ended December 31, 2017, and current contribution rates for 2018 are shown in Table 18.

TABLE 18
COUNTY CONTRIBUTION RATES AND AMOUNTS

	PERS Plan 1	PERS Plan 2	PERS Plan 3	LEOFF Plan 1	LEOFF Plan 2	PSERS Plan 2
2017						
Average Employer Contribution Rate (%)	11.94 ⁽¹⁾	11.94 ⁽¹⁾	11.94 ⁽¹⁾	0.18 ⁽¹⁾⁽²⁾	5.33 ⁽¹⁾⁽²⁾	11.64 ⁽¹⁾
Average Employee Contribution Rate (%)	6.00 ⁽³⁾	6.79 ⁽³⁾	Varies ⁽³⁾⁽⁴⁾	0.00	8.58	6.60
Employer Contribution Amount (\$000)	1,738	103,471	19,806	-	4,956	4,316
Employee Contribution Amount (\$000)	894	58,802	11,601	-	7,978	2,448
Total Contribution Amount (\$000)	2,632	162,273	31,408	-	12,935	6,764
2018 (Current)						
Employer Contribution Rate (%)	12.83 ⁽¹⁾	12.83 ⁽¹⁾	12.83 ⁽¹⁾	0.18 ⁽¹⁾⁽²⁾	5.43 ⁽¹⁾⁽²⁾	12.38 ⁽¹⁾
Employee Contribution Rate (%)	6.00 ⁽³⁾	7.41 ⁽³⁾	Varies ⁽³⁾⁽⁴⁾	0.00	8.75	7.07

(1) The employer contribution rate includes an employer administrative expense fee of 0.18%.

(2) The State contributed an additional 3.36% in 2016 and 3.50% in 2017.

(3) Under the Judicial Benefit Multiplier Program, County judges participating in PERS Plans 1, 2, and 3 may pay higher employee rates in exchange for enhanced benefits.

(4) The employee contributions to PERS Plan 3, which may range between 5% and 15% of employees' compensation, are paid into a defined contribution plan rather than funding a defined retirement benefit.

Sources: King County Finance and Business Operations Division—Financial Management Section and WSDRS

Under State statute, contribution rates for WSDRS-administered plans are adopted by the State Pension Funding Council ("PFC") (and, for LEOFF 2, by the LEOFF 2 Board) in even-numbered years for the next ensuing State biennium. The rate-setting process begins with an actuarial valuation by the Office of the State Actuary, which makes non-binding recommendations to the

Select Committee on Pension Policy, which then recommends contribution rates to the PFC and the LEOFF 2 Board. No later than the end of July in even-numbered years, the PFC and LEOFF 2 Board adopt contribution rates, which are subject to revision by the State Legislature. The County has met its funding obligations to these systems when they have come due. While the County's contributions represent its full statutorily required contribution to the retirement systems, any unfunded pension benefit obligations could be reflected in future years as higher contribution rates.

To calculate the funded status, the WSDRS-administered plans compare the Actuarial Value of Assets ("AVA") to the Entry Age Normal ("EAN") liabilities. The EAN cost method projects future benefits under the plans, using salary growth and other assumptions, and applies the service that has been earned as of the valuation date to determine accrued liabilities. The AVA is calculated using a methodology that smooths the effect of short-term volatility in the Market Value of Assets ("MVA") by deferring a portion of the annual investment gains or losses over a period of up to eight years. This helps limit fluctuations in contribution rates and funded status that would otherwise arise from short-term changes in the MVA. Additional information on this measure is provided in the 2017 Actuarial Valuation Report (published August 2018), which can be found on the Office of the State Actuary's website at:

<http://leg.wa.gov/osa/pensionfunding/Pages/Valuations.aspx>

Retirement System Funded Status. Information regarding the funded status from the most recent actuarial report for each WSDRS-administered plan (as of June 30, 2017) is shown in Table 19.

TABLE 19
RETIREMENT SYSTEM FUNDED STATUS⁽¹⁾
(\$000,000)

		2017 Actuarial	2017 Actuarial				
		Accrued	Valuation of	2017	2017 Funded	2016 Funded	2015 Funded
		Liability	Assets ⁽²⁾	UAAL ⁽³⁾	Ratio %	Ratio %	Ratio %
Plan	Status	(a)	(b)	(a-b)	(b/a)	(b/a)	(b/a)
PERS - Plan 1	Closed in 1977	\$ 12,341	\$ 7,042	5,299	57 %	56 %	58 %
PERS - Plan 2/3	Open	37,166	33,191	3,975	89	87	88
PSERS - Plan 2	Open	506	480	25	95	94	95
LEOFF - Plan 1	Closed in 1977	4,121	5,403	(1,282)	131	126	125
LEOFF - Plan 2	Open	10,160	11,037	(878)	109	105	105

(1) Reflects the full retirement systems, not the County's share of each system.

(2) Asset valuations incorporate the smoothing of investment gains and losses.

(3) Unfunded actuarial accrued liability. Totals may not agree due to rounding.

Source: 2017 Actuarial Valuation from the Office of the State Actuary

As shown in Table 19, the funded status on an actuarial basis for some plans is greater than 100%, while others are underfunded. Other than PERS Plans 2 and 3, assets from one plan may not be used to fund benefits for another plan. Retirement funds for the WSDRS-administered plans are invested by the Washington State Investment Board.

Table 20 shows historical investment returns for retirement funds held in the WSDRS-administered plans.

TABLE 20
HISTORICAL ONE-YEAR INVESTMENT RETURNS ON RETIREMENT FUNDS

<u>Year</u>	<u>Investment Return⁽¹⁾</u>
2009	-22.8%
2010	13.2
2011	21.1
2012	1.4
2013	12.4
2014	17.1
2015	4.9
2016	2.7
2017	13.4
2018	10.0

(1) As of June 30.

Source: Washington State Investment Board

The County implemented GASB 68 for the year 2015. In accordance with GASB 68, the County elected to use June 30, 2017, as the measurement date for reporting net pension liability. Table 21 represents the County's share of aggregate pension amounts for all pension plans subject to the requirements of GASB 68.

TABLE 21
AGGREGATE PENSION AMOUNTS—ALL WSDRS-ADMINISTERED PLANS, 2017
(\$000)

Pension liabilities	\$756,022
Pension assets	49,475
Deferred outflows of resources	115,425
Deferred inflows of resources	148,138
Pension expense/expenditures	49,237

Source: 2017 CAFR—Note 9

For more information on employee retirement plans, see the County's Water Quality Enterprise Fund 2017 Audited Financial Statements, attached as Appendix C, and the County's 2017 CAFR.

Other Post-Employment Benefits

The King County Health Plan (the "Health Plan") is a single-employer defined-benefit healthcare plan administered by the County. The Health Plan provides medical, prescription drug, vision, and other unreimbursed medical benefits to eligible retirees and employees. LEOFF Plan 1 retirees are not required to contribute to the Health Plan. Entry into LEOFF Plan 1 is now closed. All other retirees are required to pay the COBRA rate associated with the elected plan. The County's liability for other post-employment benefits ("OPEB") is limited to the direct Health Plan subsidy associated with LEOFF Plan 1 retirees and the implicit rate subsidy for other Health Plan retiree participants, which is the difference between (i) what retirees pay for their health insurance as a

result of being included with active employees for rate-setting purposes, and (ii) the estimated required premiums if their rates were set based on claims experience of the retirees as a group separate from active employees. For the fiscal year ended December 31, 2017, the County contributed an actuarially estimated \$5.9 million to the Health Plan. The County's contribution was entirely to fund “pay-as-you-go” costs under the Health Plan and not to prefund benefits. For the fiscal year ended December 31, 2017, the County’s annual OPEB cost (expense), which is calculated based on the annual required contribution of the County, was \$8.0 million and the County’s net OPEB obligation was \$73.0 million. The Health Plan liability is based on a computed annual required contribution that includes the current period’s service cost and an amount to amortize unfunded accrued liabilities.

For additional information regarding the County’s OPEB liability, see the County’s 2017 CAFR—Note 10.

Risk Management and Insurance

The County has a separate division that is responsible for claims handling, insurance, and loss control programs. The County has implemented a program of self-insurance to cover general and automobile liability, Health Department professional malpractice, police professionals, and public officials’ errors and omissions. The County has excess liability coverage that currently provides \$92.5 million in limits above a \$7.5 million per occurrence self-insured retention for Transit and \$6.5 million per occurrence self-insured retention for all other County agencies.

Insurance policies currently in force covering other major exposure areas are as follows:

**TABLE 22
INSURANCE POLICIES**

<u>COVERAGE</u>	<u>LIMITS</u>
Combined Property Damage and Extra Expense for covered County property (includes \$100 million earthquake and \$250 million flood)	\$750 million ⁽¹⁾
Stand-Alone Terrorism Insurance for covered County property (excluding the airport)	\$500 million
Airport Liability	\$300 million
Airport Property Damage and Extra Expense for covered airport property (includes \$50 million earthquake and \$100 million flood)	\$186 million
Fiduciary Liability	\$20 million
Crime Insurance/Employee Dishonesty	\$2.5 million
Aviation (Police Helicopter) Program	\$50 million
Excess Workers’ Compensation	Statutory above \$2 million deductible per occurrence
Marine Liability	\$150 million
Cyber Liability	\$30 million
Cedar Hill Pollution Legal Liability	\$50 million

(1) As of July 1, 2018.

The balance of current assets in the Insurance Fund was \$76.6 million as of December 31, 2017. The estimated liability for probable self-insurance losses (reported and unreported) recorded in the fund as of December 31, 2017, was \$75.0 million.

For additional information, see the County's 2017 CAFR—Note 11.

Emergency Management and Preparedness

The County's Office of Emergency Management ("OEM") is responsible for managing and coordinating the County's resources and responsibilities in dealing with all aspects of emergencies. It also provides regional leadership in developing operational and communication strategies among cities, tribes, private businesses, and other key stakeholders within the County. The OEM prepares for emergencies, trains County staff in emergency response, provides education to the community about emergency preparedness, plans for emergency recovery, and works to mitigate known hazards. It has identified and assessed many types of hazards that may impact the County, including geophysical hazards (e.g., earthquakes, seismic seiches, landslides, tsunamis, volcanic eruptions, and lahars), infectious disease outbreaks, intentional hazards (e.g., terrorism and civil disorder), transportation incidents, fires, hazardous materials, and unusual weather conditions (e.g., floods, snow, extreme temperatures, water shortages, and wind storms). However, the County cannot anticipate all potential hazards and their impacts on people, property, the environment, the local economy, and the County's finances.

OTHER CONSIDERATIONS

The purchase of the Bonds involves investment risk. Prospective purchasers of the Bonds should consider carefully all of the information set forth in this Official Statement, including its appendices, evaluate the investment considerations and merits of an investment in the Bonds, and confer with their own tax and financial advisors when considering a purchase of the Bonds.

The following section discusses some of the other factors affecting the County and the Bonds. The following discussion cannot, however, describe all of the factors that could affect the County and the Bonds. In addition to these known factors, other factors could affect the County and the Bonds.

Federal Budget and Sequestration

The County receives operating, health, public employment, and capital improvement grants from the federal government (either directly or indirectly through the State or local governmental agencies). In 2017, the County received an estimated \$100.0 million in federal grant revenue (67.0% of total 2017 grant revenue received by the County). These federal grant funds may be adversely impacted by federal legislative and executive actions, including to cuts to federal spending. Federal funding is subject to federal legislative action, including through the federal budget process.

Budgetary acts, including the sequestration provisions of the Budget Control Act of 2011 ("Sequestration"), could continue to affect the availability of federal funds. Sequestration has resulted in and is expected to continue to result in a reduction in the amount that the County expects to receive from the federal government in connection with interest payments on taxable bonds eligible for federal interest subsidies. Payments made by the federal government between

October 1, 2017, and September 30, 2018, were reduced by 6.6%, totaling approximately \$97,000. In September 2018, the Internal Revenue Service Office of Tax Exempt Bonds announced that the federal interest subsidy payments would be reduced by 6.2% for payments scheduled to be received between October 1, 2018, and September 30, 2019. The approximate amount of this reduction is \$87,000. Sequestration of such interest payments has been extended by Congress and is scheduled to remain in effect through federal fiscal year 2027.

Cybersecurity

The County, like many other large public and private entities, relies on a complex technology environment to conduct its operations and support the community it serves. The County has invested in cybersecurity protections in recent years that include staffing, a restructure of its security office, technology tools; and policies, standards, and processes. WTD has implemented cybersecurity measures including isolating its distributed control system (“DCS”) network from the corporate network and controlling access to the DCS network, using a variety of tools such as anti-virus clients, patch management, internal firewalls, and centrally managed policies and permissions. WTD has allocated up to \$1.2 million to a control system upgrade (scheduled to begin in 2019 for completion in 2020) to purchase additional software and hardware intended to further tighten security and identify and resolve potential threats. Notwithstanding these and other cybersecurity measures, a cybersecurity breach could damage County and WTD systems and cause material disruption to operations and services. The cost to remedy such damage or protect against future attacks could be substantial. Security breaches could expose the County to litigation and other legal risks, which could cause the County to incur costs related to legal or regulatory claims. Since 2015, the County has maintained cyber liability insurance to help offset these financial risks. See “King County—Risk Management and Insurance.”

INITIATIVES AND REFERENDA

Under the State Constitution, Washington voters may initiate legislation (either directly to the voters, or to the State Legislature and then, if not enacted, to the voters) and require the State Legislature to refer legislation to the voters through the power of referendum. Any law approved through the power of initiative by a majority of the voters may not be amended or repealed by the State Legislature within a period of two years following enactment, except by a vote of two-thirds of all the members elected to each house of the State Legislature. After two years, the law is subject to amendment or repeal by the State Legislature in the same manner as other laws. The State Constitution may not be amended by initiative.

Initiatives and referenda are submitted to the voters upon receipt of a petition signed by at least 8% (initiatives) and 4% (referenda) of the number of voters registered and voting for the office of Governor at the preceding regular gubernatorial election.

In recent years, several State-wide initiative petitions to repeal or reduce the growth of taxes and fees, including County taxes, have garnered sufficient signatures to reach the ballot. Some of those tax and fee initiative measures have been approved by the voters and, of those, some remain in effect while others have been invalidated by the courts. Tax and fee initiative measures continue to be filed, but it cannot be predicted whether any such initiatives might gain sufficient signatures to qualify for submission to the State Legislature and/or the voters or, if submitted, whether they ultimately would become law.

Under the County Charter, County voters may initiate County legislation, including modifications to existing legislation, and through referendum may prevent legislation passed by the County Council from becoming law. The referendum period for the Bond Ordinance has elapsed, and no referendum petition was filed. The County Charter also permits legislation to be proposed by cities in the County, provided that at least one half of the cities in the County support the proposal.

LEGAL INFORMATION

Litigation

There is no litigation pending questioning the validity of the Bonds or the power and authority of the County to issue the Bonds or seeking to enjoin the issuance of the Bonds.

The County, like other large units of state and local government, is involved in litigation on matters relating principally to claims arising from contracts, personal injury, property damage, tax claims, and other matters. For a general description of the types of non-tort claims in which the County is involved, see the County's 2017 CAFR—Note 19. Based on its past experience and the information currently known, the County does not believe that any pending litigation would materially adversely affect the ability of the County to pay when due the principal of or interest on the Bonds.

Approval of Counsel

Legal matters incident to the authorization, issuance, and sale of Bonds by the County are subject to the approving legal opinion of Pacifica Law Group LLP, Seattle, Washington, as Bond Counsel. The form of opinion of Bond Counsel is attached hereto as Appendix B.

Certain legal matters in connection with the preparation of this Official Statement will be passed upon for the County by Pacifica Law Group LLP as Disclosure Counsel to the County.

Potential Conflicts

Some or all of the fees of Bond Counsel/Disclosure Counsel and the Municipal Advisor are contingent upon the sale of the Bonds. From time to time, Bond Counsel/Disclosure Counsel serves as counsel to other parties involved with the Bonds with respect to transactions other than the issuance of the Bonds.

Limitations on Remedies and Municipal Bankruptcy

Any remedies available to the owners of the Bonds upon the occurrence and continuation of a default under the Bond Ordinance are in many respects dependent upon judicial actions, which are in turn often subject to discretion and delay and could be both expensive and time-consuming to obtain. If the County fails to comply with its covenants under the Bond Ordinance or to pay principal of or interest on the Bonds, there can be no assurance that available remedies will be adequate to fully protect the interests of the owners of the Bonds.

In addition to the limitations on remedies contained in the Bond Ordinance, the rights and obligations under the Bonds and the Bond Ordinance may be limited by and are subject to bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium, and other laws relating to or affecting creditors' rights, to the application of equitable principles, and to the exercise of judicial discretion in appropriate cases.

A municipality such as the County must be specifically authorized under state law in order to seek relief under Chapter 9 of the U.S. Bankruptcy Code (the “Bankruptcy Code”). Washington State law permits any “taxing district” (defined to include counties) to voluntarily petition for relief under a predecessor to the Bankruptcy Code. A creditor, however, cannot bring an involuntary bankruptcy proceeding under the Bankruptcy Code against a municipality, including the County. The federal bankruptcy courts have broad discretionary powers under the Bankruptcy Code.

Under Chapter 9, creditors secured by a pledge of “special revenues” are granted certain protections in cases brought by municipalities. The definition of “special revenues” includes “receipts derived from the ownership, operation, or disposition of projects or systems of the debtor that are primarily used or intended to be used primarily to provide transportation, utility, or other services, including the proceeds of borrowings to finance the projects or systems.” Under Chapter 9, the pledge of Revenue of the System is enforceable if a bankruptcy court determines that Revenue of the System is considered “special revenues” under Chapter 9 and that the pledge (in the form of a lien and charge) of Revenue of the System pursuant to the Bond Ordinance is valid and binding under Chapter 9.

Chapter 9 further provides that special revenues acquired by a debtor after the commencement of the bankruptcy case remain subject to any lien resulting from any security agreement entered into by the debtor before the commencement of the case, and that any such lien on special revenues (other than municipal betterment assessments) derived from a project or system are subject to the necessary operating expenses of such project or system.

Unless a debtor under Chapter 9 consents or the plan approved by the bankruptcy court so provides, the court may not interfere with (i) any of the political or governmental powers of the debtor, (ii) any of the property or revenues of the debtor, or (iii) the debtor’s use or enjoyment of any income-producing property.

Although State statute provides for a lien and charge against Revenue of the System to secure payment of the Bonds, no provision of State law provides for perfection of the lien under the Uniform Commercial Code of the State.

The opinion to be delivered by Pacifica Law Group LLP, as Bond Counsel, concurrently with the issuance of the Bonds, will be subject to limitations regarding bankruptcy, insolvency, reorganization, moratorium, and other similar laws affecting creditors’ rights, and also to the exercise of judicial discretion in accordance with general principles of equity. The form of legal opinion of Bond Counsel is attached as Appendix B.

TAX MATTERS

General

In the opinion of Bond Counsel, under existing law and subject to certain qualifications described below, interest on the Bonds is excludable from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the “Code”), and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. The proposed form of opinion of Bond Counsel with respect to the Bonds to be delivered on the date of issuance of the Bonds is set forth in Appendix B.

The Code contains a number of requirements that apply to the Bonds, and the County has made certain representations and has covenanted to comply with each such requirement. Bond Counsel's opinion assumes the accuracy of the representations made by the County and is subject to the condition that the County complies with the above-referenced covenants. If the County fails to comply with such covenants or if the County's representations are inaccurate or incomplete, interest on the Bonds could be included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds.

Except as expressly stated herein, Bond Counsel expresses no opinion regarding any tax consequences related to the ownership, sale or disposition of the Bonds, or the amount, accrual or receipt of interest on, the Bonds. Owners of the Bonds should consult their tax advisors regarding the applicability of any collateral tax consequences of owning the Bonds

Original Issue Premium and Discount

If the initial offering price to the public (excluding bond houses and brokers) at which a Bond is sold is less than the amount payable at maturity thereof, then such difference constitutes "original issue discount" for purposes of federal income taxes. If the initial offering price to the public (excluding bond houses and brokers) at which a Bond is sold is greater than the amount payable at maturity thereof, then such difference constitutes "original issue premium" for purposes of federal income taxes. De minimis original issue discount and original issue premium is disregarded.

Under the Code, original issue discount is treated as interest excluded from federal gross income to the extent properly allocable to each owner thereof subject to the limitations described in the first paragraph of this section. The original issue discount accrues over the term to maturity of the Bond on the basis of a constant interest rate compounded on each interest or principal payment date (with straight-line interpolations between compounding dates). The amount of original issue discount accruing during each period is added to the adjusted basis of such Bonds to determine taxable gain upon disposition (including sale, redemption, or payment on maturity) of such Bond. The Code contains certain provisions relating to the accrual of original issue discount in the case of purchasers of the Bonds who purchase the Bonds after the initial offering of a substantial amount of such maturity. Owners of such Bonds should consult their own tax advisors with respect to the tax consequences of ownership of Bonds with original issue discount, including the treatment of purchasers who do not purchase in the original offering, the allowance of a deduction for any loss on a sale or other disposition, and the treatment of accrued original issue discount on such Bonds under federal individual alternative minimum tax.

Under the Code, original issue premium is amortized on an annual basis over the term of the Bond (said term being the shorter of the Bond's maturity date or its call date). The amount of original issue premium amortized each year reduces the adjusted basis of the owner of the Bond for purposes of determining taxable gain or loss upon disposition. The amount of original issue premium on a Bond is amortized each year over the term to maturity of the Bond on the basis of a constant interest rate compounded on each interest or principal payment date (with straight-line interpolations between compounding dates). Amortized Bond premium is not deductible for federal income tax purposes. Owners of premium Bonds, including purchasers who do not purchase in the original offering, should consult their own tax advisors with respect to federal income tax consequences of owning such Bonds.

Post-Issuance Matters

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the County or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS.

Bond Counsel's engagement with respect to the Bonds ends with the issuance of the Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the County or the Owners regarding the tax-exempt status of the Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the County and its appointed counsel, including the Owners, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of Bonds is difficult, obtaining an independent review of IRS positions with which the County legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the Bonds, and may cause the County or the Owners to incur significant expense.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the Bonds to be subject, directly or indirectly, to federal income taxation, or otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals, clarification of the Code or court decisions may also affect the market price for, or marketability of, the Bonds. Prospective purchasers of the Bonds should consult their own tax advisors regarding any pending or proposed legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

Not Bank Qualified

The County has not designated the Bonds as "qualified tax-exempt obligations" within the meaning of Section 265(b)(3)(B) of the Tax Code.

CONTINUING DISCLOSURE UNDERTAKING

Annual Disclosure Report. The County agrees to provide or cause to be provided to the Municipal Securities Rulemaking Board ("MSRB") the following annual financial information and operating data for the prior fiscal year (collectively, the "Annual Financial Information"), commencing in 2019 for the fiscal year ended December 31, 2018:

- (i) annual financial statements of the County's Water Quality Enterprise Fund prepared in accordance with the Budget Accounting and Reporting System ("BARS") prescribed by the Washington State Auditor pursuant to RCW 43.09.200 (or any successor statutes) and generally of the type attached as Appendix C;
- (ii) the amount of outstanding Parity Bonds; and

- (iii) information regarding Customers, Revenue of the System, Operating and Maintenance Expenses, and debt service coverage, generally as set forth in Table 9—“Historical Financial Statements.”

Items (ii) and (iii) are required only to the extent that such information is not included in the annual financial statements.

The Annual Financial Information will be provided on or before the end of seven months after the end of the County’s fiscal year. The County’s fiscal year currently ends on December 31. The County may adjust such fiscal year by providing written notice of the change of fiscal year to the MSRB. In lieu of providing such Annual Financial Information, the County may make specific cross-reference to other documents available to the public on the MSRB’s internet website or filed with the SEC.

The County agrees to provide or cause to be provided to the MSRB, in a timely manner, notice of its failure to provide the Annual Financial Information on or prior to the date set forth above.

The annual financial statements provided as part of the Annual Financial Information described above may or may not be audited, except that if and when audited financial statements are otherwise prepared and available to the County, they will be provided to the MSRB.

Specified Events. The County agrees to provide or cause to be provided to the MSRB, in a timely manner not in excess of ten business days after the occurrence of the event, notice of the occurrence of any of the following specified events with respect to the Bonds:

- (i) principal and interest payment delinquencies;
- (ii) non-payment related defaults, if material;
- (iii) unscheduled draws on debt service reserves reflecting financial difficulties;
- (iv) unscheduled draws on credit enhancements reflecting financial difficulties;
- (v) substitution of credit or liquidity providers, or their failure to perform;
- (vi) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
- (vii) modifications to the rights of Bondholders, if material;
- (viii) Bond calls, if material, and tender offers;
- (ix) defeasances;
- (x) release, substitution, or sale of property securing repayment of the Bonds, if material;
- (xi) rating changes;
- (xii) bankruptcy, insolvency, receivership, or similar event of the County;
- (xiii) the consummation of a merger, consolidation, or acquisition involving the County or the sale of all or substantially all of the assets of the County, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action, or the

termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and

- (xiv) appointment of a successor or additional trustee or the change of name of a trustee, if material.

EMMA; Format for Filings with the MSRB. Until otherwise designated by the MSRB or the SEC, any information or notices submitted to the MSRB in compliance with Securities and Exchange Commission Rule 15c2-12 (“Rule 15c2-12”) are to be submitted through the MSRB’s Electronic Municipal Market Access system, currently located at www.emma.msrb.org. All notices, financial information, and operating data required by the undertaking to be provided to the MSRB must be in an electronic format as prescribed by the MSRB. All documents provided to the MSRB pursuant to the undertaking must be accompanied by identifying information as prescribed by the MSRB.

Termination/Modification of Undertaking. The County’s obligations to provide Annual Financial Information and notices of specified events will terminate upon the legal defeasance, prior redemption, or payment in full of all of the Bonds. The undertaking, or any provision thereof, will be null and void if the County (i) obtains an opinion of nationally recognized bond counsel to the effect that those portions of Rule 15c2-12 which require the undertaking, or any such provision, are invalid, have been repealed retroactively, or otherwise do not apply to the Bonds; and (ii) notifies the MSRB of such opinion and the cancellation of the undertaking.

The County may amend the undertaking, and any provision of the undertaking may be waived, in accordance with Rule 15c2-12, which, as currently interpreted by the SEC, requires that (i) the amendment or waiver be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature, or status of the County, or type of business conducted; (ii) the undertaking, as amended or waived, would have complied with the requirements of Rule 15c2-12 at the time of the primary offering, after taking into account any amendments or interpretations of Rule 15c2-12, as well as any change in circumstances; and (iii) the amendment or waiver does not materially impair the interests of holders of the Bonds, as determined either by parties unaffiliated with the County (such as Bond Counsel) or by the approving vote of holders of the Bonds pursuant to the terms of the Bond Ordinance.

In the event of any amendment or waiver of a provision of the undertaking, the County will describe such amendment or waiver in the next Annual Financial Information, and will include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the County. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (i) notice of such change will be given in the same manner as for a specified event under the caption “Specified Events” above, and (ii) the annual financial statements for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

Remedies Under the Undertaking. The right of any Bond owner or beneficial owner of Bonds to enforce the provisions of the undertaking will be limited to a right to obtain specific enforcement of the County’s obligations thereunder, and any failure by the County to comply with the

provisions of the undertaking will not be an event of default with respect to the Bonds. For purposes of the undertaking, “beneficial owner” means any person who has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds, including persons holding Bonds through nominees or depositories.

Prior Compliance. The County has entered into written undertakings under Rule 15c2-12 with respect to all of its obligations subject thereto. In reviewing its continuing disclosure filings on EMMA, the County notes the following. The County has undertaken to provide information regarding customers, revenues, and expenses of the Sewer System, as set forth in the table now titled “Historical Financial Statements” (Table 9) in connection with outstanding sewer revenue bonds and certain LTGO bonds payable from sewer revenues. Although the County provided the information on customers, revenues, and expenses of the Sewer System within its CAFR and Water Quality Financial Enterprise financial statements, it has not provided the full table as shown in its original disclosure. The County filed hotel/motel tax information for 2004-2013 on November 20, 2014, in connection with its Limited Tax General Obligation Refunding Bonds, 2007 Series A (which were defeased in May 2015). The County timely filed notice of the Fitch rating upgrade of certain LTGO bonds in April 2016. This notice was not linked to the County’s Limited Tax General Obligation Bonds, Series 2007D. Although the County annually timely filed its CAFRs for County-issued bonds, the 2013 CAFR was not linked and the 2012 CAFR was not timely linked to the CUSIPs for the Housing Authority of King County Revenue Bonds, 2008 (Greenbridge Redevelopment—Eastbridge Apartments Project). On September 20, 2017, the County filed notice on EMMA in connection with the foregoing items, and all CUSIPs have now been properly linked.

OTHER BOND INFORMATION

Ratings

The Bonds have been rated “Aa1” and “AA+” by Moody’s Investors Service and S&P Global Ratings, respectively. The ratings reflect only the views of the rating agencies, and an explanation of the significance of the ratings may be obtained from each rating agency. There is no assurance that the ratings will be retained for any given period of time or that the ratings will not be revised downward or withdrawn entirely by the rating agencies if, in their judgment, circumstances so warrant. Any such downward revision or withdrawal of the ratings will be likely to have an adverse effect on the market price of the Bonds.

Municipal Advisor

The County has retained Piper Jaffray & Co., Seattle, Washington, as municipal advisor (the “Municipal Advisor”) in connection with the preparation of the County’s financing plans and with respect to the authorization and issuance of the Bonds. The Municipal Advisor is not obligated to undertake and has not undertaken to make any independent verification or to assume responsibility for the accuracy, completeness, or fairness of the information contained in this Official Statement. The Municipal Advisor is a full service investment banking firm that provides financial advisory and underwriting services to state and local governmental entities. While under contract to the County, the Municipal Advisor may not participate in the underwriting of any County debt.

Purchaser of the Bonds

The Bonds are being purchased by J.P. Morgan Securities LLC (the “Purchaser”), at an aggregate price of \$142,339,714.50 (par of \$124,455,000.00 plus original issue premium of \$17,919,859.35 less an underwriter’s discount of \$35,144.85). After the initial public offering prices may be varied from time to time. The Purchaser has not audited, authenticated or otherwise verified the information set forth in this Official Statement or any other related information available to the University with respect to the accuracy and completeness of disclosure of such information, and no guaranty, warranty or other representation is made by the Purchaser respecting the accuracy and completeness of this Official Statement or any other matter related to this Official Statement.

Official Statement

All forecasts, estimates and other statements in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Official Statement is not intended to be construed as a contract or agreement between the County and the purchasers or holders of any of the Bonds.

At the time of the delivery of the Bonds, one or more officials of the County will furnish a certificate stating that, to the best knowledge and belief of such official(s) at the date of the Official Statement and as of the Issue Date, the Official Statement (as it may have been amended or supplemented prior to the Issue Date) did not and does not contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading (except that no representation or warranty will be made with respect to information in the Official Statement relating to DTC or DTC’s book-entry system).

The County has authorized the execution and delivery of this Official Statement.

KING COUNTY, WASHINGTON

By: _____ /s/ Ken Guy

Ken Guy
Director of Finance and Business Operations Division
Department of Executive Services

APPENDIX A
SUMMARY OF BOND ORDINANCE

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SUMMARY OF THE BOND ORDINANCE

Ordinance 18588 of the County (the “Bond Ordinance”), passed by the County Council on October 23, 2017, authorizes the issuance of Parity Bonds or Parity Lien Obligations in an aggregate principal amount not to exceed \$500,000,000 to provide funds for acquiring and constructing improvements to the Sewer System. The Bonds are an authorized series issued under the Bond Ordinance.

Certain provisions of the Bond Ordinance are summarized herein. Please refer to the Bond Ordinance for full and complete statements of those provisions and for other provisions relating to the Bonds. Copies of the Bond Ordinance are available on request to Piper Jaffray & Co., 1420 Fifth Avenue, Suite 1425, Seattle, Washington 98101, or to the Finance and Business Operations Division of the County.

Many of the capitalized words or phrases used in this summary and elsewhere in this Official Statement are defined in the Bond Ordinance. Certain of those definitions are summarized below.

Certain Definitions

“Accreted Value” means for any Parity Bonds that are Capital Appreciation Bonds, as of any date of calculation, the sum of the amounts set forth in the ordinance, resolution or motion authorizing such bonds as the amounts representing the initial principal amount of such bonds plus the interest accumulated, compounded and unpaid thereon as of the most recent compounding date, as provided in the ordinance, resolution or motion authorizing the issuance of such bonds; provided, that if such calculation is not made as of a compounding date, such amount shall be determined by straight-line interpolation as of the immediately preceding and the immediately succeeding compounding dates.

“Agency Customer” means any city, town, water-sewer district or other political subdivision, person, firm, private corporation or other entity that collects sewage from customers and disposes of any portion of that sewage into the System and is not a Participant.

“Annual Debt Service” means, for any calendar year, the sum of the following:

1. The interest due on all outstanding Parity Bonds and Parity Lien Obligations (i) on all interest payment dates (other than January 1) in such calendar year, and (ii) on January 1 of the next succeeding year, and any Payment Agreement Payments due on such dates in respect of any Parity Payment Agreements and Parity Lien Obligation Payment Agreements, minus any Payment Agreement Receipts due in such period in respect of any Parity Payment Agreements and Parity Lien Obligation Payment Agreements. For purposes of calculating the amounts required to pay interest on Parity Bonds or Parity Lien Obligations, capitalized interest and accrued interest paid to the county upon the issuance of Parity Bonds or Parity Lien Obligations shall be excluded. The amount of interest deemed to be payable on any issue of Variable Rate Parity Bonds or Variable Rate Parity Lien Obligations shall be calculated on the assumption that the interest rate on those bonds would be equal to the rate (the “assumed RBI rate”) that is 90% of the average Bond Buyer Revenue Bond Index or comparable index during the fiscal quarter preceding the quarter in which the calculation is made; provided, that for purposes of determining actual compliance in any past

calendar year with the rate covenant made in the Bond Ordinance, the actual amount of interest paid on any issue of Variable Rate Parity Bonds or Parity Lien Obligations shall be taken into account.

2. The principal due (at maturity or upon the mandatory redemption of Term Bonds prior to their maturity) for all outstanding Parity Bonds and Parity Lien Obligations (i) on all principal payment dates (other than January 1) of such calendar year and (ii) on January 1 of the next succeeding year.

In the case of Capital Appreciation Bonds, the Accreted Value due at maturity or upon the mandatory redemption of Parity Term Bonds that are Capital Appreciation Bonds shall be included in the calculation of Annual Debt Service, and references in this ordinance to principal of Parity Bonds shall include the Accreted Value due at maturity or upon the mandatory redemption of any Capital Appreciation Bonds.

Notwithstanding the foregoing, debt service on Parity Bonds or Parity Lien Obligations with respect to which a Payment Agreement is in force shall be calculated by the County to reflect the net economic effect on the county intended to be produced by the terms of the Parity Bonds or Parity Lien Obligations and the terms of the applicable Payment Agreement, in accordance with the requirements for Payment Agreements set forth in the Bond Ordinance and any other applicable requirements from the ordinances authorizing issuance of such Parity Bonds or Parity Lien Obligations.

From and after the date when no Parity Lien Obligations designated as Series 2008 Bonds or Series 2009 Bonds remain outstanding, for purposes of satisfying the rate covenant in the Bond Ordinance and the tests for the issuance of additional Parity Lien Obligations in the Bond Ordinance, Annual Debt Service for any Fiscal Year or calendar year shall exclude any Debt Service Offsets.

“Annual Parity Debt Service” means, for any calendar year, the sum of the following:

1. The interest due on all outstanding Parity Bonds (i) on all interest payment dates (other than January 1) in such calendar year, and (ii) on January 1 of the next succeeding year, and any Payment Agreement Payments due on such dates in respect of Parity Payment Agreements, minus any Payment Agreement Receipts due in such period in respect of such Parity Payment Agreements. For purposes of calculating the amounts required to pay interest on Parity Bonds, capitalized interest and accrued interest paid to the County upon the issuance of Parity Bonds shall be excluded. The amount of interest deemed to be payable on any issue of Variable Rate Parity Bonds will be calculated on the assumption that the interest rate on those bonds would be equal to the rate ("the assumed RBI rate") that is 90% of the average Bond Buyer Revenue Bond Index or comparable index during the fiscal quarter preceding the quarter in which the calculation is made; provided, that for purposes of determining actual compliance in any past calendar year with the rate covenant made in the Bond Ordinance, the actual amount of interest paid on any issue of Variable Rate Parity Bonds shall be taken into account.

2. The principal due (at maturity or upon the mandatory redemption of Term Bonds prior to their maturity) for all outstanding Parity Bonds (i) on all principal payment dates (other than January 1) of such calendar year and (ii) on January 1 of the next succeeding year.

In the case of Capital Appreciation Bonds, the Accreted Value due at maturity or upon the mandatory redemption of Parity Term Bonds that are Capital Appreciation Bonds shall be included in the calculation of Annual Debt Service, and references in the Bond Ordinance to principal of Parity Bonds shall include the Accreted Value due at maturity or upon the mandatory redemption of any Capital Appreciation Bonds.

Notwithstanding the foregoing, debt service on Parity Bonds with respect to which a Payment Agreement is in force shall be calculated by the County to reflect the net economic effect of the terms of the Parity Bonds and the applicable Payment Agreement, in accordance with the requirements set forth in the Bond Ordinance and any other applicable requirements from the ordinances authorizing issuance of such Parity Bonds.

For purposes of calculating the Reserve Requirement and satisfying the rate covenant in the Bond Ordinance applicable to Parity Bonds and the tests for the issuance of Future Parity Bonds in the Bond Ordinance, Annual Parity Debt Service for any Fiscal Year or calendar year shall exclude any Debt Service Offsets.

“Beneficial Owner” means, with respect to a Bond, the owner of the beneficial interest in that Bond.

“Bond Register” means the registration books maintained by the Registrar for purposes of identifying ownership of the Bonds.

“Capital Appreciation Bonds” means any Parity Bonds the interest on which is compounded, accumulated and payable only upon redemption or on the maturity date of such Parity Bonds; provided, that Parity Bonds may be deemed to be Capital Appreciation Bonds for only a portion of their term pursuant to the ordinance, resolution or motion authorizing their issuance. On the date on which Parity Bonds no longer are Capital Appreciation Bonds, they shall be deemed outstanding in a principal amount equal to their Accreted Value.

“Comprehensive Plan” means the County’s comprehensive water pollution abatement plan authorized by RCW 35.58.200 and defined in Section 28.82.150 of the King County Code as the Comprehensive Sewage Disposal Plan adopted by Resolution No. 23 of the Metro Council on April 22, 1959, and all amendments thereto, together with any amendments hereafter approved by ordinance of the County.

“Construction Account” means the “Second Water Quality Construction Account,” as previously designated by the County.

“Credit Facility” means any letter of credit, standby bond purchase agreement, line of credit, surety bond, insurance policy or other insurance commitment or similar agreement (but not including a Payment Agreement), satisfactory to the County, that is provided by a commercial bank, insurance company or other financial institution with a current long term rating (or whose obligations thereunder are guaranteed by a financial institution with a long term rating): (i) from

Moody's and S&P not lower, when issued, than the credit rating of any series of Parity Bonds, to provide support for a series of Parity Bonds, and shall include any substitute therefor in accordance with the provisions of the ordinance providing for the issuance of Parity Bonds supported by a Credit Facility, or (ii) from Fitch, Moody's and S&P not lower, when issued, than the credit rating of any series of Parity Lien Obligations, to provide support for a series of Parity Lien Obligations (including Variable Rate Parity Lien Obligations), and shall include any substitute therefor in accordance with the provisions of the ordinance providing for the issuance of Parity Lien Obligations supported by a Credit Facility.

"Customers" means Residential Customers and Residential Customer Equivalents as defined and determined in the existing Service Agreements.

"Debt Service Offset" means receipts of the County, including federal interest subsidy payments, designated as such by the County that are not included in Revenue of the System and that are legally available to pay debt service on Parity Bonds, Parity Lien Obligations or other obligations of the County payable from and secured by a pledge of Revenue of the System.

"Finance Director" means the Director of the Finance and Business Operations Division of the Department of Executive Services of the County or any other County officer who succeeds to the duties now delegated to that office, or the designee of such officer.

"Future Parity Bonds" means any sewer revenue bonds, warrants or other obligations that may be issued in the future with a lien on Revenue of the System equal to the lien thereon of the currently outstanding Parity Bonds.

"Government Obligations" means direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America.

"Junior Lien Obligations" means the County's (i) Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2001A and Series 2001B, dated August 15, 2001, authorized by Ordinances 14171 and 14172, (ii) Junior Lien Variable Rate Demand Sewer Revenue Bond, Series 2011, dated October 26, 2011, authorized by Ordinance 17202, (iii) Junior Lien Variable Rate Demand Sewer Revenue Bond, Series 2012, dated December 27, 2012, authorized by Ordinance 17495, (iv) Junior Lien Sewer Revenue Bonds, Series 2015A and Series 2015B, dated November 24, 2015, authorized by Ordinance 18141, and (v) any other revenue bonds or revenue obligations having a lien on Revenue of the System equal to the lien thereon of such bonds.

"Multi-Modal LTGO/Sewer Revenue Bonds" means the County's Multi-Modal Limited Tax General Obligation Bonds (Payable from Sewer Revenue), Series 2010A and Series 2010B, dated January 21, 2010, authorized by Ordinances 16721 and 16722, and any additional limited tax general obligation bonds of the county payable from Revenue of the System and having the same lien on Revenue of the System as those bonds.

"Net Revenue" means Revenue of the System less Operating and Maintenance Expenses.

"Operating and Maintenance Expenses" means all normal expenses incurred by the county in causing the System to be maintained in good repair, working order and condition and includes

payments to any private or governmental agency for the operation or maintenance of facilities or for the disposal of sewage but excludes any allowance for depreciation.

“Owner” means, with respect to a Bond, without distinction, the Beneficial Owner or the Registered Owner.

“Parity Bond Fund” means the “Water Quality Revenue Bond Account” designated for the purpose of paying and securing the payment of the Parity Bonds.

“Parity Bond Reserve Account” means the bond reserve account in the Parity Bond Fund securing the payment of the Parity Bonds.

“Parity Bonds” means the outstanding Parity Bonds, the Bonds, and any Future Parity Bonds. The outstanding Parity Bonds include the following:

Designation	Ordinance	Date of Issue	Original Principal
2010 Bonds	16868	7/29/2010	\$334,365,000
2011 Bonds	16868	1/25/2011	175,000,000
2011B Bonds	17111	10/5/2011	494,270,000
2011C Bonds	17111	11/1/2011	32,445,000
2012 Bonds	17111	4/18/2012	104,445,000
2012B Bonds	17111	8/2/2012	64,260,000
2012C Bonds	17111	9/19/2012	65,415,000
2013A Bonds	17111	4/9/2013	122,895,000
2013B Bonds	17599	10/29/2013	74,930,000
2014A Bonds	17599	7/8/2014	75,000,000
2014B Bonds	17599	8/12/2014	192,460,000
2015A Bonds	17599	2/18/2015	474,025,000
2015B Bonds	18111	11/17/2015	93,345,000
2016A Bonds	18116	2/17/2016	281,535,000
2016B Bonds	18111	10/12/2016	499,655,000
2017 Bonds	18587	12/19/2017	149,485,000
2018 WIFIA Bond	18588	4/19/2018	134,500,000

“Parity Bonds” also includes any Parity Payment Agreements and parity reimbursement agreements entered into with the provider of a Credit Facility securing any Parity Bonds.

“Parity Lien Obligation Bond Fund” means the “Water Quality Limited Tax General Obligation Bond Redemption Fund” established to provide for payment of Parity Lien Obligations.

“Parity Lien Obligation Payment Agreement” means a Payment Agreement under which the County’s payment obligations are expressly stated to constitute a charge and lien on Revenue of the System equal in rank with the charge and lien on Revenue of the System securing amounts required to be paid into the Parity Lien Obligation Bond Fund to pay and secure the payment of principal of and interest on the Parity Lien Obligations.

“Parity Lien Obligation Term Bonds” means Parity Lien Obligations that are Term Bonds.

“Parity Lien Obligations” means the outstanding limited tax general obligation bonds that are additionally secured by a lien on Revenue of the System and any other future obligations issued on a parity therewith. The outstanding Parity Lien Obligations include the following:

Designation	Ordinance	Date of Issue	Original Principal
2008 Bonds	15779	2/12/2008	\$236,950,000
2009 Bonds	16133	4/8/2009	300,000,000
2012 Bonds	17111	4/18/2012	68,395,000
2012B Bonds	17111	8/2/2012	41,725,000
2012C Bonds	17111	9/19/2012	53,405,000
2015A Bonds	17599	2/18/2015	247,825,000
2017 Bonds	18116	10/25/2017	154,560,000

“Parity Lien Obligations” also includes any Parity Lien Obligation Payment Agreements and parity reimbursement agreements entered into with the provider of a Credit Facility securing any Parity Lien Obligations.

“Parity Payment Agreement” means a Payment Agreement under which the County’s payment obligations are expressly stated to constitute a charge and lien on Revenue of the System equal in rank with the charge and lien on Revenue of the System securing amounts required to be paid into the Parity Bond Fund to pay and secure the payment of principal of and interest on the Parity Bonds.

“Parity Term Bonds” means Parity Bonds that are Term Bonds.

“Participant” means each city, town, county, water-sewer district, municipal corporation, person, firm, private corporation or other entity that disposes of any portion of its sanitary sewage into the System and has entered into a Service Agreement with the County.

“Payment Agreement” means, to the extent permitted from time to time by applicable law, a written agreement entered into by the County (i) in connection with or incidental to the issuance, incurring or carrying of bonds or other obligations of the County secured in whole or in part by a lien on Revenue of the System; (ii) for the purpose of managing or reducing the County’s exposure to fluctuations or levels of interest rates, currencies or commodities or for other interest rate, investment, asset or liability management purposes; (iii) with a Qualified Counterparty; and (iv) which provides, on either a current or forward basis, for an exchange of payments determined in accordance with a formula specified therein.

“Payment Agreement Payments” means the amounts periodically required to be paid by the County to the Qualified Counterparty pursuant to a Payment Agreement. The term “Payment Agreement Payments” does not include any termination payment required to be paid with respect to a Payment Agreement.

“Payment Agreement Receipts” means the amounts periodically required to be paid by the Qualified Counterparty to the County pursuant to a Payment Agreement.

“Professional Utility Consultant” means a licensed professional engineer, a Certified Public Accountant, or other independent person or firm selected by the County having a favorable reputation for skill and experience with sewer systems of comparable size and character to the System in such areas as are relevant to the purposes for which they are retained.

“Public Works Trust Fund Loans” means loans to the County by the State Department of Commerce under the Public Works Trust Fund loan program pursuant to loan agreements in effect as of the date of the Bond Ordinance and any loan agreements thereafter entered into by the County under the Public Works Trust Fund loan program, the repayment obligations of which are secured by a lien on Revenue of the System equal to the lien thereon established by such loan agreements.

“Qualified Counterparty” means with respect to a Payment Agreement an entity (i) whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability or whose payment obligations under a Payment Agreement are guaranteed by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability are rated (at the time the Payment Agreement is entered into) at least as high as A3 by Moody’s and A- by S&P (and A- by Fitch for any Parity Lien Obligation Payment Agreement), or the equivalent thereof by any successor thereto, and (ii) who is otherwise qualified to act as the other party to a Payment Agreement under any applicable laws of the State.

“Qualified Insurance” means any unconditional municipal bond insurance policy or surety bond issued by any insurance company licensed to conduct an insurance business in any state of the United States or by a service corporation acting on behalf of one or more such insurance companies, which insurance company or service corporation, as of the time of issuance of such policy or surety bond, is then rated in one of the two highest rating categories by Moody’s, S&P, and any other rating agency then maintaining a rating on the Parity Bonds and maintains a policy owner’s surplus in excess of \$500,000,000.

“Qualified Letter of Credit” means any irrevocable letter of credit issued by a bank for the account of the County and for the benefit of the registered owners of Parity Bonds, provided that such bank maintains an office, agency or branch in the United States, and provided further, that as of the time of issuance of such letter of credit, such bank is currently rated in one of the two highest rating categories by Moody’s, S&P, and any other rating agency then maintaining a rating on the Parity Bonds.

“Rate Stabilization Fund” means the fund of that name previously created by the County and continued pursuant to the Bond Ordinance.

“Record Date” means, with respect to a Bond, unless otherwise provided in the Sale Motion, the Registrar’s close of business on the 15th day of the month preceding an interest payment date. With respect to redemption of a Bond prior to its maturity, “Record Date” means the Registrar’s close of business on the date on which the Registrar sends notice of the redemption.

“Registered Owner” means, with respect to a Bond, the person in whose name that Bond is registered on the Bond Register.

“Registrar” means, unless otherwise designated in the Sale Motion, the fiscal agent of the State (as the same may be designated by the State from time to time) for the purposes of registering

and authenticating the Bonds, maintaining the Bond Register, effecting the transfer of ownership of the Bonds and paying principal of and premium, if any, and interest on the Bonds.

“Reserve Requirement” means maximum Annual Parity Debt Service with respect to any calendar year.

“Revenue Fund” means the “Water Quality Operating Account” as previously designated by the County.

“Revenue of the System” means all the earnings, revenues and money received by the County from or on account of the operations of the System and the income from the investment of money in the Revenue Fund or any account within such fund, but shall not include any money collected pursuant to the Service Agreements applicable to administrative costs of the County other than costs of administration of the System. For certain purposes described in the Bond Ordinance, deposits from the Rate Stabilization Fund into the Revenue Fund may be included in calculations of “Revenue of the System.”

“Sale Motion” means, with respect to each series of the Bonds, the motion of the council approving a bond purchase contract (if the Bonds are sold by negotiated sale) or accepting a bid (if the Bonds are sold by competitive bid) for the purchase of the Bonds and ratifying the sale of the Bonds, all in accordance with the Bond Ordinance.

“Securities Depository” means DTC, any successor thereto, any substitute securities depository selected by the County that is qualified under applicable laws and regulations to provide the services proposed to be provided by it, or the nominee of any of the foregoing.

“Service Agreements” means the sewage disposal agreements entered into between the County and municipal corporations, persons, firms, private corporations, or governmental agencies providing for the disposal by the County of sewage collected from such contracting parties.

“SRF Loans” means loans to the County by the State Department of Ecology pursuant to loan agreements in effect as of the date of the Bond Ordinance and any loans and loan agreements hereafter entered into by the County under the State water pollution control revolving fund loan program, the repayment obligations of which are secured by a lien on Revenue of the System equal to the lien thereon established by such loan agreements.

“Subordinate Lien Obligations” means those revenue bonds or other revenue obligations that may be issued by the county in the future with a lien on Revenue of the System junior and inferior to the lien thereon of the Multi-Modal LTGO/Sewer Revenue Bonds, and payable from Revenue of the System that is available after first making the payments required to be made under paragraph "First" through "Seventh" but before making the payments required to be made under paragraph "Ninth" in the order of priority described in “Security and Sources of Payment for the Bonds—Flow of Funds.”

“System” means the sewers and sewage disposal facilities now or hereafter acquired, constructed, used or operated by the County for the purpose of carrying out the Comprehensive Plan.

“Term Bonds” means those bonds identified as such in the proceedings authorizing their issuance, the principal of which is amortized by a schedule of mandatory redemptions, payable from a bond redemption fund, prior to their maturity.

“Trustee” means a trustee for the Parity Bonds authorized to be appointed by registered owners of Parity Bonds, as provided by the Bond Ordinance.

“Variable Rate Parity Bonds” means Parity Bonds bearing interest at a variable rate of interest, provided that at least one of the following conditions is met: (i) at the time of issuance the County has entered into a Payment Agreement with respect to such Parity Bonds, which Payment Agreement converts the effective interest rate to the County on the Variable Rate Parity Bonds from a variable interest rate to a fixed interest rate, or (ii) the Parity Bonds bear interest at a variable rate but are issued concurrently in equal par amounts with other Parity Bonds bearing interest at a variable rate and are required to remain outstanding in equal amounts at all times, if the net effect of such equal par amounts and variable rates at all times is a fixed rate of interest to the County.

“Variable Rate Parity Lien Obligations” means Parity Lien Obligations bearing interest at a variable rate of interest, provided that at least one of the following conditions is met: (i) at the time of issuance the County has entered into a Payment Agreement with respect to such Parity Lien Obligations, which Payment Agreement converts the effective interest rate to the County on the Variable Rate Parity Lien Obligations from a variable interest rate to a fixed interest rate or (ii) the Parity Lien Obligations bear interest at a variable rate but are issued concurrently in equal par amounts with other Parity Lien Obligations bearing interest at a variable rate and which are required to remain outstanding in equal amounts at all times, if the net effect of such equal par amounts and variable rates at all times is a fixed rate of interest to the County.

Revenue—Priority of Payment

All Revenue of the System is to be deposited into the Revenue Fund and used and applied in the order of priority described in “Security and Sources of Payment for the Bonds—Flow of Funds.”

Covenants and Representations

Rate Covenants. The rate covenants applicable to the Bonds are described in “Security and Sources of Payment for the Bonds—Rate and Coverage Covenants.”

Maintenance and Operation. The County shall cause the System and the business in connection therewith to be operated in a safe, sound, efficient, and economic manner in compliance with all health, safety, and environmental laws, regulatory body rules, regulatory body orders and court orders applicable to the County’s operation of the System, and shall cause the System to be maintained, preserved, reconstructed, expanded and kept, with all appurtenances and every part and parcel thereof, in good repair, working order and condition, and shall from time to time cause to be made, without undue deferral, all necessary or proper repairs, replacements and renewals, so that all times the operation of the System shall be properly and advantageously conducted.

Books and Records. The County shall cause proper books of record and accounts of operation of the System to be kept, including an annual financial report.

Annual Audit. The County shall cause its books of accounts, including its annual financial report, to be audited annually by the State auditor's office or other State department or agency as may be authorized and directed by law to make such audits, or if such an audit is not made for twelve months after the close of any fiscal year of the County, by a Certified Public Accountant. The County shall furnish the audit to the Owner of any Bond upon written request therefor.

Insurance. The County shall at all times carry fire and extended coverage and such other forms of insurance on such of the buildings, equipment, facilities and properties of the System as under good practice are ordinarily carried on such buildings, equipment, facilities and properties by municipal or privately owned utilities engaged in the operation of sewer systems and shall also carry adequate public liability insurance at all times, provided that the County may, if deemed advisable by the County Council, institute or continue a self-insurance program for any or all of the aforementioned risks.

Construction. The County shall cause the construction of any duly authorized and ordered portions of the Comprehensive Plan to be performed and completed within a reasonable time and at the lowest reasonable cost.

Collection of Revenue. The County shall operate and maintain the System and conduct its affairs so as to entitle it at all times to receive and enforce payment to it of sewage disposal charges payable (i) pursuant to the ordinance or ordinances establishing a tariff of rates and charges for sewage disposal services and (ii) under any Service Agreement that the County has now or may hereafter enter into and to entitle the County to collect all revenues derived from the operation of the System. The County shall not release the obligations of any person, corporation or political subdivision under such tariff of rates and charges or the Service Agreements and shall at all times, to the extent permitted by law, defend, enforce, preserve and protect the rights and privileges of the County and of the registered owners of the Parity Bonds and Parity Lien Obligations under or with respect thereto.

In accordance with RCW 35.58.200(3), the County shall require any county, city, special district or other political subdivision to discharge to the System all sewage collected by that entity from any portion of the Seattle metropolitan area that can drain by gravity flow into facilities of the System that serve such areas if the County Council declares that the health, safety or welfare of the people within the metropolitan area require such action.

Legal Authority. The County has full legal right, power and authority to adopt the Bond Ordinance, to sell, issue and deliver the Bonds as provided therein, and to carry out and consummate all other transactions contemplated by the Bond Ordinance.

Due Authorization. By all necessary official action prior to or concurrently with the Bond Ordinance, the County has duly authorized and approved the execution and delivery of, and the performance by the County of its obligations contained in, the Bonds and in the Bond Ordinance and the consummation by it of all other transactions necessary to effectuate the Bond Ordinance in connection with the issuance of Bonds, and such authorizations and approvals are in full force and effect and have not been amended, modified or supplemented in any material respect.

Binding Obligation. The Bond Ordinance constitutes a legal, valid and binding obligation of the County.

No Conflict. The County's adoption of the Bond Ordinance and its compliance with the provisions contained therein shall not conflict with or constitute a breach of or default under any constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, ordinance, motion, agreement or other instrument to which the County is a party or to which the County or any of its property or assets are otherwise subject, nor shall any such adoption or compliance result in the creation or imposition of any lien, charge or other security interest or encumbrance of any nature whatsoever upon any of the property or assets of the County or under the terms of any such law, regulation or instrument, except as permitted by the Bond Ordinance and the ordinances authorizing the issuance of other Parity Bonds and Parity Lien Obligations.

Performance Under Bond Ordinance. None of the proceeds of the Bonds shall be used for any purpose other than as provided in the Bond Ordinance, and, except as expressly provided in the Bond Ordinance, the County shall not suffer any amendment or supplement to the Bond Ordinance, or any departure from the due performance of the obligations of the County under the Bond Ordinance, that might materially adversely affect the rights of the Registered Owners from time to time of the Bonds.

Sale or Disposition of Property. The County shall not sell or voluntarily dispose of all of the operating properties of the System unless provision is made for payment into the Parity Bond Fund and the Parity Lien Obligation Bond Fund of a sum sufficient to pay the principal of and interest on all outstanding Parity Bonds and Parity Lien Obligations in accordance with the terms thereof, nor shall the County sell or voluntarily dispose of any part of the operating properties of the System unless provision is made (i) for payment into the Parity Bond Fund of an amount that shall bear at least the same proportion to the amount of the outstanding Parity Bonds that the estimated amount of any resulting reduction in Revenue of the System for the twelve months following such sale or disposition bears to the Revenue of the System that would have been realized if such sale or disposition had not been made and (ii) for payment into the Parity Lien Obligation Bond Fund of an amount that shall bear at least the same proportion to the amount of the outstanding Parity Lien Obligations that the estimated amount of any resulting reduction in Revenue of the System for the twelve months following such sale or disposition bears to the Revenue of the System that would have been realized if such sale or disposition had not been made. Those estimates must be made by a Professional Utility Consultant. Any money so paid into the Parity Bond Fund and the Parity Lien Obligation Bond Fund must be used to retire outstanding Parity Bonds and Parity Lien Obligations as provided in the Bond Ordinance at the earliest possible date; provided, however, that the County may sell or otherwise dispose of any of the works, plant, properties and facilities of the System or any real or personal property comprising a part of the System with a value of less than 5% of the net utility plant of the System or that have become unserviceable, inadequate, obsolete or unfit to be used in the operation of the System, or no longer necessary, material to or useful in such operation, without making any deposit into the Parity Bond Fund or Parity Lien Obligation Bond Fund.

Tax Covenants. The County covenants not to take any action, or knowingly omit to take any action within its control, that if taken or omitted would cause the interest on the Bonds to be

includable in gross income, as defined in Section 61 of the Code, for federal income tax purposes. If the County does not qualify for an exception to the requirements of Section 148(f) of the Code relating to the payment of arbitrage rebate to the United States with respect to the Bonds, the County shall take all necessary steps to comply with the requirement that certain amounts earned by the County on the investment of the “gross proceeds” of the Bonds (within the meaning of the Code) be rebated.

Future Parity Bonds

The County covenants and agrees with the Registered Owner of each of the Bonds that it shall not create any special fund for the payment of the principal of and interest on any revenue bonds that shall rank on a parity with or have any priority over the payments out of Revenue of the System required to be made into the Parity Bond Fund and the accounts therein to pay or secure the payment of the outstanding Parity Bonds. The County reserves the right to issue additional or refunding Parity Bonds (including Variable Rate Parity Bonds), which bonds shall rank on a parity with the outstanding Parity Bonds, for the purposes and subject to the requirements described in “Security and Sources of Payment for the Bonds—Future Parity Bonds.”

Additional Parity Lien Obligations

The County expressly reserves the right to issue or enter into additional Parity Lien Obligations (including Variable Rate Parity Lien Obligations) for any lawful purpose of the County related to the System if at the time of issuing or entering into such Parity Lien Obligations:

1. There is no deficiency in the Parity Bond Fund, the Parity Lien Obligation Bond Fund or any other bond fund or account securing Parity Lien Obligations.

2. The County has on file a certificate from a Professional Utility Consultant (the certificate may not be dated more than 90 days prior to the date of delivery of such Parity Lien Obligations) showing that in his or her professional opinion, the “annual income available for debt service on Parity Bonds and Parity Lien Obligations” for each year during the life of such Parity Lien Obligations is at least equal to 1.25 times the amount required to pay Annual Debt Service in each such year. Such “annual income available for debt service on Parity Bonds and Parity Lien Obligations” shall be determined as follows for each year following the proposed date of issue of such Parity Lien Obligations:

- (i) The Revenue of the System shall be determined for a period of any 12 consecutive months out of the 18 months immediately preceding the delivery of the Parity Lien Obligations being issued.

- (ii) Such revenue may be adjusted to give effect on a 12-month basis to the rates in effect on the date of such certificate.

- (iii) If there were any customers added to the System during such 12-month period or thereafter and prior to the date of the Professional Utility Consultant’s certificate, such revenue may be further adjusted on the basis that added customers were customers of the System during the entire 12-month period.

(iv) There shall be deducted from such revenue the amount expended for Operating and Maintenance Expenses during such period.

(v) For each year following the proposed date of issuance of such Parity Lien Obligations the Professional Utility Consultant may add to the annual revenue determined as described in (i) through (iv) above an estimate of the income to be received in each such year from the investment of money in the Parity Bond Fund, the Parity Lien Obligation Bond Fund and the Construction Account, which shall be determined by and in the sole discretion of a firm of nationally recognized financial consultants selected by the County.

(vi) Beginning with the second year following the proposed date of issue of such Parity Lien Obligations and for each year thereafter the Professional Utility Consultant may add to the annual revenue determined as described in (i) through (v) above his or her estimate of any additional annual revenue to be received from anticipated growth in the number of customers within the area served by the System on the date of such certificate, after deducting therefrom any increased Operating and Maintenance Expenses estimated to be incurred as a result of such growth; provided, that the Professional Utility Consultant's estimate of the number of customers served may not assume a growth of more than 1/4 of 1% over and above the number of customers served or estimated to be served during the preceding year.

(vii) If extensions of or additions to the System are in the process of construction at the time of such certificate, or if the proceeds of the Parity Lien Obligations being issued are to be used to acquire or construct extensions of or additions to the System, there may be added to the annual net revenue as above determined any revenue not included as described in (i) through (vi) above that shall be derived from such additions and extensions after deducting therefrom the estimated additional Operating and Maintenance Expenses to be incurred as a result of such additions and extensions; provided, that such estimated annual revenue must be based upon 75% of any estimated customer growth in the four years following the first full year in which such additional revenue is to be collected and thereafter the estimated customer growth may not exceed 1/4 of 1% per year over and above such reduced estimate.

3. Instead of the certificate described in paragraph 2 above, the County may elect to have on file a certificate of the Finance Director demonstrating that during any 12 consecutive calendar months out of the immediately preceding 18 calendar months Net Revenue was at least equal to 1.25 times the amount required to pay, in each year that such Parity Lien Obligations would be outstanding, the Annual Debt Service for such year.

4. The County may at any time, for the purpose of refunding at or prior to their maturity any outstanding Parity Lien Obligations, Parity Bonds, or any bonds or other obligations of the County payable from Revenue of the System, issue additional Parity Lien Obligations without complying with the provisions described in paragraphs 2 and 3 above if there is filed with the Clerk of the County Council a certificate of the Finance Director stating that upon the issuance of such additional Parity Lien Obligations: (i) total debt service on all Parity Bonds and Parity Lien Obligations (including the refunding bonds but not including the bonds to be refunded thereby) shall decrease; and (ii) the Annual Debt Service for each year that any Parity Bonds and any Parity Lien Obligations (including the refunding bonds but not including the bonds to be refunded

thereby) are then outstanding shall not be increased by more than \$5,000 by reason of the issuance of such additional Parity Lien Obligations.

Nothing in the Bond Ordinance prohibits or prevents, or shall be deemed or construed to prohibit, the County from issuing Parity Lien Obligations to refund maturing Parity Lien Obligations of the County for the payment of which money is not otherwise available.

Subordinate Obligations. Nothing in the Bond Ordinance prohibits, or shall be deemed or construed to prohibit, the County from authorizing and issuing bonds, notes or other evidences of indebtedness for any purpose of the County related to the System payable in whole or in part from Revenue of the System and secured by a lien on Revenue of the System that is junior, subordinate and inferior to the lien of any Parity Lien Obligations.

Reimbursement Obligations

If the County elects to secure any Bonds with a Credit Facility, the County may contract with the entity providing the Credit Facility that the reimbursement obligation, if any, to that entity shall be a Parity Bond.

Payment Agreements

General. To the extent and for the purposes permitted by State law, the County may enter into Payment Agreements, which may include interest rate swaps, subject to the conditions described below. Each Payment Agreement must set forth the manner in which the Payment Agreement Payments and the Payment Agreement Receipts shall be calculated and a schedule of payment dates. Prior to entering into a Payment Agreement, the County Council must adopt an ordinance authorizing such agreement, and the County must give notice to Moody's and S&P prior to entering into a Payment Agreement.

Calculation of Debt Service with Respect to Payment Agreements. For purposes of determining compliance with the rate covenant and the test for issuing Future Parity Bonds or additional Parity Lien Obligations, the Bond Ordinance provides that debt service on Parity Bonds with respect to which a Parity Payment Agreement is in force shall be calculated to reflect the net economic effect on the County intended to be produced by the terms of such Parity Bonds and Parity Payment Agreement and that debt service on Parity Lien Obligations with respect to which a Parity Lien Obligation Payment Agreement is in force shall be calculated to reflect the net economic effect on the County intended to be produced by the terms of such Parity Lien Obligation Bonds and Parity Lien Obligation Payment Agreement. In calculating such amounts, the County shall be guided by the following requirements.

The amount of interest deemed to be payable on any Bonds with respect to which a Payment Agreement is in force shall be an amount equal to the amount of interest that would be payable at the rate or rates stated in those Bonds plus Payment Agreement Payments minus Payment Agreement Receipts.

For any period during which Payment Agreement Payments are not taken into account in calculating interest on any outstanding Bonds because the Payment Agreement is not then related

to any outstanding Bonds, Payment Agreement Payments on that Parity Payment Agreement shall be calculated based upon the following assumptions:

- If the County is obligated to make Payment Agreement Payments based on a fixed rate and the Qualified Counterparty is obligated to make payments based on a variable rate index, payments by the County shall be based on the assumed fixed payor rate, and payments by the Qualified Counterparty shall be based on a rate equal to the average rate determined by the variable rate index specified by the Payment Agreement during the fiscal quarter preceding the quarter in which the calculation is made.
- If the County is obligated to make Payment Agreement Payments based on a variable rate index and the Qualified Counterparty is obligated to make payments based on a fixed rate, payments by the County shall be based on a rate equal to the average rate determined by the variable rate index specified by the Payment Agreement during the fiscal quarter preceding the quarter in which the calculation is made, and the Qualified Counterparty shall make payments based on the fixed rate specified by the Payment Agreement.

Termination Payments. The County's authorizations of Parity Bonds, Parity Lien Obligations, Junior Lien Obligations, Multi-Modal LTGO/Sewer Revenue Bonds, and Subordinate Lien Obligations do not provide for termination payments with respect to any Payment Agreement to have a lien on Revenue of the System senior to the lien thereon of such Parity Bonds, Parity Lien Obligations, Junior Lien Obligations, Multi-Modal LTGO/Sewer Revenue Bonds, or Subordinate Lien Obligations. Any termination payments with respect to a Payment Agreement would have a lien position junior to the lien on Revenue of the System of all such Parity Bonds, Parity Lien Obligations, Junior Lien Obligations, Multi-Modal LTGO/Sewer Revenue Bonds, and Subordinate Lien Obligations.

Trustee for Owners of Parity Bonds

Upon the occurrence of any "event of default" described below, the registered owners of a majority in principal amount of the outstanding Parity Bonds may appoint a Trustee by an instrument or concurrent instruments in writing signed and acknowledged by such registered owners or by their attorneys-in-fact duly authorized and delivered to the Trustee, notification thereof being given to the County. Any Trustee must be a bank or trust company organized under the laws of the State or the State of New York or a national banking association. The fees and expenses of a Trustee must be borne by the owners of the Parity Bonds and not by the County. The bank or trust company acting as a Trustee may be removed at any time and a successor Trustee may be appointed by the registered owners of a majority in principal amount of the outstanding Parity Bonds, by an instrument or concurrent instruments in writing signed and acknowledged by such registered owners or by their attorneys-in-fact duly authorized.

The Trustee so appointed, and each successor thereto, is declared in the Bond Ordinance to be a trustee for the registered owners of all the Parity Bonds and is empowered to exercise all rights and powers conferred in the Bond Ordinance on the Trustee.

The Trustee is not responsible for recitals in any ordinance or in the Parity Bonds, or for the validity of any Parity Bonds, nor is the Trustee responsible for insuring the System or for collecting any insurance money or for the title to any property of the System.

Events of Default; Powers and Duties of Trustee

The occurrence of one or more of the following is an “event of default” with respect to the Bonds:

- Default in the payment of principal of or interest on any Parity Bonds when the same becomes due; or
- Default in the observance or performance of any of the other covenants applicable to Parity Bonds contained in the Bond Ordinance, and the default continues for a period of six months after written notice to the County from the registered owner of a Parity Bond specifying the default and requiring that it be remedied.

The Trustee in its own name and on behalf of and for the benefit and protection of the registered owners of all Parity Bonds may proceed, and upon the written request of the registered owners of not less than 25% in principal amount of the Parity Bonds then outstanding must proceed, to protect and enforce any rights of the Trustee and, to the full extent that registered owners of Parity Bonds themselves might do, the rights of such registered owners of Parity Bonds under the laws of the State or under the ordinances providing for the issuance of the Parity Bonds, by such suits, actions or proceedings in equity or at law, either for the specific performance of any covenant contained in the Bond Ordinance or in aid or execution of any power granted in the Bond Ordinance or for any proper legal or equitable remedy as the Trustee may deem most effectual to protect and enforce the rights of the Trustee and the registered owners of Parity Bonds. In the enforcement of any such rights under the Bond Ordinance or any other ordinance of the County, the Trustee is entitled to sue for, to enforce payment of and to receive any and all amounts due from the County for principal, interest or otherwise under any of the provisions of such ordinance, with interest on overdue payments at the rate or rates set forth in such Parity Bond or Parity Bonds, together with any and all costs and expenses of collection and of all proceedings taken by the Trustee without prejudice to any other right or remedy of the Trustee or of the owners of the Parity Bonds.

If default is made in the payment of principal of any Parity Bond and the default continues for a period of 30 days, the Trustee may not accelerate payment of any Parity Bonds but may proceed to enforce payment thereof as described above. If, in the sole judgment of the Trustee, any default is cured and the Trustee furnishes the County a certificate so stating, that default is conclusively deemed to be cured, and the County, Trustee and owners of Parity Bonds shall be restored to the same rights and position they would have held if no event of default had occurred.

No owner of any one or more of the Parity Bonds has any right to institute any action, suit or proceedings at law or in equity for the enforcement of the same, unless an event of default occurs and unless no Trustee is appointed as provided in the Bond Ordinance, but any remedy authorized in the Bond Ordinance to be exercised by a Trustee may be exercised individually by any registered owner of a Parity Bond, in his, her or its own name and on his, her or its own behalf

or for the benefit of all registered owners of Parity Bonds, if no Trustee is appointed, or with the consent of the Trustee if such Trustee has been appointed.

Any money collected by the Trustee at any time as described above is to be applied, first, to the payment of its charges, expenses, advances and compensation and the charges, expenses, counsel fees, disbursements and compensation of its agents and attorneys, and, second, toward payment of the amount then due and unpaid upon the Parity Bonds, ratably and without preference or priority of any kind not expressly provided in the Bond Ordinance, according to the amounts due and payable upon the Parity Bonds at the date fixed by the Trustee for the distribution of such money.

Supplemental Ordinances

Without Bondowner Consent. The County Council from time to time and at any time may adopt an ordinance or ordinances supplemental to the Bond Ordinance, without the consent of owners of any of the Bonds, for any one or more of the following purposes:

- To add to the covenants and agreements of the County in the Bond Ordinance such other covenants and agreements thereafter to be observed that shall not adversely affect the interests of the registered owners of any Parity Bonds or Parity Lien Obligations, as applicable, or to surrender any right or power therein reserved to or conferred upon the County.
- To make such provisions for the purpose of curing any ambiguities or of curing, correcting or supplementing any defective provision in the Bond Ordinance or any ordinance authorizing Parity Bonds or Parity Lien Obligations in regard to matters or questions arising under such ordinances as the County Council may deem necessary or desirable and not inconsistent with such ordinances and that shall not adversely affect the interest of the registered owners of Parity Bonds or Parity Lien Obligations, as applicable.

With Bondowner Consent. With the consent of the registered owners of not less than 51% in aggregate principal amount of all Parity Bonds at the time outstanding, the County Council may adopt an ordinance or ordinances supplemental to the Bond Ordinance for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Bond Ordinance or of any supplemental ordinance applicable to Parity Bonds, except as described below. From and after such time as no Parity Lien Obligations designated as Series 2008 Bonds or Series 2009 Bonds remain outstanding, with the consent of the registered owners of not less than 51% in aggregate principal amount of all Parity Lien Obligations at the time outstanding, the Council may adopt an ordinance or ordinances supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Bond Ordinance or of any supplemental ordinance applicable to Parity Lien Obligations.

No supplemental ordinance entered into pursuant to these provisions may:

- Extend the fixed maturity of any Parity Bonds or Parity Lien Obligations, or reduce the rate of interest thereon, or extend the time of payments of interest from their due date, or reduce the amount of the principal thereof, or reduce any premium

payable on the redemption thereof, without the consent of the registered owner of each bond so affected; or

- Reduce the aforesaid percentage of registered owners of Parity Bonds required to approve any such supplemental ordinance, without the consent of the registered owners of all of such bonds.

It is not necessary for the consent of registered owners of Bonds to approve the particular form of any proposed supplemental ordinance, but it is sufficient if such consent approves the substance thereof.

Amendments Deemed Approved by Parity Bondowners. The Registered Owners from time to time of the Bonds, by taking and holding the same, shall be deemed to have consented to the adoption of an ordinance or ordinances supplemental to this ordinance to amend the definition of Reserve Requirement. Such supplemental ordinance or ordinances may:

- Establish one or more separate Reserve Requirements for one or more series of Parity Bonds, including the Bonds;
- Reduce any Reserve Requirement, including the Reserve Requirement for the Bonds, to an amount less than maximum Annual Parity Debt Service in any calendar year, including to zero; and
- Establish one or more separate subaccounts within the Parity Bond Reserve Account to secure one or more series of Parity Bonds, including the Bonds, with other series of Parity Bonds not being secured by such separate subaccounts.

The adoption of any such supplemental ordinance or ordinances may result in the Bonds not being secured by any amounts in the Parity Bond Reserve Account.

APPENDIX B

FORM OF BOND COUNSEL OPINION

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November 15, 2018

King County, Washington

J.P. Morgan Securities LLC
New York, New York

Re: King County, Washington
Sewer Revenue Bonds, 2018, Series B — \$124,455,000

Ladies and Gentlemen:

We have acted as bond counsel to King County, Washington (the “County”), and have examined a certified transcript of all of the proceedings taken in the matter of the issuance by the County of its Sewer Revenue Bonds, 2018, Series B, in the principal amount of \$124,455,000 (the “Bonds”) issued pursuant to Ordinance 18588, passed on October 23, 2017 (the “Bond Ordinance”) and sold pursuant to Motion 15243, passed on November 5, 2018, to pay costs of capital improvements to the County’s sewer system (the “System”) and to pay costs of issuance of the Bonds. Capitalized terms used in this opinion have the meanings given such terms in the Bond Ordinance.

The Bonds are subject to redemption prior to maturity as provided in the Bond Ordinance and the Notice of Sale. The County has not designated the Bonds as “qualified tax-exempt obligations” within the meaning of Section 265(b)(3) of the Internal Revenue Code of 1986, as amended (the “Code”).

Regarding questions of fact material to our opinions, we have relied on representations of the County in the Bond Ordinance and in the certified proceedings and on other certifications of public officials and others furnished to us without undertaking to verify the same by independent investigation.

Based on the foregoing, we are of the opinion that, under existing law:

1. The Bond Ordinance is a legal, valid and binding obligation of the County, has been duly authorized, executed and delivered and is enforceable in accordance with its terms, except to the extent that enforcement may be limited by laws relating to bankruptcy, insolvency, moratorium, reorganization or other similar laws of general application affecting the rights of creditors, by the application of equitable principles and the exercise of judicial discretion.

2. The Bonds have been legally issued and constitute valid and binding special obligations of the County, both principal thereof and interest thereon payable solely out of Revenue

of the System to be paid into a special fund of the County known as the “Water Quality Revenue Bond Account” (the “Parity Bond Fund”), except to the extent that the enforcement of the rights and remedies of the holders of the Bonds may be limited by laws relating to bankruptcy, reorganization, insolvency, moratorium or other similar laws of general application affecting the rights of creditors, by the application of equitable principles and the exercise of judicial discretion.

3. The County has irrevocably bound itself to set aside and pay into the Parity Bond Fund and accounts therein out of Revenue of the System amounts sufficient to pay the principal of and interest on the Bonds when due. The County has pledged that the payments to be made from Revenue of the System into the Parity Bond Fund and accounts therein have a lien and charge on Revenue of the System superior to all other charges of any kind or nature except Operating and Maintenance Expenses, and equal in rank to the lien and charge upon Revenue of the System of the amounts required to pay and secure the payment of the principal of and interest on the outstanding Parity Bonds and any Future Parity Bonds. The Bonds are not general obligations of the County.

4. Interest on the Bonds is excludable from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. The opinion set forth in the preceding sentence is subject to the condition that the County must comply with all requirements of the Code, that must be satisfied subsequent to the issuance of the Bonds in order that the interest thereon be, and continue to be, excludable from gross income for federal income tax purposes. The County has covenanted to comply with all applicable requirements. Failure to comply with certain of such requirements may cause interest on the Bonds to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds.

Except as expressly stated above, we express no opinion regarding any tax consequences related to the ownership, sale or disposition of the Bonds, or the amount, accrual or receipt of interest on, the Bonds. Owners of the Bonds should consult their tax advisors regarding the applicability of any collateral tax consequences of owning the Bonds.

We have not been engaged nor have we undertaken to review the accuracy, completeness or sufficiency of the official statement or other offering material related to the Bonds (except to the extent, if any, stated in the official statement), and we express no opinion relating thereto, or relating to the undertaking by the County to provide ongoing disclosure pursuant to Securities and Exchange Commission Rule 15c2-12.

This opinion is given as of the date hereof, and we assume no obligation to update, revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Very truly yours,
PACIFICA LAW GROUP LLP

APPENDIX C

**KING COUNTY WATER QUALITY ENTERPRISE FUND
2017 AUDITED FINANCIAL STATEMENTS**

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REPORT OF INDEPENDENT AUDITORS AND FINANCIAL
STATEMENTS WITH REQUIRED SUPPLEMENTARY
INFORMATION AND OTHER INFORMATION

**KING COUNTY WATER QUALITY ENTERPRISE FUND
(AN ENTERPRISE FUND OF KING COUNTY, WASHINGTON)**

December 31, 2017 and 2016



MOSSADAMS

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Report of Independent Auditors

To the Metropolitan King County Council
Seattle, Washington

Report on the Financial Statements

We have audited the accompanying financial statements of the King County Water Quality Enterprise Fund (Water Quality), which comprise the statements of net position as of December 31, 2017 and 2016, and the related statements of revenues, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the King County Water Quality Enterprise Fund as of December 31, 2017 and 2016, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Schedule of the County's Proportionate Share of the Net Pension Liability, Schedule of the County's Contributions, and Schedule of Funding Progress for the Plan be presented to supplement the basic financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on Water Quality's financial statements. The Supplemental Schedule of Debt Service Coverage Ratios and Supplemental Schedule of Historical Debt Service Coverage Ratios are presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The other information has not been subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Moss Adams LLP

Seattle, Washington
April 30, 2018

King County Water Quality Enterprise Fund

Management's Discussion and Analysis

The management of King County Water Quality Enterprise Fund (Water Quality) presents to readers of its financial statements this narrative overview and analysis of its activities and financial performance for the fiscal years ended December 31, 2017 and 2016.

The Sewer System

Water Quality provides regional wastewater treatment services to Western Washington in King County, part of Snohomish County, and part of Pierce County with a service area encompassing over 424 square miles. The major wastewater treatment facilities include three secondary treatment plants at West Point in Seattle, South Plant in Renton and the Brightwater Treatment Plant located near Woodinville and two smaller secondary treatment plants at Vashon Island and Carnation, 391 miles of interceptors, 47 pump stations, and 25 regulator stations. Other facilities include four combined sewer overflow (CSO) treatment plants and 39 CSO control locations. The sewer system collected and treated an average of 194 million gallons per day (MGD) in 2017 from approximately 1.7 million residents.

Financial Highlights

During 2017, Water Quality provided sewage treatment services to 756,916 (based on sewer revenues that include sewer agency prior year adjustments) residential customer equivalents (RCE) compared to 756,430 in 2016 and 736,090 in 2015. An RCE is one single-family residence or an equivalent unit of 750 cubic feet of monthly water consumption for all other customers such as multifamily residential, commercial, and industrial properties. The capacity charge program added 12,484 new connections to its customer billing base in 2017. The program added 10,743 and 11,676 new connections in 2016 and 2015, respectively. In 2017, the average flow of the five treatment plants was 194 MGD with a peak daily flow of 605 MGD. Maximum system capacity was 862 MGD in 2017 and in 2016. The average daily flow fluctuated between a peak of 194 MGD in 2017 and 188 MGD in 2016. The annual fluctuation in flows largely depends on the amount of annual precipitation.

In 2017, resource recovery delivered 117,195 tons compared to 122,194 tons in 2016 of Loop® biosolids to customers for use in forest management, agriculture, and composting. Approximately 108 million gallons compared to 83 million gallons in 2016 of Class A reclaimed water was distributed for irrigation, urinals/toilets, municipal purposes, and wetland enhancement and about 621 million gallons of filtered, treated wastewater compared to 711 million gallons in 2016 were used for internal treatment plant processes. The permitted capacity for the South Plant reclaimed water facility is a filter feed loading of 1.3 MGD and the Brightwater permitted reclaimed water treatment capacity is 21 MGD.

Water Quality sold 2.4 million therms of natural gas to Puget Sound Energy from the South Treatment Plant in 2017 and 211 thousand therms in 2016. Recently, Congressional action under the Energy Independence Security Act and subsequent rule-making by the Environmental Protection Agency (EPA) created an opportunity for Water Quality to monetize the environmental benefit of its biofuel through the generation and sale of environmental attributes called RINS (Renewable Identification Numbers). In November 2016, King County entered an agreement with IGI Resources, Inc., for the sale of bio-methane from South Plant and the corresponding RINS. In 2017, this agreement resulted in \$5.6 million in revenue from which \$785 thousand was paid for operational costs to fulfill the administrative and operations requirements of the contract and to improve the operation of the biogas system. West Point Treatment Plant sold Seattle City Light 10.9 million kilowatt hours of electricity generated from digester gas in 2017 and 18 million kilowatt hours in 2016.

King County Water Quality Enterprise Fund

Management's Discussion and Analysis

Financial Highlights (continued)

The Industrial Pretreatment Program conducted 339 inspections and took 1,735 compliance samples in 2017 compared to 309 inspections and 1,500 compliance samples taken in 2016. The program currently tracks 585 facilities with discharge authorization permits and 111 significant industrial users compared to 552 facilities with discharge authorization permits and 114 significant industrial users in 2016.

In 1999, the Metropolitan King County Council adopted the Regional Wastewater Services Plan (RWSP) to construct additional capacity, protect public health and provide for future projected population growth in its service area through 2030. Major RWSP projects include improvements to the regional Conveyance system and CSO control projects. Total capital program expenditures were \$192 million in 2017 and \$167.5 million in 2016.

Water Quality currently has 39 CSO locations plus four CSO treatment facilities. Past investments conducted in concert with the City of Seattle have resulted in a significant reduction in combined sewer overflows from a baseline of 2.3 billion gallons per year in years 1980-1983 to an average of 1 billion gallons per year at present.

In 2012, the EPA entered into a consent decree with Water Quality to reduce CSO overflows to meet regulator's standards for discharges or treatment by 2030. The consent decree is based on Water Quality's 2012 Amended Long-term CSO Control Plan. The Plan amended the original total of 21 CSO projects to 13, of which four were completed in 2017. These 13 projects will control 18 CSO locations. Presently, nine CSO projects remain, four of which are currently underway. A joint project with the City of Seattle is being developed that will address two of the nine projects.

The EPA and Washington State Department of Ecology (DOE) will monitor Water Quality's progress with CSO control and work closely with the enterprise going forward to meet CSO control requirements. In accordance with the county's National Pollutant Discharge Elimination System permit for the West Point Treatment Plant and the consent decree, an update to the Plan is underway and will be completed by the end of 2018.

On February 9, 2017, during heavy rainfall in the Seattle area, the West Point treatment plant was operating at peak hydraulic capacity when a partial interruption of power supply occurred. The ensuing cascade of events caused several elements of the treatment plant to fail, culminating in flooding of the plant and leading to the emergency bypass of the treatment system and the discharge into Puget Sound of an estimated 180 million gallons of stormwater mixed with untreated sewage. Water Quality was able to restore primary treatment to the plant on February 28, 2017. On May 8, 2017, secondary treatment and full regulatory compliance was restored. Costs incurred in remediating the damage come under the terms of the County's property insurance coverage, with a \$250 thousand deductible and a maximum loss recovery of \$500 million per occurrence. The County Council commissioned the consulting engineering firm AECOM to provide an independent review of the West Point accident, which was received on July 18, 2017. Water Quality has worked closely with AECOM in its review of West Point and is committed to moving forward on its recommendations to improve redundancy, resiliency and implement a higher level of operational integration to manage its interdependencies. On September 12, 2017, the DOE issued a Notice of Penalty against Water Quality in the amount of \$361 thousand for permit violations stemming from the incident.

King County Water Quality Enterprise Fund Management's Discussion and Analysis

Financial Highlights (continued)

The DOE also issued an Administrative Order requiring that six corrective actions be implemented amounting to \$1.4 million. Given the remedial actions already taken and already planned by Water Quality, including those set forth in the Administrative Order, the County has filed a Notice of Appeal with the Pollution Control Hearings Board regarding the Notice of Penalty. Water Quality did not appeal the Administrative Order.

The unprecedented electrical disturbance during the intense rainstorm precipitated electrical failures throughout the treatment plant resulting in catastrophic flood damage to equipment and building assets. In 2017, Water Quality received \$12.5 million in insurance proceeds offsetting the asset impairment loss of \$1.6 million and recovery costs of \$10.0 million resulting in a net gain of \$883 thousand. Water Quality incurred and capitalized an additional \$11.0 million in capital assets in 2017 and will capitalize related 2018 costs outstanding.

In April of 2016, the Magnolia CSO Control Facility entered service and functioned until a pipeline leak was detected on November 2, 2016. An extensive analysis was undertaken by Water Quality project management in conjunction with the project contractor to determine the root cause of the leak and a corrective course of action. The work continued until December, 2017 when the project team decided on a plan to destroy the existing pipe and replace it with a continuous pipeline. Water Quality determined the original pipeline a total loss and impairment in accordance with governmental accounting standards. The storage tank and other components of this project remain intact and depreciation for them continued since the expected life of the facility remains as originally capitalized. The carrying value of the fully retired pipeline was \$9.6 million. The costs associated with replacing the pipeline are still being determined and will be capitalized in 2018.

Water Quality operating revenues increased by 8.2 percent, or \$38.1 million, to \$502.6 million in 2017 from \$464.5 million in 2016 while operating expenses before depreciation and amortization increased by 2.6 percent, or \$3.6 million, to \$142.3 million in 2017 from \$138.7 million in 2016.

The monthly sewer rate increased to \$44.22 in 2017 from \$42.03 per RCE in 2016. In 2016, it stayed the same as 2015 at \$42.03 per RCE. The capacity charge rate increased to \$60.80 per RCE in 2017 from \$58.7 per RCE in 2016. Capacity charge revenues increased 16 percent, or \$11.4 million, to \$82.6 million in 2017 from \$71.2 million in 2016. The RCE's billed for sewer treatment services increased to 756,916 (based on sewer revenues that include sewer agency prior year adjustments) in 2017 from 756,430 in 2016. The County allows the capacity charge to be prepaid on a discounted basis at the customer's option. The discount rate reflects the 15-year mortgage and 10- and 20-year investment rates and was 2.9 percent in 2017 compared to 2.8 percent in 2016. In June, 2017, the County Council adopted a capacity charge of \$62.60, a 3 percent increase, and maintained the \$44.22 sewer rate for 2018.

The rate stabilization reserve, as mandated by the Metropolitan King County Council as part of its rate setting activities, permits Water Quality to set aside a portion of current revenue for future periods in order to moderate the impact of rate increases over time. The rate stabilization reserve was unchanged at \$46.3 million in 2017 and 2016. Future deposits to the rate stabilization reserve will decrease operating revenues and debt service coverage in the year of the deposit. Withdrawals will have the opposite effect of increasing operating revenues and debt service coverage in the year the rate stabilization reserve is reduced.

King County Water Quality Enterprise Fund

Management's Discussion and Analysis

Financial Highlights (continued)

Water Quality issued \$149.5 million in Sewer Refunding Revenue Bonds in 2017, which resulted in \$35.8 million in savings over the lives of the refunded issues or \$19.9 million in present value of debt service savings. In February 2017, Water Quality deposited cash in an irrevocable escrow to defease \$5.1 million of outstanding 2008 and 2009 sewer revenue bonds. With the defeasance of these bonds, revised covenants in the bond ordinance that establish the minimum ratings for surety bonds that the County may use as qualified investments in lieu of cash in the Bond Reserve have become effective. In December, 2017, Water Quality issued \$50 million in Junior Lien Sewer Revenue Bonds, Series 2017, used for new capital construction. Water Quality issued \$154.6 million in Limited Tax General Obligation Refunding Bonds which resulted in \$41.2 million in savings over the life of the refunded issue or \$33.5 in present value of debt service savings. On October 26, 2017, Water Quality issued \$100 million in Multi-Modal Limited Tax General Obligation Refunding Bonds to refund all outstanding 2010 Multi-Modal, Series A and B debt. Water Quality received \$26.5 million in low interest state loans in 2017 at rates of 2.41 and 2.72 percent.

In 2016, Water Quality issued \$781.2 million of Sewer Revenue and Refunding Bonds, which provided \$50.0 million for new construction. This resulted in \$168.9 million in savings over the lives of the refunded issues or \$113.5 million in present value of debt service savings. In November 2016, Water Quality remarketed \$100 million in 2015 Junior Lien Sewer Revenue Bonds, and changed the interest rate mode to a one-month variable rate from a one-year fixed rate. Water Quality received \$39.1 million in low interest state loans in 2016.

The results of operations for 2017 and 2016 produced a debt service coverage ratio on senior lien debt of 1.70 and 1.55, respectively, exceeding the coverage covenant requirement of 1.15 in both years. The total debt coverage ratio of 1.51 in 2017 and 1.41 in 2016 exceeded the 1.15 policy minimum in both years.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to Water Quality's basic financial statements. The basic financial statements are comprised of the comparative statements of net position; statements of revenues, expenses and changes in net position; statements of cash flows; and the notes to the financial statements, which explain certain elements of the financial statements in greater detail.

Water Quality's financial statements provide information with respect to all of its activities using accounting methods similar to those used by private-sector companies. The statements provide both long-term and short-term information about Water Quality's financial status.

The comparative statement of net position presents information on all of Water Quality's assets, liabilities and deferred inflows/outflows of resources, with the difference presented as net position as of each year-end. Over time, the statements demonstrate Water Quality's financial health by providing a basis for the reader to evaluate capital structure, liquidity, and financial flexibility.

King County Water Quality Enterprise Fund Management's Discussion and Analysis

Overview of the Financial Statements (continued)

The two most recent years' operating and non-operating revenues and expenses of Water Quality are accounted for in the statements of revenues, expenses and changes in net position. The statements illustrate the current and prior period results of operations and recovery of costs by receipt of fees, and are instrumental in demonstrating Water Quality's continued creditworthiness. All changes in net position are reported as soon as the underlying event occurs, irrespective of the timing of related cash flows. The receipt of monthly sewage treatment charges provides the principal support for Water Quality's activities. Sewage treatment charges of \$401.7 million provided 79.9 percent of operating revenues in 2017 and \$381.5 million provided 82.1 percent of operating revenues in 2016. Water Quality is a wholesale provider of sewage treatment services to 34 municipal and 3 non-municipal participants in King, Pierce, and Snohomish counties. The receipt of the monthly payments is governed by service agreements, the majority of which expire in July 2036.

The statements of cash flows report cash receipts, cash payments, and net changes in cash derived from operations, financing, and investment activities. From the statements, the reader can discern Water Quality's sources and applications of cash during 2017 and 2016, reasons for differences between operating cash flows and operating income, and the effect on the statements of net position from investing, capital, and financing activities.

The notes to financial statements provide additional information essential to obtain a full understanding of the data provided in the basic statements.

In the following comparative analysis of the financial statements, percentages and ratios were calculated and rounded using the actual detail from the financial statements.

King County Water Quality Enterprise Fund

Management's Discussion and Analysis

Financial Analysis of the Statement of Net Position

Comparative data, stated in millions of dollars:

	Years Ended December 31,		
	2017	2016	2015
Current assets	\$ 438.7	\$ 458.1	\$ 431.8
Noncurrent assets	242.4	217.1	245.2
Capital assets	4,077.8	4,081.5	4,106.5
Other	120.2	113.3	110.4
Total assets	4,879.1	4,870.0	4,893.9
Deferred outflows of resources	233.6	247.5	184.9
Total assets and deferred outflows of resources	5,112.7	5,117.5	5,078.8
Current liabilities	217.2	214.5	456.5
Noncurrent liabilities	4,144.8	4,216.1	4,065.9
Total liabilities	4,362.0	4,430.6	4,522.4
Deferred inflows of resources	54.1	47.5	53.2
Total liabilities and deferred inflows of resources	4,416.1	4,478.1	4,575.6
Net position - net investment in capital assets	180.7	154.2	191.1
Net position - restricted	235.9	202.4	201.6
Net position - unrestricted	280.0	282.8	110.5
Total net position	\$ 696.6	\$ 639.4	\$ 503.2

Net position serves as a useful indicator of Water Quality's financial position. As of December 31, 2017 and 2016, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$696.6 million and \$639.4 million, respectively.

Of the total Water Quality assets and deferred outflows of resources, 79.8 percent or \$4,077.8 million were invested in capital assets such as treatment plants, pumping and regulator stations, interceptors, and other equipment at year-end 2017. For the year-end 2016, 79.8 percent or \$4,081.5 million were invested in capital assets. Water Quality uses its capital assets to provide wholesale wastewater collection and treatment services in King, Pierce, and Snohomish counties. Current operating and debt service requirements are met by operating and non-operating revenues composed of monthly sewage treatment charges, a capacity charge for new customers, other special-handling charges, miscellaneous operating revenues, and investment earnings.

King County Water Quality Enterprise Fund Management's Discussion and Analysis

Financial Analysis of the Statement of Net Position (continued)

The net position increased by 8.9 percent or \$57.2 million in 2017 to \$696.6 million from \$639.4 million in 2016. Changes in net position are largely due to increased sewage disposal, capacity charge and other operating revenues. Water Quality also prevailed in a July 6, 2017 judgement by the Supreme Court which released a total of \$15.4 million in attorney's fees related to the litigation settlement between Vinci, Parsons, Frontier-Kemper (VPFK) and King County. Restricted net position increased by 16.6 percent or \$33.5 million in 2017 to \$235.9 million from \$202.4 million in 2016. The unrestricted net position decreased by \$2.8 million in 2017 to \$280.0 million from \$282.8 million in 2016.

In 2016, the net position increased by 27.1 percent or \$136.2 million to \$639.4 million from \$503.2 million in 2015. This change was primarily due to the release of restricted funds held in reserve and the recognition of the settlement income from the 2013 litigation settlement between VPFK and King County. On September 7, 2016, the Supreme Court issued an order denying VPFK's Petition for Review and thus, released \$129.6 million of the disputed \$144.3 million. Restricted net position increased by 0.4 percent or \$799 thousand in 2016 to \$202.4 million from \$201.6 million in 2015. The unrestricted net position increased by \$172.3 million in 2016 to \$282.8 from \$110.5 million in 2015.

Financial Analysis of the Statement of Revenues, Expenses, and Changes in Net Position

Comparative data, stated in millions of dollars:

	Years Ended December 31,		
	2017	2016	2015
Sewage treatment fees	\$ 401.7	\$ 381.5	\$ 371.3
Rate stabilization	-	-	(12.0)
Capacity charge revenue	82.6	71.2	62.5
Other revenue	18.3	11.8	11.6
Operating revenues	502.6	464.5	433.4
Operating expenses	319.3	315.0	301.0
Operating income	183.3	149.5	132.4
Nonoperating (expenses)	(126.1)	(13.4)	(142.6)
Grant revenues	-	0.1	0.8
Change in net position	57.2	136.2	(9.4)
Net position beginning of year	639.4	503.2	512.6
Net position end of year	<u>\$ 696.6</u>	<u>\$ 639.4</u>	<u>\$ 503.2</u>

King County Water Quality Enterprise Fund

Management's Discussion and Analysis

Financial Analysis of the Statement of Revenues, Expenses, and Changes in Net Position (continued)

While the statements of net position show changes in assets, liabilities, deferred inflows/outflows of resources and net position, the statements of revenues, expenses and changes in net position provide insight into the source of these changes.

During 2017, operating revenues increased by 8.2 percent or \$38.1 million to \$502.6 million from \$464.5 million in 2016. Operating expenses increased by 1.4 percent or \$4.3 million to \$319.3 million in 2017 from \$315.0 million in 2016.

In 2016, operating revenues increased by 7.2 percent or \$31.1 million to \$464.5 million from \$433.4 million in 2015. Operating expenses increased by 4.7 percent or \$14.0 million to \$315.0 million from \$301.0 million in 2015.

Operating Revenues

In 2017, the \$20.2 million, 5.3 percent increase in sewage disposal fee revenue of \$401.7 million from \$381.5 million in 2016 was due to a 5.2 percent rate increase and growth in number of RCE's. Water Quality charged a monthly sewage treatment rate of \$44.22 per RCE in 2017, \$42.03 per RCE in 2016, and \$42.03 in 2015. In 2016, sewage disposal revenues increased by 2.7 percent or \$10.2 million to \$381.5 million from \$371.3 million in 2015.

A 3.6 percent increase in the 2017 capacity charge rate for new customers and continued growth in new connections contributed to a 16.0 percent, or \$11.4 million, increase in overall capacity charge revenue of \$82.6 million. In 2016, capacity charge revenue increased by 13.9 percent to \$71.2 million from \$62.5 million in 2015. Capacity charge early payoffs accounted for 28.6 percent of the 2017 capacity charge revenue compared to 25.4 percent in 2016 and 28.6 percent in 2015.

Other operating revenues totaling \$18.3 million in 2017 increased \$6.5 million, or 55.1 percent, due primarily to the sale of bio-methane credits known as RINS. In 2016, other operating revenue increased 1.7 percent, or \$200 thousand to \$11.8 million from \$11.6 million in 2015.

Operating Expenses

In 2017, operating expenses, excluding depreciation, rose 2.6 percent or \$3.6 million to \$142.3 million compared to a 9.0 percent increase, or \$138.7 million in 2016. Utility and Service costs rose 13.2 percent, or \$4.2 million from \$31.9 million in 2016 to \$36.1 million in 2017 primarily due to consultant and engineering fees. Utility and Service costs in 2016 increased 6.7 percent or \$2.0 million from \$29.9 million to \$31.9 million. Electricity costs in 2017 rose by 1.4 percent, or \$220 thousand, to \$14.2 million from \$14.0 million in 2016. In 2016, electricity costs increased by 1.0 percent or \$129 thousand to \$14.0 million. After using methane gas to produce electricity for its Cogen system at South Treatment Plant in 2016, Water Quality returned to selling its methane in 2017. Chemical costs stayed the same at \$8.1 million in 2017 and 2016. Chemical costs increased by 12.5 percent or about \$903 thousand in 2016 to \$8.1 million.

King County Water Quality Enterprise Fund Management's Discussion and Analysis

Financial Analysis of the Statement of Revenues, Expenses, and Changes in Net Position (continued)

Intragovernmental expenses grew 9.4 percent, or \$3.4 million, to \$39.2 million from \$35.8 million in 2016. Contributors to increases were rent and property management fees, in addition to attorney and insurance payments. In 2016, intragovernmental expenses increased by 4.1 percent or \$1.4 million to \$35.8 million from \$34.4 million.

Non-operating Revenues and Expenses

Non-operating expenses (net) increased by \$113.6 million to \$127.0 million in 2017 from \$13.4 million in 2016. The main contributor to the non-operating expense increase (net) in 2016 was the release of \$129.6 million in restricted funds related to the VPFK legal action on the Brightwater project. Subsequently in 2017, the drop in non-operating expense (net) corresponds to the 2016 decision. In 2017, an additional \$15.4 million of disputed VPFK legal fees were settled in a July 6, 2017 Supreme Court decision, and were added to non-operating expense (net). Impaired asset costs totaling \$9.6 million for Magnolia CSO project, and net 2017 West Point flood event costs are included in non-operating expense (see Financial Highlights for additional information). In 2016, non-operating expenses (net) decreased by 90.6 percent or \$129.2 million to \$13.4 million from \$142.6 million in 2015.

Capital Assets

At December 31, 2017, Water Quality's investment in capital assets, net of accumulated depreciation, was \$4,077.8 million, reflecting a decrease of \$3.7 million or 0.1 percent less than the balance of \$4,081.5 million at December 31, 2016. Capital assets net decrease from December 31, 2015 to December 31, 2016 was \$25.0 million or 0.6 percent.

Large 2017 construction project expenditures include:

- \$37.7 million for North Creek Interceptor
- \$13.6 million for Kent-Auburn Pacific Pump Station and Interceptors
- \$11.9 million for Georgetown Wet Weather Treatment Station
- \$11.0 million for West Point Treatment Plant
- \$10.4 million for Hanford Conveyance and Storage Tank

Large 2016 construction project expenditures include:

- \$16.7 million for Georgetown Wet Weather Treatment Station
- \$16.3 million for North Creek Interceptor
- \$13.7 million for Fremont Siphon Replacement
- \$10.9 million for Joint Ship Canal CSO
- \$ 8.9 million for Hanford Conveyance & Storage Tank

For more detailed information on capital assets, refer to Note 6 in the financial statements.

King County Water Quality Enterprise Fund

Management's Discussion and Analysis

Debt Administration

On February 22, 2017, Water Quality deposited cash in an irrevocable escrow to defease \$5.1 million in Sewer Revenue Bonds, Series 2008 and 2009. With the defeasance of this debt, revised covenants in the bond ordinance that establish the minimum ratings for surety bonds that the County may use as qualified investments in lieu of cash in the Bond Reserve have become effective.

Water Quality issued \$154.6 million of limited tax general obligation refunding bonds in October, 2017 with an average life of 9.6 years at an average rate of 4.3 percent and an effective rate of 2.6 percent and \$149.5 million of sewer refunding revenue bonds in December, 2017 with an average life of 15.9 years at an average rate of 5.0 percent and an effective rate of 3.6 percent. On October 26, 2017, Water Quality issued \$100 million in multi-modal limited tax general obligation refunding bonds to refund all outstanding 2010 Multi-Modal, Series A and B. On December 19, 2017 Water Quality issued \$50 million in Junior Lien Sewer Revenue Bonds, Series 2017 which was used for new capital construction.

Water Quality issued \$281.5 million of sewer revenue refunding bonds in February 2016 with an average life of 18.4 years at an average rate of 4.1 percent and an effective rate of 3.3 percent, and \$499.7 million of sewer improvement and refunding revenue bonds in October 2016 with an average life of 17.6 years at an average rate of 4.7 percent and effective rate of 3.2 percent. In November 2016, Water Quality remarketed \$100.0 million in Junior Lien Sewer Revenue Bonds changing their interest rate mode to a monthly variable rate from a one-year fixed rate.

Water Quality received \$26.5 million in low-interest loans from the State of Washington in 2017 and \$39.1 million in 2016. The new loans carry below-market rates of 2.41 percent and 2.72 percent with repayment terms of 20 years.

Water Quality has \$2.9 billion of sewer revenue bonds and variable rate revenue bonds outstanding at the end of 2017 and had \$2.9 billion of sewer revenue bonds and variable rate revenue bonds outstanding at the end of 2016. Revenue bonds are repaid from and secured by a pledge of earnings, revenues and money received by Water Quality from or on account of operation of the sewer system, including receipts from sewage treatment fees, and other income of Water Quality. Revenue bonds are not guaranteed by the full faith and credit of King County.

At the end of 2017, Water Quality has \$706.0 million of general obligation bonds and variable rate general obligation bonds outstanding and had \$755.9 million of general obligation bonds and variable rate general obligation bonds outstanding at the end of 2016. While the full faith and credit of King County guarantees repayment of principal and interest on general obligation bonds, they are paid from sewage treatment fees and other income.

King County received ratings of AAA from Standard and Poor's and Aaa from Moody's Investors Service for the limited tax general obligation bond issued in October, 2017. On September 19, 2017, Moody's Investors Service raised its rating of King County Sewer Enterprise parity revenue bonds to Aa1 from Aa2 and raised its rating of King County Sewer Enterprise junior sewer revenue bonds to Aa2 from Aa3. In 2016, Water Quality's bond ratings were Aa2 and AA+ by Moody's Investors Service and S&P Global Ratings, respectively.

King County Water Quality Enterprise Fund Management's Discussion and Analysis

Debt Administration (continued)

At the time of the issuance of the sewer revenue bonds in December, 2017, Water Quality's bond ratings were:

<u>Moody's Investors Service</u>	<u>Standard & Poor's</u>
Aa1	AA+

As required by bond covenant, Water Quality maintains a bond reserve account, which is funded by cash and surety bond policies. At December 31, 2017, the cash balance in the reserve account was \$150.5 million and with a surety bond balance of \$29.6 million, totaled \$180.1 million. This balance exceeded the reserve account requirement of maximum annual debt service on the parity bonds by \$7.9 million. In June 2017, excess funds in the reserve account of \$10 million were transferred to the construction fund to pay for capital improvements. At the end of 2016, the bond reserve account balance was \$160.5 million. In addition to bond covenant reserves, Water Quality also maintains financial policy reserves. At December 31, 2017 and 2016, respectively, the rate stabilization, liquidity, and asset management financial policy reserves totaled \$81.1 million and \$79.9 million.

For more detailed information on debt, reference the notes to the financial statements.

Debt Service Coverage Ratios

	<u>Year Ended December 31,</u>	
	<u>2017</u>	<u>2016</u>
Parity Debt	1.70	1.55
Total Debt	1.51	1.41

Two debt service coverage ratios closely monitored by bond rating agencies are coverage on parity debt and coverage on total debt. By bond ordinance, Water Quality sets sewer rates at a level adequate to provide net revenue equal to at least 1.15 times the annual debt service requirement on parity debt. Water Quality has an adopted policy to equal or exceed a ratio of at least 1.25 on parity debt or 0.10 above the ratio required by bond ordinance. Since 2001, Water Quality established a minimum coverage policy of 1.15 on total debt to further strengthen coverage performance.

Requests for Information

This financial report is designed to provide an overview of Water Quality's financial condition as of the years ended December 31, 2017 and 2016. Questions concerning this report or requests for additional information should be addressed to Cheryl Lee, Chief Accountant for King County, 500 Fourth Avenue, Room 653, Seattle, WA 98104.

King County Water Quality Enterprise Fund **Statements of Net Position (in thousands)**

	December 31,	
	2017	2016
CURRENT ASSETS		
Cash and cash equivalents	\$ 366,227	\$ 383,232
Restricted cash and cash equivalents	2,481	19,748
Accounts receivable, net	57,767	44,755
Due from other funds	2,087	1,292
Inventory of supplies	9,531	8,760
Prepayments	579	315
	<u>438,672</u>	<u>458,102</u>
NONCURRENT ASSETS		
Restricted cash and cash equivalents	<u>242,406</u>	<u>217,093</u>
Capital assets		
Building and land improvements	2,114,776	2,082,829
Artwork	6,045	5,700
Infrastructure and right of way	2,297,081	2,268,422
Plant in service and other equipment	1,145,510	1,146,609
Less accumulated depreciation	<u>(2,134,638)</u>	<u>(2,010,012)</u>
	<u>3,428,774</u>	<u>3,493,548</u>
Land and easements	259,657	256,048
Construction work in progress	<u>389,354</u>	<u>331,948</u>
	<u>4,077,785</u>	<u>4,081,544</u>
Other noncurrent		
Prepayments	-	2
Regulatory and other utility assets, net of amortization	116,750	109,550
Other assets	<u>3,488</u>	<u>3,725</u>
	<u>120,238</u>	<u>113,277</u>
Total assets	<u>4,879,101</u>	<u>4,870,016</u>
DEFERRED OUTFLOWS OF RESOURCES		
Deferred outflows on refunding	227,851	237,604
Deferred outflows on pension	<u>5,767</u>	<u>9,849</u>
Total deferred outflows of resources	<u>233,618</u>	<u>247,453</u>
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	<u><u>\$ 5,112,719</u></u>	<u><u>\$ 5,117,469</u></u>

King County Water Quality Enterprise Fund
Statements of Net Position (continued) (in thousands)

	December 31,	
	2017	2016
CURRENT LIABILITIES		
Accounts payable	\$ 34,827	\$ 26,767
Retainage payable	2,481	2,049
Due to other funds	25	16
Interest payable	66,590	68,116
Wages and benefits payable	3,080	2,983
Compensated absences	669	608
Taxes payable	16	14
Unearned revenue	2,325	2,594
State loans payable	15,690	13,565
General obligation bonds payable	29,340	21,105
Revenue bonds payable	55,535	52,015
Environmental remediation costs	6,627	6,928
Deposits and other liabilities	-	17,698
	<u>217,205</u>	<u>214,458</u>
NONCURRENT LIABILITIES		
Compensated absences	10,596	10,865
Other post-employment benefits	1,631	1,583
Net pension liability	35,112	51,568
State loans payable, net	202,354	192,424
General obligation bonds payable, net	755,018	801,363
Revenue bonds payable, net	3,100,316	3,118,433
Environmental remediation costs	39,833	39,949
	<u>4,144,860</u>	<u>4,216,185</u>
Total liabilities	<u>4,362,065</u>	<u>4,430,643</u>
DEFERRED INFLOWS OF RESOURCES		
Regulatory credits - rate stabilization	46,250	46,250
Deferred inflows on pension	7,825	1,217
Total deferred inflows of resources	<u>54,075</u>	<u>47,467</u>
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	<u>4,416,140</u>	<u>4,478,110</u>
NET POSITION		
Net investments in capital assets	180,727	154,183
Restricted for		
Debt service	162,103	170,843
Regulatory assets and environmental liabilities	73,777	31,568
Unrestricted	<u>279,972</u>	<u>282,765</u>
Total net position	<u>\$ 696,579</u>	<u>\$ 639,359</u>

King County Water Quality Enterprise Fund
Statements of Revenues, Expenses, and Changes in Net Position (in thousands)

	Years Ended December 31,	
	2017	2016
OPERATING REVENUES		
Sewage disposal fees	\$ 401,650	\$ 381,513
Other operating revenues	100,923	83,028
Total operating revenues	502,573	464,541
OPERATING EXPENSES		
Sewage treatment, disposal, and transmission	102,680	95,429
General and administrative	39,583	43,269
Environmental related amortization	4,242	3,707
Depreciation and amortization	172,779	172,598
Total operating expenses	319,284	315,003
OPERATING INCOME	183,289	149,538
NONOPERATING REVENUES (EXPENSES)		
Investment earnings	4,386	4,019
Interest expense	(128,137)	(131,042)
Loss on disposal and impairment of capital assets	(4,250)	(19,100)
Other	1,932	132,697
Total nonoperating expenses	(126,069)	(13,426)
INCOME BEFORE GRANTS	57,220	136,112
Capital grants	-	50
CHANGE IN NET POSITION	57,220	136,162
NET POSITION		
Beginning of year	639,359	503,197
End of year	\$ 696,579	\$ 639,359

King County Water Quality Enterprise Fund

Statements of Cash Flows (in thousands)

	Years Ended December 31,	
	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers	\$ 492,400	\$ 462,654
Cash payments to suppliers for goods and services	(90,653)	(78,905)
Cash payments for employee services	(54,953)	(51,658)
Other receipts	12,500	-
Other payments	(22,661)	(8,995)
Net cash provided by operating activities	<u>336,633</u>	<u>323,096</u>
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Transfers out	(741)	(150)
Assistance to other agencies	(425)	(948)
Net cash used in noncapital financing activities	<u>(1,166)</u>	<u>(1,098)</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition of capital and other utility assets	(175,138)	(171,138)
Proceeds from disposal of capital assets	62	72
Principal paid on capital debt	(86,944)	(78,980)
Interest paid on capital debt	(157,869)	(170,028)
Proceeds of new bond issuance	50,000	50,000
Proceeds of state loans	26,471	39,151
Cash payments for bond defeasance	(5,394)	-
Capital grants received	-	50
Net cash used in capital and related financing activities	<u>(348,812)</u>	<u>(330,873)</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest on investments	<u>4,386</u>	<u>4,019</u>
NET DECREASE IN CASH AND CASH EQUIVALENTS	<u>(8,959)</u>	<u>(4,856)</u>
CASH AND CASH EQUIVALENTS		
Beginning of year	<u>620,073</u>	<u>624,929</u>
End of year	<u>\$ 611,114</u>	<u>\$ 620,073</u>

King County Water Quality Enterprise Fund

Statements of Cash Flows (in thousands)

	Years Ended December 31,	
	2017	2016
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income	\$ 183,289	\$ 149,538
Adjustments to reconcile operating income to net cash provided by operating activities		
Depreciation and amortization	172,779	172,598
Other nonoperating revenue and expense	22,358	134,379
Changes in assets		
Accounts receivable	(13,011)	(7,738)
Due from other funds	(92)	(118)
Inventory of supplies	(771)	(335)
Prepayments	(265)	59
Other assets	(6,963)	135
Changes in deferred outflows of resources		
Deferred outflows on pension	4,082	(4,862)
Changes in liabilities		
Accounts payable	3,393	5,744
Retainage payable	82	18
Due to other funds	9	(95)
Taxes payable	2	2
Unearned revenue	(269)	527
Wages and benefits payable	134	364
Compensated absences	(208)	208
Other post-employment benefits	48	116
Net pension liability	(16,457)	12,683
Other liabilities	(18,115)	(134,360)
Changes in deferred inflows of resources		
Deferred inflows on pension	6,608	(5,767)
Total adjustments	153,344	173,558
NET CASH PROVIDED BY OPERATING ACTIVITIES	\$ 336,633	\$ 323,096

NONCASH INVESTING, CAPITAL, AND FINANCING ACTIVITIES

Water Quality issued bonds in 2017 to refund debt issued from 2008 to 2011. The \$356.4 million of bond proceeds and \$6.5 million of cash payments by Water Quality were placed in escrow for the defeasance of \$335.3 million of outstanding bond principal and \$30.5 million of interest.

Water Quality issued bonds in 2016 to refund debt issued from 2006 to 2011. The \$870.9 million of bond proceeds were placed in escrow for the defeasance of \$769.5 million of outstanding revenue bond principal and \$130.6 million of interest. The \$100.0 million of fixed rate junior lien bonds issued in 2015 were remarketed in 2016 to junior lien variable rate demand sewer revenue bonds.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 1 – Operations and Accounting Policies

Summary of operations – The King County Water Quality Enterprise Fund (Water Quality) is an enterprise fund operated by the King County Department of Natural Resources and Parks in accordance with Chapter 35.58 of the Revised Code of Washington (RCW) to provide sewage treatment and water pollution abatement services to the urbanized areas of King County, Washington (the County).

Water Quality is an integral part of the County reporting entity and is included, as an enterprise fund, in the County's comprehensive annual financial report. As an enterprise fund, Water Quality is funded and operated separately from other operations of the County. Revenues, bond proceeds, and grants are restricted by purpose. Accordingly, Water Quality maintains separate accounting records and issues stand-alone financial statements.

Water Quality has long-term sewage disposal agreements with the cities and sewer districts that operate sewage collection systems within its service area. The monthly sewage disposal charge to the contracting cities and districts is based on Water Quality's estimated annual monetary requirements, including operating costs and debt service. Revenues from Water Quality's largest customer, the City of Seattle (Seattle Public Utilities), represent approximately 40 percent of total sewage disposal fees in 2017 and in 2016.

Water Quality purchases goods and services from other County agencies, including reimbursement of the County's general fund for a share of general government. Expenses incurred in doing business with other County agencies amounted to \$39.2 million and \$35.8 million in 2017 and 2016, respectively.

Significant accounting policies – Water Quality is accounted for using the flow of economic resources measurement focus similar to that of a private enterprise organized for profit. Water Quality's financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) as applied to governmental units using the accrual basis of accounting. Under this method, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred. Water Quality, regardless of the timing of cash flows, applies all applicable Governmental Accounting Standards Board (GASB) pronouncements.

- a. **Cash and cash equivalents** – Water Quality considers as cash and cash equivalents all balances held with the King County Treasurer in the King County Investment Pool (the Pool), cash with escrow agents or held in trust, and petty cash. Unrealized gain or loss on Water Quality's proportionate share of the Pool is reported as a component of investment earnings.
- b. **Receivables and allowance for doubtful accounts** – Receivables include charges for services rendered by Water Quality or intergovernmental grants. All unbilled service receivables are recorded at year-end. The provisions for estimated uncollectible receivables are reviewed and updated at year-end. These provisions are estimated based on actual historical write-off trends and knowledge of specific circumstances that indicate collection of an account may be unlikely. As of December 31, 2017 and 2016, Water Quality's allowance for doubtful accounts was \$890 thousand and \$815 thousand, respectively.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 1 – Operations and Accounting Policies (continued)

- c. **Due from and to other funds, interfund loans, and advances** – Due from and to other funds consists of current receivables and payables from or to other funds within the County. They typically arise from interfund goods and service transactions and reimbursements.

Interfund loans receivable and payable or advances from and to other funds represent authorized short-term and long-term, respectively, lending and borrowing arrangements within the County.

- d. **Inventory of supplies** – Inventory is recorded at the lower of cost or market using the weighted-average cost method. Materials and supplies are expensed as consumed. Inventory is written off in the year that it is determined obsolete.
- e. **Restricted assets** – In accordance with Water Quality's bond resolutions, state law, King County codes, or other agreements, separate restricted assets have been established. These assets are restricted for specific purposes, including bond and state loan reserves.
- f. **Capital assets** – Capital assets are stated at cost, less accumulated depreciation and amortization. Water Quality's capitalization threshold is: equipment at \$5 thousand; software and intangible assets at \$500 thousand, and buildings and improvements at \$100 thousand. Provision for depreciation and amortization are made on a straight-line basis over the estimated useful lives of Water Quality's capital assets as follows:

Description	Estimated Useful Life
Buildings and improvements other than building	10–75 years
Cars, vans, and trucks	5–10 years
Data processing equipment	3–10 years
Heavy equipment	5–25 years
Sewer lines	20–50 years
Shop equipment	5–20 years
Software	3–10 years
Intangibles	35 years

Water Quality capitalizes certain interest income and expense related to borrowings until the assets are ready for their intended use. The amount capitalized is the difference between the interest revenue and interest expense associated with the applicable tax free borrowings. Total interest expense incurred was \$149.0 million and \$150.2 million during the years ended December 31, 2017 and 2016, of which \$13.2 million and \$12.1 million, respectively, was capitalized.

Repairs and maintenance are expensed as incurred; major renewals, replacements, and betterments are capitalized.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 1 – Operations and Accounting Policies (continued)

Water Quality annually reviews long-lived assets for impairment to determine whether any events or circumstances indicate the carrying value of the assets may not be recoverable. During 2017, Water Quality recognized the asset impairment of \$11.2 million due to damage caused by West Point Treatment Plant flooding in February 2017 and Magnolia CSO control facility pipeline failure in November 2016. The Magnolia facility has been out of service since November 2016. The construction to fully replace the pipeline will occur in 2018, and the other assets at the facility, with a total 2017 year-end carrying amount of \$32.1 million, remain idle until the new pipeline enters service.

- g. **Compensated absences** – Employees earn vacation based upon their date of hire and years of service. They may accumulate a maximum of 480 hours or as bargained for by represented employees. Unused vacation at retirement or normal termination is considered vested and payable to the employee. Employees also earn up to 12 days of sick leave per year and may accumulate sick leave balances without limit. Employees or their beneficiaries are paid 35 percent of the accrued unused sick leave upon retirement or death. No amounts are paid for unused sick leave upon termination. Vacation pay and a portion of sick leave liabilities, including payroll taxes, are accrued.

Water Quality accrues estimated excess compensation liabilities to the Washington State Department of Retirement Systems based on an employee's accrued vacation and sick leave. An excess compensation liability is incurred when an employee whose retirement benefits are based in part on excess compensation receives a termination or severance payment defined by the State as excess compensation. This includes, but is not limited to, a cash-out of unused annual leave in excess of 240 hours and a cash-out of any other form of leave.

- h. **Rebatable arbitrage** – Water Quality's tax-exempt debt is subject to arbitrage restrictions as defined by the Internal Revenue Code. Arbitrage occurs when the funds borrowed at tax-exempt rates of interest are invested in higher yielding taxable securities. These interest earnings in excess of interest expense must be remitted to the federal government except when spending exceptions rules are met. The liability is recognized during the period the excess interest is earned. Water Quality has no liability as of December 31, 2017 and 2016.
- i. **Deferred outflows and inflows of resources** – Deferred outflows of resources represent consumption of resources that is applicable to future reporting periods and deferred inflows of resources represent acquisition of resources that is applicable to future reporting periods. Deferred outflows of resources include deferred losses on the refunding of bonds and certain amounts related to pension accounting. Deferred inflows of resources include certain amounts related to pension accounting and rate stabilization.
- j. **Operating and nonoperating revenues and expenses** – Operating revenues result from exchange transactions of Water Quality's activities. Expenses associated with providing wastewater treatment services and operating Water Quality's treatment facilities are considered operating. Nonoperating revenues result from nonexchange transactions such as operating subsidies and investment earnings.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 1 – Operations and Accounting Policies (continued)

Water Quality provides water treatment services to cities and sewer districts and recognizes revenue when such service is provided. Additionally, the capacity charge revenue is generated from new connections to the sewer system. Both water treatment service and capacity charge rates are authorized by ordinances passed by the King County Council. Water treatment service and capacity charge revenues are recorded through cycle billings rendered to customers monthly. Water Quality accrues and records unbilled water service and capacity charge revenues in the financial statements for services provided from the date of the last billing to year end.

- k. **Debt-related amortization** – Bond premiums, discounts and refunding losses and gains are amortized over the life of the bonds using the outstanding principal balance method.
- l. **Capital grant revenues** – Pursuant to GASB Statement No. 33, *Accounting and Financial Reporting for Nonexchange Transactions*, grant revenues are reported separately from operating and nonoperating revenues as capital grant revenues. Water Quality received capital grant revenues of \$50 thousand for the year ended December 31, 2016.
- m. **Net position** – Resources set aside for debt service and other obligations, net of related liabilities, are classified as restricted net position on the statements of net position as their use is limited by externally-imposed restrictions. Net investments in capital assets are reported as a separate component of net position and consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any bonds, notes, or other borrowings attributable to the acquisition, construction, or improvement of those assets. Any net position not subject to classification as restricted or invested in capital assets are reported as unrestricted.
- n. **Use of estimates** – The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements. Specific estimates have been made in the areas of allowance for uncollectible accounts, environmental remediation costs, useful lives of capital assets, pension liability and related deferred outflow and inflow of resources, and future interest rates. Actual results could differ from these estimates.

New accounting standards – The following GASB pronouncement was implemented during the current year.

GASB Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73*, was issued in March 2016. This Statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The statement was implemented in 2017 by Water Quality.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 2 – Deposits in King County Investment Pool

The King County Treasurer is the custodian of Water Quality's cash. Water Quality's cash on deposit with the King County Treasurer is pooled with cash from other County funds and other jurisdictions and are either deposited in the County's bank account or invested by the County. The King County Investment Pool (the Pool) functions essentially as a demand deposit account where Water Quality receives an allocation of its proportionate share of pooled earnings as interest.

The Pool is administered by the King County Treasury Operations Section and is not registered with the Securities and Exchange Commission (SEC) as an investment company. Oversight is provided by the King County Executive Finance Committee (EFC), which serves the role of the County Finance Committee as defined in RCW 36.48.070.

The County has deposit and investment policies addressing risks that have the potential to result in losses of deposits and investments. All deposits not insured by the Federal Depositary Insurance Corporation (FDIC) are covered by the Public Deposit Protection Commission of the State of Washington (PDPC), a statutory authority established under chapter 39.58 RCW that governs public depositories and provides that "All public funds deposited in public depositories, including investment deposits and accrued interest thereon, shall be protected against loss, as provided in the chapter." The PDPC constitutes a multiple financial institution collateral pool that can make pro rata assessments to all public depositories within the state for their public deposits. PDPC protection is of the nature of collateral, not of insurance. Effective July 1, 2016, resolution 2016-1 adopted by the PDPC on May 31, 2016 allowed for well capitalized public depositories to collateralize uninsured public deposits at no less than fifty percent.

The custodial credit risk for deposits is the risk that Water Quality's deposits may not be returned to it in the event of a bank failure.

Assessing Water Quality's risk exposure, Water Quality's cash and cash equivalents balance of \$611.1 million and \$620.1 million were fully invested in the Pool as of December 31, 2017 and 2016, respectively. The County had demand deposits of \$38.1 million as of December 31, 2017, of which \$18.0 million was exposed to custodial credit risk as uninsured and uncollateralized. As of December 31, 2016, the County had demand deposits of \$149.0 million in insured and collateralized depository accounts at U.S. Bank and other banks under FDIC and PDPC as set out above.

Credit risk – investments – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. As of December 31, 2017, the Pool was not rated by a Nationally Recognized Statistical Rating Organization (NRSRO). In compliance with state statutes, Pool policies authorize investments in U.S. Treasury securities, U.S. Federal agency securities and mortgage-backed securities, municipal securities and corporate notes (rated at least "A" by two NRSROs), commercial paper (rated at least the equivalent of "A-1" by two NRSROs), certificates of deposit issued by qualified public depositories, repurchase agreements, and the Local Government Investment Pool managed by the Washington State Treasurer's office.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 2 – Deposits in King County Investment Pool (continued)

The Pool's policies limit the maximum amount that can be invested in various securities. At 2017 and 2016 year-end the Pool was in compliance. The Pool's actual composition, as of December 31, 2017 and 2016, is as follows (in thousands):

Investment type	2017		2016	
	Total	Allocation Percentage	Total	Allocation Percentage
Repurchase agreements	\$ 296,000	4.30%	\$ 100,000	1.65%
Commercial paper	386,989	5.62%	249,505	4.12%
U.S. Agency discount notes	478,950	6.96%	440,879	7.29%
Corporate notes	1,019,747	14.81%	959,115	15.85%
U.S. Treasury notes	2,486,956	36.12%	2,456,511	40.60%
U.S. Agency notes	1,418,257	20.60%	1,203,362	19.89%
U.S. Agency collateralized mortgage obligations	4,922	0.07%	6,070	0.10%
Supranational coupon notes	377,600	5.48%	-	-
State treasurer's investment pool	415,634	6.04%	634,558	10.50%
	<u>\$ 6,885,055</u>	<u>100.00%</u>	<u>\$ 6,050,000</u>	<u>100.00%</u>

Custodial credit risk – investments – Custodial credit risk is the risk that in the event of the failure of the counterparty, the County will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. County policy mandates that all security transactions, including repurchase agreements, are settled “delivery versus payment (DVP).” This means that payment is made simultaneously with the receipt of the security. These securities are delivered to the County's safekeeping bank or its tri-party custodian banks. Exempt from the DVP policy are Certificates of Deposits (CDs) and funds placed with the State of Washington Local Government Investment Pool.

Concentration of credit risk – investments – Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issue. At 2017 year-end the Pool had concentrations greater than 5 percent of the total investment pool portfolio in the following issuers: Federal Farm Credit Bank, 9.7 percent, Federal Home Loan Mortgage Corporation, 8.6 percent, Wells Fargo Bank, 5.7 percent, and Federal National Mortgage Association, 5.6 percent.

The issues with concentrations greater than 5 percent of the pool portfolio at 2016 year-end were as follows: Federal Home Loan Mortgage Corporation, 5.7 percent, Federal National Mortgage Association, 7.5 percent, Federal Home Loan Bank, 5.2 percent, and Federal Farm Credit Bank, 8.9 percent.

Interest rate risk – investments – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Through its investment policy, the County manages its exposure to fair value losses arising from increasing interest rates by setting maturity and effective duration limits for the Pool. The policy limit for the Pool's maximum effective duration is 1.5 years, and 40 percent of the Pool's total value in securities must have a maturity of 12 months or fewer. Securities in the portfolio cannot have an average life greater than five years at purchase. The combined effective duration of the liquidity and core portfolios was 1.022 years and 1.122 years at December 31, 2017 and 2016, respectively.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 2 – Deposits in King County Investment Pool (continued)

All securities are reported at fair value. Fair value reports are prepared monthly and distributed to all Pool participants. The Pool values participants' shares using an amortized cost basis. Monthly income is distributed to participants based on their relative participation during the period.

Fair Value Hierarchy

The County categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure fair value of the assets. Level 1 inputs are quoted prices in an active market for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

The following is a summary of inputs in valuing the County's investments as of December 31, 2017 and 2016.

KING COUNTY INVESTMENT POOL

Investments by Fair Value Level	Fair Value 12/31/2017	Fair Value Measurement Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Commercial paper	\$ 386,989	\$ -	\$ 386,989	\$ -
U.S. agency discount notes	478,950	-	478,950	-
Corporate notes	1,019,747	-	1,019,747	-
U.S. treasury notes	2,486,956	2,486,956	-	-
U.S. agency notes	1,418,257	-	1,418,257	-
U.S. agency collateralized mortgage obligations	4,922	-	4,922	-
Supranational coupon notes	377,600	-	377,600	-
Subtotal	<u>\$ 6,173,421</u>	<u>\$ 2,486,956</u>	<u>\$ 3,686,465</u>	<u>\$ -</u>
Investments Measured at Amortized Cost (Not Subject to Fair Value Hierarchy)				
Repurchase agreements	296,000			
State treasurer's investment pool	<u>415,634</u>			
Subtotal	<u>711,634</u>			
Total investment in Investment Pool	<u>\$ 6,885,055</u>			

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 2 – Deposits in King County Investment Pool (continued)

KING COUNTY INVESTMENT POOL

Investments by Fair Value Level	Fair Value 12/31/2016	Fair Value Measurement Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Commercial paper	\$ 249,505	\$ -	\$ 249,505	\$ -
U.S. agency discount notes	440,879	-	440,879	-
Corporate notes	959,115	-	959,115	-
U.S. treasury notes	2,456,511	2,456,511	-	-
U.S. agency notes	1,203,362	-	1,203,362	-
U.S. agency collateralized mortgage obligations	6,070	-	6,070	-
Subtotal	<u>\$ 5,315,442</u>	<u>\$ 2,456,511</u>	<u>\$ 2,858,931</u>	<u>\$ -</u>
Investments Measured at Amortized Cost (Not Subject to Fair Value Hierarchy)				
Repurchase agreements	100,000			
State treasurer's investment pool	<u>634,558</u>			
Subtotal	<u>734,558</u>			
Total investment in Investment Pool	<u><u>\$ 6,050,000</u></u>			

U.S. Treasury Notes are valued using quoted prices in active markets and classified in Level 1 of the fair value hierarchy.

Commercial Paper, U.S. Agency Discount Notes, Corporate Notes, U.S. Agency Notes, U.S. Agency Collateralized Mortgage Obligations and Supranational Coupon Notes are valued using standard inputs including benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data including market research publications. Interactive Data also monitors market indicators, industry and economic events and corroborating market data and are classified in Level 2 of the fair value hierarchy.

State Treasurer's Investment Pool and Repurchase Agreement are overnight securities and are recorded at amortized cost.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 3 – Restricted Assets

A significant portion of Water Quality's assets are restricted as to use by legal and contractual provisions and by fiscal management policy. Restricted assets comprise \$244.9 million at December 31, 2017 and \$236.8 million at December 31, 2016, to comply with bond covenants and other requirements.

Liability amounts payable from restricted assets primarily consist of escrow and in-house retainage payables. These amounted to \$2.5 million and \$2.0 million at December 31, 2017 and 2016, respectively. The details of restricted and unrestricted cash and cash equivalents as of December 31, 2017 and 2016 are as follows (in thousands):

	2017	2016
Unrestricted cash and cash equivalents		
Operating funds	\$ 36,738	\$ 23,702
Construction funds	169,291	197,355
Bond funds	125,393	128,543
Policy reserves	34,805	33,632
	<hr/>	<hr/>
Total unrestricted cash and cash equivalents	366,227	383,232
	<hr/>	<hr/>
Restricted cash and cash equivalents		
Bond reserves	150,491	160,491
SRF loan reserves	11,612	10,352
Bond proceeds committed to construction	34,053	-
Retainage	2,481	2,049
Rate stabilization reserve	46,250	46,250
Legally restricted funds	-	17,699
	<hr/>	<hr/>
Total restricted cash and cash equivalents	244,887	236,841
	<hr/>	<hr/>
Total cash and cash equivalents	\$ 611,114	\$ 620,073
	<hr/>	<hr/>

Note 4 – Risk Management

Water Quality is exposed to a wide range of risks of loss, including those related to tort; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters.

Water Quality participates in three County internal service funds to account for and finance its (1) property/casualty, (2) workers' compensation, and (3) employee medical and dental benefits, through self-insurance programs. The County contracts with a plan administrator to process medical and dental claims. County fund/claims managers, together with the Civil Division of the King County Prosecuting Attorney's Office, are responsible for processing all tort and workers' compensation claims.

During 2017 and 2016, Water Quality claims paid by the Insurance Fund of King County were \$248 thousand and \$154 thousand, respectively. In the past three years there was no occurrence that resulted in payment in excess of the self-insured retention of \$7.5 million.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 4 – Risk Management (continued)

Claims settlements and loss expenses are accrued in the three internal service funds for the estimated settlement value of both reported and unreported claims. These funds are responsible for collecting interfund premiums from insured funds and departments, for paying claim settlements, and for purchasing certain policies. The County's internal service funds assess premiums attributable to Water Quality on the basis of claims experience, actuarial evaluation of future claims risk, and adequacy of available reserves. Premiums are recorded as an expense in the year paid or accrued.

Water Quality retains all risk associated with environmental claims.

Note 5 – Long-Term Liabilities and Notes Payable

Sewer revenue bonds – As of December 31, 2017, bonds outstanding include \$2,875.3 million of serial and term bonds maturing from January 1, 2018 through January 1, 2052, bearing interest at stated rates of 1.00 percent to 5.50 percent per annum.

On February 22, 2017, the County defeased \$5.1 million of outstanding sewer revenue bonds 2008 and 2009.

On December 19, 2017, the County issued \$149.5 million in sewer revenue bonds, Series 2017, with an effective interest cost of 3.6 percent to advance refund \$159.7 million of outstanding 2010, 2011-A, 2011-B, and 2011-C sewer revenue bonds and 2009 general obligation bonds with an average coupon interest rate of 5.0 percent. The reacquisition price exceeded the net carrying amount of the refunded debt by \$11.2 million. This advance refunding was undertaken to reduce total debt service payments by \$35.8 million over the life of the bonds, resulting in an economic gain (difference between the present values of the old and new debt service payments) of \$19.9 million.

On December 19, 2017, the County issued \$50.0 million in junior lien sewer revenue bonds, Series 2017, with a one-month variable interest rate. On April 2, 2018 the King County council approved a January 1, 2048 maturity date for the bonds, correcting a January 1, 2040 date from the December 2017 sale motion.

On February 17, 2016, the County issued \$281.5 million in sewer revenue bonds, Series A, with an effective interest cost of 3.3 percent to advance refund \$278.8 million of outstanding 2007, 2008, 2009, and 2010 sewer revenue bonds with an average coupon interest rate of 4.4 percent. The reacquisition price exceeded the net carrying amount of the refunded debt by \$35.4 million. This advance refunding was undertaken to reduce total debt service payments by \$65.0 million over the life of the bonds, resulting in an economic gain (difference between the present values of the old and new debt service payments) of \$39.6 million.

On October 12, 2016, the County issued \$499.7 million in sewer revenue bonds, Series B, with an effective interest cost of 3.2 percent, to currently refund \$120.9 million of outstanding 2006 sewer revenue bonds and advance refund \$369.8 million of outstanding 2010, 2011-A, 2011-B, 2011-C sewer revenue bonds with a coupon interest rate of 5.0 percent. The reacquisition price exceeded the net carrying amount of the refunded debt by \$50.3 million. This refunding was undertaken to reduce total debt service payments by \$103.9 million over the life of the bonds, resulting in an economic gain (difference between the present values of the old and new debt service payments) of \$73.9 million.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 5 – Long-Term Liabilities and Notes Payable (continued)

On November 16, 2016, the County remarketed \$100.0 million in junior lien sewer revenue bonds, 2015 Series A and B, changing their interest rate mode to a one-month variable rate from a one-year fixed rate. These bonds have a final maturity date of January 1, 2046.

Bond issues provide funding for Water Quality's construction plan. Certain serial bonds may not be redeemed prior to maturity; other bonds may be redeemed after the lapse of specific periods of time. Amounts from the sewer revenue bond fund may be used to purchase term bonds prior to maturity.

The bonds are secured by a pledge of the revenue of the sewer system subject to payment of all operating and maintenance expenses of the sewer system. Payments from revenues of Water Quality are required to be made to the sewer revenue bond fund to pay interest and retire serial or term bonds on or before maturity. The amount required in the cash reserves and surety policies are based on the highest year of debt service over the life of all outstanding revenue bonds.

The following table summarizes Water Quality's revenue bonds (in thousands):

	Final Maturity	Interest Rates	Original Issue Amount	Outstanding at December 31, 2017
2001A-B Junior Lien Variable	1/1/32	(variable)	\$ 100,000	\$ 100,000
2010	1/1/50	2.00-5.00%	334,365	55,755
2011	1/1/41	5.00-5.125%	175,000	15,765
2011 Series B	1/1/41	1.00-5.00%	494,270	191,785
2011 Series C	1/1/35	3.00-5.00%	32,445	7,885
2011 Sewer Junior Lien Variable	1/1/42	(variable)	100,000	100,000
2012A Refunding	1/1/52	5.00%	104,445	104,445
2012B Refunding	1/1/35	4.00-5.00%	64,260	64,260
2012C Refunding	1/4/33	2.50-5.00%	65,415	65,415
2012 Sewer Junior Lien Variable	1/1/43	(variable)	100,000	100,000
2013A Refunding	1/1/35	2.00-5.00%	122,895	111,020
2013B Revenue and Refunding	1/1/44	2.00-5.00%	74,930	61,020
2014A Refunding	1/1/47	5.00%	75,000	75,000
2014B Refunding	7/1/35	1.00-5.00%	192,460	190,790
2015 Sewer Junior Lien Variable	1/1/46	(variable)	100,000	100,000
2015A Refunding	7/1/47	3.00-5.00%	474,025	472,325
2015B Refunding	1/1/46	4.00-5.00%	93,345	85,220
2016A Refunding	7/1/41	4.00-5.00%	281,535	278,975
2016B Refunding	7/1/49	4.00-5.00%	499,655	496,165
2017A Refunding	7/1/49	5.00%	149,485	149,485
2017B Sewer Junior Lien Variable	1/1/48	(variable)	50,000	50,000
			<u>\$ 3,683,530</u>	<u>\$ 2,875,310</u>

General obligation bonds – As of December 31, 2017, bonds outstanding include \$706.0 million of serial and term bonds maturing January 1, 2018 through 2040, bearing interest at stated rates of 2.00 percent to 5.25 percent per annum.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 5 – Long-Term Liabilities and Notes Payable (continued)

Certain serial bonds cannot be redeemed prior to maturity; other bonds may be redeemed after the lapse of specific periods of time.

On October 25, 2017, the County issued \$154.6 million in general obligation refunding bonds, Series 2017, with an effective interest cost of 2.6 percent to advance refund \$175.6 million of 2008 general obligation bonds, with an average coupon interest rate of 4.3 percent. The reacquisition price exceeded the net carrying amount of the refunded debt by \$6.6 million. This advance refunding was undertaken to reduce total debt service payments by \$41.2 million over the life of the bonds, resulting in an economic gain (difference between the present values of the old and new debt service payments) of \$33.5 million.

On October 26, 2017, the County issued \$100.0 million in multi-modal general obligation refunding bonds, Series 2017A and Series 2017B, with a one-month variable rate, maturing on January 1, 2040. The bonds refunded all outstanding 2010 Series A and B debt.

The following table summarizes Water Quality's general obligation bonds (in thousands):

	Final Maturity	Interest Rates	Original Issue Amount	Outstanding at December 31, 2017
2008 LTGO	1/1/34	3.25-5.25%	\$ 236,950	\$ 29,615
2009B LTGO	7/1/39	5.00-5.25%	300,000	14,380
2017A-B Multi-Modal LTGO	1/1/40	(variable)	100,000	100,000
2012A LTGO	1/1/25	2.00-5.00%	68,395	61,640
2012B LTGO	1/1/29	5.00%	41,725	41,725
2012C LTGO	1/1/34	5.00%	53,405	53,405
2012F LTGO	12/1/22	2.20%	3,010	3,010
2015A LTGO	7/1/38	2.00-5.00%	247,825	247,620
2017A LTGO	1/1/34	4.00-5.00%	154,560	154,560
			<u>\$ 1,051,310</u>	<u>\$ 705,955</u>

State loans – Water Quality has received loans from the Washington State Department of Ecology under the Water Pollution Control State Revolving Fund Loan Program and the Washington Public Works Trust Fund. The loans require annual payments of principal and interest from 2018 through 2037 and bear interest at stated rates from 0.0 percent to 3.1 percent. As of December 31, 2017, the balance due on all state loans is \$218 million. Water Quality maintains separate cash reserves of \$11.6 million as of December 31, 2017. These reserves are treated as restricted, being required under the Revolving Fund Loan Program.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 5 – Long-Term Liabilities and Notes Payable (continued)

At December 31, 2017, the required principal and interest payments for all classes of long-term debt are as follows (in thousands):

Year(s) Beginning	Revenue Bonds		General Obligation Bonds		State Loans		Total
	Principal	Interest	Principal	Interest	Principal	Interest	
January 1, 2018	\$ 55,535	\$ 123,038	\$ 29,340	\$ 31,696	\$ 15,690	\$ 4,741	\$ 260,040
January 1, 2019	63,170	123,931	21,760	32,617	16,126	4,439	262,043
January 1, 2020	62,675	120,867	22,900	31,706	15,936	4,131	258,215
January 1, 2021	59,100	117,949	15,800	30,556	15,830	3,825	243,060
January 1, 2022	61,855	115,145	29,885	29,497	15,085	3,517	254,984
January 1, 2023-2026	268,490	429,262	125,955	103,006	53,364	11,042	991,119
January 1, 2027-2031	411,335	456,345	179,420	93,145	49,200	7,751	1,197,196
January 1, 2032-2036	602,690	330,789	142,480	51,499	36,132	2,063	1,165,653
January 1, 2037-2041	471,350	217,741	138,415	18,522	680	3	846,711
January 1, 2042-2046	625,950	105,893	-	-	-	-	731,843
January 1, 2047-2051	183,295	19,897	-	-	-	-	203,192
January 1, 2052	9,865	247	-	-	-	-	10,112
	<u>\$ 2,875,310</u>	<u>\$ 2,161,104</u>	<u>\$ 705,955</u>	<u>\$ 422,244</u>	<u>\$ 218,043</u>	<u>\$ 41,512</u>	<u>\$ 6,424,168</u>

The future annualized interest payments for the variable rate revenue bonds are based on an interest rate of 5.4 percent, which represents 90 percent of the long-term interest rate assumed by the County for financial planning purposes.

Variable rate general obligation and revenue bonds – The variable rate bonds, 2001 Series A and Series B revenue bonds are supported by a periodically renewable letter of credit that expires September 30, 2020. On October 26, 2017, the County issued \$100.0 million in multi-modal general obligation bonds, Series 2017 A and B to refund Series 2010 A and B. On December 19, 2017, the County issued \$50.0 million in junior lien sewer revenue bonds, Series 2017 to fund capital programs. The variable rate bonds, 2011, 2012, 2015 Series A and Series B, Series 2017 and Series 2017 A and B do not have liquidity facilities.

Financial policy reserves – In addition to bond reserves related to Sewer Revenue Bonds, Water Quality maintains liquidity and asset management reserves totaling \$34.8 million at December 31, 2017.

Compliance with bond resolutions – With respect to the year ended December 31, 2017, Water Quality complied with all financial covenants stipulated by its bond resolutions.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 5 – Long-Term Liabilities and Notes Payable (continued)

Changes in long-term liabilities – Long-term liability activity for the years ended December 31, 2017 and 2016 was as follows (in thousands):

	Balance January 1, 2017	Additions	Reductions	Balance December 31, 2017	Due Within One Year
Bonds payable	\$ 3,640,765	\$ 454,045	\$ (513,545)	\$ 3,581,265	\$ 84,875
Bond premiums and discounts	352,151	33,776	(26,983)	358,944	-
Total bonds payable	3,992,916	487,821	(540,528)	3,940,209	84,875
State loans	205,989	26,472	(14,417)	218,044	15,690
Compensated absences	11,473	10,332	(10,540)	11,265	669
Other post-employment benefits	1,583	48	-	1,631	-
Net pension liability	51,568	26,846	(43,302)	35,112	-
Environmental remediation	46,877	8,665	(9,082)	46,460	6,627
Total long-term liabilities	<u>\$ 4,310,406</u>	<u>\$ 560,184</u>	<u>\$ (617,869)</u>	<u>\$ 4,252,721</u>	<u>\$ 107,861</u>
	Balance January 1, 2016	Additions	Reductions	Balance December 31, 2016	Due Within One Year
Bonds payable	\$ 3,695,560	\$ 781,190	\$ (835,985)	\$ 3,640,765	\$ 73,120
Bond premiums and discounts	274,709	102,618	(25,176)	352,151	-
Total bonds payable	3,970,269	883,808	(861,161)	3,992,916	73,120
State loans	179,388	39,151	(12,550)	205,989	13,565
Compensated absences	11,265	11,133	(10,925)	11,473	608
Other post-employment benefits	1,467	190	(74)	1,583	-
Net pension liability	38,885	25,693	(13,010)	51,568	-
Environmental remediation	52,298	2,838	(8,259)	46,877	6,928
Total long-term liabilities	<u>\$ 4,253,572</u>	<u>\$ 962,813</u>	<u>\$ (905,979)</u>	<u>\$ 4,310,406</u>	<u>\$ 94,221</u>

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 6 – Changes in Capital Assets

Changes in capital assets for the years ended December 31, 2017 and 2016, are shown in the following table (in thousands):

	Balance January 1, 2017	Increases	Decreases	Balance December 31, 2017
Land	\$ 240,759	\$ 3,557	\$ (41)	\$ 244,275
Easements	15,289	93	-	15,382
Construction work in progress	331,948	167,697	(110,291)	389,354
Total nondepreciable assets	587,996	171,347	(110,332)	649,011
Buildings	1,980,048	25,396	(2,873)	2,002,571
Improvements other than building	102,781	9,626	(202)	112,205
Artwork	5,700	405	(60)	6,045
Right of way	7,635	-	-	7,635
Infrastructure	2,260,787	43,144	(14,485)	2,289,446
Equipment	1,110,978	37,617	(38,716)	1,109,879
Software development	35,631	-	-	35,631
Total depreciable assets	5,503,560	116,188	(56,336)	5,563,412
Accumulated depreciation and amortization				
Building	(706,833)	(53,136)	1,570	(758,399)
Improvements other than building	(28,577)	(3,698)	88	(32,187)
Artwork	(1,079)	(205)	-	(1,284)
Right of way	(1,145)	(218)	-	(1,363)
Infrastructure	(578,134)	(47,881)	3,243	(622,772)
Equipment	(661,414)	(58,314)	35,826	(683,902)
Software development	(32,830)	(1,901)	-	(34,731)
Total depreciation and amortization	(2,010,012)	(165,353)	40,727	(2,134,638)
Depreciable assets - net	3,493,548	(49,165)	(15,609)	3,428,774
Total capital assets - net	\$ 4,081,544	\$ 122,182	\$ (125,941)	\$ 4,077,785

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 6 – Changes in Capital Assets (continued)

	Balance January 1, 2016	Increases	Decreases	Balance December 31, 2016
Land	\$ 253,535	\$ 2,175	\$ (14,951)	\$ 240,759
Easements	14,863	426	-	15,289
Construction work in progress	319,960	144,565	(132,577)	331,948
Total nondepreciable assets	588,358	147,166	(147,528)	587,996
Buildings	1,915,240	65,005	(197)	1,980,048
Improvements other than building	94,246	11,104	(2,569)	102,781
Artwork	5,645	60	(5)	5,700
Right of way	7,635	-	-	7,635
Infrastructure	2,238,131	22,656	-	2,260,787
Equipment	1,071,642	43,873	(4,537)	1,110,978
Software development	35,614	52	(35)	35,631
Total depreciable assets	5,368,153	142,750	(7,343)	5,503,560
Accumulated depreciation and amortization				
Building	(655,574)	(51,441)	182	(706,833)
Improvements other than building	(25,993)	(3,256)	672	(28,577)
Artwork	(874)	(205)	-	(1,079)
Right of way	(927)	(218)	-	(1,145)
Infrastructure	(530,650)	(47,484)	-	(578,134)
Equipment	(606,100)	(59,834)	4,520	(661,414)
Software development	(29,874)	(2,991)	35	(32,830)
Total depreciation and amortization	(1,849,992)	(165,429)	5,409	(2,010,012)
Depreciable assets - net	3,518,161	(22,679)	(1,934)	3,493,548
Total capital assets - net	\$ 4,106,519	\$ 124,487	\$ (149,462)	\$ 4,081,544

Note 7 – Environmental Remediation

Water Quality operations are subject to rules and regulations enacted by the Washington State Department of Ecology (DOE) and the U.S. Environmental Protection Agency (EPA).

Water Quality follows GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations* (GASB 49), which mandates the disclosure of “obligations to address current or potential detrimental effects of existing pollution by participating in pollution remediation activities.” GASB 49 establishes five events, any one of which obligates Water Quality to record a liability for pollution remediation expenditures. Liabilities are related to ongoing projects, which include the sediment management of aquatic habitats along Elliot Bay and the clean-up of certain sites along the Lower Duwamish Waterway (LDW). Environmental remediation costs are capitalized and amortized over 30 years.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 7 – Environmental Remediation (continued)

The Sediment Management Project was obligated when the Metropolitan King County Council approved the pollution remediation program. The LDW project became a Water Quality obligation when King County entered into an Administrative Order on Consent (AOC) with the DOE and EPA. This AOC also includes The Boeing Company, the City of Seattle and the Port of Seattle as parties conduct the studies on which to base the cleanup decision. Each party has agreed to pay one fourth of the costs under the AOC.

Both projects may result in additional cleanup efforts as a result of future regulatory orders. These potential cleanup liabilities cannot be currently estimated. Ongoing, regulatory action has identified and may identify other Potentially Responsible Parties (PRP) for the LDW cleanup.

There are no estimated recoveries at this time that will reduce the amount of Water Quality's pollution remediation obligations. The total environmental remediation liability at December 31, 2017, stands at \$46.5 million and \$46.9 million in 2016.

The pollution remediation obligation is an estimate and subject to changes resulting from price increases or reductions, technology, or changes in applicable laws or regulations.

The methodology for estimating liabilities continues to be based on Water Quality engineering analysis, program experience and cost estimates for the remediation activities scheduled to be undertaken in future years as programmed under Water Quality's Regional Wastewater Services Plan. Certain costs were developed by consulting engineers. Costs were estimated using the expected cash flow method set out by GASB 49. For the LDW project, a weighted average method is used to calculate the liability. The Sediment Management Plan does not employ weighted average cost estimation because the remaining work is well-defined and negates the utility of multiple estimates. The cost estimates continue to be re-measured as succeeding benchmarks are reached or when cost assumptions are modified. All pollution remediation obligations are being deferred and amortized over 30 years as permitted by regulatory accounting standards (see Note 8 – Regulatory Assets and Credits).

Note 8 – Regulatory Assets and Credits

The King County Council has taken various regulatory actions resulting in differences between the recognition of revenues for rate-making purposes and their treatment under generally accepted accounting principles for nonregulated entities. Changes to these balances and their inclusion in rates may occur only at the direction of the Council.

Rate stabilization – In 2005, the Council established a Rate Stabilization Reserve. This action created a deferred inflow of resource which deferred operating revenue to be set aside in a reserve and recognized in subsequent years to maintain stable sewer rates. The reserve was \$46.3 million in 2016 and remains unchanged in 2017.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 8 – Regulatory Assets and Credits (continued)

Pollution remediation – In 2006, the Council approved the application of regulatory accounting to treat pollution remediation obligations as regulatory assets to allow for cost recovery through future rate increases. The portion of regulatory asset costs that have been accrued is being amortized over a recovery period of 30 years.

Rainwise program – In 2013, the Council approved the application of regulatory accounting to treat program payments to Rainwise participants as regulatory assets to allow for cost recovery through future rate increases. The portion of regulatory asset costs that have been accrued is being amortized over a recovery period of 7 years.

Strategic planning costs – In 2016, the Council approved the application of regulatory accounting to treat strategic planning costs as regulatory assets to allow for cost recovery through future rate increases. The portion of regulatory asset costs that have been accrued is amortized over a 7- to 10-year recovery period.

Note 9 – Employee Benefit Plans

In accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pension*, the County elected to use June 30, 2017 and 2016, respectively, as the measurement date for reporting net pension liability at 2017 and 2016 year-end, respectively.

The following table represents the aggregate pension amounts allocated to Water Quality for all pension plans subject to the requirements of GASB Statement No. 68 for the years 2017 and 2016 (in thousands):

	Aggregate Pension Amounts—All Plans	
	2017	2016
Pension liabilities	\$ 35,112	\$ 51,568
Deferred outflows of resources	5,767	9,849
Deferred inflows of resources	7,825	1,217
Pension expense	1,837	8,848

Pension plans –Substantially all full-time and qualifying part-time employees of Water Quality participate in one of the following retirement plans: Public Employees' Retirement System (PERS) Plan 1, 2 and 3.

PERS is administered by the Washington State Department of Retirement Systems (DRS) under cost-sharing, multiple-employer public employee defined benefit and defined contribution retirement plans. The state Legislature establishes, and amends, laws pertaining to the creation and administration of all statewide public retirement systems.

The DRS, a department within the primary government of the State of Washington, issues a publicly available comprehensive annual financial report (CAFR) that includes financial statements and required supplementary information for each plan.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 9 – Employee Benefit Plans (continued)

The DRS CAFR may be obtained by writing to:

Department of Retirement Systems
Communications Unit
P.O. Box 48380
Olympia, WA 98540-8380

Or the DRS CAFR may be downloaded from the DRS website at www.drs.wa.gov.

Public Employees Retirement System – PERS members include elected officials; state employees; employees of the Supreme, Appeals and Superior Courts; employees of the legislature; employees of district and municipal courts; employees of local governments; and higher education employees not participating in higher education retirement programs. PERS is comprised of three separate pension plans for membership purposes. PERS plans 1 and 2 are defined benefit plans, and PERS plan 3 is a defined benefit plan with a defined contribution component.

PERS Plan 1 provides retirement, disability and death benefits. Retirement benefits are determined as two percent of the member's average final compensation (AFC) times the member's years of service. The AFC is the average of the member's 24 highest consecutive service months. Members are eligible for retirement from active status at any age with at least 30 years of service, at age 55 with at least 25 years of service, or at age 60 with at least five years of service. Members retiring from active status prior to the age of 65 may receive actuarially reduced benefits. Retirement benefits are actuarially reduced to reflect the choice of a survivor benefit. Other benefits include duty and non-duty disability payments, an optional cost-of-living adjustment (COLA), and a one-time duty-related death benefit, if found eligible by the Department of Labor and Industries. PERS 1 members were vested after the completion of five years of eligible service. The plan was closed to new entrants on September 30, 1977.

The PERS Plan 1-member contribution rate is established by State statute at 6 percent. The employer contribution rate is developed by the Office of the State Actuary and includes an administrative expense component that is currently set at 0.18 percent. Each biennium, the state Pension Funding Council adopts Plan 1 employer contribution rates. The PERS Plan 1 required contribution rates (expressed as a percentage of covered payroll) for 2017 and 2016 were as follows:

PERS Plan 1		
	Employer	Employee
Actual contribution rates		
January through June 2017	11.18%	6.00%
July through December 2017	12.70%	6.00%
January through December 2016	11.18%	6.00%

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 9 – Employee Benefit Plans (continued)

Water Quality's actual contributions to the plan were as follows for the years ended December 31 (in thousands):

	<u>PERS Plan 1</u>
2017	\$ 58
2016	77
2015	78

PERS Plan 2/3 provides retirement, disability and death benefits. Retirement benefits are determined as two percent of the member's average final compensation (AFC) times the member's years of service for Plan 2 and 1 percent of AFC for Plan 3. The AFC is the average of the member's 60 highest-paid consecutive service months. There is no cap on years of service credit. Members are eligible for retirement with a full benefit at 65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. PERS Plan 2/3 members who have at least 20 years of service credit and are 55 years of age or older, are eligible for early retirement with a benefit that is reduced by a factor that varies according to age for each year before age 65. PERS Plan 2/3 members who have 30 or more years of service credit and are at least 55 years old can retire under one of two provisions:

- With a benefit that is reduced by three percent for each year before age 65; or
- With a benefit that has a smaller (or no) reduction (depending on age) that imposes stricter return-to-work rules.

PERS Plan 2/3 members hired on or after May 1, 2013, have the option to retire early by accepting a reduction of five percent for each year of retirement before age 65. This option is available only to those who are age 55 or older and have at least 30 years of service credit. PERS Plan 2/3 retirement benefits are also actuarially reduced to reflect the choice of a survivor benefit. Other PERS Plan 2/3 benefits include duty and non-duty disability payments, a cost-of-living allowance (based on the CPI), capped at three percent annually and a one-time duty related death benefit, if found eligible by the Department of Labor and Industries. PERS 2 members are vested after completing five years of eligible service. Plan 3 members are vested in the defined benefit portion of their plan after ten years of service; or after five years of service if 12 months of that service are earned after age 44.

PERS Plan 3 defined contribution benefits are totally dependent on employee contributions and investment earnings on those contributions. PERS Plan 3 members choose their contribution rate upon joining membership and have a chance to change rates upon changing employers. As established by statute, Plan 3 required defined contribution rates are set at a minimum of 5 percent and escalate to 15 percent with a choice of six options. Employers do not contribute to the defined contribution benefits. PERS Plan 3 members are immediately vested in the defined contribution portion of their plan.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 9 – Employee Benefit Plans (continued)

The PERS Plan 2/3 employer and employee contribution rates are developed by the Office of the State Actuary to fully fund Plan 2 and the defined benefit portion of Plan 3. The Plan 2/3 employer rates include a component to address the PERS Plan 1 UAAL and an administrative expense that is currently set at 0.18 percent. Each biennium, the state Pension Funding Council adopts Plan 2 employer and employee contribution rates and Plan 3 contribution rates. The PERS Plan 2/3 required contribution rates (expressed as a percentage of covered payroll) for 2017 and 2016 were as follows:

PERS Plan 2/3		
	Employer 2/3	Employee 2
Actual contribution rates		
January through June 2017	11.18%	6.12%
July through December 2017	12.70%	7.38%
2017 Employee PERS Plan 3		Varies
January through December 2016	11.18%	6.12%
2016 Employee PERS Plan 3		Varies

Water Quality's actual contributions to the plan were as follows for the years ended December 31 (in thousands):

	PERS Plans 2/3
2017	\$ 7,546
2016	6,717
2015	5,705

Actuarial assumptions – The total pension liability (TPL) for each of the DRS plans was determined using the most recent actuarial valuation completed in 2017 with a valuation date of June 30, 2016. The actuarial assumptions used in the valuation were based on the results of the Office of the State Actuary's (OSA) 2007-2012 Experience Study and the 2015 Economic Experience Study.

Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report. The TPL was calculated as of the valuation date and rolled forward to the measurement date of June 30, 2017. Plan liabilities were rolled forward from June 30, 2016, to June 30, 2017, reflecting each plan's normal cost (using the entry-age cost method), assumed interest and actual benefit payments.

- Inflation: 3% total economic inflation; 3.75% salary inflation
- Salary increases: In addition to the base 3.75% salary inflation assumption, salaries are also expected to grow by promotions and longevity.
- Investment rate of return: 7.5%

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 9 – Employee Benefit Plans (continued)

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, published by the Society of Actuaries. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis; meaning, each member is assumed to receive additional mortality improvements in each future year throughout his or her lifetime.

There were minor changes in methods and assumptions since the last valuation.

- For all plans except Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF) Plan 1, how terminated and vested member benefits are valued was corrected.
- How the basis minimum COLA in PERS Plan 1 is valued for legal order payees was improved.
- For all plans, the average expected remaining service lives calculation was revised.

Discount rate – The discount rate used to measure the total pension liability for all DRS plans was 7.5 percent.

To determine that rate, an asset sufficiency test included an assumed 7.7 percent long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. (All plans use 7.7 percent except LEOFF 2, which has assumed 7.5 percent). Consistent with the long-term expected rate of return, a 7.5 percent future investment rate of return on invested assets was assumed for the test. Contributions from plan members and employers are assumed to continue being made at contractually required rates (including PERS 2/3 employers, whose rates include a component for the PERS 1 plan liabilities). Based on these assumptions, the pension plans' fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.5 percent was used to determine the total liability.

Long-term expected rate of return – The long-term expected rate of return on the DRS pension plan investments of 7.5 percent was determined using a building-block-method. In selecting this assumption, the Office of the State Actuary (OSA) reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered capital market assumptions and simulated expected investment returns provided by the Washington State Investment Board (WSIB). The WSIB uses the capital market assumptions and their target asset allocation to simulate future investment returns over various time horizons.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 9 – Employee Benefit Plans (continued)

Estimated rates of return by asset class – Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2017, are summarized in the table below. The inflation component used to create the table is 2.2 percent and represents the WSIB's most recent long-term estimate of broad economic inflation.

Asset Class	Target Allocation	% Long-Term Expected Real Rate of Return Arithmetic
Fixed income	20.00%	1.70%
Tangible assets	5.00%	4.90%
Real estate	15.00%	5.80%
Global equity	37.00%	6.30%
Private equity	23.00%	9.30%
	<u>100.00%</u>	

Sensitivity of NPL – The table below presents Water Quality's proportionate share of the net pension liability calculated using the discount rate of 7.5 percent, as well as what Water Quality's proportionate share of the net pension liability/(asset) would be if it were calculated using a discount rate that is 1-percentage point lower (6.5 percent) or 1-percentage point higher (8.5 percent) than the current rate (in thousands).

Year	Pension Plan	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
2017	PERS 1	\$ 16,503	\$ 13,547	\$ 10,987
2017	PERS 2/3	58,097	21,565	(8,368)
2016	PERS 1	\$ 23,099	\$ 19,155	\$ 15,761
2016	PERS 2/3	59,679	32,413	(16,873)

Pension plan fiduciary net position – Detailed information about the State's pension plans' fiduciary net position is available in the separately issued DRS financial report.

Pension liabilities, pension expense, and deferred outflows of resources and deferred inflows of resources related to pensions – At June 30, 2017 and 2016, Water Quality reported a total pension liability of \$35.1 million and \$51.6 million, respectively, for its proportionate share of the net pension liabilities as follows (in thousands):

	Liability	
	2017	2016
PERS 1	\$ 13,547	\$ 19,155
PERS 2/3	21,565	32,413

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 9 – Employee Benefit Plans (continued)

At June 30, Water Quality's proportionate share of the collective net pension liabilities was as follows:

	Proportionate Share 6/30/16	Proportionate Share 6/30/17	Change in Proportion
PERS 1	0.36%	0.29%	(0.07%)
PERS 2/3	0.64%	0.62%	(0.02%)
	Proportionate Share 6/30/15	Proportionate Share 6/30/16	Change in Proportion
PERS 1	0.32%	0.36%	0.04%
PERS 2/3	0.61%	0.64%	0.03%

Employer contribution transmittals received and processed by the DRS for the fiscal year ended June 30 are used as the basis for determining each employer's proportionate share of the collective pension amounts reported by the DRS in the Schedules of Employer and Nonemployer Allocations for all plans except Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF) Plan 1.

The collective net pension liability was measured as of June 30, 2017 and 2016, respectively, and the actuarial valuation date on which the total pension liability is based was as of June 30, 2016 and 2015, respectively, with update procedures used to roll forward the total pension liability to the measurement date.

Pension expense – For the year ended December 31, 2017 and 2016, Water Quality recognized pension expense as follows (in thousands):

	Pension Expense	
	2017	2016
PERS 1	\$ (4,509)	\$ 760
PERS 2/3	6,346	8,088
Total	<u>\$ 1,837</u>	<u>\$ 8,848</u>

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 9 – Employee Benefit Plans (continued)

Deferred outflows of resources and deferred inflows of resources – At December 31, 2017 and 2016, Water Quality reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (in thousands):

PERS 1	2017		2016	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual investment earnings on pension plan investments.	\$ -	\$ 505	\$ 482	\$ -
Contributions subsequent to the measurement date.	953	-	1,007	-
Total	<u>\$ 953</u>	<u>\$ 505</u>	<u>\$ 1,489</u>	<u>\$ -</u>

PERS 2/3	2017		2016	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience.	\$ 2,186	\$ 710	\$ 1,726	\$ 1,070
Net difference between projected and actual investment earnings on pension plan investments.	-	5,749	3,967	-
Changes of assumptions	229	-	335	-
Changes in proportion and differences between contributions and proportionate share of contributions.	23	861	462	147
Contributions subsequent to the measurement date.	<u>2,376</u>	<u>-</u>	<u>1,870</u>	<u>-</u>
Total	<u>\$ 4,814</u>	<u>\$ 7,320</u>	<u>\$ 8,360</u>	<u>\$ 1,217</u>

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 9 – Employee Benefit Plans (continued)

Deferred outflows of resources related to pensions resulting from Water Quality's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2018 and 2017, respectively. Other amounts reported as deferred outflows and deferred inflows of resources related to pensions will be recognized in pension expense as follows (in thousands):

Year Ending December 31,	2017	
	PERS 1	PERS 2/3
2018	\$ (342)	\$ (2,416)
2019	108	485
2020	(25)	(635)
2021	(246)	(2,449)
2022		58
Thereafter		75

Year Ending December 31,	2016	
	PERS 1	PERS 2/3
2017	\$ (119)	\$ 106
2018	(119)	106
2019	443	3,153
2020	277	1,908

Note 10 – Other Post-Employment Benefits

GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pension*, requires the County to accrue other post-employment benefits (OPEB) expenses related to its post-retirement healthcare plan based on a computed annual required contribution (ARC) that includes the current period's service cost and an amount to amortize unfunded accrued liabilities. The liability is included in noncurrent liabilities on the statements of net position for Water Quality.

Plan description – The King County Health Plan (the Health Plan) is a single-employer defined benefit healthcare plan administered by the County. The Health Plan provides medical, prescription drug, vision, and other unreimbursed medical benefits to eligible employees. The Health Plan's actuary is Healthcare Actuaries and it does not issue a separate stand-alone financial report.

Funding policy – Law Enforcement Officers' and Fire Fighters' Retirement System Plan (LEOFF) 1 retirees are not required to contribute to the Health Plan. All other retirees are required to pay the COBRA rate associated with the elected plan. For the years ended December 31, 2017 and 2016, Water Quality contributed to the Health Plan an estimated \$55 thousand and \$74 thousand, respectively. The contribution was entirely to fund "pay-as-you-go" costs under the Health Plan and not to advance fund the cost of benefits.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 10 – Other Post-Employment Benefits (continued)

Annual OPEB and net OPEB obligation – The basis of the County’s annual OPEB cost (expense) is the ARC. The ARC represents a level of funding that, if paid on an ongoing basis, the actuary projects will cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Water Quality’s allocated annual OPEB costs, the percentage of annual OPEB cost contributed to the Health Plan, and the net OPEB obligation for the years ended December 31, 2017 and 2016 were as follows (in thousands):

	2017	2016
Normal cost - Unit Credit Method	\$ 84	\$ 164
Amortization of unfunded actuarial accrued liability (UAAL)	27	32
Annual Required Contribution (ARC)	111	196
Interest on net OPEB obligation	8	5
Adjustment to annual required contribution	(16)	(11)
Annual OPEB cost (expense)	103	190
Contributions made	(55)	(74)
Increase in net OPEB obligation	48	116
Net OPEB obligation - beginning of year	1,583	1,467
Net OPEB obligation - end of year	<u>\$ 1,631</u>	<u>\$ 1,583</u>

Water Quality’s allocated annual OPEB costs, the percentage of annual OPEB costs contributed to the Health Plan, and the net OPEB obligation were as follows (in thousands):

Year Ended	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
12/31/2017	\$ 103	53.4%	\$ 1,631
12/31/2016	190	38.9%	1,583
12/31/2015	190	38.9%	1,467

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 10 – Other Post-Employment Benefits (continued)

Actuarial methods and assumptions – The basis of projections of benefits for financial reporting purposes is the substantive plan (the Health Plan as understood by the County and members of the Health Plan) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the County and Members of the Health Plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

The December 31, 2017 valuation used the unit credit actuarial cost method. The actuarial assumptions included a 3.50 percent investment rate of return (net of administrative expenses) and an initial annual health care cost trend rate of 7.5 percent for KingCare medical and miscellaneous LEOFF 1 expenses, 9.0 percent for KingCare pharmacy, and 7.5 percent for HMO medical/pharmacy, each reduced by decrements to an ultimate rate of 3.8 percent after 57 years and 7 years for medical and pharmacy, respectively. The Medicare Premium trend rate is 6.0 percent, for all years. All trend rates include a 3.0 percent inflation assumption. The UAAL is recalculated each year and amortized as a level dollar amount on an open basis over 20 years.

Note 11 – Interfund Balances and Transfers

Water Quality is an enterprise fund of the County and reports in its financial statements interfund balances and transfers as a result of intra-county activity with other County agencies.

Interfund balances – The balances result from the time lag between the dates when interfund goods and services were provided or reimbursable expenditures incurred and when interfund payments were made, Water Quality reported total due from other funds of \$2.1 million and due to other funds of \$25 thousand at December 31, 2017. Water Quality had total due from other funds of \$1.3 million and due to other funds of \$16 thousand at December 31, 2016.

Interfund transfers – The King County Council approves ordinances and/or motions authorizing Water Quality to contribute and receive amounts to and from various County funds. During 2017 and 2016, the transfers from Water Quality to other funds were \$741 thousand and \$150 thousand, respectively.

Note 12 – Commitments and Contingencies

Construction and maintenance programs – To ensure the continued operation, reliability, and compliance with regulatory standards of existing wastewater treatment facilities, Water Quality is committed to expending approximately \$197.7 million on active construction contracts as of December 31, 2017.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 12 – Commitments and Contingencies (continued)

Contingencies and claims – The following litigation, or potential litigation, may involve claims for material damages against the King County Water Quality Enterprise Fund for which Water Quality is unable to provide an opinion as to the ultimate outcome or the amount of damages that may be found:

- An administrative order issued by the Environmental Protection Agency (EPA) that required King County, the City of Seattle, Boeing, and the Port of Seattle to conduct studies to determine the nature and extent of contamination in the Lower Duwamish Waterway. The County and the other three parties recently agreed with EPA to amend the administrative order and to conduct additional studies pursuant to the amendment. The Feasibility Study, which discusses the remediation alternatives, has been issued in final form by EPA. EPA issued a Record of Decision (ROD) in the latter part of 2014. The ROD contains EPA's final plan for cleanup of the Lower Duwamish Waterway. King County and a number of other parties are participating in an alternative dispute resolution process, called an allocation, to determine shares of liability for the costs of the cleanup. If parties that participate in the allocation accept their allotted shares, they then expect to enter into a settlement agreement and to negotiate a consent decree with EPA to implement the cleanup. Due to the fact that the parties do not yet know their respective shares of cleanup costs and no consent decree has been negotiated with EPA, the County is unable to determine the schedule or cost of any required remediation. In addition, the County is unable to determine the extent to which King County and the Wastewater Treatment Division (WTD) or Water Quality will be responsible for the cost of such remediation.
- A potential requirement for more cleanup in the area contaminated when the Denny Way combined sewer outflow was replaced in 2005. Water Quality has already performed interim cleanup costing \$3.6 million to comply with a formal agreement with the Washington State Department of Ecology (DOE). Water Quality had discussions in March 2018 with DOE and stakeholders regarding site conditions and next steps toward final cleanup. The County is unable to determine an amount, if any, for which Water Quality may be responsible.
- Potential claims for past and future cleanup costs at the Harbor Island Superfund Site. Certain removal costs already incurred by the Port of Seattle are expected to be defrayed by the County and the City of Seattle. The City of Seattle, Port of Seattle and King County intend to negotiate the amount, if any, that the City and the County will contribute. This is an extremely complex negotiation for which the County is unable to determine an amount that Water Quality may be responsible for, if any. The parties have also agreed to share the cost of a supplemental investigation and feasibility study required by the EPA. The agreement states that Water Quality has only a one-third pro rata share of the study costs although that portion may still be reallocated among the parties or with other Potentially Responsible Parties (PRP) who may agree to participate in the study. The parties may also seek contribution from other PRP's for the cost of the study. The EPA will not determine if, or the nature of, any additional remediation until the study is completed. Further remediation costs cannot be reasonably estimated until the study has been completed. The County and three other PRPs have negotiated a memorandum of agreements to implement a search for other responsible parties.

King County Water Quality Enterprise Fund

Notes to Financial Statements

Note 12 – Commitments and Contingencies (continued)

- A claim submitted by a contractor against Water Quality over the project to repair and replace two miles of pipeline serving the rapidly developing area in the vicinity of Canyon Park. The project is subject to an agreement with DOE that mandates a bypass system be constructed if this capital project was not completed by the onset of the 2016 wet season. The contractor has submitted a request for change order based on its assertion that the contract dewatering and open-faced shield tunneling specifications are defective. The amount claimed for costs for additional work at this time is approximately \$1.5 million. Water Quality found the contractor in default, terminated the contract, made demand upon the performance bond surety, and procured a \$20 million completion contract. Water Quality's additional costs to complete the project and consequential damages, and the contractor's counterclaims will be addressed in the lawsuit. The contractor filed a second lawsuit in Snohomish County Superior Court to enjoin the default termination. This lawsuit was dismissed and the contractor appealed that decision to Division One of the Court of Appeals. The motion to change venue in the King County action was denied and the contractor appealed that decision. Discretionary review was granted and both appeals are now consolidated. Oral argument was heard on October 31, 2017 and the County is awaiting a decision.

Note 13 – West Point Treatment Plant Flood Event

On February 9, 2017, the West Point Treatment Plant suffered an unprecedented electrical disturbance during an intense rainstorm. The electrical disturbance precipitated electrical failures throughout the treatment plant resulting in catastrophic flooding damage to equipment and building assets. Water Quality received \$12.5 million in insurance proceeds to offset the asset impairment loss of \$1.6 million and cleanup, equipment repairs and maintenance recovery expenditures of \$10.0 million resulting in a net gain of \$883 thousand. Capital expenditures for equipment and building assets in 2017 amounted to \$11.0 million.

Note 14 – Subsequent Event

Water Quality closed on a \$134.5 million loan commitment with the Environmental Protection Agency in April 2018 for the Georgetown Wet Weather Treatment Station. Draws on the loan commitment, authorized to begin in 2018, was evidenced by the sewer revenue bond, 2018 (WIFIA – N17107WA) authorized by King County Council on April 2, 2018.

Required Supplementary Information

King County Water Quality Enterprise Fund
Required Supplementary Information
Pension Plan Information

Schedule of the County's Proportionate Share of the Net Pension Liability
Public Employees' Retirement System (PERS) Plan 1
Measurement Date of June 30*
(dollars in thousands)

	<u>2017</u>	<u>2016</u>	<u>2015</u>
County's proportion of the net pension liability	8.45%	8.90%	8.76%
County's proportionate share of the net pension liability	\$ 400,803	\$ 477,872	\$ 458,477
Covered payroll	\$ 15,426	\$ 18,793	\$ 22,880
County's proportionate share of the net pension liability as a percentage of covered payroll	2598.23%	2542.82%	2243.04%
Plan fiduciary net position as a percentage of the total pension liability	61.24%	57.03%	59.10%

* This schedule is to be built until it contains ten years of data.

King County Water Quality Enterprise Fund
Required Supplementary Information
Pension Plan Information (continued)

Schedule of the County's Proportionate Share of the Net Pension Liability
Public Employees' Retirement System (PERS) Plan 2/3
Measurement Date of June 30*
(dollars in thousands)

	<u>2017</u>	<u>2016</u>	<u>2015</u>
County's proportion of the net pension liability	10.14%	10.52%	10.36%
County's proportionate share of the net pension liability	\$ 352,361	\$ 529,855	\$ 370,294
Covered payroll	\$ 995,800	\$ 953,254	\$ 949,860
County's proportionate share of the net pension liability as a percentage of covered payroll	35.38%	55.58%	39.68%
Plan fiduciary net position as a percentage of the total pension liability	90.97%	85.82%	89.20%

* This schedule is to be built until it contains ten years of data.

King County Water Quality Enterprise Fund
Required Supplementary Information
Pension Plan Information (continued)

Schedule of the County's Contributions
Public Employees' Retirement System (PERS) Plan 1
For the Year Ended December 31*
(dollars in thousands)

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually required contributions	\$ 1,738	\$ 1,901	\$ 2,076
Contributions in relation to the contractually required contributions	<u>1,738</u>	<u>1,901</u>	<u>2,076</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 14,569	\$ 17,003	\$ 20,440
Contributions as a percentage of covered payroll	11.93%	11.18%	10.16%

* This schedule is to be built until it contains ten years of data.

King County Water Quality Enterprise Fund
Required Supplementary Information
Pension Plan Information (continued)

Schedule of the County's Contributions
Public Employees' Retirement System (PERS) Plan 2/3
For the Year Ended December 31*
(dollars in thousands)

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually required contributions	\$ 123,333	\$ 109,269	\$ 95,176
Contributions in relation to the contractually required contributions	<u>123,333</u>	<u>109,269</u>	<u>95,176</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 1,031,418	\$ 977,342	\$ 933,304
Contributions as a percentage of covered payroll	11.96%	11.18%	10.20%

* This schedule is to be built until it contains ten years of data.

King County Water Quality Enterprise Fund

Required Supplementary Information

Postemployment Health Care Plan

Schedule of Funding Progress for the Plan
(dollars in thousands)

Year	Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) ÷ c)
2015	12/31/2015	\$ -	\$ 167,417	\$ 167,417	-	\$ 1,076,068	15.6%
2016	12/31/2016	\$ -	\$ 167,417	\$ 167,417	-	\$ 1,121,962	14.9%
2017	12/31/2017	\$ -	\$ 121,079	\$ 121,079	-	\$ 1,178,142	10.3%

Other Information

King County Water Quality Enterprise Fund
Supplemental Information
Supplemental Schedule of Debt Service
Coverage Ratios (Unaudited)
Year Ended December 31, 2017

Water Quality is obligated by applicable bond ordinances to set sewage disposal rates at a level adequate to provide net revenue equal to at least 1.15 times the annual debt service requirements for sewer revenue and general obligation bonds payable from revenues of Water Quality. It is an adopted policy of Water Quality to achieve a debt service coverage ratio of 1.25. Excluded from the calculation of the coverage ratios for 2017 below is the optional redemption of \$920 thousand of 2015 Junior Lien Variable Rate Bonds, Series A and Series B.

Coverage (1.15 required by covenant, adopted policy 1.25) 1.70

In 2001, Water Quality adopted a new debt service target of 1.15 times the annual debt service for bonds, obligations, notes, and loans of Water Quality.

Coverage (1.15 adopted target) 1.51

Water Quality is required to generate revenues sufficient to pay all costs of operation of the sewage treatment system and debt service on obligations of Water Quality.

Coverage (1.00 required by covenant) 1.38

In 2001, Water Quality issued an additional tier of revenue bonds. The bond covenants of the Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2001A and Series 2001B, require that sewage disposal rates provide net revenue equal to at least 1.10 times the annual debt service requirements for all junior lien obligations after payment of senior lien requirements. All of Water Quality Junior Lien Variable Rate Sewer Revenue Bonds and Multi-Modal Limited Tax General Obligation Revenue Bonds incorporate the identical requirement stated in the 2001 bond covenant requirements.

Coverage (1.10 required by covenant) 25.29

King County Water Quality Enterprise Fund
Supplemental Information
Supplemental Schedule of Historical Debt Service
Coverage Ratios (Unaudited)

DEBT SERVICE COVERAGE FOR THE WATER QUALITY ENTERPRISE
LAST TEN FISCAL YEARS
(dollars in thousands)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Residential Customer and Residential Customer Equivalents (RCEs) (annual average, rounded)	706,846	703,795	704,400	707,300	708,900	718,160	725,844	736,090	756,430	756,916
Percentage Annual Change	0.56%	-0.43%	0.09%	0.41%	0.23%	1.31%	1.07%	1.41%	2.76%	0.06%
Operating Revenues										
Sewage disposal fees	\$ 237,001	\$ 271,558	\$ 269,498	\$ 306,430	\$ 307,143	\$ 342,850	\$ 346,591	\$ 371,253	\$ 381,513	\$ 401,650
Rate stabilization	3,000	(15,398)	(15,814)	(25,523)	13,923	10,350	18,000	(12,000)	-	-
Capacity charge revenues	35,002	40,827	41,363	48,693	51,411	58,660	59,522	62,479	71,200	82,615
Other operating revenues	9,170	9,869	9,778	7,830	9,398	10,126	11,675	11,674	11,828	18,308
Total Operating Revenues	284,173	306,856	304,825	337,430	381,875	421,986	435,788	433,406	464,541	502,573
Operating and Maintenance Expenses ¹⁾	98,370	103,118	103,682	103,995	114,939	117,183	122,014	127,211	138,698	142,263
Add: GAAP adjustment ²⁾	-	-	-	-	-	-	2,187	1,715	(2,377)	5,936
Net Operating and Maintenance Expenses	98,370	103,118	103,682	103,995	114,939	117,183	124,201	128,926	136,321	148,199
Net Operating Revenue	185,803	203,738	201,143	233,435	266,936	304,803	311,587	304,480	328,220	354,374
Interest Income ³⁾	4,087	5,613	3,426	2,725	1,697	2,682	2,822	2,863	4,549	6,055
Net Revenue Available for Debt Service	189,890	209,351	204,569	236,160	268,633	307,485	314,409	307,343	332,769	360,429
Debt Service										
Parity Bonds	110,237	118,925	118,817	132,664	157,117	172,959	175,463	167,694	160,957	159,761
Parity Lien Obligations	24,178	26,042	26,838	32,910	38,626	43,064	42,876	40,348	53,164	52,650
Subordinate Debt Service	18,581	12,150	12,182	12,769	14,087	15,039	17,477	18,318	21,316	26,277
Total Debt Service	\$ 152,996	\$ 157,117	\$ 157,837	\$ 178,343	\$ 209,830	\$ 231,062	\$ 235,816	\$ 226,360	\$ 235,437	\$ 238,688
Debt Service Coverage										
On Parity Bonds	1.72	1.76	1.72	1.78	1.71	1.78	1.79	1.83	2.07	2.26
On Parity Bonds and Parity Lien Obligations	1.41	1.44	1.40	1.42	1.36	1.42	1.44	1.48	1.55	1.70
On All Sewer System Obligations	1.24	1.33	1.30	1.32	1.28	1.33	1.33	1.36	1.41	1.51

1) 2014 operating expenses were restated as part of GASB Statements 68 and 71 implementation.

2) Non-cash GAAP adjustments consist of pension, other post-employment benefits and compensated absence accruals.

3) Interest Income excludes unrealized gains in the GASB Statement 31 market valuation adjustment.

APPENDIX D

SUMMARY OF KING COUNTY’S INVESTMENT POLICY

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SUMMARY OF KING COUNTY'S INVESTMENT POLICY

The Treasury Operations Section of the King County Finance and Business Operations Division administers the County's investments. Under Section 4.10 of the County Code, the Executive Finance Committee (the "Committee") oversees the County's investment practices. The Committee consists of the Chair of the County Council or his or her designee, the County Executive or his or her designee, the Chief Budget Officer, and the County Director of the Finance and Business Operations Division.

The County's own funds are invested in the County's Residual Investment Pool (the "Investment Pool"). All investments of County funds are subject to written policies and procedures adopted by the Committee. The Committee reviews the performance of the Investment Pool on a monthly basis.

In addition to investing the County's own funds, the Treasury Operations Section also invests the funds of approximately 100 special purpose districts within the County for which the Treasury Operations Section serves as treasurer, including all school districts, fire protection districts, water districts, sewer districts, and hospital districts. Each district has the option either to invest in the Investment Pool or to direct the term and amount of each of its investments. To participate in the Investment Pool, a district must sign an interlocal agreement that governs its participation in the Investment Pool, and, to exit the Investment Pool, a district must provide the required notice prior to its anniversary date. The Treasury Operations Section selects the particular investment instruments.

The Investment Pool must maintain an effective duration of 1.5 years or less and 40% of its total value must be held in securities that mature within one year. As of September 30, 2018, the Investment Pool had a balance of \$7.2 billion and an effective duration of 1.02 years, and 50.9% of the portfolio had a maturity of one year or less.

Under State law and the County's current investment policy, subject to certain minimum credit and maximum maturity limitations as described therein, the County may invest in the following instruments:

- (i) up to 100% of the portfolio in U.S. Treasury or U.S. Agency securities;
- (ii) up to 25% of the portfolio in certificates of deposit ("CDs") with institutions that are public depositaries in the State of Washington with a maximum of 5% per issuer across investment types;
- (iii) up to 25% of the portfolio in bankers' acceptances with a maximum of 5% per issuer across investment types;
- (iv) up to 100% of the portfolio in repurchase agreements, with a maximum of 25% exposure to any one repo counterparty, provided that the underlying security must be a U.S. Treasury or U.S. Agency and all underlying securities are held by a third party;
- (v) up to 25% of the portfolio in commercial paper and corporate notes with a maximum of 5% per issuer across investment types;

- (vi) up to 20% of the portfolio in general obligation municipal bonds with a maximum of 5% per issuer;
- (vii) up to 25% of the portfolio in mortgage-backed securities issued by agencies of the U.S. Government which pass the Federal Financial Institutions Examination Council (“FFIEC”) suitability test that banks use to determine lowest risk securities; and
- (viii) up to 25% of the portfolio in the State’s Local Government Investment Pool.

The combined total of repurchase agreements greater than overnight, bankers’ acceptances, CDs, commercial paper, and corporate notes must not exceed 50% of Investment Pool assets. The County currently does not purchase structured notes or inverse floating rate notes, and has no intention of doing so in the near future.

The County’s entire investment policy is located on the County’s website at the following link:

www.kingcounty.gov/operations/Finance/Treasury/InvestmentPool.aspx

The investment policy also includes, as Schedule VIII, a policy adopted by the Committee to address the circumstances under which County agencies or districts can invest funds beyond the maximum maturity limits established for the Investment Pool. This policy provides the “Pool-Plus” investment option, which allows a participant in the Investment Pool to request the County to combine a portfolio of individual long-term securities in the same fund that is invested in the Investment Pool. Under the Pool-Plus option, the Investment Pool will be used for the liquidity portion of the portfolio, while the following investment types may be used for the longer term investments: U.S Treasuries or securities with full faith and credit of the U.S. government backing them, and senior debt obligations issued by U.S. agencies, instrumentalities, or government-sponsored enterprises such as Federal National Mortgage Association (FNMA), Federal Home Loan Bank (FHLB), Federal Farm Credit Bank (FFCB), and Federal Home Loan Mortgage Corporation (FHLMC).

APPENDIX E

DEMOGRAPHIC AND ECONOMIC INFORMATION

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DEMOGRAPHIC AND ECONOMIC INFORMATION

King County is the largest county in the State of Washington (the “State”) in population, number of cities and employment, and the fourteenth most populous county in the United States. Of the State’s population, nearly 30% reside in King County, and of the County’s population, 33% live in the City of Seattle (“Seattle”). Seattle is the largest city in the Pacific Northwest, the County seat, and the center of the County’s economic activity.

Population

Historical and current population figures for the State, the County, and Seattle are given below.

POPULATION

Year	Washington	King County	Seattle
1980 ⁽¹⁾	4,130,163	1,269,749	493,846
1990 ⁽¹⁾	4,866,692	1,507,319	516,259
2000 ⁽¹⁾	5,894,121	1,737,034	563,374
2010 ⁽¹⁾	6,724,540	1,931,249	608,660
2014 ⁽²⁾	6,968,170	2,017,250	640,500
2015 ⁽²⁾	7,061,410	2,052,800	662,400
2016 ⁽²⁾	7,183,700	2,105,000	686,800
2017 ⁽²⁾	7,310,300	2,153,700	713,700
2018 ⁽²⁾	7,427,570	2,190,200	730,400

(1) Source: U.S. Department of Commerce, Bureau of Census

(2) Source: State of Washington, Office of Financial Management

Per Capita Income

The following table presents per capita personal income for the Seattle Metropolitan Division (the cities of Seattle, Bellevue, and Everett), the County, the State, and the U.S.

PER CAPITA INCOME

	2012	2013	2014	2015	2016
Seattle MD	\$ 59,554	\$ 60,219	\$ 65,033	\$ 68,094	\$ 69,786
King County	65,345	66,073	71,882	75,518	77,213
State of Washington	47,338	47,814	50,890	53,064	54,579
U.S.	44,282	44,493	46,494	48,451	49,246

Source: U.S. Bureau of Economic Analysis, U.S. Department of Commerce

Construction

The table below lists the value of housing construction for which building permits have been issued by entities within the County. The value of public construction is not included in this table.

KING COUNTY RESIDENTIAL BUILDING PERMIT VALUES

Year	New Single Family Units		New Multi-Family Units		Total Value
	Number	Value	Number	Value	
2013	4,419	\$ 1,419,065,243	7,858	\$ 1,053,237,846	\$ 2,472,303,089
2014	4,215	1,478,116,875	10,488	1,478,117,263	2,880,006,794
2015	4,010	1,539,049,136	14,527	2,227,509,189	3,766,558,325
2016	4,254	1,616,722,532	13,445	1,759,255,696	3,375,978,228
2017	4,356	1,735,074,421	14,285	2,174,576,693	3,909,651,114
2017 ⁽¹⁾	3,348	1,302,375,836	9,180	1,394,252,704	2,595,628,541
2018 ⁽¹⁾	3,465	1,347,643,130	8,595	1,102,210,111	2,449,853,241

(1) Through September.

Source: U.S. Bureau of the Census

Retail Activity

The following table presents taxable retail sales in King County and Seattle.

KING COUNTY AND THE CITY OF SEATTLE TAXABLE RETAIL SALES

Year	King County	City of Seattle
2013	\$ 46,093,349,116	\$ 18,258,202,770
2014	49,638,174,066	19,995,171,842
2015	54,890,159,770	22,407,443,037
2016	59,530,882,870	24,287,539,378
2017	62,910,608,935	26,005,147,210
2017 ⁽¹⁾	14,094,314,668	5,829,963,492
2018 ⁽¹⁾	15,358,937,153	6,379,339,072

(1) Through first quarter.

Source: Washington State Department of Revenue and Quarterly Business Review

Industry and Employment

The following table presents major Puget Sound-area employers and their State-wide employment data as of May 1, 2018 (except where noted).

PUGET SOUND AREA MAJOR EMPLOYERS	
Employer	Employees
The Boeing Company	65,800 ⁽¹⁾
Joint Base Lewis-McChord	54,000
Amazon.com Inc.	50,000
Microsoft Corp.	46,300 ⁽¹⁾
Navy Region Northwest	45,900
University of Washington	45,000
Providence Health & Services	43,100
Safeway Inc. and Albertsons LLC	21,500 ⁽¹⁾
Wal-Mart Stores, Inc.	20,000
Costco Wholesale Corp.	17,600 ¹
MultiCare Health System	16,300
Fred Meyer Stores	15,500 ⁽¹⁾
King County Government	15,300 ⁽¹⁾⁽²⁾
Starbucks Corp.	14,000 ⁽¹⁾
City of Seattle	13,700 ⁽³⁾
Swedish Medical Center	13,300
CHI Franciscan Health System	12,400
Seattle Public Schools	11,400
Nordstrom Inc.	10,200
PeaceHealth	9,300

(1) Latest information available is for 2017.

(2) Source: King County.

(3) Source: City of Seattle.

Source: Puget Sound Business Journal, 2018

KING COUNTY
RESIDENT CIVILIAN LABOR FORCE AND EMPLOYMENT
AND NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT⁽¹⁾

	Annual Average				
	2013	2014	2015	2016	2017
Civilian Labor Force	1,137,369	1,158,195	1,178,040	1,204,360	1,230,207
Total Employment	1,079,695	1,103,941	1,127,580	1,156,939	1,184,707
Total Unemployment	57,674	54,254	50,460	47,421	45,500
Percent of Labor Force	5.1%	4.7%	4.3%	3.9%	3.7%
NAICS INDUSTRY	2013	2014	2015	2016	2017
Total Nonfarm	1,237,217	1,278,033	1,311,575	1,358,517	1,401,333
Total Private	1,069,975	1,108,425	1,137,442	1,180,175	1,219,450
Goods Producing	162,508	168,283	174,908	176,800	178,550
Mining and Logging	458	458	575	500	575
Construction	55,883	60,792	66,800	70,833	75,108
Manufacturing	106,167	107,025	107,542	105,475	102,892
Service Providing	1,074,708	1,109,750	1,136,667	1,181,717	1,222,783
Trade, Transportation, and Utilities	225,167	235,758	244,433	254,642	269,508
Information	82,617	85,583	89,058	95,967	102,983
Financial Activities	70,892	72,000	69,675	70,758	71,208
Professional and Business Services	201,042	207,933	215,733	222,667	228,183
Educational and Health Services	162,633	167,983	167,008	174,592	179,092
Leisure and Hospitality	120,575	124,883	130,108	136,425	141,392
Other Services	44,542	46,000	46,517	48,325	48,533
Government	167,242	169,608	174,133	178,342	181,883
Workers in Labor/Management Disputes	0	0	0	0	0
	Sept.				
	2018				
Civilian Labor Force	1,264,988				
Total Employment	1,221,845				
Total Unemployment	43,143				
Percent of Labor Force	3.4				

(1) Columns may not add to totals due to rounding.

Source: Washington State Employment Security Department

APPENDIX F
BOOK-ENTRY SYSTEM

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BOOK-ENTRY SYSTEM

The following information has been provided by the Depository Trust Company, New York, New York ("DTC"). The County makes no representation regarding the accuracy or completeness thereof, or for the absence of material changes in such information subsequent to the date hereof. Beneficial Owners (as hereinafter defined) should therefore confirm the following with DTC or the Participants (as hereinafter defined).

1. The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the securities (the "Securities"). The Securities will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Security certificate will be issued for [each issue of] the Securities, [each] in the aggregate principal amount of such issue, and will be deposited with DTC. [If, however, the aggregate principal amount of [any] issue exceeds \$500 million, one certificate will be issued with respect to each \$500 million of principal amount, and an additional certificate will be issued with respect to any remaining principal amount of such issue.]
2. DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.
3. Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC's records. The ownership interest of each actual purchaser of each Security ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners

are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Securities are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Securities, except in the event that use of the book-entry system for the Securities is discontinued.

4. To facilitate subsequent transfers, all Securities deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Securities with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Securities; DTC's records reflect only the identity of the Direct Participants to whose accounts such Securities are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.
5. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. [Beneficial Owners of Securities may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.]
6. Redemption notices shall be sent to DTC. If less than all of the Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.
7. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Securities unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).
8. Redemption proceeds, distributions, and dividend payments on the Securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from Issuer or Agent, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and

customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in “street name,” and will be the responsibility of such Participant and not of DTC, Agent, or Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of Issuer or Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

9. A Beneficial Owner shall give notice to elect to have its Securities purchased or tendered, through its Participant, to [Tender/Remarketing] Agent, and shall effect delivery of such Securities by causing the Direct Participant to transfer the Participant’s interest in the Securities, on DTC’s records, to [Tender/Remarketing] Agent. The requirement for physical delivery of Securities in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Securities are transferred by Direct Participants on DTC’s records and followed by a book-entry credit of tendered Securities to [Tender/Remarketing] Agent’s DTC account.
10. DTC may discontinue providing its services as depository with respect to the Securities at any time by giving reasonable notice to Issuer or Agent. Under such circumstances, in the event that a successor depository is not obtained, Security certificates are required to be printed and delivered.
11. Issuer may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.
12. The information in this section concerning DTC and DTC’s book-entry system has been obtained from sources that Issuer believes to be reliable, but Issuer takes no responsibility for the accuracy thereof.