OFFICIAL STATEMENT

RATINGS
Moody's: Aa1
S&P: AA+

New Issue, Book-Entry Only **See "Other Bond Information—Ratings" herein.**

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 2020A Bonds is excludable from gross income for federal income tax purposes. In addition, interest on the 2020A Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. See "Legal and Tax Information—Tax Matters Relating to the 2020A Bonds" herein. Interest on the 2020B Bonds is not intended to be exempt from federal income taxes. See "Legal and Tax Information—Certain Income Tax Consequences Relating to the 2020B Bonds."

KING COUNTY, WASHINGTON

$179,530,000

SEWER IMPROVEMENT AND REFUNDING REVENUE BONDS, 2020, SERIES A

$186,745,000

SEWER REFUNDING REVENUE BONDS, 2020, SERIES B (TAXABLE)

DATED: Date of Initial Delivery **DUE: January 1, as shown on page i**

King County, Washington (the "County"), is issuing its Sewer Improvement and Refunding Revenue Bonds, 2020, Series A (the "2020A Bonds"), and Sewer Refunding Revenue Bonds, 2020, Series B (Taxable) (the "2020B Bonds") as fully registered obligations. The 2020A Bonds and the 2020B Bonds are referred to together herein as the "Bonds." 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 Series and a maturity of the Bonds, 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. 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, 2021, to maturity or prior redemption. The Bonds will mature on January 1 in the years and amounts and bear interest at the rates set forth on pages i and ii 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 G—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 2020A Bonds are being issued to provide funds for acquiring and constructing improvements to the County's sewer system (the "Sewer System"), to defease and refund on a current basis certain outstanding bonds of the Sewer System, and to pay the costs of issuing the 2020A Bonds. The 2020B Bonds are being issued to defease and advance refund certain outstanding bonds secured by the Sewer System and to pay the costs of issuing the 2020B 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**. By their purchase of the Bonds, Bondowners are deemed to consent to springing amendments to the Ordinance. See Appendix A.**

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 forms of Bond Counsel's opinions are 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 August 4, 2020.

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: July 21, 2020

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 G—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.

The public offering prices set forth on pages i and ii of this Official Statement may be changed from time to time by the initial purchaser(s) of the Bonds (the "Purchaser(s)"). The Purchaser of each Series of the Bonds may offer and sell such Series to certain dealers, unit investment trusts, or money market funds at prices lower than the public offering prices set forth on pages i and ii of 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.

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 is not obligated to update, or otherwise revise, the financial projections or the specific portions presented in this Official Statement to reflect circumstances existing after the date when made or to reflect the occurrence of future events, even in the event that any or all of the assumptions are shown to be in error.

The websites of the County, any County department or agency, the City of Seattle, DTC, and the Municipal Securities Rulemaking Board are 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.

MATURITY SCHEDULE

$179,530,000
SEWER IMPROVEMENT AND REFUNDING REVENUE BONDS, 2020, SERIES A

SERIAL BONDS

Due January 1	Amounts	Interest Rates	Yields	Prices	CUSIP Numbers
2022	$ 2,090,000	5.000%	0.16%	106.805	495290 BE7
2023	2,200,000	5.000%	0.20%	111.526	495290 BF4
2024	2,310,000	5.000%	0.22%	116.221	495290 BG2
2025	2,420,000	5.000%	0.31%	120.518	495290 BH0
2026	2,545,000	5.000%	0.40%	124.586	495290 BJ6
2027	2,670,000	5.000%	0.53%	128.127	495290 BK3
2028	2,805,000	5.000%	0.63%	131.581	495290 BL1
2029	2,940,000	5.000%	0.72%	134.858	495290 BM9
2030	3,090,000	5.000%	0.80%	137.990	495290 BN7
2031	3,245,000	4.000%	0.90%	127.904 (1)	495290 BP2
2032	3,375,000	4.000%	1.03%	126.565 (1)	495290 BQ0
2033	5,990,000	1.625%	1.67%	99.497	495290 BR8
2034	8,705,000	1.625%	1.74%	98.629	495290 BS6
2035	8,885,000	1.750%	1.81%	99.241	495290 BT4
2036	9,080,000	1.750%	1.87%	98.399	495290 BU1
2037	3,265,000	1.875%	1.92%	99.368	495290 BV9
2038	3,320,000	1.875%	1.97%	98.605	495290 BW7
2039	3,385,000	2.000%	2.02%	99.693	495290 BX5
2040	3,450,000	2.000%	2.07%	98.885	495290 BY3
2041	3,520,000	4.000%	1.72%	119.725 (1)	495290 BZ0
2042	3,660,000	4.000%	1.75%	119.438 (1)	495290 CA4
2043	8,440,000	4.000%	1.78%	119.151 (1)	495290 CB2
2044	8,780,000	4.000%	1.83%	118.675 (1)	495290 CC0
2045	9,125,000	4.000%	1.85%	118.485 (1)	495290 CD8
2046	9,495,000	4.000%	1.86%	118.391 (1)	495290 CE6
2047	9,875,000	4.000%	1.87%	118.296 (1)	495290 CF3

TERM BONDS

Due January 1	Amount	Interest Rate	Yield	Price	CUSIP Number
2052	$ 50,865,000	4.00%	1.92%	117.824 (1)	495290 CL0

(1) Calculated to the January 1, 2030, par call date.

MATURITY SCHEDULE

$186,745,000
SEWER REFUNDING REVENUE BONDS, 2020, SERIES B (TAXABLE)

Due January 1	Amounts	Interest Rates	Yields	Prices	CUSIP Numbers
2021	$ 1,550,000	0.27%	0.27%	100.000	495290 CM8
2022	3,795,000	0.37%	0.37%	100.000	495290 CN6
2023	3,805,000	0.47%	0.47%	100.000	495290 CP1
2024	3,825,000	0.65%	0.65%	100.000	495290 CQ9
2025	3,850,000	0.75%	0.75%	100.000	495290 CR7
2026	3,875,000	0.95%	0.95%	100.000	495290 CS5
2027	11,735,000	1.12%	1.12%	100.000	495290 CT3
2028	16,465,000	1.30%	1.30%	100.000	495290 CU0
2029	16,915,000	1.46%	1.46%	100.000	495290 CV8
2030	8,485,000	1.51%	1.51%	100.000	495290 CW6
2031	8,590,000	1.66%	1.66%	100.000	495290 CX4
2032	16,745,000	1.76%	1.76%	100.000	495290 CY2
2033	17,080,000	1.86%	1.86%	100.000	495290 CZ9
2034	18,390,000	1.96%	1.96%	100.000	495290 DA3
2035	14,310,000	2.06%	2.06%	100.000	495290 DB1
2036	7,140,000	2.15%	2.15%	100.000	495290 DC9
2037	7,290,000	2.25%	2.25%	100.000	495290 DD7
2038	7,455,000	2.33%	2.33%	100.000	495290 DE5
2039	7,630,000	2.43%	2.43%	100.000	495290 DF2
2040	7,815,000	2.48%	2.48%	100.000	495290 DG0

KING COUNTY, WASHINGTON
500 FOURTH AVENUE
SEATTLE, WASHINGTON 98104

KING COUNTY EXECUTIVE

Dow Constantine

METROPOLITAN KING COUNTY COUNCIL

Claudia Balducci	Chair
Reagan Dunn	Vice Chair
Joe McDermott	Vice Chair
Rod Dembowski	Councilmember
Jeanne Kohl-Welles	Councilmember
Kathy Lambert	Councilmember
Dave Upthegrove	Councilmember
Pete von Reichbauer	Councilmember
Girmay Zahilay	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
Seattle, Washington

MUNICIPAL ADVISOR TO THE COUNTY

Piper Sandler & Co.
Seattle, Washington

REGISTRAR

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

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KING COUNTY, WASHINGTON
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SEWER IMPROVEMENT AND REFUNDING REVENUE BONDS, 2020, SERIES A

$186,745,000
SEWER REFUNDING REVENUE BONDS, 2020, SERIES B (TAXABLE)

INTRODUCTION

This Official Statement contains certain information concerning the issuance by King County, Washington (the "County"), of $179,530,000 aggregate principal amount of its Sewer Improvement and Refunding Revenue Bonds, 2020, Series A (the "2020A Bonds"), and $186,745,000 aggregate principal amount of its Sewer Refunding Revenue Bonds, 2020, Series B (Taxable) the ("2020B Bonds"). Together, the 2020A Bonds and the 2020B Bonds are referred to in this Official Statement as the "Bonds" and separately as a "Series."

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 19112, passed on June 23, 2020 (the "Ordinance"), and Motion 15652 of the Metropolitan King County Council (the "County Council") passed on July 21, 2020, 2020 (the "Sale Motion"). A summary of the 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 Ordinance. See Appendix A—Summary of Certain Definitions and Other Bond Provisions of the Ordinance.

The outbreak of the 2019 novel coronavirus ("COVID-19") is a significant event that has had and will have ongoing, material effects on the finances, operations, and economy of the County. Historic information in this Official Statement about the finances and operations of the Sewer System and the County predate the outbreak of COVID-19 and should be considered in light of the possible or probable negative effects the COVID-19 pandemic may have on the current and future finances and operations of the Sewer System and economy of the County and the State of Washington (the "State"). See "The Sewer System—Impact of COVID-19" and "—Possible Financial Impacts of COVID-19" herein for current information and expectations about the effects of COVID-19, including on projected revenues of the Sewer System. See also "King County—Impact of COVID-19" for a discussion of the effects of COVID-19 on the operations of the County.

The Preliminary Official Statement dated July 14, 2020, is updated to reflect the results of pricing the Bonds and to add a subsequent event. See "Legal and Tax Information—Litigation" for information regarding the Suquamish Tribe's notice of intent to sue the County in connection with certain discharges into Puget Sound.

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 each Series and maturity of the Bonds. 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 at the rates set forth on pages i and ii, payable semiannually on each January 1 and July 1, beginning January 1, 2021, 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 date of their initial delivery (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 January 1 in the years and amounts set forth on pages i and ii 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, 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 G—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 January 1, 2031, 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 January 1, 2030, at the price of par plus accrued interest, if any, to the date fixed for redemption.

Mandatory Sinking Fund Redemption of Term Bonds. The County will redeem Term Bonds, if not optionally redeemed as described above or purchased under the provisions described in the Ordinance, at par plus accrued interest on January 1 in the years and amounts as follows:

TERM BONDS

Years	Amounts
2048	$ 10,270,000
2049	10,680,000
2050	11,110,000
2051	11,550,000
2052[(1)]	7,255,000

(1) Maturity.

If the County redeems Term Bonds under the optional redemption provisions described above or purchases for cancellation or defeases Term Bonds, the Term Bonds so redeemed, purchased, or defeased (irrespective of their redemption or purchase prices) will be credited against one or more scheduled mandatory redemption amounts for those Term Bonds. The County will determine the manner in which the credit is to be allocated.

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 in the case of the 2020B Bonds, on a pro rata pass-through distribution-of-principal basis, 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 Form. 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 G 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 Ordinance.

Purchase of Bonds

The County reserves the right and option to purchase any or all of the Bonds offered to the County 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 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 Ordinance for the redemption of Bonds.

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

Defeasance of any 2020B Bond may result in a reissuance thereof, in which event a holder will recognize taxable gain or loss equal to the difference between the amount realized from the sale, exchange, or retirement (less any accrued qualified stated interest which will be taxable as such) and the holder's adjusted tax basis in the 2020B Bond. See "Legal and Tax Information—Certain Income Tax Consequences Relating to the 2020B Bonds."

USE OF PROCEEDS

Purpose

The 2020A Bonds are being issued to provide funds for acquiring and constructing improvements to the County's sewer system (the "Sewer System," as defined below under "Security and Sources of Payment for the Bonds—Lien and Charge on Revenue of the System"), to defease and refund on a current basis certain revenue bonds of the Sewer System as shown below under "—Refunding Plan," and to pay the costs of issuing the 2020A Bonds.

The 2020B Bonds are being issued to defease and advance refund certain revenue bonds of the Sewer System as shown below under "—Refunding Plan" and to pay the costs of issuing the 2020B 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	**2020A Bonds**	**2020B Bonds**	**Total**
Par Amount of Bonds	$ 179,530,000	$ 186,745,000	$ 366,275,000
Parity Bond Reserve Account Contribution	3,601,766	-	3,601,766
Accrued Interest Contribution	110,408	756,071	866,479
Net Reoffering Premium	26,019,917	-	26,019,917
Total Sources of Funds	$ 209,262,091	$ 187,501,071	$ 396,763,162
USES OF FUNDS			
Deposit to Project Fund	$ 180,241,196	$ -	$ 180,241,196
Deposit to Escrow	28,450,409	186,330,088	214,780,497
Payment of Costs of Issuance(1)	570,486	1,170,983	1,741,469
Total Uses of Funds	$ 209,262,091	$ 187,501,071	$ 396,763,162

(1) Includes rating agency fees, Municipal Advisor fees, underwriters' discount, legal fees, printing costs, other costs of issuing the Bonds, escrow costs and other costs of administering the refunding, and additional proceeds.

Refunding Plan

A portion of the proceeds from the sale of the 2020A Bonds, along with a contribution from the Parity Bond Reserve Account, will be used to defease and refund on a current basis the County's outstanding callable Sewer Revenue and Refunding Bonds, 2010 (the "2020A Refunded Bonds"), and a portion of the proceeds of the 2020B Bonds will be used to defease and advance refund all or a portion of the County's outstanding callable Sewer Revenue Refunding Bonds, 2012, Series B; Sewer Revenue Refunding Bonds, 2012, Series C; Sewer Revenue Refunding Bonds, 2013 Series A; and Sewer Refunding Revenue Bonds, 2016, Series B (collectively, the "2020B Refunded Bonds"), for the purposes of realizing debt service savings. The 2020A Refunded Bonds and 2020B Refunded Bonds are referred to collectively in this Official Statement as the "Refunded Bonds."

Table 2 provides information on the Refunded Bonds

TABLE 2
REFUNDED BONDS

Bond Component	Maturity Date	Interest Rate (%)	Par Amount	Redemption Date	Redemption Price (%)	CUSIP Number
2020A Refunded Bonds						
Sewer Revenue and Refunding Bonds, 2010						
Term	1/1/2036	4.25	$ 28,340,000	8/4/2020	100	495289 6F2
Total 2020A Refunded Bonds			$ 28,340,000			
2020B Refunded Bonds						
Sewer Revenue Refunding Bonds, 2012, Series B						
Serial	1/1/2027	5.00	$ 9,305,000	7/1/2022	100	495289 C40
	1/1/2028	5.00	5,000,000	7/1/2022	100	495289 C57
	1/1/2029	4.00	10,195,000	7/1/2022	100	495289 C81
	1/1/2034	5.00	12,740,000	7/1/2022	100	495289 C65
	1/1/2035	5.00	13,380,000	7/1/2022	100	495289 C73
Subtotal			$ 50,620,000			
Sewer Revenue Refunding Bonds, 2012, Series C						
Serial	1/1/2032	5.00	$ 9,895,000	7/1/2022	100	495289 E30
	1/1/2033	5.00	10,385,000	7/1/2022	100	495289 E55
Subtotal			$ 20,280,000			
Sewer Revenue Refunding Bonds, 2013 Series A						
Serial	1/1/2028	5.00	$ 10,115,000	1/1/2023	100	495289 H94
	1/1/2029	5.00	6,015,000	1/1/2023	100	495289 J27
	1/1/2030	5.00	6,595,000	1/1/2023	100	495289 J35
	1/1/2031	5.00	6,900,000	1/1/2023	100	495289 J43
	1/1/2032	5.00	7,175,000	1/1/2023	100	495289 J50
	1/1/2033	5.00	7,590,000	1/1/2023	100	495289 J68
	1/1/2034	5.00	6,995,000	1/1/2023	100	495289 J76
	1/1/2035	5.00	2,120,000	1/1/2023	100	495289 J84
Subtotal			$ 53,505,000			
Sewer Improvement and Refunding Revenue Bonds, 2016, Series B						
Term	7/1/2039	5.00	$ 42,595,000	7/1/2023	100	495289 4S6
Subtotal			$ 42,595,000			
Total 2020B Refunded Bonds			$ 167,000,000			

Procedure. The County will enter into an Escrow Agreement with U.S. Bank, N.A., as Escrow Agent, to provide for the refunding of the Refunded Bonds and the payment of Bond issuance costs. The Escrow Agreement will create an irrevocable trust fund to be held by the Escrow Agent and to be applied solely to the payment of the Refunded Bonds and the payment of Bond issuance costs. The net proceeds of the Bonds deposited with the Escrow Agent to be used to refund the Refunded Bonds will be held in cash or invested in noncallable direct obligations of the United

States of America or obligations the payment of which is unconditionally guaranteed by the United States of America (the “Acquired Obligations”) that will mature and bear interest at rates sufficient, together with cash held by the Escrow Agent, to pay the principal of and accrued interest on the Refunded Bonds.

Verification of Calculations. The mathematical accuracy of the computations of the adequacy of the maturing principal amounts of and interest on the Acquired Obligations and cash on deposit to be held by the Escrow Agent to pay principal of and accrued interest on the Refunded Bonds as described above will be verified by Causey Demgen & Moore P.C., independent certified public accountant.

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. Tax revenues of the County may not be used directly or indirectly to secure or guarantee the payment of the principal of or interest on 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 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 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 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 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 3
PARITY BOND RESERVE ACCOUNT
(as of June 30, 2020)

	Provider	Amount	Moody's/S&P 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.	12,500,001	A3/AA	2047
	Subtotal	$ 29,581,040		
Cash and Investments		140,365,363		
Total		$ 169,946,403		

(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 approximately $162.1 million. 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 June 30, 2020, the value of investments and the policy amount of the Surety Bonds in the Parity Bond Reserve Account is $140,365,363. Approximately $3.6 million of this amount will be withdrawn at the closing date for the Bonds and contributed towards the redemption of the 2020A Refunded Bonds. See "Use of Proceeds—Sources and Uses of Funds" and "—Refunding Plan." 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 book value of $15,089,240 and a market value of $16,576,202 invested in the Pool-Plus option described in Appendix D. The book value is the number reflected in Table 3 under Cash and Investments. 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.

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 Ordinance to amend, reduce, or eliminate the Reserve Requirement as follows. A supplemental 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.

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 the definitions of "First Springing Amendment Date (Parity Bonds)" and "Reserve Requirement" in Appendix A—Summary of Certain Definitions and Other Bond Provisions of the Ordinance.

Outstanding Sewer System Obligations

Table 4 presents information on the outstanding obligations of the County's Sewer System ("Sewer System Obligations") as of July 14, 2020. See Table 14–"Scheduled Debt Service on All Obligations of the Sewer System" under "The Sewer System—Debt Service Requirements Payable From Revenue of the System."

TABLE 4
OUTSTANDING SEWER SYSTEM OBLIGATIONS

Sewer System Obligations	Amount Outstanding	Final Maturity	Ratings
Parity Bonds (Senior Lien)[(1)]	$ 2,378,295,000	2052	Aa1/AA+
Parity Lien Obligations (LTGO)	565,350,000	2039	Aaa/AAA
Junior Lien Obligations	300,590,000	2043	Aa2/AA
Multi-Modal LTGO/Sewer Revenue Bonds	246,320,000	2046	
SRF Loans and Public Works Trust Fund Loans[(2)]	224,990,828	2054	
Total Sewer System Obligations Outstanding[(3)]	$ 3,715,545,828		

(1) Excludes the Refunded Bonds; includes the Bonds. 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 (the "WIFIA Bond"). See "The Sewer System—Future Sewer System Financing Plans—WIFIA Bond."

(2) Excludes $47.6 million in undrawn loan commitments from the Washington State Department of Ecology ("Ecology") and the Washington State Public Works Board ("PWB"). 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 the refunding of the Refunded Bonds, and including the WIFIA Bond, which is yet to be drawn upon, the County has outstanding 19 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 three 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 four 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.”

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 since the adoption of the 2017 Sewer Rate provide for the amortization of outstanding Variable Rate Bonds through optional redemptions that begin ten years prior to their final maturity dates. Such planned optional redemptions are excluded from Table 14—"Scheduled Debt Service on All Outstanding Obligations of the Sewer System" under "The Sewer System."

Credit Agreements and Put Bonds. 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 conditions to the term-out provisions, events of default (or events of termination), and remedies. Events of default include certain cross defaults, judgments against the County, 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. Stated remedies included in the credit agreements, or available pursuant to a "most-favored nation" provision, in some cases 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 5.

Additionally, the County has marketed certain of its Variable Rate Bonds as put bonds in a term rate mode. These bonds are subject to mandatory purchase on predetermined dates. If the County is unable to redeem or remarket the bonds on or before the respective mandatory purchase date, the County will become subject to certain step-up pricing provisions. See Table 6—"Summary of Put Bonds" for related optional and mandatory purchase dates and associated step-up pricing provisions.

TABLE 5
SUMMARY OF CREDIT AGREEMENTS

Series	Type of Sewer System Obligations	Outstanding as of 7/14/2020	Type of Agreement	Provider	Expiration	Term-Out Provision[1]	Maturity
Multi-Modal Limited Tax General Obligation Refunding Bonds (Payable from Sewer Revenue), Series 2017A and B	Multi-Modal LTGO/Sewer Revenue Bonds	$98,225,000	Continuing Covenant Agreement	State Street Public Lending Corporation	4/5/2021	Three Years	1/1/2040
Multi-Modal Limited Tax General Obligation Refunding Bonds (Payable from Sewer Revenue), Series 2019A and B	Multi-Modal LTGO/Sewer Revenue Bonds	$148,095,000	Standby Bond Purchase Agreement	TD Bank N.A.	6/26/2024	Three Years	1/1/2046

(1) Subject to conditions under the agreements.

TABLE 6
SUMMARY OF PUT BONDS

Series	Type of Sewer System Obligations	Outstanding as of 7/14/2020	Optional Redemption	Mandatory Purchase	Step-Up Provision	Maturity
Junior Lien Variable Rate Demand Sewer Revenue Bond, Series 2012	Junior Lien Obligations	$100,000,000	on and after 3/1/2021	12/1/2021	6% for first 90 days following the Mandatory Purchase Date, 8% thereafter	1/1/2043
Junior Lien Sewer Revenue Refunding Bonds, 2020A (Mandatory Put)	Junior Lien Obligations	$100,295,000	on and after 7/1/2023	1/1/2024	none	1/1/2032
Junior Lien Sewer Revenue Refunding Bonds, 2020B (Mandatory Put)	Junior Lien Obligations	$100,295,000	on and after 4/1/2025	1/1/2026	none	1/1/2042

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. All of 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 0.61% of sewage disposal revenues in the year ended December 31, 2019, 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 are pending until further developments in the Clean Water Plan. See "—Regional Wastewater Services and Clean Water Plans." 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 15.9% of sewage disposal revenues in the year ended December 31, 2019. 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 6.6% of sewage disposal revenues in the year ending December 31, 2019. 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 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 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 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 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 Certain Definitions and Other Bond Provisions of the 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 June 30, 2020, the balance in the Rate Stabilization Fund was $46.25 million. The County projects that it will make a $30 million deposit into the Rate Stabilization Fund in 2025. See Table 12—"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 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 Ordinance prevent the County from issuing Future Parity Bonds to refund maturing Parity Bonds for the payment of which money is not otherwise available.

By their purchase of the Bonds, Bondowners are deemed to consent to all of the springing amendments, which will become effective as of the First Springing Amendment Date (Parity Bonds) and as of the Second Springing Amendment Date (Parity Bonds), set forth in the Ordinance and summarized in Appendix A. These springing amendments (as of the First Springing Amendment Date (Parity Bonds)) allow the County to amend the definition of Reserve Requirement to establish one or more separate Reserve Requirements for one or more Series of Parity Bonds, including each Series of the Bonds issued as Parity Bonds, reduce any Reserve Requirement, including the Reserve Requirement for each Series of the Bonds issued as Parity Bonds, to an amount less than maximum Annual Parity Debt Service in any calendar year, including to zero, or establish one or more separate subaccounts within the Parity Bond Reserve Account to secure one or more Series of Parity Bonds, including each Series of the Bonds issued as Parity Bonds, with other Series of Parity Bonds not being secured by such separate subaccounts. In addition, as of the Second Springing Amendment (Parity Bonds), the definitions of Assumed Amortization Period, Assumed Debt Service, Balloon Maturity, and Annual Parity Debt Service set forth in the Ordinance will become effective and among other things, as more specifically provided in the Ordinance, will allow for Balloon Maturity obligations to be amortized for a period no longer than the lesser of: (i) the useful life, as of the date of designation, of the assets being financed; and (ii) 75 years, in connection with the issuance of Future Parity Bonds. All Registered Owners of Parity Bonds issued after the effective date of the Ordinance, specifically including the Bonds, are deemed to have consented to these amendments by their purchase of such Parity Bonds. See Appendix A—Summary of Certain Definitions and Other Bond Provisions of the Ordinance.

THE SEWER SYSTEM

Impact of COVID-19

In response to the COVID-19 pandemic, Governor Inslee issued a Stay Home, Stay Healthy Proclamation on March 23, 2020, followed by the closing of all non-essential businesses on March 25, 2020. The State is currently following a phased re-opening approach, including, as of June 19, 2020, the reopening of businesses with reduced capacity and hours.

The COVID-19 pandemic has not impacted WTD's ability to continue full operations of its wastewater conveyance and treatment systems, and WTD continues to meet or exceed all discharge permit requirements. WTD has been maintaining required staffing levels; all operations and maintenance is continuing as planned and without deferrals; critical parts, materials, and chemicals continue to be delivered without delays; and social distancing practices, personal protective gear requirements, and daily disinfection of shared work spaces have been implemented at work sites to keep workers safe from infection. WTD has verified with chemical vendors that it is a priority customer due to the need to maintain essential services and, therefore, WTD has delivery priority over vendors' other customers. The COVID-19 outbreak is ongoing, and its dynamic nature leads to uncertainties. The County cannot predict the magnitude of the effect that the outbreak and the governmental and regulatory responses thereto will have on the Sewer System or the County. See "—Possible Financial Impacts of COVID-19" and "King County—Impact of COVID-19."

At this time, the Sewer System is not receiving any federal or State aid related to the COVID-19 pandemic.

General Information

The sewage 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 31-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 13 years in various capacities, including Assistant Manager at the Brightwater treatment plant and Engineering Unit Manager. He negotiated revisions to the Brightwater discharge permit with Ecology and the 2016 Joint Project Agreement for the Ship Canal Water Quality Combined Sewer Overflow Project with Seattle. 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 four 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.

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 161 million gallons of sewage per day ("mgd") from approximately 1.8 million residents in 2019. The major wastewater facilities include three major secondary treatment plants (West Point in Seattle, South in Renton, and Brightwater in south Snohomish County), 397 miles of conveyance lines, 48 pump stations, and 25 regulator stations. Other facilities include four combined sewer overflow ("CSO") treatment plants, four CSO storage facilities, 39 CSO outfall locations, and secondary treatment plants on Vashon Island and in Carnation.

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 99.4% of sewage disposal revenues in the year ended December 31, 2019, and the non-Municipal Participants accounted for 0.6%.

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 sewage 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, 2019, is presented in Table 7.

TABLE 7
SEWER SYSTEM PARTICIPANTS AS OF DECEMBER 31, 2019

	Single Family Residential Customers	RCE[(1)]	Total Customers	Percentage of Total (%)
Municipal Participants-Cities				
Algona	1,034	365	1,399	0.18
Auburn	13,231	17,281	30,512	4.01
Bellevue	32,540	26,418	58,958	7.74
Black Diamond	1,025	160	1,185	0.16
Bothell	4,747	4,622	9,369	1.23
Brier[(2)]	1,564	287	1,851	0.24
Carnation	873	226	1,099	0.14
Issaquah	6,793	5,554	12,347	1.62
Kent	13,131	22,195	35,326	4.64
Kirkland	9,931	6,566	16,497	2.17
Lake Forest Park	3,588	508	4,096	0.54
Mercer Island	7,176	1,175	8,351	1.10
Pacific	1,533	1,185	2,718	0.36
Redmond	15,148	16,666	31,814	4.18
Renton	16,040	15,186	31,226	4.10
Seattle[(3)]	152,575	150,014	302,589	39.74
Tukwila	1,033	6,591	7,624	1.00
Subtotal	**281,962**	**274,999**	**556,961**	**73.15**
Municipal Participants-Sewer Districts and Tribe				
Alderwood Water & Wastewater District[(2)]	33,946	13,914	47,860	6.29
Cedar River Water & Sewer District	4,117	1,367	5,484	0.72
Coal Creek Utility District	3,127	1,682	4,809	0.63
Cross Valley Water District[(2)]	-	513	513	0.07
Highlands Sewer District	104	2	106	0.01
Lakehaven Utility District	1,022	13	1,035	0.14
Muckleshoot Indian Tribe	301	77	378	0.05
NE Sammamish Sewer & Water District	4,717	138	4,855	0.64
Northshore Utility District	19,832	12,654	32,486	4.27
Olympic View Water & Sewer District[(2)]	207	-	207	0.03
Ronald Wastewater District	15,125	3,874	18,999	2.50
Sammamish Plateau Water & Sewer District	11,179	5,241	16,420	2.16
Skyway Water & Sewer District	3,926	859	4,785	0.63
Soos Creek Water & Sewer District	32,292	7,278	39,570	5.20
Valley View Sewer District	7,096	8,779	15,875	2.08
Vashon Sewer District	415	581	996	0.13
Woodinville Water District	2,873	2,531	5,404	0.71
Subtotal	**140,279**	**59,503**	**199,782**	**26.24**
Non-Municipal Participants and Other Customers	-	4,673	4,673	0.61
Total	**422,241**	**339,175**	**761,416**	**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 2020, for example, were based on the number of Residential Customers as of September 30, 2019, and the average number of RCEs beginning with the fourth quarter of 2018 through the third quarter of 2019.

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 and Proposed Sewer Rates. The adopted monthly Sewer Rates for each Residential Customer and RCE for the years 2012 through 2021 are set forth in Table 8.

TABLE 8
SEWER RATES FOR
RESIDENTIAL CUSTOMERS AND
RESIDENTIAL CUSTOMER EQUIVALENTS

Effective Date (January 1)	Rate ($/month)	Percentage Change (%)
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
2020	45.33	--
2021	47.37	4.5

Source: King County Wastewater Treatment Division

Projected Sewer Rates. Table 9 shows the County's current Sewer Rate projections for the years 2022 through 2026. 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 9
PROJECTED SEWER RATES
FOR RESIDENTIAL CUSTOMERS
AND RESIDENTIAL CUSTOMER EQUIVALENTS

Effective Date (January 1)	Rate ($/month)	Percentage Change (%)
2022	$ 47.37	--
2023	52.23	10.25%
2024	52.23	--
2025	57.58	10.25
2026	57.58	--

Source: King County Wastewater Treatment Division

As discussed under "—Projected Customers, Revenues and Expenses" the projected Sewer Rate for 2022 may be revisited after the impacts of the COVID-19 pandemic can be assessed. See "—Impact of COVID-19." The projected Sewer Rates shown in the table above are based on funding the capital improvement program as presented in Table 15. Capital spending is expected to increase significantly after adoption of the Clean Water Plan, and the rate proposal for 2023 is expected to include additional rate impacts for these costs. See "—Regional Wastewater Services and Clean Water Plans" and "—Capital Improvement Plan."

Sewer System Operating Revenues

Sewage Disposal Charges, based on the adopted Sewer Rates described above, contributed on average 80% of Sewer System operating revenues between 2015 and 2019.

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 17% of total Sewer System operating revenues between 2015 and 2019. Table 10 shows the number of new capacity charge connections for the past five years.

TABLE 10
HISTORICAL NEW CAPACITY CHARGE CONNECTIONS

Year	Connections
2015	11,676
2016	10,743
2017	12,484
2018	12,906
2019	12,513

Capacity charges are based upon the year of connection and remain fixed for a term of 15 years. The capacity charge assessed for Customers who establish new connections to the Sewer System in 2020 is $66.35 per month, compared to $64.50 for Customers who established service in 2019. The County has adopted a capacity charge of $68.34, a 3.0% increase, for 2021. State law authorizes WTD to collect capacity charges subject to certain restrictions, but capacity charges do not require the approval of the Washington State Utilities and Transportation Commission or the Participants or Agency Customers.

Provisions that expand the low-income housing rate classification, establish new reductions in capacity charges for shelter housing for homeless people, and permit qualified low-income seniors and disabled people to defer payment of the capacity charge through a low-interest lien became effective in January 2020.

Changes in the capacity charge rate structure have been proposed to more equitably assess wastewater flow capacity demand based on a review of customer classification criteria. The proposed changes were developed to be revenue-neutral, meaning that they will impact how the charge is allocated to different building types, not the amount of revenue that WTD will collect. Due to the impact of COVID-19, County Council action on these changes is not expected until late 2020 or early 2021.

In April 2020, WTD began offering additional payment options for capacity charge customers that have been financially impacted by the COVID-19 outbreak. These include:

(i) Deferral of one capacity charge invoice for up to one year.

(ii) Flexible payment plan offerings including due date extensions with no interest and late fee penalties.

(iii) Suspension of “Intent to File Lien” notifications to delinquent customers during this time.

As of June 30, 2020, WTD has outstanding 49 deferrals in the amount of $128,900. Capacity charge payments more than 90 days in arrears are $6.9 million as of June 30, 2020, compared to $6.7 million as of December 31, 2019, and $6.4 million as of June 30, 2019. Capacity charge payments less than 90 days in arrears are $1.5 million as of June 30, 2020, compared to $3.5 million as of December 31, 2019, and $1.4 million as of June 30, 2019. See "—Impact of COVID-19."

The County allows the capacity charge to be prepaid on a discounted basis at the customer's option. The annual discount rate is set to reflect the 15-year mortgage rate and the yields on the 10- and 20-year Treasury bonds. The discount rate was 3.2% in 2019 and is 2.6% in 2020.

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 2015 and 2019.

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. Under the Ordinance, the County has covenanted to establish, maintain, and collect rates and charges for sewage disposal service that, together with interest to be earned on investments, will provide in each calendar year Net Revenue, after deducting therefrom amounts required in such year to pay Annual Debt Service on Parity Bonds and Parity Lien Obligations, in an amount equal to at least 1.10 times the amounts required to pay the Annual Debt Service for all Junior Lien Obligations and Multi-Modal LTGO/Sewer Revenue Bonds for that year. 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 and higher than what is required by the covenant in the Ordinance on Junior Lien Obligations and Multi-Modal LTGO/Sewer Revenue Bonds.

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 2021 Sewer Rate, the County Council was presented with projected Sewer Rates that, after payment of operating expenses and debt service, would provide an amount that would equal 40% of projected capital expenditures through 2026. These Sewer Rates would provide projected coverage ratios on all Sewer System Obligations between 1.45 and 1.57 times. The Sewer Rates that appear in Table 9—"Projected Sewer Rates for Residential Customers or Residential Customer Equivalents" 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 June 30, 2020, these reserves were fully funded, with balances of $20.4 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 plan ("CIP") 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. In 2019, the Sewer System had, but did not utilize, authorization to draw $35 million from the Investment Pool. The Sewer System does not anticipate utilizing interfund borrowing for operating or capital purposes in response to the effects of COVID-19. See "—Impact of COVID-19."

Historical Customers, Revenues and Expenses

Table 11 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 11 are based on provisions of the applicable bond ordinances, incorporating data from the audited financial statements and financial records of the Sewer System.

TABLE 11
HISTORICAL FINANCIAL STATEMENTS
($ EXPRESSED IN THOUSANDS) (FISCAL YEAR ENDING DECEMBER 31)

	2015	2016	2017	2018	2019
Residential Customer and Residential Customer Equivalents (RCEs) (Annual Average, Rounded)	736,090	756,430	756,916 [1]	760,571	763,436
Percentage Annual Increase	1.41%	2.76%	0.06%	0.48%	0.38%
Operating Revenues					
Sewage Disposal Charges	$371,253	$381,513	$401,650	$403,589	$415,279
Capacity Charge Revenues	62,479	71,200	82,615	86,836	102,146
Other Operating Revenues	11,673	11,828	18,308	19,125	19,024
Total Operating Revenues	$445,405	$464,541	$502,573	$509,550	$536,449
Operating Expenses[2]	(128,926)	(136,321)	(148,199)	(152,589)	(154,272)
Net Operating Revenue	$316,479	$328,220	$354,374	$356,961	$382,177
Interest Income[3]	2,863	4,549	6,055	8,956	10,765
Rate Stabilization[4]	(12,000)	-	-	-	-
Net Revenue Available for Debt Service	$307,342	$332,769	$360,429	$365,917	$392,942
Debt Service					
Parity Bonds	$167,694	$160,957	$159,761	$163,967	$171,321
Parity Lien Obligations	40,348	53,164	52,650	49,121	41,539
Subordinate Debt Service[5]	18,318	21,316	26,277	33,139	35,174
Total Debt Service	$226,360	$235,437	$238,688	$246,227	$248,034
Debt Service Coverage[6]					
On Parity Bonds	1.83	2.07	2.26	2.23	2.29
On Parity Bonds and Parity Lien Obligations	1.48	1.55	1.70	1.72	1.85
On All Sewer System Obligations	1.36	1.41	1.51	1.49	1.58

NOTES TO TABLE:

(1) The small (0.06%) increase in billed RCEs in 2017 reflects non-recurring adjustments to Sewage Disposal Charges relating to prior periods that increased revenues by $1.9 million in 2016 and decreased revenues by $2.0 million in 2017. When billed RCEs are adjusted for these prior period changes, total RCEs increased by 0.60%, to 757,240 in 2017 from 752,710 in 2016.

(2) Excludes depreciation and amortization expense along with non-cash accounting adjustments for pension and other employee benefit costs.

(3) Excludes unrealized gains and losses that are included in the audited financial statements.

(4) Withdrawals from (deposits into) the Rate Stabilization Fund.

(5) 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 the table 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.

(6) Operating Revenues and Expenses in the 2017 and 2018 Audited Financial Statements exclude $10 million of expenses associated with repairs at the West Point treatment plant ("West Point") and an insurance advance of $12.5 million in 2017 and a final insurance settlement of $10 million in 2018. These amounts, with other items, were reported as nonoperating revenues and expenses and have been excluded from the computation of debt service coverage in 2017 and 2018. See "West Point Flooding Accident" herein.

Source: Audited Financial Statements and financial records of the Water Quality Enterprise Fund 2015-2019, Finance and Business Operations Division

Management Discussion of 2019 Sewer System Financial Results

The Sewer System's net operating revenue (excluding depreciation expense) in 2019 was $382.2 million, a 7.1%, or $25.2 million, increase from the $357.0 million of net operating revenue in 2018. Total operating revenues increased by $26.9 million, or 5.3%, to $536.4 million from $509.5 million, while operating expenses (excluding depreciation) increased by $1.7 million, or 1.1%, to $154.3 million in 2019 from $152.6 million in 2018.

Revenues. The $26.9 million, or 5.3%, increase in operating revenue in 2019 from 2018 can be attributed to a 2.5% increase in the Sewer Rate to $45.33 from $44.22 in 2018, growth in RCEs, and increases in capacity charge and other operating revenues. Sewage Disposal Charges increased by $11.7 million, or 2.9%, compared to 2018 due to a 2.5% rate increase and a 0.38% increase in the number of RCEs. Capacity charge revenues increased by 17.6%, or $15.3 million, to $102.1 million in 2019 from $86.8 million in 2018. On-going billings from new and existing customers increased by $6.4 million to $69.4 million, or 10.1%, from 2018, while revenues from early payoffs increased by $9.2 million, or 41.7%, to $31.2 million in 2019. Other operating revenues decreased by $0.1 million, or 0.5%, to $19 million.

Expenses. Operating expenses of the Sewer System, excluding depreciation and adjusted for non-cash accounting adjustments associated with employee benefits, increased $1.7 million to $154.3 million in 2019, an increase of 1.1%. Labor expenses of $61.4 million in 2019 increased by $2.9 million, or 5.0%, from 2018 because of general wage and benefit increases and budgeted increases for both temporary and new positions. Utility and service costs decreased by $2.4 million, or 6.3%, to $35.6 million in 2019 from $38.0 million in 2018. Intergovernmental expenses of $39.5 million in 2019 increased by $0.1 million from 2018.

Interest Income. Interest income increased by $1.8 million to $10.8 million in 2019 due to higher average yields in the Investment Pool (2.25% in 2019; 1.73% in 2018), offset by a slightly lower average monthly balance ($505 million in 2019; $531 million in 2018).

Debt Defeasance. In October 2019, the County used $96.3 million of operating cash and excess cash in its Parity Bond Reserve Account to purchase Treasury securities and defease $22.5 million of outstanding Sewer Revenue and Refunding Bonds, Series 2012C and $64.6 million of 2012 B and 2012C LTGO Refunding Bonds (Payable from Sewer Revenues).

Debt Service Coverage. The Sewer System achieved a coverage ratio of 1.85x on the combined debt service of Parity Bonds and Parity Lien Obligations in 2019, exceeding the 1.25x minimum coverage target stipulated by the County's adopted financial policies. The debt service coverage ratio of 1.58x on all Sewer System Obligations in 2019 exceeded the 1.15x minimum coverage target stipulated by the County's adopted financial policies.

West Point Flooding Accident

On February 9, 2017, a partial interruption of power supply occurred at the West Point treatment plant resulting in major equipment failure and culminating in flooding of the plant, the emergency bypass of the treatment system, and the discharge into Puget Sound of an estimated 235 million gallons of stormwater mixed with untreated sewage. Because of the accident, 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. Ecology assessed a $361,000 penalty against the County for permit violations and required six corrective actions at West Point, which WTD completed by February 2019.

WTD incurred $23.8 million in operating and capital costs to remediate damage at West Point in 2017 and 2018. In December 2018, it reached a final settlement of $22.5 million with its insurer for the damage that was sustained from the flood. Neither the insurance settlements nor the costs have been included in the calculation of debt service coverage that appears in Table 11—"Historical Financial Statements."

Projected Customers, Revenues, and Expenses

Table 12 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, 2020, through December 31, 2026. Notes for Table 12 are provided on the page following the table.

The COVID-19 pandemic began impacting the region during the development of the 2021 Sewer Rate and capacity charge proposal and insufficient data were available to make reasonable estimates of any potential revenue losses that might occur in 2020 or 2021. Projected revenues do not include any potential revenue losses from COVID-19 or any mitigation strategies that may be developed, including cost reductions and draws on the Rate Stabilization Reserve in 2020 or 2021. With time, WTD and the County Council will have better information on the impacts of COVID-19 that will inform recommendations and a decision on the rate increase for 2022 that will be made in June 2021. See Table 9—"Projected Sewer Rates for Residential Customers and Residential Customer Equivalents" and "—Possible Financial Impacts of COVID-19."

The revenues that are projected in Table 12 reflect the assumed monthly Sewer Rates presented in Table 9—"Projected Sewer Rates for Residential Customers and 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 CIP presented to the County Council in proceedings for the adoption of the 2021 Sewer Rate.

Estimates for 2020 are based on year-to-date unaudited revenues and expenses through May 2020 and WTD's projections for the remainder of the year. The Sewer System is expected to generate net operating revenue of $359.8 million in 2020, a decrease of $22.4 million, or 5.9%, from $382.2 million in 2019. Total operating revenues are projected to decrease by $7.8 million, or 1.5%, to $528.7 million in 2020 from $536.5 million in 2019, while operating expenses are projected to increase by $14.6 million, or 9.5%, to $168.9 million in 2020 from $154.3 million in 2019.

Revenues from Sewage Disposal Charges are projected to increase by $2.6 million, or 0.6%, from 2019 due to projected growth of 0.63% in RCEs. Annual growth in RCEs is expected to be 0.52% beginning in 2021, which is closer to recent historical average growth rates.

Capacity Charge Revenues are expected to decrease by $9.8 million, or 9.6%, from 2019 due to an exceptionally high amount of early payoffs in 2019, which increased by $9.2 million, or 41.7%, from 2018. The $0.5 million, or 2.9%, projected decrease in Other Operating Revenues for 2020 reflects lower projected sales of Renewable Identification Numbers ("RINs") from WTD's contract with IGI Resources, Inc. and methane gas. Annual revenues from the sale of RINs are projected to be approximately $2.3 million in 2020 (almost $0.5 million less than 2019 sales), $3.1 million in 2021, and $1.5 million in 2022, the final year of the contract. No RINs sales are projected after 2022 and Other Operating Revenues are projected to grow at a 3.0% annual rate from 2023 through 2026.

Operating expenses for 2020 of $168.9 million is the amount that was included in the adopted 2019-2020 budget for 2020.

Interest income is expected to be $6.9 million in 2020, a decrease of $3.9 million from 2019, as the lower expected average interest rate on WTD funds in the Investment Pool (1.40% projected for 2020, compared to 2.25% in 2019) is being offset by a higher average annual balance. See "Management Discussion of 2019 Sewer System Financial Results."

As of May 31, 2020, unrestricted cash balances included approximately $74.8 million in the operating fund and $45.6 million in the capital fund.

In anticipation of higher levels of capital spending after 2026, WTD expects to increase the Rate Stabilization Fund in 2025 and make draws in 2028 and 2029 that will reduce the level of rate increases for those years, but that will maintain the fund at its current level of approximately $46.3 million.

Total debt service is projected to increase from $248.0 million in 2019 to $305.9 million in 2026. The increase is related to the issuance of new debt to provide funding for WTD's capital program, as shown in Table 15, in accordance with estimates given to the County Council with the adoption of the 2021 Sewer Rate. See "—Financial Policies." See also "—Capital Improvement Plan" and "—Future Sewer System Financing Plans."

Possible Financial Impacts of COVID-19

The following section provides a calculation of debt service coverage, for illustrative purposes only, on all Sewer System Obligations based on specific decreases in RCEs and capacity charge revenues that could arise from COVID-19. These decreases are not intended to be a forecast of the impact of COVID-19 and are provided solely to demonstrate the effect on debt service coverage of decreases in RCEs and capacity charge revenues under the illustrative scenarios. With the closing of non-essential businesses on March 25, 2020, and the start of a phased re-opening in June and the timing delays in WTD's billing cycle, insufficient time has elapsed to estimate what decreases in Sewer Disposal Charges and Capacity Charge Revenues may occur as a result of COVID-19.

WTD does not expect that COVID-19 will have a significant impact on Sewage Disposal Charges in 2020 because of the stability of its Residential Customer base and the averaging over four quarters of RCEs from commercial, multi-family, and industrial customers. Approximately 55% of Sewage Disposal Charges in 2019 were derived from the number of Residential Customers of Municipal Participants and these charges are not impacted by changes in water consumption. In July 2020, billings to Municipal Participants are comprised of 423,694 Residential Customers and this number is not expected to decrease due to COVID-19. The Service Agreements do not allow Municipal Participants to defer payments to WTD for deferrals that they have provided to their retail customers.

WTD's billings for RCEs are based on the average of reported RCEs for four calendar quarters ending with the second previous calendar quarter. RCE-based Sewer Disposal Charges through June 2020 have not been impacted by COVID-19 business closures because they are based on water consumption through the fourth quarter of 2019. Billing for July 2020, which includes results for the quarter ending March 31, 2020, shows an increase of 1,453 Residential customers from December 31, 2020, and a 1.9% increase in RCEs compared to the first quarter of 2019.

The impact of COVID-19 business closures that began on March 25, 2020, will be seen in RCEs for the second quarter of 2020. Municipal Participants will not be reporting this data to WTD until August 15, 2020. Second-quarter RCEs will be included in billings beginning with the fourth quarter of 2020 through the third quarter of 2021. Preliminary data from two of the Municipal Participants that account for approximately 52% of RCEs show a decrease in the second quarter of 2020 of 18.3% and 12%, respectively, compared to the second quarter of 2019. Because billings for RCEs are averaged over four quarters, only one fourth of the decrease in the second quarter RCEs will impact Sewage Disposal Charges in 2020.

WTD has calculated that a 20% decrease in RCEs beginning in the second quarter of 2020 and extending through the first quarter of 2021, followed by a 10% decrease in the second quarter of 2021, would reduce Sewage Disposal Charges shown in Table 12 by $1.2 million in 2020 (a 0.3% decrease) and $34.8 million in 2021 (a 7.9% decrease). These calculations assume quarterly increases of approximately 300 new Residential Customers compared to an average of 991 new Residential Customers per quarter from 2017 through 2019.

Through June 2020, capacity charge revenues from regular billings and early payoffs totaled $44.8 million, a $3.5 million, 7.2% decrease compared to the first six months of 2019. While recurring billings of $36.1 million have increased by $3.4 million compared to 2019, early payoffs of $8.6 million have decreased by $6.4 million from 2019. Projections for Capacity Charge Revenues in Table 12 for 2020 and 2021 are based on recurring billings of $70.0 million in each year ($70.9 million in 2019) and early payoffs of $22.3 million in 2020 and $25.8 million in 2021 ($31.9 million in 2019). Early payoffs would be reduced by $11.1 million in 2020 and $10.3 million in 2021 if there is a 50% reduction in early payoffs in 2020 and a 40% reduction in early payoffs in 2021.

In 2020, a $1.2 million decrease in Sewage Disposal Charges and an $11.1 million decrease in Capacity Charge Revenues would reduce Net Revenue Available for Debt Service by $12.3 million and reduce debt service coverage on Parity Bonds to 2.15x from the 2.23x that is projected in Table 12 and on all Sewer System Obligations to 1.44x from the 1.49x that is projected in Table 12.

In 2021, a $34.8 million decrease in Sewage Disposal Charges and a $10.3 million decrease in Capacity Charge Revenues would reduce Net Revenue Available for Debt Service by $45.1 million and reduce debt service coverage on Parity Bonds to 2.15x from the 2.43x that is projected in Table 12 and on all Sewer System Obligations to 1.39x from the 1.57x that is projected in Table 12.

TABLE 12
PROJECTED FINANCIAL STATEMENTS
($ EXPRESSED IN THOUSANDS) (FISCAL YEAR ENDING DECEMBER 31)[(1)]

	2020[(2)]	2021	2022	2023	2024	2025	2026
Residential Customer and Residential Customer Equivalents (Average for Year, Rounded)	768,212	772,207	776,222	780,259	784,316	788,394	792,494
Percentage Annual Increase	0.63%	0.52%	0.52%	0.52%	0.52%	0.52%	0.52%
Monthly Sewer Rate	$ 45.33	$ 47.37	$ 47.37	$ 52.23	$ 52.23	$ 57.58	$ 57.58
Percentage Annual Increase	0.00%	4.50%	0.00%	10.25%	0.00%	10.25%	0.00%
Operating Revenues							
Sewage Disposal Charges[(3)]	$ 417,877	$ 438,953	$ 441,236	$ 488,988	$ 491,531	$ 544,749	$ 547,582
Capacity Charge Revenues	92,302	95,800	99,086	102,113	106,158	111,264	116,856
Other Operating Revenues	18,481	19,814	18,730	17,662	18,192	18,738	19,300
Total Operating Revenues	$ 528,660	$ 554,567	$ 559,052	$ 608,763	$ 615,881	$ 674,751	$ 683,737
Operating Expenses[(4)]	(168,886)	(173,116)	(181,872)	(191,617)	(203,127)	(213,388)	(221,835)
Net Operating Revenue	$ 359,774	$ 381,450	$ 377,180	$ 417,146	$ 412,754	$ 461,363	$ 461,902
Interest Income[(5)]	$ 6,924	$ 3,677	$ 1,901	$ 1,928	$ 2,286	$ 2,712	$ 3,448
Rate Stabilization	-	-	-	-	-	(30,000)	-
Net Revenue Available for Debt Service	$ 366,697	$ 385,127	$ 379,082	$ 419,074	$ 415,040	$ 434,075	$ 465,350
Debt Service							
Parity Bonds[(6)]	$ 164,453	$ 158,210	$ 158,662	$ 172,502	$ 185,975	$ 197,427	$ 216,684
Parity Lien Obligations	50,755	52,965	52,947	50,669	50,642	50,680	50,641
Subordinate Debt Service[(7)]	30,430	34,201	42,093	38,169	40,659	37,639	38,548
Total Debt Service	$ 245,638	$ 245,376	$ 253,702	$ 261,341	$ 277,277	$ 285,747	$ 305,874
Debt Service Coverage							
On Parity Bonds	2.23	2.43	2.39	2.43	2.23	2.20	2.15
On Parity Bonds and Parity Lien Obligations	1.70	1.82	1.79	1.88	1.75	1.75	1.74
On All Sewer System Obligations	1.49	1.57	1.49	1.60	1.50	1.52	1.52

NOTES TO TABLE:

(1) Totals may not add due to rounding.

(2) Projections for 2020 are based on unaudited financial statements for the five months ending May 2020, and estimated results through December.

(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 2021 and 2022 are based on the Sewer System's preliminary operating budget that is being developed for the County Council. Operating expenses after 2022 are assumed to increase at an annual rate of 4% through 2026, along with operating costs increases for new facilities that are expected to go into service.

(5) Based on the Investment Pool earning at projected annual rates of 1.40% in 2020, 0.80% in 2021, 0.55% in 2022, 0.53% in 2023, 0.56% in 2024, 0.64% in 2025, and 0.74% in 2026. Projected Investment Pool earnings rates are from the County's Office of Economic and Financial Analysis.

(6) Projections include debt service on the Bonds and exclude debt service on the Refunded Bonds. Projections assume draws on the $134.5 million WIFIA Bond of $14.6 million in 2022 and $119.9 million in 2023 at its 3.06% interest rate and issuance of additional Parity Bonds with 30-year terms at a 5% interest rate in the amount of $166 million in 2023, $205 million in 2024, $170 million in 2025, and $342 million in 2026, which includes a potential $96 million WIFIA loan for the Joint Ship Canal project at a rate of 3%. In the event that the County does not receive a WIFIA loan for the Joint Ship Canal project, additional Parity Bonds would be issued through 2026 to pay for project costs. Beginning in 2021, annual Parity Bond Debt Service has been reduced by $4 million to reflect a proposed defeasance of certain outstanding Parity Bonds that may occur at the end of 2020.

(7) Subordinate Debt Service consists of debt service on the Variable Rate Bonds and the SRF Loans and PWTF Loans.

Projections assume the issuance of $64 million of Variable Rate Bonds between 2020 and 2026 along with the issuance and redemption of $156 million of Variable Rate Bonds to provide financing for WIFIA Loan projects on an interim basis pending the final drawdown of those loans after project completion. See "—Future Sewer System Financing Plans." The projections assume an aggregate average interest rate on Variable Rate Bonds of 1.40% in 2020, 1.86% in 2021, 2.68% in 2022 and 2023, 3.09% in 2024 and 2025, and 3.50% in 2026. See Table 14—"Scheduled Debt Service on All Obligations of the Sewer System," footnote 2.

Projections include debt service on $57.6 million of signed loan commitments from Ecology and the PWB. Signed loan commitments include two loans from Ecology with 30-year terms, one for $13.5 million at a rate of 2.6% and a second loan for $37.1 million at a rate of 2.70%, two loans totaling $2.0 million from the PWB at an average rate of 0.81% with five-year terms, and a $5.0 million, 20-year PWB loan at a rate of 1.58%. See "—Future Sewer System Financing Plans."

Source: King County Wastewater Treatment Division

Debt Service Requirements Payable from Revenue of the System

Table 13 sets forth the scheduled amounts required to be paid from Revenue of the System in each year for the Bonds, and Table 14 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 Tables 13 and 14 are provided on the following pages.

TABLE 13
SCHEDULED DEBT SERVICE ON THE BONDS[(1)]
(Fiscal Year Ending December 31)

Year Ending	The 2020A Bonds		The 2020B Bonds		The Bonds (Combined)		
December 31[(1)]	Principal	Interest	Principal	Interest	Principal	Interest	Total
2020	$ -	$ 2,606,004	$ 1,550,000	$ 1,277,226	$ 1,550,000	$ 3,883,230	$ 5,433,230
2021	2,090,000	6,382,050	3,795,000	3,123,716	5,885,000	9,505,766	15,390,766
2022	2,200,000	6,277,550	3,805,000	3,109,675	6,005,000	9,387,225	15,392,225
2023	2,310,000	6,167,550	3,825,000	3,091,791	6,135,000	9,259,341	15,394,341
2024	2,420,000	6,052,050	3,850,000	3,066,929	6,270,000	9,118,979	15,388,979
2025	2,545,000	5,931,050	3,875,000	3,038,054	6,420,000	8,969,104	15,389,104
2026	2,670,000	5,803,800	11,735,000	3,001,241	14,405,000	8,805,041	23,210,041
2027	2,805,000	5,670,300	16,465,000	2,869,809	19,270,000	8,540,109	27,810,109
2028	2,940,000	5,530,050	16,915,000	2,655,764	19,855,000	8,185,814	28,040,814
2029	3,090,000	5,383,050	8,485,000	2,408,805	11,575,000	7,791,855	19,366,855
2030	3,245,000	5,228,550	8,590,000	2,280,682	11,835,000	7,509,232	19,344,232
2031	3,375,000	5,098,750	16,745,000	2,138,088	20,120,000	7,236,838	27,356,838
2032	5,990,000	4,963,750	17,080,000	1,843,376	23,070,000	6,807,126	29,877,126
2033	8,705,000	4,866,413	18,390,000	1,525,688	27,095,000	6,392,100	33,487,100
2034	8,885,000	4,724,956	14,310,000	1,165,244	23,195,000	5,890,200	29,085,200
2035	9,080,000	4,569,469	7,140,000	870,458	16,220,000	5,439,926	21,659,926
2036	3,265,000	4,410,569	7,290,000	716,948	10,555,000	5,127,516	15,682,516
2037	3,320,000	4,349,350	7,455,000	552,923	10,775,000	4,902,273	15,677,273
2038	3,385,000	4,287,100	7,630,000	379,221	11,015,000	4,666,321	15,681,321
2039	3,450,000	4,219,400	7,815,000	193,812	11,265,000	4,413,212	15,678,212
2040	3,520,000	4,150,400	-	-	3,520,000	4,150,400	7,670,400
2041	3,660,000	4,009,600	-	-	3,660,000	4,009,600	7,669,600
2042	8,440,000	3,863,200	-	-	8,440,000	3,863,200	12,303,200
2043	8,780,000	3,525,600	-	-	8,780,000	3,525,600	12,305,600
2044	9,125,000	3,174,400	-	-	9,125,000	3,174,400	12,299,400
2045	9,495,000	2,809,400	-	-	9,495,000	2,809,400	12,304,400
2046	9,875,000	2,429,600	-	-	9,875,000	2,429,600	12,304,600
2047	10,270,000	2,034,600	-	-	10,270,000	2,034,600	12,304,600
2048	10,680,000	1,623,800	-	-	10,680,000	1,623,800	12,303,800
2049	11,110,000	1,196,600	-	-	11,110,000	1,196,600	12,306,600
2050	11,550,000	752,200	-	-	11,550,000	752,200	12,302,200
2051	7,255,000	290,200	-	-	7,255,000	290,200	7,545,200
2052	-	-	-	-	-	-	-
Total	$ 179,530,000	$ 132,381,360	$ 186,745,000	$ 39,309,445	$ 366,275,000	$ 171,690,805	$ 537,965,805

(1) January 1 payments shown in the prior year.

TABLE 14
SCHEDULED DEBT SERVICE ON ALL OBLIGATIONS OF THE SEWER SYSTEM[1]
(Fiscal Year Ending December 31)

	Parity Bonds									
Year Ending		The Bonds			Parity Lien	Junior Lien	Multi-Modal	SRF Loans and		
December 31[1]	Outstanding[2]	Principal	Interest	Total	Obligations	Obligations[3]	LTGO/Sewer[3]	PWTF Loans[4]	QECB Bonds[5]	Total
2020	$ 158,952,079	$ 1,550,000	$ 3,883,230	$ 164,385,309	$ 50,754,550	$ 5,475,072	$ 2,224,928	$ 22,454,708	$ 66,220	$ 245,360,787
2021	146,658,225	5,885,000	9,505,766	162,048,991	52,965,225	4,030,000	6,200,000	22,328,278	66,220	247,638,714
2022	146,661,600	6,005,000	9,387,225	162,053,825	52,946,500	5,316,000	9,424,000	21,349,194	3,076,220	254,165,739
2023	146,661,375	6,135,000	9,259,341	162,055,716	50,669,275	5,316,000	9,424,000	20,347,065	-	247,812,056
2024	146,654,625	6,270,000	9,118,979	162,043,604	50,642,275	8,116,600	8,878,400	20,460,556	-	250,141,435
2025	146,656,625	6,420,000	8,969,104	162,045,729	50,680,275	8,116,600	8,878,400	19,069,894	-	248,790,898
2026	137,354,625	14,405,000	8,805,041	160,564,666	50,641,400	10,520,650	8,729,350	15,813,441	-	246,269,507
2027	127,160,500	19,270,000	8,540,109	154,970,609	50,606,775	10,520,650	8,621,200	15,382,387	-	240,101,621
2028	126,761,700	19,855,000	8,185,814	154,802,514	48,831,575	10,520,650	8,621,200	14,936,237	-	237,712,176
2029	126,816,675	11,575,000	7,791,855	146,183,530	57,373,900	10,520,650	8,621,200	13,967,729	-	236,667,009
2030	131,535,850	11,835,000	7,509,232	150,880,082	59,059,925	10,520,650	8,621,200	13,958,616	-	243,040,473
2031	131,973,500	20,120,000	7,236,838	159,330,338	49,794,350	110,815,650	8,621,200	12,809,040	-	341,370,578
2032	130,134,125	23,070,000	6,807,126	160,011,251	48,515,075	7,010,325	8,621,200	12,734,885	-	236,892,736
2033	125,362,100	27,095,000	6,392,100	158,849,200	40,501,800	7,010,325	8,621,200	12,726,073	-	227,708,598
2034	131,034,450	23,195,000	5,890,200	160,119,650	21,262,350	7,010,325	8,621,200	10,402,123	-	207,415,648
2035	116,061,425	16,220,000	5,439,926	137,721,351	29,975,975	7,010,325	8,621,200	9,315,991	-	192,644,842
2036	123,525,850	10,555,000	5,127,516	139,208,366	30,010,975	7,010,325	8,621,200	6,975,058	-	191,825,924
2037	123,605,575	10,775,000	4,902,273	139,282,848	30,029,400	7,010,325	8,621,200	3,318,445	-	188,262,218
2038	123,778,700	11,015,000	4,666,321	139,460,021	19,997,100	7,010,325	8,621,200	1,835,317	-	176,923,963
2039	123,785,775	11,265,000	4,413,212	139,463,987	-	7,010,325	106,846,200	995,217	-	254,315,729
2040	123,807,500	3,520,000	4,150,400	131,477,900	-	7,010,325	5,183,325	741,732	-	144,413,282
2041	108,865,625	3,660,000	4,009,600	116,535,225	-	107,305,325	5,183,325	742,207	-	229,766,082
2042	86,519,400	8,440,000	3,863,200	98,822,600	-	103,500,000	5,183,325	742,695	-	208,248,620
2043	86,362,550	8,780,000	3,525,600	98,668,150	-	-	5,183,325	743,195	-	104,594,670
2044	83,101,200	9,125,000	3,174,400	95,400,600	-	-	5,183,325	743,710	-	101,327,635
2045	83,047,350	9,495,000	2,809,400	95,351,750	-	-	153,278,325	744,239	-	249,374,314
2046	79,040,250	9,875,000	2,429,600	91,344,850	-	-	-	744,779	-	92,089,629
2047	55,781,875	10,270,000	2,034,600	68,086,475	-	-	-	745,336	-	68,831,811
2048	26,799,875	10,680,000	1,623,800	39,103,675	-	-	-	745,906	-	39,849,581
2049	26,796,375	11,110,000	1,196,600	39,102,975	-	-	-	746,492	-	39,849,467
2050	10,358,000	11,550,000	752,200	22,660,200	-	-	-	747,092	-	23,407,292
2051	10,358,250	7,255,000	290,200	17,903,450	-	-	-	660,741	-	18,564,191
2052	-	-	-	-	-	-	-	557,926	-	557,926
Total	$ 3,451,973,629	$ 366,275,000	$ 171,690,805	$ 3,989,939,434	$ 845,258,700	$ 473,687,422	$ 443,254,628	$ 280,586,304	$ 3,208,660	$ 6,035,935,148

NOTES TO TABLE:

(1) January 1 payments shown in the prior year.

(2) Excludes debt service on the Refunded Bonds. Amount in 2020 includes accrued interest that is contributed to the escrow account for the Refunded Bonds.

(3) The projections assume an aggregate average interest rate on the Variable Rate Bonds of 1.40% in 2020, 1.86% in 2021, 2.68% in 2022 and 2023, 3.09% in 2024 and 2025, and 3.50% thereafter. The Junior Lien Obligations have bullet maturities in 2032, 2042, and 2043. The Multi-Modal LTGO/Sewer Revenue Bonds have bullet maturities in 2040 and 2046. Projections exclude planned optional redemptions of Variable Rate Bonds prior to their final maturity dates. See "Security and Sources of Payment for the Bonds—Outstanding Sewer System Obligations—Summary of Credit Agreements."

(4) Does not include debt service on $10.5 million in undrawn, signed loan commitments from Ecology and the PWB that are expected to be drawn upon through 2024. See "—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 and Clean Water Plans

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.

WTD completed a summary report in November 2019 that assessed the flows, loadings, and limitations of the treatment processes at each of the regional treatment plants. The report found that most of the capacity limitations for all three regional plants are projected to occur in the 2030s and are related to digestion and secondary treatment processes. WTD will continue addressing many of the findings and recommendations from the study through the proposed Treatment Planning Program, to begin with the next budget cycle in 2021, as well as within the Clean Water Plan. The Treatment Planning Program will comprehensively and strategically integrate capacity, regulatory, asset management, and other needs into WTD's near-term and long-term treatment planning at both the facility (treatment plant) and regional system level.

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 12 CSI construction and design projects with estimated spending of $368 million through 2026. 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 three years, WTD's new Comprehensive Plan is intended to define regional water quality investments over both near-term (up to ten years) and long-term time horizons (ten to 40 years) (the "Clean Water Plan"). The Clean Water Plan will explore 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 water quality investments for WTD to undertake to achieve the best water quality outcome for those investments.

Much of the development of the Clean Water Plan is expected to be completed by the end of 2021. Milestones for plan development include a Draft and Final Environmental Impact Statement following the Washington State Environmental Policy Act, as well as a Draft Clean Water Plan for discussion. During 2022, the plan will be submitted to the County Council for review and approval. 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 about one billion gallons in a typical year of rainfall (based on long-term averages). The County's combined sewer system discharged 752 million gallons of untreated CSOs in 2019 and 839 million gallons in 2018.

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 CSO control measures outlined in the 2013 Consent Decree were consistent with a Long-Term Control Plan ("LTCP") approved by the County Council in 2012.

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 and Barton, the Beach projects have been completed and are operating. The Rainier

Valley Wet Weather Storage Project achieved substantial completion on June 9, 2018, and began operation in winter 2018. Rainier Valley has since been monitored to ensure that it achieves the required regulatory performance standard. Construction on the Georgetown Wet Weather Treatment Station began in January 2018 and is expected to be completed in early 2022. The County is also working with Seattle on a project to control overflows at two locations (the "Joint Project"), as further described below). 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.

FIGURE 1: CURRENT AND FUTURE PROJECTS OF THE CSO SYSTEM

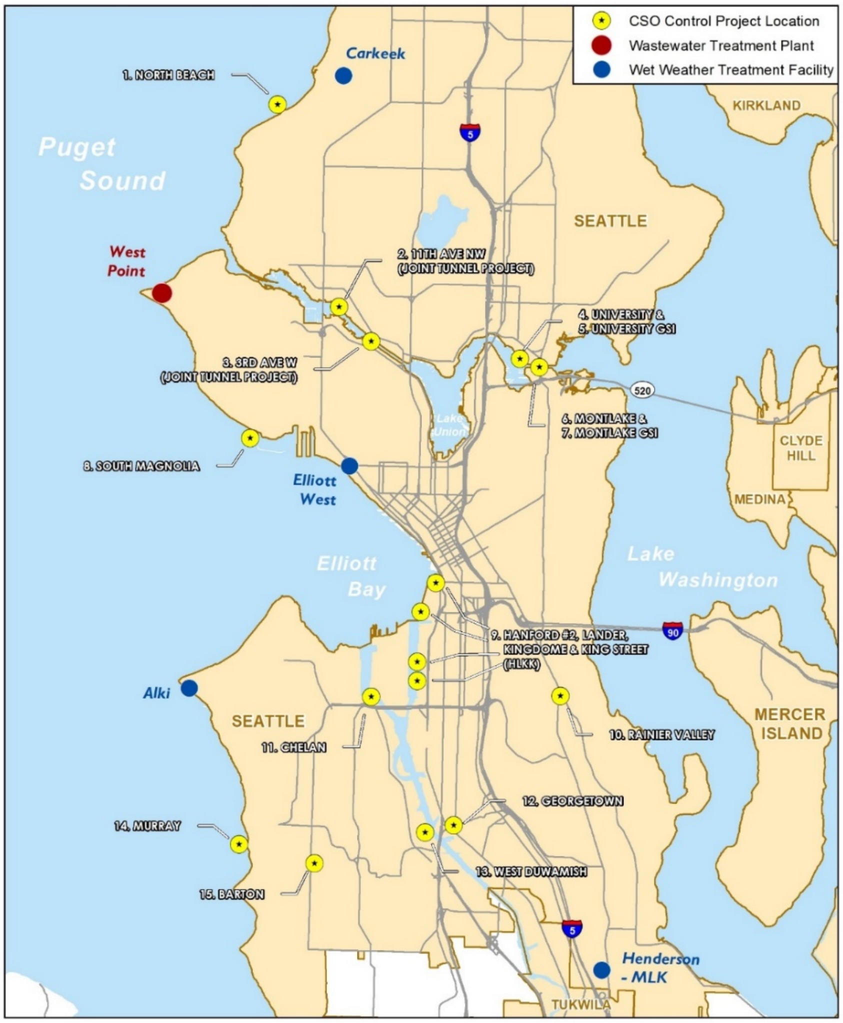

Diagram is not to scale.

Source: King County Wastewater Treatment Division

The 2013 Consent Decree establishes critical milestones for the submission of facilities plans, completion of bidding, and completion of construction for all of the projects through 2030. All milestones required by the 2013 Consent Decree have been met to date. The 2013 Consent Decree also requires that the County prepare Supplemental Compliance Plans when performance criteria have not been met at the completed projects and other CSO outfall locations.

The South Magnolia Wet Weather Storage project did not achieve controlled status within one year of construction completion. Construction on South Magnolia was completed in December 2015, and the facility was apparently operating correctly until a conveyance pipe failure that completely prevented storm flows from reaching the storage tank was discovered in the fall of 2016.

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. Remedial action was undertaken, and South Magnolia went back online in late December 2018 and has been operating as designed. Costs incurred for replacement of the damaged pipe were $13.6 million and are net of a $10.0 million insurance settlement that the County received in March 2020. The insurance settlement was received after the County had initiated a federal lawsuit against the contractor's provider of builders risk insurance, which it has withdrawn.

The Barton Street CSO project uses green stormwater infrastructure components (bioretention swales and associated drainage structures) within the impacted basin to reduce and delay flows to achieve CSO reductions. Because modeling showed that the post-project performance did not achieve the required average of one uncontrolled CSO event per year (for the most recent 20 years), a Supplemental Compliance Plan was filed in April 2018, as required by the 2013 Consent Decree, and was approved by Ecology in May 2018. Initial analysis showed the associated Barton pump station was not performing at its design capacity of 33 mgd, contributing to the project missing its performance requirement. Remedial work to address some electrical and controls optimization adjustments at the pump station is ongoing. Performance will be monitored and reported on in the 2019 and subsequent CSO/Consent Decree annual reports.

The Elliott West Wet Weather Station has experienced permit violations in recent years despite operating and capital projects designed to optimize facility performance. In an August 2019 letter to Ecology, WTD expressed a commitment to developing and implementing a compliance strategy for the Elliott West facility. WTD has proposed that an alternatives analysis be completed by mid-2021 to identify the best alternatives to improve compliance. Once the alternatives analysis is complete and the scope of the corrections understood, a draft facility plan will be submitted to Ecology for review and approval. WTD will not move into implementation or construction on this project until after completion of the Clean Water Plan and the update to the LTCP.

Projected CSO expenditures are included in Table 15 and total $607 million for the period 2020 through 2026. Expenditures from 2020 through 2026 for the two largest projects currently in construction are $140 million for the Joint Project (described below under "—Joint Project with Seattle") and $111 million for Georgetown. Design estimates for the Elliott West facility in the 2021-2022 biennium total $12 million and include funding for the alternatives analysis and facility plan. Estimates will be updated for full project implementation as part of the 2023-2024 biennial budget process.

The CSO project costs have not been updated from 2018 forecasts and costs for the future projects are now estimated at $1.9 billion or significantly higher through 2030, depending on alternative selection. These cost estimates are expected to escalate due to climate change, the difficulty of finding locations for facilities in a dense urban area, and the associated needs for more pumping and conveyance and other system-wide changes that were not evident at the time the 2013 Consent Decree was approved by the Court. Cost estimate updates for the CSO program and a comprehensive evaluation of clean water investment priorities are part of the development of the Clean Water Plan described herein.

Request for 2013 Consent Decree Modification

In January 2020, the County initiated negotiations to modify the 2013 Consent Decree to address changed conditions since the Consent Decree was signed. These changed conditions include substantially higher cost estimates for planned CSO control projects, climate change impacts, anticipated future increases in regulatory requirements for nutrient discharges to Puget Sound, and rate affordability. In the letter requesting negotiations to modify the 2013 Consent Decree, the County also requested an extension for two milestones associated with the Chelan Avenue CSO: the completion of bidding milestone by December 31, 2020 and the completion of construction milestone by December 31, 2023. The County is reviewing alternatives for controlling the CSOs in the Lower Duwamish area that may result in a more cost-effective CSO control measure for the Chelan CSO than the one identified in the Facility Plan. Extension of the Chelan milestones will allow for the planning process to be completed to determine the best project moving forward.

Any potential modification agreed to by EPA, Ecology, the U.S. Department of Justice, and the Court would also need King County Council approval.

Joint Project with Seattle

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 separate consent decree. Seattle is the lead agency for design and construction of a 2.7-mile long,18-foot, 10-inch-inside-diameter storage tunnel to capture and store 29 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 amount of uncontrolled current CSO discharges by approximately 75 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 to realize 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 estimate for the total cost of the Joint Project is $570 million. The County's 35% share of the agreed elements of the Joint Project is currently $179.3 million through 2025. Periodic assessments after the achievement of design and construction milestones may result in increases in the total costs and the County's share. The County is also evaluating the purchase of additional storage capacity in the tunnel, which may also increase its costs.

Completion of the Joint Project is currently scheduled for April 2025, eight months before the construction completion milestone in the modified 2013 Consent Decree for the County.

Capital Improvement Plan

As shown in Table 15, the Sewer System's CIP for the period 2020-2026 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.

The CIP reflects a new investment priority strategy for asset management and includes more than 50 new projects within the CIP to address both the medium- and high-priority asset management inventory. Asset management is set to become the largest investment category by 2023, given the new priority assigned to those projects by WTD and its regional stakeholders.

Increases in the Monthly Sewer Rate that are less than what is shown in Table 9 may reduce projected spending on asset management projects and lengthen the period of time needed to complete all of the inventory of projects.

TABLE 15
CAPITAL IMPROVEMENT PLAN—PROJECTED EXPENDITURES(1)
($000)

	RWSP		Other Improvements and	
Year	**CSO**	**CSI**	**Asset Management**	**Total**
2020	$ 92,829	$ 30,103	$ 97,708	$ 220,639
2021	100,830	41,090	132,644	274,564
2022	86,439	65,593	140,845	292,877
2023	71,045	80,354	186,775	338,175
2024	65,327	77,803	190,954	334,084
2025	69,228	38,100	204,356	311,685
2026	124,051	35,753	249,137	408,940
Total	$ 609,748	$ 368,796	$ 1,202,420	$ 2,180,964

(1) Expenditures in 2020-2026 are in nominal dollars.

Note: totals may not add due to rounding.

Source: King County Wastewater Treatment Division

The capital expenditures shown above were used to develop projected Sewer Rates and the projections shown in Table 12 and are based on an expected accomplishment rate of 87% of total expenditures authorized in the County budget for WTD, including pending amendments. Changes in the scope and increases in the cost of projects may increase total capital spending, but increases that are expected to exceed 15% of a project's budget must first be approved by the County Council. Additional capital spending, both prior to and after 2026, may also arise from new federal and State environmental regulations or new requirements in the permits for System facilities. See "Environmental Regulations."

West Seattle Bridge. The West Seattle High Rise Bridge (the "Bridge), completed in 1984, is a seven-lane cantilevered bridge that crosses the West Duwamish Waterway to connect the communities of West Seattle to downtown Seattle. The Seattle Department of Transportation ("SDOT") first noticed cracks in the concrete in 2013, and subsequent inspections have noted increases in the cracks. On March 23, 2020, SDOT announced the closure of the Bridge to all traffic due to structural defects found on the main span of the Bridge, which will necessitate major repairs to or, potentially, demolition of the Bridge. The structural engineering firm WSP USA, partnering with SDOT, stated in a report dated May 15, 2020, that it is not currently able to indicate the likelihood of any of the potential failure scenarios.

The Sewer System has three major conveyance lines buried eight to 15 feet underneath a shorter span of the Bridge or alongside the Bridge. SDOT continues to assess the status of the Bridge and is working to stabilize the structure. WTD is currently working with an inter-agency task force led by the Seattle Office of Emergency Management to create a contingency plan in the event of Bridge failure. The task force includes a number of federal, State, and local agencies, including WTD. Although the conveyance lines are buried, the Bridge has a height of 140 feet and debris falling from that height has the potential for damaging these lines or preventing or delaying WTD from undertaking necessary repairs should damage occur.

WTD's current assessment is that it has the ability to divert flows from the area to protect public health; however, these diversions may result in controlled releases of partially treated or untreated wastewater into local water bodies. WTD is currently developing plans that would reduce or eliminate the amount of partially or untreated wastewater releases should flow diversion be required.

Future Sewer System Financing Plans

The current financial plan for the Sewer System projects the issuance of approximately $1.3 billion of additional debt to fund the CIP (including the 2020A Bonds, which will provide $180 million for the CIP): $1.2 billion of additional Parity Bonds (including draws on the WIFIA Bond described below), $64.5 million of additional variable rate Junior Lien Obligations, and $56.7 million from signed and pending loan commitments received from Ecology and the PWB. Offsetting this anticipated issuance of $1.3 billion of additional debt are scheduled principal payments on outstanding obligations and the Bonds of approximately $756.4 million. The financial plan also includes the issuance and redemption of $156 million of Variable Rate Bonds to provide financing for WIFIA Loan projects on an interim basis pending the final drawdown of those loans after project completion.

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.

The County may from time to time consider the defeasance of outstanding Parity and Parity Lien Bonds from operating cash as was done in 2019. See "Management Discussion of 2019 Sewer System Financial Results—Debt Defeasance."

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 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 Georgetown. The County expects to draw on the WIFIA Bond in 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 Sewer 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 and State Reclaimed 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 County also distributes reclaimed water at three of the five regional wastewater plants. The State's Reclaimed Water Act (Chapter 90.46 RCW) and associated Water Reclamation and Reuse Standards contain requirements to assure that distribution and use of reclaimed water are protective of public health and the environment. Reclaimed water permits can be authorized separately or in combination with the NPDES permits. The status of the NPDES and Reclaimed Water permits is shown below:

TABLE 16
NPDES PERMITS

Facility	Expiration Date
Brightwater	February 2023
Brightwater-Reclaimed Water	April 2024
Carnation (Includes Reclaimed Water)	December 2018(1)
South Plant	July 2020
South Plant-Reclaimed Water	July 2020
Vashon	February 2022
West Point	January 2020(1)

(1) Administratively extended.

Source: King County Wastewater Treatment Division

The Carnation permit is in the process of being renewed; no significant changes are expected. The application for renewal of the West Point NPDES permit was submitted in January 2019, and the application for renewal of the South Plant NPDES and Reclaimed Water permits was submitted in July 2019. As discussed in the next section, Ecology has begun development of a general permit for nutrients in response to water quality impairments in the marine Puget Sound environment. The first iteration of the General Permit will focus on nutrient controls in the effluent of wastewater treatment plants. As an interim measure while the General Permit is developed, Ecology has also stated that it intends to place nutrient loading cap and planning requirements in individual plant permits, when they are renewed. The operating and capital costs associated with these measures will not be known until specific standards are included in the NPDES permits for each plant.

The NPDES permit for West Point includes limits and operating requirements for WTD's four CSO wet weather facilities (Alki, Carkeek, Elliott West and Henderson MLK, as shown in Figure 1). These facilities store and convey sewage and stormwater to West Point during wet weather events and, when storage volumes are exceeded, provide partial primary treatment of the effluent prior to its discharge into regional waters.

Permit violations have occurred at each of these facilities with variable frequency (the majority of them at Elliott West). WTD has undertaken operating and capital projects that are intended to bring effluent levels at these facilities in compliance with permit standards. WTD notified Ecology of planning efforts underway for Elliott West, including an alternatives analysis with the intent to complete construction of any identified improvements by the 2029 timeframe. In connection with the renewal of the permit for West Point, Ecology may require WTD to initiate new operating procedures or perform studies and undertake capital improvements that are not currently in its six-year CIP as shown in Table 15.

All five of the regional wastewater treatment plants, except as noted below, have been in substantial compliance with their permit effluent limits.

On July 18, 2019, an estimated 3.43 million gallons of secondary treated effluent was discharged without disinfection from the South Plant. The discharge occurred during a planned upgrade of one of the plant's control systems when power was lost, resulting in the closure of a valve that prevented effluent that was leaving the plant from receiving disinfection. Staff performed a shutdown to stop flow out of the facility, determined the origin of the problem, and resumed disinfection later that day.

On July 19, 2019, the emergency bypass gate was opened at West Point, resulting in the discharge of an estimated 2.1 million gallons of untreated stormwater and sewage into Elliott Bay. The bypass was initiated after a power disruption caused plant equipment to fall offline. While emergency bypass pumps were back online approximately 20 minutes after the power disturbance, it was necessary to open the plant's emergency bypass gate for 27 minutes before hydraulic control at West Point could be reestablished. There was no damage to plant facilities.

Ecology is in the process of investigating both of these incidents.

Puget Sound Nutrient Source Reduction Project. 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 among many stakeholders, including the County, to both understand the impacts of nutrients on Puget Sound and develop strategies to manage the problem.

In 2018, separate but complementary to Ecology's Nutrient Reduction Project, Ecology and the Puget Sound Partnership (a State agency created to coordinate and lead the effort to restore and protect Puget Sound) initiated the marine water quality Implementation Strategy ("IS") process to develop a broad strategic framework for nutrient reduction strategies. A draft IS document originally scheduled to be completed by late 2019 was delayed due to stakeholders requesting further deliberations on the underlying scientific information with which to develop the IS. With the COVID-19 pandemic, the IS process has not resumed yet. However, Ecology and the Puget Sound Partnership intend for the IS to be completed, and the results of the IS process will support Ecology in its development of the Nutrient Reduction Project. For the Nutrient Reduction Project in 2018, Ecology and the Batelle Pacific Northwest National Laboratory (a division of the Department of Energy) completed development of a computer model of Puget Sound and released an initial "Bounding Scenarios" modeling report in January 2019. The report provides a baseline assessment and problem definition of nutrient loading and dissolved oxygen conditions in Puget Sound. Following the baseline assessment, Ecology has begun performing additional Puget Sound modeling to assess the most important wastewater and other nutrient sources on a regional watershed basis, as well as assessment of population growth and climate change effects on Puget Sound water quality. This effort will run through mid-2021 and inform removal targets and limits which are expected to be addressed in the Nutrient Reduction Project that is scheduled to be completed in 2022. Ecology has indicated that it is considering development of a watershed model (or other tools) to better understand the nonpoint source watershed sources (e.g., stormwater, agriculture, septic systems, and forestry).

After a public comment period, Ecology announced in January 2020 that it intended to develop a general permit for the nearly 70 wastewater treatment plants that discharge into Puget Sound. Ecology indicated that the general permit could include requirements for data collection, treatment process optimization, long-term planning for major upgrades and technology assessments, and facility-specific design-based treatment outcomes. Additionally, as a preliminary measure before the general permit is developed, Ecology intends to issue interim nitrogen load caps and planning requirements for municipal wastewater treatment plants as their individual NPDES permits are renewed. Ecology will develop an initial general permit by mid-2021 that will encompass interim nutrient loading caps and planning requirements. Ecology has indicated that when the Nutrient Reduction Project is completed, the general permit will be amended to include nutrient reduction requirements anticipated to be applicable to the sector in total and/or limits at individual plants.

In March 2020, Ecology formed an Advisory Committee of volunteer representatives from wastewater utilities, State and federal resource agencies, industry, and environmental organizations. Ecology and the Advisory Committee are currently meeting to determine an appropriate development process and schedule for the issuance of a general permit.

WTD is conducting, and expects to complete by August 2020, a study identifying the most feasible technologies available for reducing nutrient levels at its three treatment plants. The study will be used in formulating potential action planning scenarios for the Clean Water Plan. The study will provide updated planning information for understanding the relative sizing of facility improvements and implications for additional capital and operational costs for different levels of nutrient removal technologies. WTD also undertook the study to update assessments conducted for South Plant (in 2010) and West Point (in 2011), which at the time indicated that capital and operating costs over 20 years were approximately $2.9 billion (in 2010 dollars) for the most stringent type of year-round nutrient reduction requirements at both plants.

It is anticipated that if WTD becomes subject to nutrient reduction requirements in either a general permit or the individual permits, time will be allowed to design and construct facilities that would be needed to achieve the nutrient reduction levels specified in the permit.

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 have agreed with EPA to amend the administrative order on a number of occasions to conduct additional studies, and have most recently negotiated 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 2019 Audited Financial Statements—Notes 8 and 13.

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 has been on the list of endangered species since 2005. The Southern Resident Killer Whale Task Force (the "Task Force") convened by the Governor issued its final report with recommendations on November 7, 2019, after extensive public review and comment.

With respect to the wastewater utility sector, one of the Task Force's recommendations is currently being implemented by Ecology: developing a framework for NPDES permits for advanced treatment to reduce nutrients in wastewater discharges to Puget Sound. The Task Force also recommended that Ecology expedite development of a prioritized list of chemicals of emerging concern that threaten the health of orcas and their prey. Ecology, in collaboration with the Puget Sound Ecosystem Monitoring Program's Toxics work group, is working with regional partners to conduct a risk-based contaminants of emerging concern prioritization. The report also recommended that Ecology improve pollution permitting to reduce contaminant exposure of orcas and their prey by updating aquatic life water quality standards and developing stronger pre-treatment standards for municipal wastewater discharges under NPDES permits.

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. Following several years of development, Ecology submitted new water quality standards for human health protection to EPA on August 1, 2016, for approval. On November 15, 2016, EPA partially approved Ecology's proposal, but disapproved most of the standards and published lower (more stringent) standards. The rule sets applicable human health standards for State water bodies to adequately protect 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. The majority of both the Ecology- and EPA-adopted criteria were substantially more stringent than the previous version of the State's applicable human health water quality standards.

In a reversal of position, EPA approved Ecology's originally proposed criteria in May 2019 and announced that the EPA-adopted criteria would be rescinded (a process that was completed on March 25, 2020). The State's Attorney General filed suit in June 2019 challenging EPA's reversal in position, claiming that it would create confusion and disrupt the work the State had already completed to implement the standards. Until the lawsuit is resolved, a question remains over which standards will be enforced and applied within the State.

The Sewer System's secondary and CSO treatment facilities must operate in compliance with all standards that apply to those discharges. The NPDES permits for both the Vashon and Brightwater treatment plants were renewed in consideration of the initial and most restrictive criteria adopted in November 2016 and resulted in no changes to the effluent limitations for these facilities. The County will continue to monitor progress of Ecology's lawsuit, and implementation of the water quality standards and the potential effects of any proposed changes to effluent limitations of the Sewer System's discharges.

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 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. Sea level rise has been incorporated as a factor in the siting and planning of new facilities since 2008 and include the elevation of critical components, installing barriers (tide gates and flaps), and siting new facilities at higher ground for protection from possible future intrusion and corrosion. Studies at that time 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. New studies on the risk of sea level rise at WTD facilities are in progress and are expected to be completed before the end of 2020.

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 2020 that will model the possible impacts of these changes on wastewater conveyance and treatment.

Strategic Climate Action Plan

The County is developing an updated Strategic Climate Action Plan ("SCAP"), which is expected to be transmitted to the County Council by July 31, 2020. For more information on the SCAP, see "Other Considerations—Climate Change and the County's Strategic Climate Action Plan."

In furtherance of the existing SCAP, the County required WTD to achieve carbon neutrality in its operations, including embodied carbon, by 2025. WTD has estimated that, in 2019, 72% 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 land application of biosolids and carbon offsets purchased from WLRD, WTD has been carbon-neutral for its operations, excluding embodied carbon, since 2016. In 2017, 2018, and 2019, WTD paid WLRD for carbon offsets to address emissions not offset by biosolids and purchased offsets for 22,960, 18,108, and 23,056 metric tons of carbon dioxide equivalent, respectively. Annual costs for the offsets have been less than $300,000.

Since mid-2019, electric energy purchased for the South Plant and other WTD facilities in the service territory of Puget Sound Energy ("PSE") has been 100% renewable. The County entered into a ten-year contract with PSE in 2019 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 in its operations, including embodied carbon, 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.

Cybersecurity

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 (which began in 2019, with completion expected in September 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 WTD systems and cause material disruption to operations and services. The cost to remedy such damage or protect against future attacks could be substantial. See "King County—Risk Management and Insurance" for a discussion of the cyber liability insurance maintained by the County.

KING COUNTY

Impact of COVID-19

The effect that the COVID-19 pandemic is having and will have on the County is significant, and the nature of the impact is likely to evolve over the next several years. Although the County does not yet have sufficient information to quantify the direct impact of the COVID-19 pandemic on the County's finances, it expects that County tax and other revenues will be materially adversely affected. As of May 19, 2020, the County's Office of Economic and Financial Analysis predicts the County will experience a serious recession of unknown depth and duration. There is great uncertainty about future effects of COVID-19, the economic effects that have already occurred and will occur, and future federal responses.

Many County funds, including the General Fund, receive most or all of their revenue from property taxes. Although the values of certain properties will likely be adversely affected by COVID-19, the system of property taxation used in the State largely protects the annual amount of property tax revenues received by senior taxing districts like the County from the effect of lowered property tax values.

The County uses a biennial budget on a calendar-year basis, and is starting the process to develop its 2021-2022 budget. As of May 19, 2020, very preliminary forecasts suggest a biennial deficit of about $150 million for the General Fund, which is about 8% of expected revenue. The County plans to address this through finding efficiencies in service delivery, using revenue from the rent for the right-of-way recently upheld by the State Supreme Court, reducing growth in employee compensation, utilizing potential federal funding, cutting services and costs if necessary, and using reserves.

Upon the President's emergency declaration in response to COVID-19, the County became eligible to access the FEMA Public Assistance program to support certain extraordinary operating costs incurred. The County also is receiving funding under the CARES Act, including additional FEMA funding, Coronavirus Relief Fund appropriations, additional Community Development Block Grants, transit, airport, and other funding. The County received a direct allocation of

$261.6 million in Coronavirus Relief Funds to pay for necessary expenditures incurred due to the public health emergency that were not included in the County's budget and other more targeted funding. With very few exceptions, relief funds must be used to reimburse or pay COVID-19-related expenses and are not available to replace lost tax and other revenues. The County's Office of Performance, Strategy and Budget, Office of Emergency Management, and Finance and Business Operations Division have developed a coordinated approach to track County expenses and match them with available funding sources. As of May 19, 2020, the County expects that almost all of its direct costs for COVID-19 response will be covered with federal or State funds.

The forecast information described in this section is a "forward-looking statement," speaking only as of its date. Actual results may differ materially.

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 ("PSB").

The PSB, 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 four 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 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, 2018, and is incorporated into the County's Comprehensive Annual Financial Report ("CAFR") for 2018.

The County's 2018 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, 2019, 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 110 other public entities such as fire, school, sewer, and water districts. It had an average asset balance of more than $7.3 billion during 2019. Assets of County agencies in 2019 averaged approximately 40% 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 County's 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 March 31, 2020, 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 17
COUNTY EMPLOYEES

Year	Full-time	Part-time
2014	13,319	866
2015	13,614	929
2016	13,821	883
2017	14,395	872
2018	14,652	943
2019	15,198	957

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.

An agreement with a coalition of County unions covers the majority of labor contracts and a total of 5,900 employees (approximately 45% of total employees) for the 2019-2020 biennium. The agreement provides 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. A majority of other unions not part of the coalition agreed to similar terms.

Negotiations with other unions not part of the coalition have been essentially completed. The County has concluded negotiations with the King County Police Officers Guild. The ratified contract, which has been adopted by the County Council, provides for retroactive pay increases of 2.25%, 3.25%, 4.00%, and 3.25%, respectively, for the years 2017 through 2020 and an increase of 3.25% for 2021. The County has also received an arbitration decision for the King County Corrections Guild. The decision provides for retroactive general wage increases for the years 2017 through 2019 of 2.25%, 3.00%, and 3.00%, respectively.

The Amalgamated Transit Union, the largest union in the County, representing approximately 4,200 employees, has ratified a three-year agreement for the years 2020 through 2022 that calls for increases of 3% for 2020, 3% for 2021, 2% for the first half of 2022, and an additional 2% in the second half of 2022. This contract is expected to be adopted by the County Council.

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 18
RETIREMENT SYSTEMS

Number of Employees As of December 31, 2019	Retirement System
13,585	State of Washington—Public Employees Retirement System (“PERS”)
818	State of Washington—Law Enforcement Officers and Fire Fighters Retirement System (“LEOFF”)
459	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 19
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
PSERS - Plan 2	Defined Benefit	Open
LEOFF - Plan 1	Defined Benefit	Closed in 1977
LEOFF - Plan 2	Defined Benefit	Open

Source: State Department of Retirement Systems

In addition to these programs, 22 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. Retirement funds are held in the Commingled Trust Fund and invested by the State Investment Board (the "WSIB"), a 15-member board created by the State Legislature. The average annual dollar-weighted investment return of the Commingled Trust Fund for the ten-year period from July 1, 2009, to June 30, 2019, was 10.31%. The actuarial assumptions used in the most recent rate calculations are summarized in Table 20.

TABLE 20
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: 2018 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, 2019, and current contribution rates for 2020 are shown in Table 21.

TABLE 21
COUNTY CONTRIBUTION RATES AND AMOUNTS

	PERS Plan 1	PERS Plan 2	PERS Plan 3	LEOFF Plan 1	LEOFF Plan 2	PSERS Plan 2
2019						
Average Employer Contribution Rate (%)	12.85 (1)	12.85 (1)	12.85 (1)	0.18 (1)	5.38 (1)	12.26 (1)
Average Employee Contribution Rate (%)	6.00 (2)	8.23 (2)	Varies (2)(3)	0.00	8.82	8.54
Employer Contribution Amount ($000)	1,539	118,591	23,555	-	5,239	4,909
Employee Contribution Amount ($000)	535	75,988	13,906	-	8,588	3,420
Total Contribution Amount ($000)	2,074	194,579	37,461	-	13,827	8,329
2020						
Employer Contribution Rate (%)	12.86 (1)	12.86 (1)	12.86 (1)	0.18 (1)	5.33 (1)	12.14 (1)
Employee Contribution Rate (%)	6.00 (2)	7.90 (2)	Varies (2)(3)	0.00	8.59	7.20

Note: Totals may not add due to rounding.

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

(2) 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.

(3) 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 2018 Actuarial Valuation Report (published September 2019), 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, 2018) is shown in Table 22.

TABLE 22
RETIREMENT SYSTEM FUNDED STATUS[1]
($000,000)

	Plan Status	2018 Actuarial Accrued Liability (a)	2018 Actuarial Valuation of Assets[2] (b)	2018 UAAL[3] (a-b)	2018 Funded Ratio % (b/a)	2017 Funded Ratio % (b/a)	2016 Funded Ratio % (b/a)
PERS - Plan 1	Closed in 1977	$ 11,942	$ 7,193	4,749	60 %	57 %	56 %
PERS - Plan 2/3	Open	40,024	36,601	3,423	91	89	87
PSERS - Plan 2	Open	596	572	24	96	95	94
LEOFF - Plan 1	Closed in 1977	4,095	5,538	(1,444)	135	131	126
LEOFF - Plan 2	Open	11,066	11,972	(906)	108	109	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.

Sources: 2018 Actuarial Valuation from the Office of the State Actuary

As shown in Table 22, 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 23 shows historical investment returns for retirement funds held in the WSDRS-administered plans.

TABLE 23
HISTORICAL ONE-YEAR INVESTMENT RETURNS ON RETIREMENT FUNDS

Year	Investment Return[1]
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
2019	8.4

(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 24 represents the County's share of aggregate pension amounts for all pension plans subject to the requirements of GASB 68.

TABLE 24
AGGREGATE PENSION AMOUNTS—ALL WSDRS-ADMINISTERED PLANS, 2017
($000)

Net pension liabilities	$558,531
Net pension assets	60,414
Deferred outflows of resources	113,235
Deferred inflows of resources	241,106
Pension expense/expenditures	30,541

Source: 2018 CAFR—Note 9

For more information on employee retirement plans, see the County's Water Quality Enterprise Fund 2019 Audited Financial Statements, attached as Appendix C, and the County's 2018 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, 2018, the County contributed an actuarially estimated $5.6 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, 2018, the County's net OPEB obligation was $111.4 million.

For additional information regarding the County's OPEB liability, see the County's 2018 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 purchases reinsurance and excess liability insurance above a $7.5 million per occurrence self-insured retention ("SIR") for Metro Transit and a $6.5 million SIR per occurrence for non-Metro Transit operations. The County maintains $67.5 million in limits above the SIR for Metro Transit claims and $68.5 million in limits above the SIR for non-Metro Transit operations. The County maintains $62.5 million in limits for public official errors and omissions and professional liability claims and $52.5 million in limits for medical malpractice claims.

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

TABLE 25
INSURANCE POLICIES

COVERAGE	LIMITS
Combined Property Damage and Extra Expense for covered County property (includes $100 million earthquake and $250 million flood)	$750 million
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)	$246 million
Fiduciary Liability	$20 million
Fiduciary Liability-Investment Pool	$10 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

The balance of current assets in the Insurance Fund was $76.9 million as of December 31, 2018. The estimated liability for probable self-insurance losses (reported and unreported) recorded in the fund as of December 31, 2018, was $70.5 million.

For additional information, see the County's 2018 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

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 2018, the County received $93.4 million in federal grant revenue (64.4% of total 2018 grant revenue received by the County). These federal grant funds may be adversely impacted by federal legislative and executive actions, including cuts to federal spending. Federal funding is subject to federal contract requirements as well as federal legislative action, including through the federal budget process.

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. Notwithstanding these and other cybersecurity measures, a cybersecurity breach could damage County 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."

Climate Change and the County's Strategic Climate Action Plan

There are potential risks to the County associated with long-term changes in climate and associated changes in the frequency, timing, and severity of extreme weather events. Expected impacts include sea level rise, more intense heavy rain events, more intense summer heat events, lower and warmer summer streamflows, ocean acidification, and an increased risk of flooding, drought, landslides, and forest fires. The County is preparing for a changing climate and the resulting economic, infrastructure, health, and other community impacts by integrating consideration of climate change into decision making and implementing mitigation and preparedness actions that enhance the resilience of County services, infrastructure, assets, and natural resources.

The County's SCAP is a five-year blueprint for County action to confront climate change, integrating climate change into all areas of County operations and its work in the community. In 2015, the County updated the 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. In 2020, the SCAP is undergoing another five-year update, including a review of targets, measures, and priority actions for reducing GHG emissions, updates to strategies and priority actions to prepare for climate change impacts, and a new section and priority actions focused on supporting resilience in communities disproportionately impacted by climate change. The updated SCAP will be transmitted by the County Executive to the County Council. Goals of the 2020 SCAP include (i) further reducing regional GHG emissions; (ii) taking action to prepare the County's infrastructure, services, and communities for climate change impacts; and (iii) identifying new opportunities to take action on climate solutions that achieve social, economic, and environmental benefits for communities in the County. Policies and actions to support these goals are being developed around transportation, energy, public health, emergency preparedness, housing, and food security, and more. The SCAP continues to require 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. A copy of the SCAP and performance reports with status of progress and implementation details can be found on the County's website at

https://www.kingcounty.gov/services/environment/climate/strategies/strategic-climate-action-plan.aspx.

While the County cannot predict precisely how, when, and where specific climate impacts will occur, there will be climate impacts on the County. Although the County has not yet developed a methodology for precisely quantifying the impact climate change will have on the County, its population, or its operations, based on current County projections, the County anticipates that the costs could be significant and could have a material adverse effect on the County's finances over time by requiring greater expenditures to counteract the effects of climate change.

COVID-19 Pandemic

As discussed herein, the COVID-19 pandemic is affecting many parts of the world, including the State and local region. The impact that the COVID-19 pandemic is having and will have on commerce, financial markets, the State, and the region is significant, and the nature of the impact is likely to evolve over the next several years. The County has provided the information contained in this Official Statement to describe some of the impacts that the COVID-19 pandemic and related orders have had on the County's finances and operations, and to describe some of the actions that the County is taking in response. The County cannot predict the duration and extent of the COVID-19 public health emergency, or quantify the magnitude of the impact on the State and regional economy or on the other revenues and expenses of the County. The COVID-19 outbreak is ongoing, and its dynamic nature leads to many uncertainties, including (i) the geographic spread of the virus; (ii) the severity of the disease; (iii) the duration of the outbreak; (iv) actions that may be taken by governmental authorities to contain or mitigate the outbreak; (v) the development of medical therapeutics or vaccinations; (vi) travel restrictions; (vii) the impact of the outbreak on the local or global economy; (viii) whether and to what extent the State Governor may order additional public health measures; and (ix) the impact of the outbreak and actions taken in response to the outbreak on County revenues, expenses, and financial condition. Prospective investors should assume that the restrictions and limitations instituted related to COVID-19 may continue, and the current upheaval to the national and global economies may continue and/or be exacerbated, at least over the near term, and the recovery may be prolonged.

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 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.

Future Initiatives and Legislative Action

Additional initiative petitions may be filed in the future. The County cannot predict whether any such initiatives will qualify to be submitted to the voters or, if submitted, will be approved. Likewise, the County cannot predict what actions the State Legislature might take, if any, regarding any future initiatives approved by the voters.

LEGAL AND TAX 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 is party to litigation in its normal course of business. The County's 2018 Comprehensive Annual Financial Report includes Note 19 concerning non-tort legal matters. As to tort litigation, the County and its agencies are a party to litigation involving tort claims. The County expects that the amount of the Insurance Fund and County insurance coverage, together with routinized budget practices, are sufficient to cover all costs associated with known tort litigation pending. On July 23, 2020, the County received from the Suquamish Tribe (the "Tribe"), a letter providing 60 days' notice of the Tribe's intent to file suit against the County under section 505 of the Clean Water Act ("CWA"), in connection with discharges of sewage from the County's wastewater collection and treatment system into Puget Sound. During the 60-day notice period, the Tribe is interested in discussing effective remedies for the stated CWA violations with the County, and the County is engaging in these discussions. Although the County cannot predict the amount of damages that may be payable, if any, in this or any other litigation, if filed, 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.

Recent Developments in Non-Tort Litigation. Certain class action litigation is described in Note 19 to the County's 2018 Comprehensive Annual Financial Report.

Approval of Counsel

Legal matters incident to the authorization, issuance, and sale of the Bonds by the County are subject to the approving legal opinion of Pacifica Law Group LLP, Bond Counsel. The forms of Bond Counsel's opinions are attached as Appendix B. The opinions of Bond Counsel are given based on factual representations made to Bond Counsel, and under existing law, as of the date of issue of the Bonds, and Bond Counsel assumes no obligation to revise or supplement its opinions to reflect any facts or circumstances that may thereafter come to its attention, or any changes in law that may thereafter occur. The opinions of Bond Counsel are an expression of its professional judgment on the matters expressly addressed in its opinions and do not constitute a guarantee of result.

Pacifica Law Group LLP also is serving as Disclosure Counsel to the County.

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 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 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 Ordinance, the rights and obligations under the Bonds and the 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. The opinion to be delivered by Pacifica Law Group LLP, as Bond Counsel, concurrently with the issuance of the Bonds, will be subject to such limitations. The forms of Bond Counsel's opinions are set forth in Appendix B.

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.

The Bonds are payable from and secured by a pledge of Revenue of the System as described in the Ordinance. 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 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 is 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.

Tax Matters Relating to the 2020A Bonds

General. In the opinion of Bond Counsel, under existing law and subject to certain qualifications described below, interest on the 2020A 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 2020A Bonds to be delivered on the date of issuance of the 2020A Bonds is set forth in Appendix B.

The Code contains a number of requirements that apply to the 2020A 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 comply 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 2020A Bonds could be included in gross income for federal income tax purposes retroactively to the date of issuance of the 2020A Bonds.

Except as expressly stated herein, Bond Counsel expresses no opinion regarding any tax consequences related to the ownership, sale or disposition of the 2020A Bonds, or the amount, accrual or receipt of interest on, the 2020A Bonds. Owners of the 2020A Bonds should consult their tax advisors regarding the applicability of any collateral tax consequences of owning the 2020A Bonds.

Original Issue Premium and Discount. If the initial offering price to the public at which a 2020A 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 at which a 2020A 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 2020A 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 2020A Bonds to determine taxable gain upon disposition (including sale, redemption, or payment on maturity) of such 2020A Bond. The Code contains certain provisions relating to the accrual of original issue discount in the case of purchasers of the 2020A Bonds who purchase the 2020A Bonds after the initial offering of a substantial amount of such maturity. Owners of such 2020A Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2020A 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 2020A Bonds under federal individual alternative minimum tax.

Under the Code, original issue premium is amortized on an annual basis over the term of the 2020A Bond (said term being the shorter of the 2020A 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 2020A Bond for purposes of determining taxable gain or loss upon disposition. The amount of original issue premium on a 2020A Bond is amortized each year over the term to maturity of the 2020A 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 2020A Bond premium is not deductible for federal income tax purposes. Owners of premium 2020A 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 2020A 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 2020A 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 2020A Bonds ends with the issuance of the 2020A Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the County or the owners regarding the tax-exempt status of the 2020A 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 tax-exempt 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 2020A 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 2020A 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 2020A 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 2020A Bonds. Prospective purchasers of the 2020A 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 Code.

Certain Income Tax Consequences Relating to the 2020B Bonds

The interest on the 2020B Bonds is not intended by the County to be excluded from gross income for federal income tax purposes. Owners of the 2020B Bonds should be aware that the ownership or disposition of, or the accrual or receipt of interest on, the 2020B Bonds may have federal income tax consequences not described herein and should consult their own tax advisors with respect to federal income tax consequences of owning such 2020B Bonds. Bond Counsel expresses no opinion regarding any federal or state tax consequences arising with respect to the 2020B Bonds other than as expressly described above.

The proposed form of opinion of Bond Counsel with respect to the 2020B Bonds to be delivered on the date of issuance of the 2020B Bonds is set forth as the form of 2020B Bond opinion in Appendix B.

ERISA Considerations

The Employee Retirement Income Security Act of 1974, as amended ("ERISA") and the Code generally prohibit certain transactions between a qualified employee benefit plan under ERISA or tax-qualified retirement plans and individual retirement accounts under the Code (collectively, the "Plans") and persons who, with respect to a Plan, are fiduciaries or other "parties in interest" within the meaning of ERISA or "disqualified persons" within the meaning of the Code. All fiduciaries of Plans, in consultation with their advisors, should carefully consider the impact of ERISA and the Code on an investment in any 2020B Bonds. In all events investors should consult their own tax advisors in determining the federal, state, local and other tax consequences to them of the purchase, ownership, and disposition of the Bonds.

CONTINUING DISCLOSURE UNDERTAKING

In connection with the issuance and delivery of the Bonds, the County will execute a certificate (a "Continuing Disclosure Certificate"), pursuant to which it will covenant for the benefit of the owners and the "Beneficial Owners" (as defined in the Continuing Disclosure Certificate), pursuant to Securities and Exchange Commission Rule 15c2-12, to provide certain financial information and operating data not later than the end of nine months after the end of each of the County's fiscal years (currently, December 31), commencing with the report for the fiscal year ended December 31, 2020, and to provide notices of the occurrence of certain enumerated events with respect to the Bonds. The information will be filed by or on behalf of the County with the Municipal Securities Rulemaking Board ("MSRB") through its Electronic Municipal Market Access ("EMMA") system. See Appendix E for the form of the Continuing Disclosure Certificate to be executed in connection with the Bonds.

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, 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 the Sewer System financial statements, it has not provided the full table as shown in its original disclosure. 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 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 Sandler & 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(s) of the Bonds

The 2020A Bonds are being purchased by J.P. Morgan Securities LLC at a price of $205,189,788.44, and will be reoffered at a price of $205,549,916.65. The 2020B Bonds are being purchased by Morgan Stanley & Co. LLC at a price of $185,797,855.50, and will be reoffered at a price of $186,745,000.00. The purchasers of each Series of the Bonds are together referred to as the "Purchasers." Each Purchaser may offer and sell the Bonds of the respective Series to certain dealers (including dealers depositing Bonds of such Series into investment trusts) and others at prices lower than the initial offering prices and yields set forth on pages i and ii of this Official Statement, and such initial offering prices and yields may be changed from time to time by the respective Purchaser. After the initial public offering, the public offering prices and yields may be varied from time to time.

Morgan Stanley & Co. LLC, the Purchaser of the 2020B Bonds, has entered into a distribution agreement with its affiliate, Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Bonds.

Potential Conflicts of Interest

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 the County and other parties involved with the Bonds with respect to transactions other than the issuance of the Bonds.

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. The information contained in this Official Statement is presented for the guidance of prospective purchasers of the Bonds described herein. The information has been compiled from official sources and, while not guaranteed by the County, is believed to be correct.

At the time of the delivery of each Series 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 (however, the County will make no representation regarding Bond Counsel's forms of opinions or the information provided by DTC, U.S. Bank National Association, the Purchaser(s) of the Bonds, or any entity providing bond insurance or other credit facility).

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

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APPENDIX A

SUMMARY OF CERTAIN DEFINITIONS AND OTHER BOND PROVISIONS OF THE ORDINANCE

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SUMMARY OF THE BOND ORDINANCE

Ordinance _____ of the County (the "Bond Ordinance"), passed by the County Council on _______, authorizes the issuance of Parity Bonds or Parity Lien Obligations in an aggregate principal amount not to exceed $825,000,000 to provide funds for acquiring and constructing improvements to the Sewer System and authorizes the issuance of Parity Bonds and Parity Lien Obligations for refunding purposes. The Bonds are an authorized series of Parity Bonds 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: (a) on all interest payment dates (other than January 1) in such calendar year; and (b) 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.

a. 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 and, on and after the Second Springing Amendment Date (Parity Lien Obligations), interest on any Balloon Maturity shall also be excluded.

b. Prior to the Second Springing Amendment Date (Parity Lien Obligations), 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 Section 18 of 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. On and after the Second Springing Amendment Date (Parity Lien Obligations), 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 variable rate") that is the average of the SIFMA Municipal Swap Index over the 10 calendar years 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 Section 18 of 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. Prior to the Second Springing Amendment Date (Parity Lien Obligations), 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: (a) on all principal payment dates (other than January 1) of such calendar year; and (b) on January 1 of the next succeeding year. On and after the Second Springing Amendment Date (Parity Lien Obligations), 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 other than any Balloon Maturity: (a) on all principal payment dates (other than January 1) of such calendar year; and (b) on January 1 of the next succeeding year.

3. On and after the Second Springing Amendment Date (Parity Lien Obligations), the Assumed Debt Service for any Balloon Maturity of a Parity Bond or Parity Lien Obligation for that calendar 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 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 Section 27 of 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 First Springing Amendment Date (Parity Lien Obligations), for purposes of satisfying the rate covenant in Section 18.B. of the Bond Ordinance and the tests for the issuance of additional Parity Lien Obligations in Section 25 of the Bond Ordinance, Annual Debt Service for any fiscal year or calendar year shall exclude any Debt Service Offsets (e.g., any Debt Service Offsets shall be deducted from Annual Debt Service).

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

1. The interest due on all outstanding Parity Bonds: (a) on all interest payment dates (other than January 1) in such calendar year; and (b) 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.

a. 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 and, on and after the Second Springing Amendment Date (Parity Bonds), interest on any Balloon Maturity shall also be excluded.

b. Prior to the Second Springing Amendment Date (Parity Bonds), the amount of interest deemed to be payable on any issue of Variable Rate Parity Bonds 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 Section 18 of the Bond Ordinance, the actual amount of interest paid on any issue of Variable Rate Parity Bonds shall be taken into account. On and after the Second Springing Amendment Date (Parity Bonds), the amount of interest deemed to be payable on any issue of Variable Rate Parity Bonds shall be calculated on the assumption that the interest rate on those bonds would be equal to the rate ("the assumed variable rate") that is the average of the SIFMA Municipal Swap Index over the 10 calendar years 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 Section 18 of the Bond Ordinance, the actual amount of interest paid on any issue of Variable Rate Parity Bonds shall be taken into account.

2. Prior to the Second Springing Amendment Date (Parity Bonds), the principal due (at maturity or upon the mandatory redemption of Term Bonds prior to their maturity) for all outstanding Parity Bonds; (a) on all principal payment dates (other than January 1) of such calendar year; and (b) on January 1 of the next succeeding year. On and after the Second Springing Amendment Date (Parity Bonds), the principal due (at maturity or upon the mandatory redemption of Term Bonds prior to their maturity) for all outstanding Parity Bonds other than any Balloon Maturity: (a) on all principal payment dates (other than January 1) of such calendar year; and (b) on January 1 of the next succeeding year.

3. On and after the Second Springing Amendment Date (Parity Bonds), the Assumed Debt Service for any Balloon Maturity of a Parity Bond for that calendar 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 Section 27 of 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 Section 18.A. of the Bond Ordinance and the tests for the issuance of Future Parity Bonds in Section 24 of the Bond Ordinance, Annual Parity Debt Service for any fiscal year or calendar year shall exclude any Debt Service Offsets (e.g., any Debt Service Offsets shall be deducted from Annual Parity Debt Service).

"Assumed Amortization Period" means an assumed amortization period for a Balloon Maturity as specified in the Sale Motion designating the Balloon Maturity. An Assumed Amortization Period may not be longer than the lesser of: (a) the useful life, as of the date of designation, of the assets being financed; and (b) 75 years. The Assumed Amortization Period for a Balloon Maturity applies (e.g., is not reset) until the Balloon Maturity, and any Balloon Maturity issued to refund that Balloon Maturity, is no longer outstanding.

"Assumed Debt Service" for any Balloon Maturity for any calendar year means an amount equals to the principal and interest that would be payable in each calendar year if that Balloon Maturity were amortized over the Assumed Amortization Period on a substantially level debt service basis, calculated based on the actual interest rate on the Balloon Maturity, if fixed, and based on the average of the SIFMA Municipal Swap Index over the 10 calendar years preceding the quarter in which the calculation is made, if variable.

"Balloon Maturity" means any scheduled principal maturity of any Series of Parity Bonds or Parity Lien Obligations that the County designates in the Sale Motion for that Series to be a Balloon Maturity for the purposes of the definitions of Annual Debt Service and Annual Parity Debt Service. Any Balloon Maturity includes any corresponding scheduled principal maturity of Parity Bonds or Parity Lien Obligations issued to refund such Balloon Maturity unless the Balloon Maturity designation is rescinded in the Sale Motion approving the refunding.

"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.

"Bonds" means the Project Bonds of the County in an aggregate principal amount not to exceed $825,000,000 authorized to be issued under the Bond Ordinance to pay costs of acquiring and constructing improvements to the System and the Refunding Bonds authorized to be issued under the Bond Ordinance to refund outstanding obligations of the County. The Bonds may be issued in one or more Series of Parity Bonds or Parity Lien Obligations, as provided in the Bond Ordinance.

"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.

"Certified Public Accountant" means an independent certified public accountant (or firm of certified public accountants) selected by the County and having a favorable national reputation.

"Closing" means the delivery of a Series of the Bonds to, and payment of the purchase price therefor by, the initial purchasers of that Series of Bonds.

"Code" means the Internal Revenue Code of 1986 as in effect on the date of issuance of a Series of Parity Bonds or Parity Lien Obligations or (except as otherwise referenced in the Bond Ordinance) as it may be amended to apply to obligations issued on the date of issuance of the Tax-Exempt Obligations, together with applicable proposed, temporary and final regulations promulgated, and applicable official public guidance published, under the Code.

"Comprehensive Plan" means the County's comprehensive water pollution abatement plan authorized by RCW 35.58.200 and defined in K.C.C. 28.82.150 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.

"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): (a) 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 (b) 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.

"Fair Market Value" means the price at which a willing buyer would purchase an investment from a willing seller in a bona fide, arm's-length transaction, except for specified investments as described in Treasury Regulation §1.148-5(d)(6), including United States Treasury obligations, certificates of deposit, guaranteed investment contracts, and investments for yield-restricted defeasance escrows. Fair Market Value is generally determined on the date on which a contract to purchase or sell an investment becomes binding, and, to the extent required by the applicable regulations under the Code, the term "investment" will include a hedge.

"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.

"First Springing Amendment Date (Parity Bonds) " means the date when the Registered owners of at least 51% in aggregate principal amount of all outstanding Parity Bonds have consented to the adoption of an ordinance or ordinances amending the definition of Reserve Requirement; establishing one or more separate Reserve Requirements for one or more Series of Parity Bonds, including each Series of the Bonds issued as Parity Bonds; reducing any Reserve Requirement, including the Reserve Requirement for each Series of the Bonds issued as Parity Bonds, to an amount less than maximum Annual Parity Debt Service in any calendar year, including to zero; or establishing one or more separate subaccounts within the Parity Bond Reserve Account to secure one or more Series of Parity Bonds, including each Series of the Bonds issued as Parity Bonds, with other Series of Parity Bonds not being secured by such separate subaccounts, as set forth in Ordinance 18588, Section 34.C., and Section 35.C. of the Bond Ordinance.

"First Springing Amendment Date (Parity Lien Obligations)" means the date when no Parity Lien Obligations designated as Series 2008 Bonds remain outstanding.

"Future Junior Lien Obligations" 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 Junior Lien Obligations.

"Future Multi-Modal LTGO/Sewer Revenue Bonds" means any limited tax general obligation bonds that may be issued in the future that are additionally secured by a lien on Revenue of the System on a parity with the lien thereon of the currently outstanding Multi-Modal LTGO/Sewer Revenue Bonds.

"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.

"Future Parity Lien Obligations" means any limited tax general obligation bonds that may be issued in the future that are additionally secured by a lien on Revenue of the System on a parity with the lien thereon of the currently outstanding Parity Lien Obligations.

"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: (a) Junior Lien Variable Rate Demand Sewer Revenue Bonds, Series 2001A and Series 2001B, dated August 15, 2001, authorized by Ordinances 14171 and 14172 , respectively; (b) Junior Lien Variable Rate Demand Sewer Revenue Bond, Series 2011, dated October 26, 2011, authorized by Ordinance 17202 (c) Junior Lien Variable Rate Demand Sewer Revenue Bond, Series 2012, dated December 27, 2012, authorized by Ordinance 17495 and (d) any Future Junior Lien Obligations.

"Multi-Modal LTGO/Sewer Revenue Bonds" means the County's: (a)Multi-Modal Limited Tax General Obligation Refunding Bonds (Payable from Sewer Revenue), Series 2017A and Series 2017B, dated October 26, 2017, authorized by Ordinance 18581 ; (b) Multi-Modal Limited Tax General Obligation Refunding Bonds (Payable from Sewer Revenues), Series 2019A and Series 2019B, dated June 27, 2019, authorized by Ordinance 18898 and (c) any Future Multi-Modal LTGO/Sewer Revenue 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 pursuant to Ordinance 12076, Section 30, and continued pursuant to Section 9 of the Bond Ordinance 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 together with: (a) the Bonds and (b) any Future Parity Bonds. "Parity Bonds" include 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 pursuant to Ordinance 11241, Section 8, and continued pursuant to Section 10 of the Bond Ordinance, 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 Obligations" mean the outstanding Parity Lien Obligations and any Future Parity Lien Obligations. "Parity Lien Obligations" include 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: (a) 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; (b) 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; (c) with a Qualified Counterparty; and (d) 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.

"Permitted Investments" means any investment permitted by law, but only to the extent that the same are acquired at Fair Market Value.

"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 hereafter 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 in effect as of the date of the Bond Ordinance.

"Qualified Counterparty" means with respect to a Payment Agreement an entity: (a) 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 (b) 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 created pursuant to Ordinance 12314, Section 13.D., and continued pursuant to Section 13.B. of the Bond Ordinance.

"RCW" means the Revised Code of Washington.

"Rebate Amount" means the amount, if any, determined to be payable with respect to the Bonds by the County to the United States of America in accordance with Section 148(f) of the Code.

"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; provided that on and after the First Springing Amendment Date (Parity Bonds), Reserve Requirement shall have the meaning set forth in any ordinance or ordinances amending the definition of Reserve Requirement pursuant to Ordinance 18588, Section 34.C., and Section 35.C. of the Bond Ordinance.

"Revenue Fund" means the "Water Quality Operating Account" as designated by Ordinance 12076, Section 30.

"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 Section 13.B. of 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), accepting a bid (if the Bonds are sold by competitive bid) or approving a loan or other agreement with the federal government or other purchaser, for the purchase of the Bonds and ratifying the sale of the Bonds, all in accordance with Section 28 of the Bond Ordinance.

"Second Springing Amendment Date (Parity Bonds) " means the date when the Registered Owners of at least 51% in aggregate principal amount of all outstanding Parity Bonds have consented to the definitions of Assumed Amortization Period, Assumed Debt Service, Balloon Maturity, and Annual Parity Debt Service set forth in the Bond Ordinance (including all springing amendments set forth in the Bond Ordinance). All Registered Owners of Parity Bonds issued after the effective date of the Bond Ordinance are deemed to have consented to the definitions of Assumed Amortization Period, Assumed Debt Service, Balloon Maturity, and Annual Parity Debt Service set forth in the Bond Ordinance (including all springing amendments set forth in the Bond Ordinance) by their purchase of such Parity Bonds.

"Second Springing Amendment Date (Parity Lien Obligations) " means the date when: (a) the First Springing Amendment Date (Parity Lien Obligations) has occurred; and (b) the Registered Owners of at least 51% in aggregate principal amount of all outstanding Parity Lien Obligations have consented to the definitions of Assumed Amortization Period, Assumed Debt Service, Balloon Maturity, and Annual Debt Service set forth in the Bond Ordinance (including all springing amendments set forth in the Bond Ordinance). All Registered Owners of Parity Lien Obligations issued after the effective date of the Bond Ordinance are deemed to have consented to the definitions of Assumed Amortization Period, Assumed Debt Service, Balloon Maturity and Annual Debt Service set forth in the Bond Ordinance (including all springing amendments set forth in the Bond Ordinance) by their purchase of such Parity Lien Obligations.

"Series" means any series of Parity Bonds or Parity Lien Obligations.

"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 in effect as of the date of the Bond Ordinance.

"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" of Section 14 of the Bond Ordinance.

"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.

"Tax Certificate" means the Federal Tax Certificate regarding certain federal tax matters executed on behalf of the County upon the issuance of each Series of Tax-Exempt Obligations.

"Tax-Exempt Obligations" means Parity Bonds or Parity Lien Obligations the interest on which the County intends to be excludable from gross income for federal income tax purposes and also includes taxable direct pay or other Parity Bonds or Parity Lien Obligations that are subject to the requirements applicable to Tax-Exempt Obligations.

"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.

"Undertaking" means an undertaking for ongoing disclosure to be entered into by the County for each Series of Bonds, if and to the extent required by Rule15c2-12, as authorized by a Sale Motion.

"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: (a) 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 (b) 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: (a) 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 (b) 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.

Parity Bond Fund.

A special fund of the County known as the "Water Quality Revenue Bond Account" ("the Parity Bond Fund") has heretofore been created and is hereby continued, along with the accounts therein. The Parity Bond Fund is at all times completely segregated and set apart from all other funds and accounts of the County and is a trust fund for the security and payment of principal of and premium, if any, and interest on Parity Bonds. All money credited to the Parity Bond Fund is pledged and ordered to be used for the sole purpose of paying the principal of and premium, if any, and interest on Parity Bonds.

A "Debt Service Account" has heretofore been established in the Parity Bond Fund. The County hereby obligates and binds itself to set aside and pay into that account out of Revenue of the System amounts sufficient, together with accrued interest, if any, received at the time of delivery of any Series of Bonds that are Parity Bonds and deposited therein, income from the investment of money in the Debt Service Account and Parity Bond Reserve Account, and any other money on deposit in the Debt Service Account and legally available, to pay the principal of and interest on outstanding Parity Bonds as the same become due and payable.

For each Series of the Bonds that are Parity Bonds there is hereby authorized to be created a special subaccount in the Debt Service Account. All money required to be deposited into the Debt Service Account for the payment of principal of and interest on that Series of the Bonds shall be deposited into the subaccount created for the Series, and the County covenants to budget for each such payment of principal and interest when due. Money in the subaccount will be treated in all respects as all other money in the Debt Service Account, but will be accounted for separately for the purpose of calculating any Rebate Amount payable with respect to that Series of the Bonds.

Payments on account of each Series of the Bonds that are Parity Bonds will be made out of Revenue of the System into the applicable debt service subaccount in the Parity Bond Fund on or before the day each payment of interest on or principal of those Bonds is due.

Parity Bond Reserve Account.

A Parity Bond Reserve Account has heretofore been established in the Parity Bond Fund. The County hereby pledges that it 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 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. The Qualified Letter of Credit or Qualified Insurance must not be cancelable on less than five years' notice. In the event of any cancellation, the Parity Bond Reserve Account will be funded in accordance with the provisions providing for payment in the event of a deficiency therein, as if the Parity Bonds that remain outstanding had been issued on the date of such notice of cancellation.

On the date of Closing of a Series of Bonds that are Parity Bonds, an amount sufficient to satisfy the Reserve Requirement in the Parity Bond Reserve Account required by the issuance of that Series of Bonds must be deposited therein from the proceeds of Parity Bonds or other funds available therefor or provided for by Qualified Insurance or a Qualified Letter of Credit, as permitted in the Bond Ordinance.

If there is a deficiency in the Debt Service Account to make any payment when due of either principal of or interest on any Parity Bonds, the deficiency will be made up from the Parity Bond Reserve Account by the withdrawal of money therefrom and by the sale or redemption of obligations held in the Parity Bond Reserve Account, if necessary, in such amounts as will provide cash in the Parity Bond Reserve Account sufficient to make up any such deficiency. If a deficiency still exists immediately prior to an interest payment date and after the withdrawal of cash, the County will then draw from any Qualified Letter of Credit, Qualified Insurance, or other equivalent credit facility in sufficient amount to make up the deficiency. The draw will be made at such times and under such conditions as the agreement for the Qualified Letter of Credit or Qualified

Insurance provides. If more than one Qualified Letter of Credit or Qualified Insurance is available, draws will be made ratably thereon to make up the deficiency. Any deficiency created in the Parity Bond Reserve Account by reason of any such withdrawal must then be made up from Revenue of the System that is available after first making the payments required to be made under paragraph "First" through "Third" of the Sewer Revenue Priority of Payment provisions of the Bond Ordinance.

Income from the investment of money in the Parity Bond Reserve Account will be deposited in and become a part of the Parity Bond Fund.

Pledge of Sewer Revenues.

The amounts covenanted to be paid out of Revenue of the System into the Parity Bond Fund and the accounts therein shall 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 Parity Bonds.

If money and investments in the Debt Service Account of the Parity Bond Fund and the Parity Bond Reserve Account are reduced below the amounts required to pay the principal and/or interest then due and payable on any Parity Bonds, funds on deposit in any reserve created in the Revenue Fund not then required for the payment of necessary Operating and Maintenance Expenses will be transferred to the Debt Service Account of the Parity Bond Fund to the extent required to pay that principal and interest.

Revenue Fund; Rate Stabilization Fund.

A special fund of the County known as the "Water Quality Operating Account" ("the Revenue Fund") has heretofore been created and is hereby continued. All Revenue of the System will be deposited in the Revenue Fund. All Operating and Maintenance Expenses will be paid out of the Revenue Fund or appropriate reserves therein.

In anticipation of increases in revenue requirements of the System, a special fund of the County designated as the "Sewer Rate Stabilization Fund" ("the Rate Stabilization Fund") has heretofore been established and is hereby continued. The County may from time to time appropriate or budget amounts in the Revenue Fund for deposit in the Rate Stabilization Fund, as provided in Section 14 of the Bond Ordinance, and may from time to time withdraw amounts therefrom for deposit in the Revenue Fund to prevent or mitigate sewer rate increases or for other lawful purposes of the County related to the System, including calculations of "Net Revenue" and "Revenue of the System" for the purposes of satisfying requirements of Sections 18, 24 and 25 of the Bond Ordinance.

For any fiscal year: (a) 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 (b) 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.

Sewer Revenue Priorities of Payment

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:

First, to pay all Operating and Maintenance Expenses;

Second, 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 as the same become due and payable and to make any Payment Agreement Payments with respect to any Parity Payment Agreements;

Third, 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;

Fourth, 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);

Fifth, to make all required payments of principal and interest on the Parity Lien Obligations and to make any Payment Agreement Payments with respect to any Parity Lien Obligation Payment Agreements;

Sixth, 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;

Seventh, 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;

Eighth, to make all required payments of principal of and interest on the Subordinate Lien Obligations as the same become due and payable;

Ninth, 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

Tenth, to make all required payments of principal of and interest due on the SRF Loans and the Public Works Trust Fund Loans.

Any surplus money that the County may have on hand in the Revenue Fund after making all required payments set forth above may be used by the County: (a) to make necessary improvements, additions and repairs to and extensions and replacements of the System; (b) to purchase or redeem and retire outstanding sewer revenue bonds of the County; (c) to make deposits into the Rate Stabilization Fund; or (d) for any other lawful purposes of the County related to the System.

Rate Covenant

The County covenants with the Registered Owner of each of the Bonds issued as Parity Bonds that, for so long as any of the same are outstanding, the County will at all times establish, maintain and collect rates and charges for sewage disposal service that will provide in each calendar year 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.

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 System, to make all payments and to establish and maintain all reserves required by this 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.

In determining compliance with the requirements of the Rate Covenant, Revenue of the System and Net Revenue shall be calculated by taking into account deposits and withdrawals from the Rate Stabilization Fund.

Certain Other Covenants of the County Regarding the Bonds

The County covenants with the Registered Owner of each of the Bonds for as long as any of the Bonds are outstanding, as follows:

Maintain in Good Order. The County will 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 will 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 will from time to time cause to be made, without undue deferral, all necessary or proper repairs, replacements and renewals, so that at all times the operation of the System will be properly and advantageously conducted.

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

Annual Audit. The County will 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 will furnish the audit to the Owner of any Bond upon written request therefor.

Insurance. The County will 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 will also carry adequate public liability insurance at all times, provided that the County may, if deemed advisable by the council, institute or continue a self-insurance program for any or all of the aforementioned risks.

Construction. The County will 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 will 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: (a) pursuant to the ordinance or ordinances establishing a tariff of rates and charges for sewage disposal services; and (b) 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 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 in the Bond Ordinance, 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 adoption of 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 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 in the Bond Ordinance will 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 will 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 will be used for any purpose other than as provided in the Bond Ordinance, and except as otherwise 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. The County will 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 will the County sell or voluntarily dispose of any part of the operating properties of the System unless provision is made: (a) for payment into the Parity Bond Fund of an amount that will 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 (b) for payment into the Parity Lien Obligation Bond Fund of an amount that will 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 will take all actions necessary to assure the exclusion of interest on any Tax-Exempt Obligations from the gross income of the Owners of such Tax-Exempt Obligations to the same extent as such interest is permitted to be excluded from gross income under the Code as in effect on the date of issuance of such Tax-Exempt Obligations as set forth in the Federal Tax Certificate.

Trustee for Registered Owners of Parity Bonds.

Appointment of Trustee. Upon the occurrence of any "event of default" described in Section 23.A. of the Bond Ordinance, 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 appointment of a Trustee under these provisions 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 appointed in the manner provided in the Bond Ordinance, and each successor thereto, is hereby declared to be a trustee for the Registered Owners of all the Parity Bonds and is empowered to exercise all rights and powers in the Bond Ordinance conferred on the Trustee.

Certain Rights and Obligations of Trustee. The Trustee will not be responsible for recitals in any ordinance or in the Parity Bonds, or for the validity of any Parity Bonds, nor will the Trustee be responsible for insuring the System or for collecting any insurance money or for the title to any property of the System.

The Trustee will be protected in acting upon any notice, request, consent, certificate, order, affidavit, letter or other paper or document believed by it to be genuine and correct and to have been signed, sent or delivered by the person or persons by whom such paper or document is purported to have been signed, sent or delivered.

The Trustee will not be answerable for any neglect or default of any person, firm or corporation employed and selected by it with reasonable care.

The Trustee will permit the owner of any Parity Bonds to inspect any instrument, opinion or certificate filed with the Trustee by the County or by any person, firm or corporation acting for the County.

The Trustee will not be bound to recognize any person as an owner of any Parity Bond until such person's title thereto, if disputed, has been established to the Trustee's reasonable satisfaction.

The Trustee may consult with counsel, and the opinion of such counsel will be full and complete authorization and protection in respect of any action taken or suffered by it under the Bond Ordinance in good faith and in accordance with the opinion of such counsel.

Events of Default for Parity Bonds; Powers and Duties of Trustee

Events of Default. The occurrence of one or more of the following is an "event of default" with respect to any Bonds issued as Parity Bonds under the Bond Ordinance:

1. default in the payment of principal of or interest on any Parity Bonds when the same becomes due; or

2. 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.

Powers of Trustee. 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 this 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 hereinabove provided. 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 will be restored to the same rights and position they would have held if no event of default had occurred.

Actions in Name of Trustee. All rights of action under the Bond Ordinance or upon any of the Parity Bonds enforceable by the Trustee may be enforced by the Trustee without the possession of any Parity Bonds or the production thereof in the trial or other proceedings relative thereto, and any such suit, action or proceeding instituted by the Trustee will be brought in its name for the ratable benefit of the Registered Owners of all Parity Bonds, subject to the provisions of the Bond Ordinance.

Procedure by Bond Owners. 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 no Trustee has been appointed as provided in the Bond Ordinance, but any remedy in the Bond Ordinance authorized to be exercised by a Trustee may be exercised individually by any registered owner of a Parity Bond, in such Registered Owner's own name and on such Registered Owner's 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.

Application of Money Collected by Trustee. Any money collected by the Trustee at any time will 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 on the Parity Bonds at the date fixed by the Trustee for the distribution of such money, upon presentation of the several Parity Bonds and upon causing such payment to be stamped thereon, if partly paid, and upon surrender thereof, if fully paid.

Future Parity Bonds

The County further covenants and agrees with the Registered Owner of each of the Bonds issued as Parity Bonds for as long as the same 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: (a) the purpose of acquiring, constructing and installing any portion of the Comprehensive Plan; (b) the purpose of acquiring, constructing and installing any necessary renewals or replacements of the System; or (c) the purpose of refunding or purchasing and 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:

A. At the time of the issuance of any Future Parity Bonds there is no deficiency in the Parity Bond Fund or any account therein.

B. 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.

C. 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. The Future Parity Bonds may bear such date of issue, interest payment dates, and principal payment dates, and may mature in such year or years, as the council provides. 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.

D. At the time of the issuance of any Future Parity Bonds, the County must have on file a certificate from a Professional Utility Consultant (dated no more than 90 days prior to the date of delivery of such Future Parity Bonds) showing that, in the Professional Utility Consultant's professional opinion, the "annual income available for debt service on Parity Bonds" for each year during the life of such Future Parity Bonds shall 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:

1. 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.

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

3. 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.

4. There will be deducted from such revenue the amount expended for Operating and Maintenance Expenses during such period.

5. 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 in subsection D.1. through 4. of this section 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.

6. 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 in subsection D.1. through 5. of this section the Professional Utility Consultant's 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 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.

7. 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 Future Parity Bonds 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 in subsection D.1. through 6. of this section 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 1/4 of 1% per year over and above such reduced estimate.

E. Instead of the certificate described in subsection D. of this section, 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.

F. 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 of subsection D. or E. of this section; provided, that the County may not issue Future Parity Bonds for such purpose under this subsection F. 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.

The principal amount of Future Parity Bonds issued pursuant to this subsection F. may include amounts necessary to pay the principal of the Parity Bonds or other obligations to be refunded, interest thereon to the date of payment or redemption thereof, any premium payable thereon upon such payment or redemption and the costs of issuance of such Future Parity Bonds, and if a Payment Agreement has been provided with respect to the obligations to be refunded, may include amounts necessary to make the payment of all amounts, if any, due and payable by the County under such Payment Agreement. The proceeds of such Future Parity Bonds will be held and applied in such manner as is provided for in the ordinance authorizing the issuance of the Parity Bonds or other obligations to be refunded, so that upon the delivery of such Future Parity Bonds, the Parity Bonds or other obligations to be refunded thereby will be deemed no longer outstanding in accordance with the ordinance authorizing their issuance.

G. 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 shall anything in the Bond Ordinance contained prevent the County from issuing Future Parity Bonds to refund maturing Parity Bonds for the payment of which money is not otherwise available.

Payment Agreements

General. To the extent and for the purposes permitted from time to time by chapter 39.96 RCW, as it may be amended, and other applicable provisions of State law, the County may enter into Payment Agreements, subject to the conditions set forth in this section and in other provisions of the Bond Ordinance.

Manner and Schedule of Payments. Each Payment Agreement must set forth the manner in which the Payment Agreement Payments and the Payment Agreement Receipts will be calculated and a schedule of payment dates.

Authorizing Ordinance. Prior to entering into a Payment Agreement, the council must adopt an ordinance authorizing such agreement and setting forth such provisions as the County deems necessary or desirable and are not inconsistent with the provisions of the Bond Ordinance.

Calculation of Payment Agreement Payments and Debt Service on Bonds with Respect to which a Payment Agreement is in Force. It is the intent of the County, for purposes of Section 18, 24 or 25 of the Bond Ordinance, that debt service on Parity Bonds with respect to which a Parity Payment Agreement is in force will 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 Obligation Bonds with respect to which a Parity Lien Obligation Payment Agreement is in force will 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 will be guided by the following requirements.

1. The amount of interest deemed to be payable on any Bonds with respect to which a Payment Agreement is in force will 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.

2. 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 will be calculated based upon the following assumptions:

a. 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 will be based on the assumed fixed payor rate, and payments by the Qualified Counterparty will 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

b. 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 will 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 will make payments based on the fixed rate specified by the Payment Agreement.

Investment of Funds and Accounts

Money in the Parity Bond Fund, Parity Bond Reserve Account, Parity Lien Obligation Bond Fund, Revenue Fund and Construction Account may be invested in any Permitted Investments. Obligations purchased as an investment of money in the Parity Bond Fund, Parity Bond Reserve Account, Parity Lien Obligation Bond Fund, Revenue Fund and Construction Account and accounts or subaccounts therein will be deemed at all times to be a part of such respective fund, account or subaccount, and the income or interest earned and profits realized or losses suffered by a fund, account or subaccount due to the investment thereof will be retained in, credited or charged, as the case may be, to such fund or account.

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: (a) paying when due the principal of and interest on any or all of the Bonds ("the Defeased Bonds"); (b) redeeming the Defeased Bonds prior to their maturity; and (c) 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 shall cease and become void. Thereafter, the Registered Owners of Defeased Bonds shall 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 shall 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 shall be given, and selection of Bonds for any partial refunding or defeasance shall be conducted, in the manner prescribed in the Bond Ordinance for the redemption of Bonds.

Supplemental Ordinances

Without Bondowner Consent. The 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:

1. To add to the covenants and agreements of the County in the Bond Ordinance such other covenants and agreements thereafter to be observed that will 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 in the Bond Ordinance reserved to or conferred upon the County.

2. To make such provisions for the purpose of curing any ambiguities or of curing, correcting or supplementing any defective provision contained 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 council may deem necessary or desirable and not inconsistent with such ordinances and that will not adversely affect the interest of the registered owners of Parity Bonds or Parity Lien Obligations, as applicable.

With Bondowner Consent.

1. 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 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 Bonds, except as described in subsection B.3. of this section.

2. From and after the First Springing Amendment Date (Parity Lien Obligations), 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, except as described in subsection B.3. of this section.

3. No supplemental ordinance entered into pursuant to this subsection B. may:

a. 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

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

4. It is not necessary for the consent of registered owners of bonds under this subsection B. 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 issued as Parity Bonds, by taking and holding the same, shall be deemed to have consented to the adoption of an ordinance or ordinances supplemental to the Bond Ordinance to amend the definition of Reserve Requirement. From and after the First Springing Amendment Date (Parity Bonds), such supplemental ordinance or ordinances may:

1. Establish one or more separate Reserve Requirements for one or more Series of Parity Bonds, including each Series of the Bonds issued as Parity Bonds;

2. Reduce any Reserve Requirement, including the Reserve Requirement for each Series of the Bonds issued as Parity Bonds, to an amount less than maximum Annual Parity Debt Service in any calendar year, including to zero; and

3. Establish one or more separate subaccounts within the Parity Bond Reserve Account to secure one or more Series of Parity Bonds, including each Series of the Bonds issued as Parity 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 Bonds issued as Parity Bonds not being secured by any amounts in the Parity Bond Reserve Account.

Ordinance a Contract; Severability

The covenants contained in the Bond Ordinance constitute a contract between the County and: (a) the Registered Owner of each Bond; (b) the Qualified Counterparty to any Payment Agreement entered into with respect to any Bonds; and (c) the provider of any Credit Facility, Qualified Insurance or Qualified Letter of Credit with respect to any Bonds. If any court of competent jurisdiction determines that any covenant or agreement provided in the Bond Ordinance to be performed on the part of the County is contrary to law, then such covenant or agreement shall be null and void and shall be deemed separable from the remaining covenants and agreements of the Bond Ordinance and shall in no way affect the validity of the other provisions of the Bond Ordinance or of the Bonds.

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APPENDIX B

FORMS OF BOND COUNSEL'S OPINIONS

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PACIFICA
LAW GROUP

_______, 2020

King County, Washington

J.P. Morgan Securities LLC

Re: King County, Washington, Sewer Improvement and Refunding Revenue Bonds, 2020, Series A (the “Bonds”)

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 the Bonds issued pursuant to Ordinance 19112, passed on June 23, 2020 and Motion 15652, passed on July 21, 2020 (together the “Bond Authorization”). Capitalized terms used in this opinion have the meanings given such terms in the Bond Authorization.

The Bonds are subject to optional and mandatory redemption prior to maturity as provided in the Bond Authorization.

Regarding questions of fact material to our opinions, we have relied on representations of the County in the Bond Authorization, 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 Authorization 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 pursuant to the terms of the Bond Authorization and constitute legal, valid and binding special obligations of the County, both principal thereof and interest thereon being payable solely out of 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 owner of the Bond 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 by 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 principal of and interest on the Bond as the same become due.

4. The County has pledged that the payments to be made from Revenue of the System into the Parity Bond Fund and accounts therein shall have a duly created and valid lien and charge on Revenue of the System junior, subordinate and inferior to Operating and Maintenance Expenses; equal to the lien and charge on Revenue of the System to pay and secure the payment of the outstanding Parity Bonds and any Future Parity Bonds; and superior to all other liens and charges of any kind or nature, including, inter alia, the lien and charge on Revenue of the System to pay and secure the payment of Parity Lien Obligations, Junior Lien Obligations, Multi-Modal LTGO/Sewer Revenue Bonds, Future Subordinate Lien Obligations, SRF Loans and Public Works Trust Fund Loans. The County has reserved the right to issue bonds in the future with a lien on Revenue of the System equal or junior to the lien thereon of the Bond as provided in the Bond Ordinance.

5. 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 Internal Revenue Code of 1986, as amended (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.

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

PACIFICA
LAW GROUP

___________, 2020

King County, Washington

Morgan Stanley & Co, LLC

Re: King County, Washington, Sewer Refunding Revenue Bonds, 2020, Series B (Taxable) (the "Bonds")

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 the Bonds issued pursuant to Ordinance 19112, passed on June 23, 2020 and Motion 15652, passed on July 21, 2020 (together the "Bond Authorization"). Capitalized terms used in this opinion have the meanings given such terms in the Bond Authorization.

The Bonds are subject to optional and mandatory redemption prior to maturity as provided in the Bond Authorization.

Regarding questions of fact material to our opinions, we have relied on representations of the County in the Bond Authorization, 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 Authorization 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 pursuant to the terms of the Bond Authorization and constitute legal, valid and binding special obligations of the County, both principal thereof and interest thereon being payable solely out of 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 owner of the Bond 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 by 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 principal of and interest on the Bond as the same become due.

4. The County has pledged that the payments to be made from Revenue of the System into the Parity Bond Fund and accounts therein shall have a duly created and valid lien and charge on Revenue of the System junior, subordinate and inferior to Operating and Maintenance Expenses; equal to the lien and charge on Revenue of the System to pay and secure the payment of the outstanding Parity Bonds and any Future Parity Bonds; and superior to all other liens and charges of any kind or nature, including, inter alia, the lien and charge on Revenue of the System to pay and secure the payment of Parity Lien Obligations, Junior Lien Obligations, Multi-Modal LTGO/Sewer Revenue Bonds, Future Subordinate Lien Obligations, SRF Loans and Public Works Trust Fund Loans. The County has reserved the right to issue bonds in the future with a lien on Revenue of the System equal or junior to the lien thereon of the Bond as provided in the Bond Ordinance.

5. Interest on the Bonds is not intended to be exempt from federal income taxes.

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.

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
2019 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, 2019 and 2018

MOSSADAMS

Table of Contents

Report of Independent Auditors

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 (the Fund), which comprise the statements of net position as of December 31, 2019 and 2018December 31, 2019 and 2018, 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. 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, 2019 and 2018, 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 the County's Changes in total OPEB Liability and Related Ratios 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 the Fund'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 are 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.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated April 30, 2020, on our consideration of the Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Fund's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Fund's internal control over financial reporting and compliance.

Moss Adams LLP

Seattle, Washington
April 30, 2020

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, 2019 and 2018.

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, Brightwater Treatment Plant located near Woodinville, and two smaller secondary treatment plants at Vashon Island and Carnation, 397 miles of conveyance lines, 48 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 161 million gallons per day (MGD) in 2019 from approximately 1.8 million residents.

Financial Highlights

During 2019, Water Quality provided sewage treatment services to 763,436 residential customer equivalents (RCE) compared to 760,571 in 2018 and 756,916 in 2017. 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 12,513 new connections to its customer billing base in 2019. The program added 12,906 and 12,484 new connections in 2018 and 2017, respectively. In 2019, the average flow of the five treatment plants was 161 MGD with a peak daily flow of 752 MGD. Maximum system capacity was 868 MGD in 2019 and in 2018. The average daily flow fluctuated between a peak of 161 MGD in 2019 and 177 MGD in 2018. The annual fluctuation in flows largely depends on the amount of annual precipitation.

In 2019, resource recovery delivered 124,958 tons compared to 129,568 tons in 2018 of Loop® biosolids to customers for use in forest management, agriculture, and composting. Approximately 82.3 million gallons compared to 76.9 million gallons in 2018 of Class A reclaimed water was distributed for irrigation, urinals/toilets, municipal purposes, and wetland enhancement and about 719 million gallons of filtered, treated wastewater compared to 669 million gallons in 2018 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 12 MGD.

Water Quality sold 2.7 million therms of natural gas to Puget Sound Energy from the South Treatment Plant in 2019 and 2.5 million therms in 2018. Congressional action under the Energy Independence Security Act and subsequent rulemaking 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 2019, RINS revenues were $2.8 million from which $800 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. The utility costs to produce RINS in 2019 were offset by an unusual two-month spike in methane gas revenue. In 2018, RINS revenue totaled $4.4 million from which $762 thousand was paid for operational and administrative costs and improvement of the operation of the biogas system. West Point Treatment Plant sold Seattle City Light 17.2 million kilowatt hours of electricity generated from digester gas in 2019 and 14.4 million kilowatt hours in 2018.

Financial Highlights (continued)

The Industrial Pretreatment Program conducted 244 inspections and took 1,712 compliance samples in 2019 compared to 297 inspections and 1,777 compliance samples taken in 2018. The program currently tracks 545 facilities with discharge authorization permits and 104 significant industrial users compared to 551 facilities with discharge authorization permits and 109 significant industrial users in 2018.

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 $209.3 million in 2019 and $225.6 million in 2018.

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 a consent decree (CD) 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). The Plan amended the original total of 21 CSO projects to 13 projects that will control 18 CSO locations. By 2018, five projects were either completed or operational and under monitoring for compliance. At present, four of the remaining nine projects are underway, including a joint project with the City of Seattle to control two King County CSO locations.

In October 2019, King County formally requested, and subsequently has begun, to initiate negotiations to modify King County's CD with EPA and Ecology to address changed conditions since the CD was signed. These changed conditions include substantially higher cost estimates for planned CSO control projects, climate change impacts, anticipated future increases in regulatory requirements for nutrient discharges to Puget Sound and rate affordability. Any potential modification agreed to by EPA, Ecology and the U.S. District Court would also need King County Council approval.

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 (NPDES) permit for the West Point Treatment Plant and the consent decree, a review of the CSO Program was submitted to the DOE as part of the West Point permit renewal, stating no changes to the Plan. The next update to the Plan is due to the DOE and EPA in 2024 as part of the next West Point NPDES permit renewal.

Financial Highlights (continued)

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 in 2017. The costs associated with replacing the pipeline totaled $21.7 million and were capitalized in 2019. Water Quality filed a claim against the contractor's insurance policy to recover its costs related to the loss of the failed pipeline and its replacement.

Water Quality operating revenues increased by 5.3 percent, or $26.9 million, to $536.4 million in 2019 from $509.5 million in 2018 while operating expenses before depreciation and amortization increased by 3.1 percent, or $4.3 million, to $143.8 million in 2019 from $139.5 million in 2018. The rise in operating revenue can be attributed to a 2.5 percent increase in the sewer rate to $45.33 from $44.22 in 2018 and 2017. The increase in operating expenses before depreciation and amortization are due to higher chemical prices and large equipment repairs.

Capacity charge revenues increased 17.6 percent, or $15.3 million, to $102.1 million in 2019 from $86.8 million in 2018. The capacity charge rate increased to $64.50 per RCE in 2019 from $62.60 per RCE in 2018. The RCE's billed for sewer treatment services increased to 763,436 in 2019 from 760,571 (based on sewer revenues that include sewer agency prior year adjustments) in 2018. 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 Treasury rates and was 3.6 percent in 2019 and 2.9 percent in 2018. Early capacity charge payoffs rose 41.1 percent in 2019 contributing to the increase in capacity charge revenue. In June of 2019, the County Council adopted a capacity charge of $66.35, a 2.9 percent increase, and maintained the $45.33 sewer rate for 2020.

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 2019 and 2018. 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.

Financial Highlights (continued)

In January of 2019, Water Quality voluntarily redeemed $1.6 million of principal on its Junior Lien Sewer Revenue Bonds, Series 2015A and 2015B. On June 27, 2019, Water Quality issued $148.1 million in Multi-Modal Limited Tax General Obligation Refunding Bonds, Series 2019A and Series 2019B to refund Junior Lien Sewer Revenue Bonds, Series 2015A and Series 2015B and Junior Lien Sewer Revenue Bonds, Series 2017. On October 7, 2019, Water Quality purchased and deposited U.S. Treasury securities in an irrevocable escrow to defease $22.5 million of outstanding 2012C Sewer Revenue and Refunding Bonds and $64.6 million of outstanding Limited Tax General Obligations Refunding Bonds, Series 2012B and Series 2012C. Funding for the escrow came from operations and excess bond reserves. On October 24, 2019, Water Quality issued $101.0 million in Limited Tax General Obligation Bonds, Series 2019A, to fund its capital program. Water Quality received $14.0 million in low interest state loans in 2019 at rates between 0.8 and 2.6 percent.

In January of 2018, Water Quality voluntarily redeemed $920 thousand of principal on its Junior Lien Sewer Revenue Bonds, Series 2015A and 2015B. In October 2018, Water Quality purchased and deposited U.S. Treasury securities in an irrevocable escrow to defease $135.8 million of outstanding 2010, 2011B, and 2012 Sewer Revenue and Refunding Bonds. Substantially all the funding for the escrow came from the $144.9 million Brightwater judgement awarded to the County in 2016. In November 2018, Water Quality issued $124.5 million in Sewer Revenue Bonds, Series 2018B, to fund its capital program. In December 2018, Water Quality remarketed two Junior Lien Variable Sewer Revenue Bonds, Series 2011 and 2012 at $100.0 million each. These were remarketed at fixed rates of 2.5 and 2.6 percent, respectively and are subject to mandatory repurchase in December 2020 and December 2021, respectively. Water Quality received $27.8 million in low interest state loans in 2018 at rates between 1.7 and 2.7 percent.

On April 19, 2018, Water Quality became the nation's first utility to receive a loan from the EPA's newly created Water Infrastructure Finance and Innovation Act (WIFIA) program – the first major federal assistance program for municipal utilities in almost 20 years. The $134.5 million loan for the Georgetown Wet Weather Treatment Station locks in a 3.1 percent interest rate through the 2051 final maturity date of the loan. Draws on this loan will reimburse Water Quality for costs incurred on the Georgetown project and must be made no later than one year after substantial completion of the project, which is currently scheduled for February of 2022. No draws were taken on this loan in 2019 and 2018. The WIFIA Loan will be evidenced by the County issuing a sewer revenue bond to the EPA.

The results of operations for 2019 and 2018 produced a debt service coverage ratio on senior lien debt of 1.85 and 1.72, respectively, exceeding the coverage covenant requirement of 1.15 in both years. The total debt coverage ratio of 1.58 in 2019 and 1.49 in 2018 exceeded the 1.15 policy minimum in both years.

Overview of the Financial Statements

This discussion and analysis are 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 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.

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 $415.3 million provided 77.4 percent of operating revenues in 2019 and $403.6 million provided 79.2 percent of operating revenues in 2018. 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 2019 and 2018, 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.

Overview of the Financial Statements (continued)

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.

Financial Analysis of the Statement of Net Position

Comparative data, stated in millions of dollars:

	Years Ended December 31,		
	2019	2018	2017
Current assets	$ 381.1	$ 297.9	$ 438.7
Noncurrent assets	289.1	310.9	242.4
Capital assets	4,112.8	4,096.1	4,077.8
Other	124.8	121.0	120.2
Total assets	4,907.8	4,825.9	4,879.1
Deferred outflows of resources	188.9	210.0	233.6
Total assets and deferred outflows of resources	5,096.7	5,035.9	5,112.7
Current liabilities	216.2	212.4	216.0
Noncurrent liabilities	3,994.3	4,019.4	4,146.0
Total liabilities	4,210.5	4,231.8	4,362.0
Deferred inflows of resources	59.5	58.4	54.1
Total liabilities and deferred inflows of resources	4,270.0	4,290.2	4,416.1
Net position - net investment in capital assets	422.9	353.1	180.7
Net position - restricted	230.6	237.8	235.9
Net positon - unrestricted	173.2	154.8	280.0
Total net position	$ 826.7	$ 745.7	$ 696.6

Net position serves as a useful indicator of Water Quality's financial position. As of December 31, 2019, and 2018, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $826.7 million and $745.7 million, respectively.

Financial Analysis of the Statement of Net Position (continued)

Of the total Water Quality assets and deferred outflows of resources, 80.7 percent or $4,112.8 million were invested in capital assets such as treatment plants, pumping and regulator stations, interceptors, and other equipment at year-end 2019. Net investment in capital assets increased by 19.8 percent or $69.8 million primarily due to new bond proceeds. For the year-end 2018, 81.3 percent or $4,096.1 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.

The net position increased by 10.9 percent or $81.0 million in 2019 to $826.7 million from $745.7 million in 2018. Changes in net position are largely due to increased sewage disposal, capacity charge and other operating revenues. Restricted net position decreased by 3.0 percent or $7.2 million in 2019 to $230.6 million from $237.8 million in 2018. Unused bond proceeds and bond reserves were lower in 2019. The unrestricted net position increased by $18.4 million in 2019 to $173.2 million from $154.8 million in 2018.

In 2018, the net position increased by 7.0 percent or $49.1 million to $745.7 million from $696.6 million in 2017. Restricted net position increased by 0.8 percent or $1.9 million in 2018 to $237.8 million from $235.9 million in 2017. The unrestricted net position decreased by $125.2 million in 2018 to $154.8 from $280.0 million in 2017. This reduction reflects the use of substantially all the $144.9 million Brightwater judgement awarded to the County in 2016 to fund an escrow for the defeasance of debt.

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

Comparative data, stated in millions of dollars:

	Years Ended December 31,		
	2019	2018	2017
Sewage treatment fees	$ 415.3	$ 403.6	$ 401.7
Capacity charge revenue	102.1	86.8	82.6
Other revenue	19.0	19.1	18.3
Operating revenues	536.4	509.5	502.6
Operating expenses	323.3	318.1	318.1
Operating income	213.1	191.4	184.5
Nonoperating (expenses)	(132.1)	(142.6)	(126.1)
Grant revenues	-	0.3	-
Change in net position	81.0	49.1	58.4
Net position beginning of year	745.7	696.6	638.2
Net positon end of year	$ 826.7	$ 745.7	$ 696.6

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 2019, operating revenues increased by 5.3 percent or $26.9 million to $536.4 million from $509.5 million in 2018. Operating expenses increased by 1.6 percent or $5.2 million to $323.3 million in 2019 from $318.1 million in 2018.

In 2018, operating revenues increased by 1.4 percent or $6.9 million to $509.5 million from $502.6 million in 2017. Operating expenses stayed the same at $318.1 million in 2018 and 2017.

Operating Revenues

In 2019, sewage disposal fee revenue increased by $11.7 million, 2.9 percent, to $415.3 million from $403.6 million in 2018 due to a 2.5 percent rate increase and an increased number of RCE's. Water Quality charged a monthly sewage treatment rate of $45.33 per RCE in 2019, and $44.22 in both 2018 and 2017. In 2018, sewage disposal revenues increased by 0.5 percent, or $1.9 million, to $403.6 million from $401.7 million in 2017.

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

Operating Revenues (continued)

A 3.0 percent increase in the 2019 capacity charge rate for new customers, continued growth in new connections and an increase in early payoff revenues contributed to a 17.6 percent, or $15.3 million, increase in overall capacity charge revenue of $102.1 million. In 2018, capacity charge revenue increased by 5.1 percent to $86.8 million from $82.6 million in 2017. Capacity charge early payoffs accounted for 30.6 percent of the 2019 capacity charge revenue compared to 25.5 percent in 2018 and 28.6 percent in 2017. This increase is attributable to the higher early payoff discount rate in 2019.

Other operating revenues totaling $19.0 million in 2019 decreased $100 thousand, or 0.5 percent, evidenced in an offset between bio-methane and methane sales. In 2018, other operating revenue increased 4.4 percent, or $800 thousand to $19.1 million from $18.3 million in 2017 due primarily to high strength surcharges in industrial waste.

Operating Expenses

In 2019, operating expenses, excluding depreciation, rose 3.1 percent or $4.3 million to $143.8 million compared to a 1.1 percent decrease, or $139.5 million in 2018. This change is due primarily to price increases on chemicals, large operating repairs and labor.

Utility and Service costs decreased 6.3 percent, or $2.4 million from $38.0 million in 2018 to $35.6 million in 2019. Utility and Service costs in 2018 increased 5.3 percent or $1.9 million from $36.1 million to $38.0 million. Electricity costs in 2019 rose by 2.7 percent, or $376 thousand, to $15.1 million from $14.7 million in 2018. In 2019, Water Quality continued to sell its methane rather than use it to generate electricity at South Treatment Plant. In 2018, electricity costs increased by 3.5 percent or $494 thousand to $14.7 million. Chemical costs increased $988 thousand or 10.6 percent in 2019 from $8.5 million to $9.4 million. In 2018, chemical costs rose $394 thousand or 4.9 percent from $8.1 million to $8.5 million. These essential operational costs are subject to market price fluctuation.

Intragovernmental expenses rose 0.3 percent, to $39.5 million in 2019 from $39.4 million in 2018. Increases in technology and insurance services were offset by decreases in GIS and legal services. In 2018, intragovernmental expenses grew 0.5 percent or $276 thousand, to $39.4 million from $39.2 million in 2017.

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

Non-operating Revenues and Expenses

Non-operating expenses (net) decreased by $10.5 million to $132.1 million in 2019 from $142.6 million in 2018. Higher investment earnings, lower short-term interest rates and fewer capital retirements contributed to the decrease. In 2018, non-operating expenses (net) increased by $16.5 million to $142.6 million from $126.1 million in 2017. Main contributors to the net increase were higher interest expense for variable rate debt and legal costs related to environmental remediation offset by increased investment earnings and a $10.1 million insurance recovery in 2017 on the West Point Treatment Plant flood event.

Capital Assets

At December 31, 2019, Water Quality's investment in capital assets, net of accumulated depreciation, was $4,112.8 million, reflecting an increase of $16.7 million or 0.4 percent more than the balance of $4,096.1 million at December 31, 2018. Capital assets net increase from December 31, 2017 to December 31, 2018 was $18.3 million or 0.4 percent.

Large 2019 construction project expenditures include:

- $44.3 million for Georgetown Wet Weather Treatment Station
- $23.6 million for Eastside Interceptor Phase 11
- $15.8 million for Sunset and Heathfield Pump Stations and Force Main Upgrade
- $ 7.8 million for North Mercer Island and Enatai Interceptor upgrade
- $ 7.1 million for Ovation Control Systems upgrade

Large 2018 construction project expenditures include:

- $33.1 million for Georgetown Wet Weather Treatment Station
- $26.3 million for Sunset and Heathfield Pump Stations and Force Main Upgrade
- $17.9 million for Magnolia CSO Control Improvements
- $12.2 million for Pacific Pump Station and Auburn West Interceptor (Kent Auburn Phase B)
- $ 7.3 million for North Mercer Island and Enatai Interceptor Upgrade

For more detailed information on capital assets, refer to Note 7 in the financial statements.

Debt Administration

In January of 2019, Water Quality voluntarily redeemed $1.6 million of principal on its Junior Lien Sewer Revenue Bonds, Series 2015A and 2015B. This is part of a financial practice whereby variable rate debt will be amortized so that each issue will be retired by its stated maturity date.

In June of 2019, Water Quality issued $148.1 million in Multi-Modal Limited Tax General Obligation Refunding Bonds, Series 2019A and Series 2019B to refund Junior Lien Sewer Revenue Bonds, Series 2015A and Series 2015B, and Junior Lien Sewer Revenue Bonds, Series 2017.

On October 7, 2019, Water Quality purchased and deposited Treasury securities in an irrevocable escrow to defease $22.5 million of outstanding Sewer Revenue and Refunding Bonds, Series 2012C, and $64.6 million of Limited Tax General Obligation Bonds, Series 2012B and Series 2012C. The escrow was funded from operations and excess bond reserves.

On October 24, 2019, Water Quality issued $101.0 million of Limited Tax General Obligation Bonds, Series 2019 with an average life of 13.2 years at an interest rate of 5.0 percent and an effective rate of 2.6 percent. This debt issue provided $128.2 million of proceeds for the capital program.

In January of 2018, Water Quality voluntarily redeemed $920 thousand of principal on its Junior Lien Sewer Revenue bonds, Series 2015A and 2015B. This is part of a financial practice whereby variable rate debt will be amortized so that each issue will be retired by its stated maturity date.

In April of 2018, Water Quality entered into a WIFIA loan agreement with the EPA for $134.5 million at a 3.1 percent interest rate. Draws on this loan will reimburse costs on the Georgetown Wet Weather Treatment Station through January of 2023. No draws were taken on the loan in 2019 and 2018.

On October 25, 2018, Water Quality purchased and deposited Treasury securities in an irrevocable escrow to defease $135.8 of outstanding Sewer Revenue and Refunding Bonds, Series 2010, 2011B and 2012. The escrow was funded using the bulk of the $144.9 million Brightwater judgement awarded in 2016. On November 5, 2018 Water Quality sold $124.5 million of sewer revenue bonds with an average life of 7.9 years at an interest rate of 5.0 percent and an effective rate of 3.0 percent. This debt issue provided $142.0 million of proceeds for the capital program.

On December 3, 2018, Water Quality remarketed $100.0 million of Junior Lien Variable Rate Demand Sewer Revenue Bond, Series 2011 with an average life of 2 years at an average rate of 2.5 percent and an effective rate of 2.6 percent. Additionally, Water Quality remarketed $100.0 million of Junior Lien Variable Rate Demand Sewer Revenue Bond, Series 2012 with an average life of 3 years at an average rate of 2.6 percent and an effective rate of 2.7 percent. On the mandatory repurchase dates of December 1, 2020 and December 1, 2021, respectively, Water Quality may affect a conversion of the Series to another authorized interest rate mode. Maturity dates on both remain at January 1, 2042 and January 1, 2043, respectively.

Debt Administration (continued)

Water Quality has $2.6 billion of sewer revenue bonds and variable rate revenue bonds outstanding at the end of 2019 and had $2.8 billion of sewer revenue bonds and variable rate revenue bonds outstanding at the end of 2018. 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 2019, Water Quality has $839.4 million of general obligation bonds and variable rate general obligation bonds outstanding and had $676.6 million of general obligation bonds and variable rate general obligation bonds outstanding at the end of 2018. 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 Sewer Enterprise parity revenue bonds ratings of AA+ from Standard and Poor's (S&P) Global Ratings and Aa1 from Moody's Investors Service were affirmed in June 2019. Water Quality's bond ratings on its limited tax general obligation bonds of AAA by Standard and Poor's and Aaa by Moody's Investors Service were affirmed in October 2019.

As required by bond covenant, Water Quality maintains a bond reserve account, which is funded by cash, Treasury securities investment and surety bond policies. At December 31, 2019, the cash and investment balance in the reserve account was $140.4 million and with a surety bond balance of $29.6 million, totaling $170.0 million. This balance exceeded the reserve account requirement of maximum annual debt service on the parity bonds by $7.1 million. In October 2019, excess funds in the reserve account of $10.1 million were contributed to the defeasance of outstanding debt. At December 31, 2019 and 2018, respectively, the rate stabilization, liquidity, and asset management financial policy reserves totaled $81.7 million.

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

Debt Service Coverage Ratios

	Year Ended December 31,	
	2019	2018
Parity and parity lien debt	1.85	1.72
Total debt	1.58	1.49

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, 2019 and 2018. 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, 2019	December 31, 2018
CURRENT ASSETS		
Cash and cash equivalents	$ 323,751	$ 240,584
Restricted cash and cash equivalents	4,531	2,757
Accounts receivable, net	40,145	38,807
Due from other funds	3,006	2,498
Inventory of supplies	9,625	9,545
Prepayments	11	368
	381,069	294,559
NONCURRENT ASSETS		
Restricted assets		
Cash and cash equivalents	273,412	295,889
Investments	15,727	15,038
	289,139	310,927
Capital assets		
Building and land improvements	2,176,357	2,147,297
Artwork	6,045	6,045
Infrastructure and right of way	2,473,263	2,420,740
Plant in service and other equipment	1,185,872	1,173,465
Less accumulated depreciation	(2,431,259)	(2,282,831)
	3,410,278	3,464,716
Land and easements	264,335	264,335
Construction work in progress	438,160	367,025
	4,112,773	4,096,076
Other noncurrent		
Regulatory assets, net of amortization	118,258	117,791
Other assets	6,586	6,575
	124,844	124,366
Total assets	4,907,825	4,825,928
DEFERRED OUTFLOWS OF RESOURCES		
Deferred outflows on refunding	182,410	205,124
Deferred outflows on other postemployment benefits	36	41
Deferred outflows on pension	5,170	4,797
Deferred outflows on asset retirement	1,250	-
Total deferred outflows of resources	188,866	209,962
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	$ 5,096,691	$ 5,035,890

See accompanying notes.

Statements of Net Position (continued) (in thousands)

	December 31, 2019	December 31, 2018
CURRENT LIABILITIES		
Accounts payable	$ 26,773	$ 29,177
Retainage payable	4,531	2,757
Due to other funds	24	37
Interest payable	68,569	67,307
Wages and benefits payable	4,678	3,430
Compensated absences	851	735
Taxes payable	15	36
Unearned revenue	2,966	2,475
State loans payable	17,348	16,538
General obligation bonds payable	22,900	21,760
Revenue bonds payable	62,675	63,170
Environmental remediation liability	4,561	4,825
Deposits and other liabilities	297	193
	216,188	212,440
NONCURRENT LIABILITIES		
Compensated absences	10,266	10,341
Other postemployment benefits	1,526	1,533
Net pension liability	5,962	17,200
State loans payable, net	208,873	212,936
General obligation bonds payable, net	900,270	725,138
Revenue bonds payable, net	2,748,909	3,009,327
Environmental remediation liability	39,947	41,729
Asset retirement obligation	1,500	-
Other liabilities	77,010	1,131
	3,994,263	4,019,335
Total liabilities	4,210,451	4,231,775
DEFERRED INFLOWS OF RESOURCES		
Regulatory credits - rate stabilization	46,250	46,250
Deferred inflows on other postemployment benefits	104	119
Deferred inflows on pension	13,168	12,012
Total deferred inflows of resources	59,522	58,381
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	4,269,973	4,290,156
NET POSITION		
Net investments in capital assets	422,889	353,122
Restricted for		
Debt service	153,850	163,364
Regulatory assets and environmental liabilities	76,763	74,488
Unrestricted	173,216	154,760
Total net position	$ 826,718	$ 745,734

See accompanying notes.

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

	Years Ended December 31, 2019	2018
OPERATING REVENUES		
Sewage disposal fees	$ 415,279	$ 403,589
Other operating revenues	121,170	105,961
Total operating revenues	536,449	509,550
OPERATING EXPENSES		
Sewage treatment, disposal, and transmission	106,891	101,681
General and administrative	36,944	37,904
Depreciation and amortization	179,547	178,517
Total operating expenses	323,382	318,102
OPERATING INCOME	213,067	191,448
NONOPERATING REVENUES (EXPENSES)		
Investment earnings	15,767	9,969
Interest expense	(138,563)	(142,283)
Loss on disposal and impairment of capital assets	(4,778)	(8,714)
Loss on extinguishment of debt	(5,451)	(1,786)
Other	942	269
Total nonoperating expenses	(132,083)	(142,545)
INCOME BEFORE GRANTS	80,984	48,903
Capital grants	-	273
CHANGE IN NET POSITION	80,984	49,176
NET POSITION		
Beginning of year (restated)	745,734	696,558
End of year	$ 826,718	$ 745,734

See accompanying notes.

Statements of Cash Flows (in thousands)

	Years Ended December 31, 2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers	$ 541,372	$ 541,476
Cash received from other funds - internal services	1,574	1,816
Cash payments to suppliers for goods and services	(52,270)	(56,354)
Cash payments to other funds - internal services	(39,486)	(39,437)
Cash payments for employee services	(60,309)	(58,161)
Other receipts	76,177	5
Other payments	(18,730)	(12,449)
Net cash provided by operating activities	448,328	376,896
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Transfers out	(960)	(982)
Assistance to other agencies	-	(494)
Net cash used in noncapital financing activities	(960)	(1,476)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition of capital and other utility assets	(191,922)	(212,376)
Proceeds from disposal of capital assets	57	430
Principal paid on capital debt	(103,850)	(102,207)
Interest paid on capital debt	(150,008)	(153,484)
Proceeds of new bond issuance	128,218	142,037
Proceeds of state loans	13,997	27,843
Cash payments for bond defeasance	(96,288)	(144,199)
Capital grants received	-	15
Net cash used in capital and related financing activities	(399,796)	(441,941)
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest on investments	15,581	9,637
Investment purchases	(689)	(15,000)
Net cash provided by (used in) investing activities	14,892	(5,363)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	62,464	(71,884)
CASH AND CASH EQUIVALENTS		
Beginning of year	539,230	611,114
End of year	$ 601,694	$ 539,230

See accompanying notes.

King County Water Quality Enterprise Fund
Statements of Cash Flows (in thousands)

	Years Ended December 31, 2019	2018
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income	$ 213,067	$ 191,448
Adjustments to reconcile operating income to net cash provided by operating activities		
Depreciation and amortization	167,777	175,699
Other nonoperating revenue and expense	2,658	9,036
Changes in assets		
Accounts receivable	(1,338)	15,636
Due from other funds	(1)	-
Inventory of supplies	(80)	(14)
Prepayments	357	211
Other assets	(476)	(805)
Changes in deferred outflows of resources		
Deferred outflows on other postemployment benefits	5	(41)
Deferred outflows on pension	(373)	969
Deferred outflows on asset retirement	251	-
Changes in liabilities		
Accounts payable	826	(2,107)
Retainage payable	41	163
Due to other funds	(14)	12
Taxes payable	(21)	20
Unearned revenue	491	150
Wages and benefits payable	1,091	331
Compensated absences	40	(188)
Other postemployment benefits	(7)	(118)
Net pension liability	(11,238)	(17,912)
Other liabilities	74,130	99
Changes in deferred inflows of resources		
Deferred inflows on other postemployment benefits	(14)	119
Deferred inflows on pension	1,156	4,188
Total adjustments	235,261	185,448
NET CASH PROVIDED BY OPERATING ACTIVITIES	$ 448,328	$ 376,896

NONCASH INVESTING, CAPITAL, AND FINANCING ACTIVITIES

Water Quality reported capital grants on account of $258 thousand at 2018 year-end and no capital grants in 2019.

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 2019 and in 2018.

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 $39.5 million and $39.4 million in 2019 and 2018, 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 surplus balances held with the King County Treasurer in the King County Investment Pool (the Pool) except the amounts invested through the Pool-Plus program, cash with escrow agents or held in trust, and petty cash. Water Quality records its investments in the Pool-Plus program at fair value. Unrealized gain or loss on Water Quality's proportionate share of the pooled investments and individual investments is reported as a component of investment earnings.

Note 1 – Operations and Accounting Policies (continued)

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, 2019 and 2018, Water Quality's allowance for doubtful accounts was $1.1 million and $997 thousand, respectively. Water Quality has the ability to place a lien on properties owned by customers for uncollected capacity charges. Water Quality reported notes receivable of $4.6 million at 2019 year-end and $4.3 million at 2018 year-end for capacity charge account balances over 365 days old.

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

Note 1 – Operations and Accounting Policies (continued)

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

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. No impairment was identified in 2019 or 2018.

g. **Compensated absences** – Employees earn vacation based upon their date of hire and years of service. Employees hired prior to January 1, 2018 have a maximum vacation accrual of 480 hours, while those hired January 1, 2018 or after have a maximum vacation accrual of 320 hours unless the employee's collective bargaining unit agreement specifies a different maximum. Unused vacation at retirement or normal termination is considered vested and payable to the employee, up to the employee's maximum accrual. Employees also earn up to 12 days of sick leave per year and may accumulate sick leave balances without limit. If the employee is leaving their employment due to death or retirement, they are paid for 35 percent of the value of unused sick leave with no maximum. Vacation pay, a portion of sick leave liabilities, and compensatory time in lieu of overtime pay, 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 exception rules are met. The liability is recognized during the period the excess interest is earned. Water Quality has no liability as of December 31, 2019 and 2018.

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, postemployment benefits other than pensions (OPEB) and asset retirement obligation accounting. Deferred inflows of resources include certain amounts related to pension and OPEB accounting and rate stabilization.

Note 1 – Operations and Accounting Policies (continued)

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.

   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 reported capital grant revenues of $273 thousand for the year ended December 31, 2018.

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 is reported as unrestricted.

n. **Net position flow assumption** – Sometimes Water Quality will fund outlays for a particular purpose from both restricted (e.g., restricted bond or grant proceeds) and unrestricted resources. In order to calculate the amounts to be reported as restricted net position and unrestricted net position, a flow assumption must be made about the order in which the resources are considered to be applied. It's the County's policy to consider restricted net position to have been depleted before unrestricted net position is applied.

o. **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 and other postemployment benefits liabilities and related deferred outflows and inflows of resources, and future interest rates. Actual results could differ from these estimates.

Note 1 – Operations and Accounting Policies (continued)

p. **Reclassification** – Certain reclassifications have been made to the prior year statements to conform to the current year presentation

New accounting standards – The following GASB pronouncements were implemented during the current year.

GASB Statement No. 83, *Certain Asset Retirement Obligations*, is effective for fiscal years beginning after June 15, 2018. This Statement addresses accounting and financial reporting for certain asset retirement obligations. Water Quality implemented the statement in 2019 and made reporting changes to meet the requirements.

GASB Statement No. 84, *Fiduciary Activities*, is effective for fiscal years beginning after December 15, 2018. This Statement improves guidance regarding the identification of fiduciary activities for accounting and financial reporting. The statement was implemented by Water Quality in 2019 with no material impact on its financial statements.

GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, is effective for fiscal years beginning after June 15, 2018. The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. Water Quality implemented this statement in 2019 and made reporting changes to comply with the requirements.

GASB Statement No. 90, *Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61*, is effective for fiscal years beginning after December 15, 2018. This Statement improves financial reporting by providing users of financial statements with essential information related to presentation of majority equity interests in legally separate organizations that previously was reported inconsistently. In addition, requiring reporting of information about component units if the government acquires a 100 percent equity interest provides information about the cost of services to be provided by the component unit in relation to the consideration provided to acquire the component unit. This statement was adopted by Water Quality in 2019 with no impact on its financial statements.

Note 2 – Deposits and Investments 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.

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

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. The deposits that are not covered by the Federal Deposit Insurance Corporation (FDIC) are collateralized by the Public Deposit Protection Commission of the State of Washington (PDPC) at no less than fifty percent. Effective June 7, 2018, resolution 2018-1 adopted by Commission on June 1, 2018, allowed "all well capitalized public depositaries may collateralize uninsured public deposits at no less than fifty percent." The PDPC is a statutory authority established under Chapter 39.58 RCW that governs public depositaries and provides that "all public funds deposited in public depositaries, including investment deposits and accrued interest thereon, shall be protected against loss, as provided in the chapter." It constitutes a multiple financial institution collateral pool that can make *pro rata* assessments to all public depositaries within the state for their public deposits. PDPC protection is of the nature of collateral, not of insurance.

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 $601.7 million and $539.2 million were fully invested in the Pool as of December 31, 2019 and 2018, respectively. The County had demand deposits of $39.9 million as of December 31, 2019, of which $13.7 million was exposed to custodial credit risk as uninsured and uncollateralized. As of December 31, 2018, the County had demand deposits of $29.1 million, of which $6.9 million was exposed to custodial credit risk as uninsured and uncollateralized.

The EFC adopted the Pool-Plus program which allows County agencies or junior taxing districts to invest funds beyond the maximum maturity limit established for the Pool. This policy provides an investment option that allows a participant in the Pool to combine a portfolio of individual long-term securities in the same fund that is invested in the Pool. The pooling of the long-term portfolio with the Pool provides the ability to invest at durations longer than the Pool while maintaining access to the liquidity of the Pool. The Pool-Plus program allows qualifying funds to invest over longer durations recognizing there are: (1) potential risks such as increased price volatility and the possibility of selling securities before maturity to pay unexpected expenditures could result in a loss of principal; (2) benefits from reducing reinvestment risk which improves the predictability of future budget revenue; (3) and potential rewards such as increased earnings.

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

The Pool is used for the liquidity portion of the portfolio while the following investment types are used for the longer term investments:

- U.S. treasuries or securities with full faith and credit of the U.S. government backing them.

- 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). While these agencies have credit ratings equivalent to the U.S. government, they are not explicitly guaranteed by the U.S. government. Financial market participants view them as having an “implied guarantee” because these agencies were chartered by Congress.

Water Quality participated in the Pool-Plus program starting in 2018 and recorded Individual Investments at fair value of $15.6 million and $15.0 million as of December 31, 2019 and 2018. Water Quality accrued $99 thousand interest on its investments at 2019 year-end. The following schedule shows the types of investments, the average interest rate, and the effective duration limits of the Pool-Plus program at December 31 (dollars in thousands):

	Fair Value	Principal	Average Interest Rate	Effective Duration (Yrs)
2019				
Investment type				
U.S. Treasury notes	$ 15,628	$ 15,262	2.53%	4.200
2018				
Investment type				
U.S. Treasury notes	$ 15,038	$ 15,321	2.45%	4.160

The U.S. Treasury notes are valued using quoted prices in active markets. The U.S. Treasury notes with AA credit rating is backed by full faith and credit of the U.S. government.

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, 2019, the Pool was not rated by a Nationally Recognized Statistical Rating Organization (NRSRO). In compliance with state statutes, Pool policies authorize investments in 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 depositaries, repurchase agreements, and the Local Government Investment Pool managed by the Washington State Treasurer’s office.

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

The Pool's policies limit the maximum amount that can be invested in various securities. At 2019 and 2018 year-end the Pool was in compliance with these policies. The Pool's actual composition, as of December 31, 2019 and 2018, is as follows (in thousands):

	2019		2018	
	Total	Allocation Percentage	Total	Allocation Percentage
Investment type				
Repurchase agreements	$ 242,000	3.25%	$ 366,000	4.91%
Commercial paper	545,325	7.32%	576,197	7.73%
U.S. Agency discount notes	408,240	5.48%	73,880	0.99%
Supranational discount notes	49,956	0.67%	49,927	0.67%
Corporate notes	661,244	8.88%	964,179	12.93%
Corporate notes floating rate	213,653	2.87%	99,948	1.34%
U.S. Treasury notes	2,768,359	37.15%	2,873,869	38.53%
U.S. Agency notes	456,309	6.13%	648,763	8.70%
U.S. Agency collateralized mortgage obligations	3,444	0.05%	4,031	0.05%
Supranational coupon notes	1,476,026	19.81%	1,212,097	16.25%
State treasurer's investment pool	625,256	8.39%	589,306	7.90%
	$ 7,449,812	100.00%	$ 7,458,197	100.00%

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 2019 year-end the Pool had concentrations greater than 5.0 percent of the total investment pool portfolio in the following issuer: International Bank Recon, 8.3 percent. The issues with concentrations greater than 5.0 percent of the pool portfolio at 2018 year-end were as follows: International Bank Recon, 7.3 percent, and Bank of Montreal, 5.4 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 0.919 years and 0.943 years at December 31, 2019 and 2018, respectively.

Note 2 – Deposits and Investments 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, 2019 and 2018.

KING COUNTY INVESTMENT POOL

		Fair Value Measurement Using		
Investments by Fair Value Level	Fair Value 12/31/2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Commercial paper	$ 545,325	$ -	$ 545,325	$ -
U.S. agency discount notes	408,240	-	408,240	-
Corporate notes	661,244	-	661,244	-
Corporate notes floating rate	213,653	-	213,653	-
U.S. treasury notes	2,768,359	2,768,359	-	-
U.S. agency notes	456,309	-	456,309	-
Supranational discount notes	49,956	-	49,956	-
U.S. agency collateralized mortgage obligations	3,444	-	3,444	-
Supranational coupon notes	1,476,026	-	1,476,026	-
Subtotal	6,582,556	$ 2,768,359	$ 3,814,197	$ -
Investments Measured at Amortized Cost (Not Subject to Fair Value Hierarchy)				
Repurchase agreements	242,000			
State treasurer's investment pool	625,256			
Subtotal	867,256			
Total investment in Investment Pool	$ 7,449,812			

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

KING COUNTY INVESTMENT POOL

		Fair Value Measurement Using		
Investments by Fair Value Level	Fair Value 12/31/2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Commercial paper	$ 576,197	$ -	$ 576,197	$ -
U.S. agency discount notes	73,880	-	73,880	-
Corporate notes	964,179	-	964,179	-
Corporate notes floating rate	99,948	-	99,948	
U.S. treasury notes	2,873,869	2,873,869	-	-
U.S. agency notes	648,763	-	648,763	-
Supranational discount notes	49,927		49,927	
U.S. agency collateralized		-		
mortgage obligations	4,031	-	4,031	-
Supranational coupon notes	1,212,097	-	1,212,097	-
Subtotal	6,502,891	$ 2,873,869	$ 3,629,022	$ -
Investments Measured at Amortized Cost (Not Subject to Fair Value Hierarchy)				
Repurchase agreements	366,000			
State treasurer's investment pool	589,306			
Subtotal	955,306			
Total investment in Investment Pool	$ 7,458,197			

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.

Note 3 – Restricted Assets

A significant portion of Water Quality's assets are restricted to use by legal and contractual provisions and by fiscal management policy. Restricted assets comprise cash and cash equivalents of $277.9 million and investments of $15.7 million at December 31, 2019, and cash and cash equivalents of $298.6 million and investments of $15.0 million at December 31, 2018, 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 $4.5 million and $2.8 million at December 31, 2019 and 2018, respectively. The details of cash and cash equivalents and restricted assets as of December 31, 2019 and 2018 are as follows (in thousands):

	2019	2018
Unrestricted cash and cash equivalents		
Operating funds	$ 41,567	$ 42,064
Construction funds	39,520	31,764
Bond funds	133,933	131,912
Unallocated insurance recoveries	73,304	-
Policy reserves	35,427	34,844
Total unrestricted cash and cash equivalents	323,751	240,584
Restricted cash and cash equivalents		
Bond reserves	124,638	135,454
SRF loan reserves	13,485	12,873
Bond proceeds committed to construction	89,039	101,312
Retainage	4,531	2,757
Rate stabilization reserve	46,250	46,250
Total restricted cash and cash equivalents	277,943	298,646
Total cash and cash equivalents	601,694	539,230
Restricted investments		
Bond reserves	15,727	15,038
Total restricted assets - cash and cash equivalents and investments	$ 293,670	$ 313,684

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.

Note 4 – Risk Management (continued)

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.

Water Quality claims paid by the Insurance Fund of King County were less than one thousand during 2019 and $52 thousand during 2018. In the past three years there was no occurrence that resulted in payment in excess of the self-insured retention of $6.5 million.

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, 2019, bonds outstanding include $2,572.7 million of serial and term bonds maturing from January 1, 2020, through January 1, 2052, bearing interest at stated rates of 1.0 percent to 5.0 percent per annum.

In January of 2019, the County voluntarily redeemed $1.6 million of principal on its Junior Lien Sewer Revenue bonds, Series 2015A and Series 2015B.

On October 7, 2019, the County purchased Treasury securities at a cost of $24.9 million and placed them in an escrow to pay interest and redeem at their earliest redemption dates $22.5 million of outstanding Sewer Revenue and Refunding Bonds, Series 2012C. Under the terms of the authorizing ordinances, these bonds have been defeased and are no longer secured by a pledge of the revenue of the sewer system. The defeasance of these bonds will reduce future principal and interest payments by $35.0 million through January 1, 2032. Funding for the escrow came from operations and excess in bond reserves. Water Quality undertook the defeasance in order to reduce future debt service.

In January of 2018, the County voluntarily redeemed $920 thousand of principal on its Junior Lien Sewer Revenue bonds, Series 2015A and Series 2015B.

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

On October 25, 2018, the County purchased Treasury securities at a cost of $144.2 million and placed them in an escrow to pay interest and redeem at their earliest redemption dates of $135.8 million of outstanding Sewer Revenue and Refunding Bonds, Series 2010, 2011B and 2012. Under the terms of the authorizing ordinances, these bonds have been defeased and are no longer secured by a pledge of the revenue of the sewer system. The defeasance of these bonds will reduce future principal and interest payments by $193.6 million through 2032. Substantially all of the funding for the escrow came from the judgement awarded to Water Quality in 2016 relating to the construction of the conveyance tunnels for its Brightwater treatment plant. Water Quality undertook the defeasance in order to reduce a portion of the debt that it had incurred as a result of the additional costs that led to the litigation and subsequent judgement.

On November 5, 2018, the County issued $124.5 million in sewer revenue bonds, Series 2018B with an effective interest cost of 3.0 percent and an average coupon interest rate of 5.0 percent.

In December 2018, the County remarketed two Junior Lien Variable Sewer Revenue Bonds, Series 2011 and 2012 at $100.0 million each. These were remarketed at a fixed rate of 2.5 and 2.6 percent, respectively, and are subject to mandatory repurchase in December 2020 and December 2021, respectively. The bonds maturity dates of January 1, 2042 and January 1, 2043, respectively, remain the same.

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.

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

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

	Final Maturity	Interest Rates	Original Issue Amount	Outstanding at December 31, 2019
2001A-B Junior Lien Variable	1/1/32	(variable)	$ 100,000	$ 100,000
2010 Revenue and Refunding	1/1/50	2.00-5.00%	334,365	37,610
2011 Sewer Revenue	1/1/41	5.00%	175,000	8,190
2011 Series B	1/1/41	1.00-5.00%	494,270	45,890
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	89,785
2012B Refunding	1/1/35	4.00-5.00%	64,260	64,260
2012C Refunding	1/4/33	2.50-5.00%	65,415	37,520
2012 Sewer Junior Lien Variable	1/1/43	(variable)	100,000	100,000
2013A Refunding	1/1/35	2.00-5.00%	122,895	103,515
2013B Revenue and Refunding	1/1/44	2.00-5.00%	74,930	56,865
2014A Refunding	1/1/47	5.00%	75,000	75,000
2014B Refunding	7/1/35	1.00-5.00%	192,460	181,490
2015A Refunding	7/1/47	3.00-5.00%	474,025	470,475
2015B Refunding	1/1/46	4.00-5.00%	93,345	75,985
2016A Refunding	7/1/41	4.00-5.00%	281,535	273,975
2016B Refunding	7/1/49	4.00-5.00%	499,655	492,005
2017A Refunding	7/1/49	5.00%	149,485	127,840
2018B Sewer Revenue	7/1/32	5.00%	124,455	124,455
			$ 3,657,985	$ 2,572,745

General obligation bonds – As of December 31, 2019, bonds outstanding include $839.4 million of serial and term bonds maturing January 1, 2020, through 2046, bearing interest at stated rates of 2.0 percent to 5.25 percent per annum.

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

On June 27, 2019, the County issued $148.1 million in Multi-Modal Limited Tax General Obligation Refunding Bonds, Series 2019A ($100.0 million) and Series 2019B ($48.1 million), to refund the County's Junior Lien Sewer Revenue Bonds, 2015 Series A and 2015 Series B, and Junior Lien Sewer Revenue Bonds, Series 2017. Both series of 2019 bonds are variable rate obligations, with daily interest rate resets for 2019A and weekly resets for 2019B. The projected net savings from this refunding are $4.5 million. The refunded 2015 and 2017 bonds were variable rate obligations with monthly resets of their interest rates.

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

On October 7, 2019, the County purchased Treasury securities at a cost of $71.4 million and placed them in an escrow to pay interest and redeem at their earliest redemption dates $64.6 million of outstanding Limited Tax General Obligations Refunding Bonds, Series 2012B and Series 2012C. Under the terms of the authorizing ordinances, these bonds have been defeased and are no longer secured by a pledge of the revenue of the sewer system. The defeasance of these bonds will reduce future principal and interest payments by $104.3 million through January 1, 2034. Funding for the escrow came from operations. Water Quality undertook the defeasance in order to reduce future debt service.

On October 24, 2019, the County issued $101.0 million in Limited Tax General Obligation Bonds, Series 2019A with an effective interest cost of 2.6 percent and an average coupon interest rate of 5.0 percent.

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

	Final Maturity	Interest Rates	Original Issue Amount	Outstanding at December 31, 2019
2008 LTGO	1/1/34	5.25%	$ 236,950	$ 21,020
2012A LTGO	1/1/25	2.00-5.00%	68,395	48,460
2012B LTGO	1/1/29	5.00%	41,725	30,500
2012F LTGO	12/1/22	2.20%	3,010	3,010
2015A LTGO	7/1/38	2.00-5.00%	247,825	247,395
2017A LTGO	1/1/34	4.00-5.00%	154,560	139,840
2017A-B Multi-Modal LTGO	1/1/40	(variable)	100,000	100,000
2019A LTGO	1/1/38	5.00%	101,035	101,035
2019A MM LTGO WQ	1/1/46	(variable)	100,000	100,000
2019B MM LTGO WQ	1/1/46	(variable)	48,095	48,095
			$ 1,101,595	$ 839,355

Prior year refunded and defeasance of debt – As of December 31, 2019, Water Quality had outstanding refunded and defeased general obligation bonds and sewer revenue bonds in the amount of $721.5 million. Water Quality defeased these bonds prior to 2019 and placed proceeds of the refunding bonds and/or existing cash from Water Quality in irrevocable trust accounts to provide for future debt service payments on the defeased bonds. The liability for the defeased bonds has been removed from Water Quality's financial statements.

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 administered by the Washington State Department of Commerce. The loans require either semi-annual or annual payments of principal and interest from 2020 through 2053 and bear interest at stated rates from 0.0 percent to 3.1 percent. As of December 31, 2019, the balance due on all state loans is $226.2 million and the unused portion of state loan agreements is $13.5 million. Water Quality maintains separate cash reserves of $13.5 million as of December 31, 2019. These reserves are treated as restricted, being required under the Revolving Fund Loan Program.

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

State loans are secured by a subordinate lien on the net revenues of the system. Events of default under the loan agreements with the Department of Ecology include nonpayment of amounts due, failure to commence the project for which the loan was granted and unjustified failure to perform loan agreement obligations. Remedies include suspending any undisbursed loan proceeds and acceleration of the outstanding balance, provided that the loan is not subject to acceleration if any sewer revenue bonds are outstanding. Any state funds owed to the County may also be withheld. Events of default under the loan agreements with the Public Works Trust Fund include nonpayment of amounts due and failure to use loan proceeds for permitted activities. Remedies include withholding of any undisbursed loan proceeds, assessment of additional interest and notification to creditors.

Water Infrastructure Finance and Innovation Act (WIFIA) loan – Water Quality has a $134.5 million WIFIA loan agreement with the U.S. Environmental Protection Agency. No draws have been taken on this loan as of December 31, 2019. The WIFIA loan, after draws are made, will be secured by a pledge of revenue of the sewer system subject to payment of all operating and maintenance expenses of the sewer system.

At December 31, 2019, the required principal and interest payments for all classes of long-term debt are as follows (in thousands):

	Revenue Bonds		General Obligation Bonds		State Loans		
Year(s) Beginning	Principal	Interest	Principal	Interest	Principal	Interest	Total
January 1,2020	$ 62,675	$ 114,409	$ 22,900	$ 34,229	$ 17,348	$ 4,985	$ 256,546
January 1,2021	60,910	111,492	15,800	40,375	17,247	4,653	250,477
January 1,2022	69,690	108,668	29,885	39,313	16,549	4,319	268,424
January 1,2023	68,750	105,555	37,485	37,899	15,881	3,988	269,558
January 1,2024	67,275	102,306	28,055	36,239	16,335	3,651	253,861
January 1, 2025-2029	356,385	460,703	160,900	158,682	63,346	13,504	1,213,520
January 1, 2030-2034	548,705	359,202	195,405	113,873	54,019	6,379	1,277,583
January 1, 2035-2039	488,320	236,847	200,830	78,498	18,815	1,477	1,024,787
January 1, 2040-2044	563,465	125,171	-	39,986	2,122	729	731,473
January 1, 2045-2049	258,360	36,036	148,095	15,994	2,416	432	461,333
January 1, 2050-2053	28,210	2,162	-	-	2,144	104	32,620
	$ 2,572,745	$ 1,762,551	$ 839,355	$ 595,088	$ 226,222	$ 44,221	$ 6,040,182

The future annualized interest payments for the variable rate 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. Interest payments on the Junior Lien Variable Sewer Revenue Bonds, Series 2011 and 2012, are based on the stated interest rates of 2.5 and 2.6 percent, respectively that will be paid through their mandatory purchase dates.

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

Variable rate general obligation and revenue bonds – The 2001 Series A and B Junior Lien Variable Rate Bonds are secured by a periodically renewable letter of credit in the amount of $101.7 million with Landesbank Hessen-Thuringen Girozentrale (Helaba) which will terminate should Water Quality default on any payments and other obligations under its reimbursement agreement with Helaba. In the event of a default, Helaba may demand immediate payment of all amounts owed to it, including any bonds that it has purchased from 2001 Series A and B bondholders. The letter of credit expires September 30, 2020.

The County's $100.0 million Limited Tax General Obligation Refunding Bonds (Payable from Sewer Revenues), Series 2017 A and B are direct placements and are secured by a subordinate lien on the net revenues of the system. Events of default under the continuing covenant agreement for the bond include nonpayment of amounts due and ratings downgrades below BBB/Baa2. The continuing covenant agreement expires on April 5, 2021.

The 2019 Series A and Series B Multi-Modal Variable Rate Bonds in the amount of $148.1 million are supported by a periodically renewable standby bond purchase agreement that expires on June 26, 2024.

The variable rate bonds, Series 2001A and B, Series 2017A and B and Series 2019 A and B have acceleration clauses (declaring outstanding balances immediately due). The variable rate bonds, Series 2011, Series 2012, 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 $35.4 million at December 31, 2019.

Compliance with bond resolutions – With respect to the year ended December 31, 2019, Water Quality complied with all financial covenants stipulated by its bond resolutions.

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

Changes in long-term liabilities – Long-term liability activity for the years ended December 31, 2019 and 2018 was as follows (in thousands):

	Balance January 1, 2019	Additions	Reductions	Balance December 31, 2019	Due Within One Year
Bonds payable	$ 3,384,125	$ 249,130	$ (321,155)	$ 3,312,100	$ 85,575
Direct placements-bonds payable	100,000	-	-	100,000	-
Bond premiums and discounts	335,270	18,993	(31,609)	322,654	-
Total bonds payable	3,819,395	268,123	(352,764)	3,734,754	85,575
Direct borrowings-state loans	229,474	13,997	(17,250)	226,221	17,348
Compensated absences	11,076	11,281	(11,240)	11,117	851
Other post-employment benefits	1,533	82	(89)	1,526	-
Net pension liability	17,200	25,313	(36,551)	5,962	-
Environmental remediation	46,554	2,313	(4,359)	44,508	4,561
Asset retirement obligations	1,500	-	-	1,500	-
Other liabilities	1,319	76,177	(194)	77,302	292
Total long-term liabilities	$ 4,128,051	$ 397,286	$ (422,447)	$ 4,102,890	$ 108,627

	Balance January 1, 2018	Additions	Reductions	Balance December 31, 2018	Due Within One Year
Bonds payable	$ 3,481,265	$ 324,455	$ (421,595)	$ 3,384,125	$ 84,930
Direct placements-bonds payable	100,000	-	-	100,000	-
Bond premiums and discounts	358,944	6,512	(30,186)	335,270	-
Total bonds payable	3,940,209	330,967	(451,781)	3,819,395	84,930
State loans	218,044	27,843	(16,413)	229,474	16,538
Compensated absences	11,265	10,934	(11,123)	11,076	735
Other post-employment benefits	1,652	635	(754)	1,533	-
Net pension liability	35,112	19,675	(37,587)	17,200	-
Environmental remediation	46,460	9,658	(9,564)	46,554	4,825
Other liabilities	1,355	174	(210)	1,319	188
Total long-term liabilities	$ 4,254,097	$ 399,886	$ (527,432)	$ 4,126,551	$ 107,216

Note 6 – Asset Retirement Obligations

In 2019, Water Quality reported the ARO of $1.5 million in accordance with GASB Statement No. 83, *Certain Asset Retirement Obligations*. The liability is measured at its current value and based on professional judgment, experience, and historical cost data.

Water Quality's ARO relates to the disposition of underground storage tanks (USTs) due to applicable regulations and requirements. The estimated remaining useful life of the USTs range from four to twenty-two years.

The liability could change over time as new information becomes available as a result of changes in technology, legal or regulatory requirements, and types of equipment, facilities or services that will be used to meet the obligation to dispose of the USTs.

Note 7 – Changes in Capital Assets

Changes in capital assets for the years ended December 31, 2019 and 2018, are shown in the following table (in thousands):

	Balance January 1, 2019	Increases	Decreases	Balance December 31, 2019
Land	$ 248,766	$ -	$ -	$ 248,766
Easements	15,569	-	-	15,569
Construction work in progress	367,025	206,544	(135,409)	438,160
Total nondepreciable assets	631,360	206,544	(135,409)	702,495
Buildings	2,023,118	15,792	(3,975)	2,034,935
Improvements other than building	124,179	17,243	-	141,422
Artwork	6,045	-	-	6,045
Right of way	7,635	-	-	7,635
Infrastructure	2,413,105	54,264	(1,741)	2,465,628
Equipment	1,137,834	30,877	(18,470)	1,150,241
Software development	35,631	-	-	35,631
Total depreciable assets	5,747,547	118,176	(24,186)	5,841,537
Accumulated depreciation and amortization				
Building	(807,796)	(52,777)	2,712	(857,861)
Improvements other than building	(36,420)	(4,611)	-	(41,031)
Artwork	(1,490)	(206)	-	(1,696)
Right of way	(1,581)	(218)	-	(1,799)
Infrastructure	(669,420)	(50,524)	485	(719,459)
Equipment	(730,493)	(59,441)	16,152	(773,782)
Software development	(35,631)	-	-	(35,631)
Total depreciation and amortization	(2,282,831)	(167,777)	19,349	(2,431,259)
Depreciable assets - net	3,464,716	(49,601)	(4,837)	3,410,278
Total capital assets - net	$ 4,096,076	$ 156,943	$ (140,246)	$ 4,112,773

Note 7 – Changes in Capital Assets (continued)

	Balance January 1, 2018	Increases	Decreases	Balance December 31, 2018
Land	$ 244,275	$ 5,322	$ (831)	$ 248,766
Easements	15,382	187	-	15,569
Construction work in progress	389,354	214,930	(237,259)	367,025
Total nondepreciable assets	649,011	220,439	(238,090)	631,360
Buildings	2,002,571	29,228	(8,681)	2,023,118
Improvements other than building	112,205	11,991	(17)	124,179
Artwork	6,045	-	-	6,045
Right of way	7,635	-	-	7,635
Infrastructure	2,289,446	128,852	(5,193)	2,413,105
Equipment	1,109,879	42,003	(14,048)	1,137,834
Software development	35,631	-	-	35,631
Total depreciable assets	5,563,412	212,074	(27,939)	5,747,547
Accumulated depreciation and amortization				
Building	(758,399)	(52,915)	3,518	(807,796)
Improvements other than building	(32,187)	(4,249)	16	(36,420)
Artwork	(1,284)	(206)	-	(1,490)
Right of way	(1,363)	(218)	-	(1,581)
Infrastructure	(622,772)	(49,628)	2,980	(669,420)
Equipment	(683,902)	(59,918)	13,327	(730,493)
Software development	(34,731)	(900)	-	(35,631)
Total depreciation and amortization	(2,134,638)	(168,034)	19,841	(2,282,831)
Depreciable assets - net	3,428,774	44,040	(8,098)	3,464,716
Total capital assets - net	$ 4,077,785	$ 264,479	$ (246,188)	$ 4,096,076

Note 8 – 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 Elliott Bay and the clean-up of certain sites along the Lower Duwamish Waterway (LDW). Environmental remediation costs are capitalized and amortized over 30 years.

Note 8 – 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, 2019, stands at $44.5 million and $46.6 million in 2018.

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 costs are being deferred and amortized over 30 years as permitted by regulatory accounting standards (see Note 9 – Regulatory Assets and Credits).

Note 9 – 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 2018 and remains unchanged in 2019.

Note 9 – 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 10 – Employee Benefit Plans

In accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, the County elected to use June 30, 2019 and 2018, respectively, as the measurement date for reporting net pension liability at 2019 and 2018 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 2019 and 2018 (in thousands):

	Aggregate Pension Amounts—All Plans	
	2019	2018
Pension liabilities	$ 5,962	$ 17,200
Deferred outflows of resources	5,170	4,797
Deferred inflows of resources	13,168	12,012
Pension expense	(1,309)	(4,501)

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.

Note 10 – Employee Benefit Plans (continued)

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.

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 2019 and 2018 were as follows:

PERS Plan 1		
	Employer	Employee
Actual contribution rates		
January -June 2019	12.83%	6.00%
July - December 2019	12.86%	6.00%
January - August 2018	12.70%	6.00%
September - December 2018	12.83%	6.00%

Note 10 – Employee Benefit Plans (continued)

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

	PERS Plan 1
2019	$ -
2018	26

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.

Note 10 – 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 2019 and 2018 were as follows:

PERS Plan 2/3		
	Employer	Employee
Actual contribution rates		
January - June 2019	12.83%	7.41%
July - December 2019	12.86%	7.90%
2019 Employee PERS Plan 3		Varies
January - August 2018	12.70%	7.38%
September - December 2018	12.83%	7.41%
2018 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
2019	$ 9,145
2018	8,227

Actuarial assumptions – The total pension liability (TPL) for each of the DRS plans was determined using the most recent actuarial valuation completed in 2019 with a valuation date of June 30, 2018. 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 *2017 Economic Experience Study*.

Additional assumptions for subsequent events and law changes are current as of the 2018 actuarial valuation report. The TPL was calculated as of the valuation date and rolled forward to the measurement date of June 30, 2019. Plan liabilities were rolled forward from June 30, 2018, to June 30, 2019, reflecting each plan's normal cost (using the entry-age cost method), assumed interest and actual benefit payments.

- Inflation: 2.75% total economic inflation; 3.50% salary inflation.
- Salary increases: In addition to the base 3.50% salary inflation assumption, salaries are also expected to grow by promotions and longevity.
- Investment rate of return: 7.4%.

Note 10 – 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.

- OSA updated modeling to reflect providing benefit payments to the date of the initial retirement eligibility for terminated vested members who delay application for retirement benefits.

- OSA updated COLA programming to reflect legislation signed during the 2018 legislative session that provides PERS and TRS Plan 1 annuitants who are not receiving a basic minimum, alternate minimum, or temporary disability benefit with a one-time permanent 1.5% increase to their monthly retirement benefit, not to exceed a maximum of $62.50 per month.

Discount rate – The discount rate used to measure the total pension liability for all DRS plans was 7.4 percent.

To determine that rate, an asset sufficiency test included an assumed 7.5 percent long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. (All plans use 7.5 percent except LEOFF 2, which has assumed 7.4 percent). Consistent with the long-term expected rate of return, a 7.4 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, PSERS 2, SERS 2/3, and TRS 2/3 employers, whose rates include a component for the PERS 1, and TRS 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 7.4 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 7.4 percent was determined using a building-block-method. In selecting this assumption, the 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.

Note 10 – 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, 2019, 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%	2.20%
Tangible assets	7.00%	5.10%
Real estate	18.00%	5.80%
Global equity	32.00%	6.30%
Private equity	23.00%	9.30%
	100.00%	

Sensitivity of NPL – The table below presents Water Quality's proportionate share of the net pension liability calculated using the discount rate of 7.4 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 (6.4 percent) or 1-percentage point higher (8.4 percent) than the current rate (in thousands).

Year	Pension Plan	1% Decrease (6.4%)	Current Discount Rate (7.4%)	1% Increase (8.4%)
2018	PERS 1	$ 8,547	$ 6,955	$ 5,576
2018	PERS 2/3	46,861	10,245	(19,776)

Year	Pension Plan	1% Decrease (6.4%)	Current Discount Rate (7.4%)	1% Increase (8.4%)
2018	PERS 1	$ 8,547	$ 6,955	$ 5,576
2018	PERS 2/3	46,861	10,245	(19,776)

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.

Note 10 – Employee Benefit Plans (continued)

Pension liabilities, pension expense, and deferred outflows of resources and deferred inflows of resources related to pensions – At June 30, 2019 and 2018, Water Quality reported a total pension liability of $6.0 million and $17.2 million, respectively, for its proportionate share of the net pension liabilities as follows (in thousands):

	Liability	
	2019	2018
PERS 1	$ 127	$ 6,955
PERS 2/3	5,835	10,245

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

	Proportionate Share 6/30/18	Proportionate Share 6/30/19	Change in Proportion
PERS 1	0.16%	0.00%	(0.16%)
PERS 2/3	0.60%	0.60%	0.00%

	Proportionate Share 6/30/17	Proportionate Share 6/30/18	Change in Proportion
PERS 1	0.29%	0.16%	(0.13%)
PERS 2/3	0.62%	0.60%	(0.02%)

Employer contribution transmittals received and processed by the DRS for its 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, 2019 and 2018, respectively, and the actuarial valuation date on which the total pension liability is based was as of June 30, 2018 and 2017, respectively, with update procedures used to roll forward the total pension liability to the measurement date.

Pension expense – For the year ended December 31, 2019 and 2018, Water Quality recognized pension expense as follows (in thousands):

	Pension Expense	
	2019	2018
PERS 1	$ (6,559)	$ (6,391)
PERS 2/3	5,250	1,890
Total	$ (1,309)	$ (4,501)

Note 10 – Employee Benefit Plans (continued)

Deferred outflows of resources and deferred inflows of resources – At December 31, 2019 and 2018, Water Quality reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (in thousands):

	2019		2018	
PERS 1	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.	$ -	$ 8	$ -	$ 276
Contributions subsequent to the measurement date.	13	-	549	-
Total	$ 13	$ 8	$ 549	$ 276

	2019		2018	
PERS 2/3	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience.	$ 1,672	$ 1,255	$ 1,256	$ 1,794
Net difference between projected and actual investment earnings on pension plan investments.	-	8,493	-	6,287
Changes of assumptions	149	2,448	120	2,915
Changes in proportion and differences between contributions and proportionate share of contributions.	287	964	423	740
Contributions subsequent to the measurement date.	3,049	-	2,449	-
Total	$ 5,157	$ 13,160	$ 4,248	$ 11,736

Note 10 – 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 years ended December 31, 2020 and 2019. Other amounts reported as deferred outflows and deferred inflows of resources related to pensions will be recognized in pension expense as follows (in thousands):

	2019	
Year Ending December 31,	PERS 1	PERS 2/3
2020	$ (2)	$ (2,732)
2021	(4)	(4,505)
2022	(2)	(2,080)
2023	-	(1,181)
2024	-	(533)
Thereafter	-	(21)

	2018	
Year Ending December 31,	PERS 1	PERS 2/3
2019	$ 12	$ (1,043)
2020	(60)	(2,141)
2021	(181)	(3,912)
2022	(47)	(1,489)
2023	-	(591)
Thereafter	-	(761)

Note 11 – Other Post-Employment Benefits

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, establishes standards for recognizing and measuring other postemployment benefits (OPEB) liabilities, deferred outflows of resources, deferred inflows of resources, and expenses. The following table represents Water Quality's allocated OPEB amounts subject to the requirements of GASB Statement No. 75 for the years 2019 and 2018 (in thousands):

	OPEB Amounts	
	2019	2018
OPEB liabilities	$ 1,526	$ 1,533
Deferred outflows of resources	36	41
Deferred inflows of resources	104	119
OPEB expense	72	50

Note 11 – Other Post-Employment Benefits (continued)

Plan description – The County administers a single-employer defined-benefit postemployment healthcare plan (the Plan). The Plan provides healthcare insurance for eligible retirees and their spouses and children through the County's health insurance plan, which covers retired members. The plan provides healthcare insurance benefits and prescription coverage. The plan offers dental and vision benefits, but the retiree premiums are assumed to cover the full cost of those benefits.

As a self-insurer, the County establishes a monthly premium rate for insurance benefits each budget year. Eligible retirees may continue to receive insurance benefits by contributing 100% of the Consolidated Omnibus Budget Reconciliation Act or COBRA rate for these benefits. The program provides the same level of healthcare benefits to retirees as the active group plan. LEOFF1 retirees are not required to contribute as the County pays 100% of their medical costs. The County pays benefits as they come due.

Employees covered by benefit terms – At December 31, 2019, the benefit terms covered the following employees:

Category	Count
Inactive employees, spouses, or beneficiaries currently receiving benefit payments	450
Inactive employees entitled to but not yet receiving benefit payment	-
Active employees	14,378
Total	14,828

Net OPEB liability – The County's net OPEB liability was measured as of December 31, 2019 and 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of December 31, 2018.

Actuarial assumptions – The total OPEB liability in the December 31, 2018, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

- Inflation: 2.50%.
- Salary increases: 3.00%.
- Healthcare cost trend rates: 7.00% in the first year, trending down to 3.84% over 56 years.
- Mortality rates were based on tables from the Society of Actuaries.
- Discount rate: The discount rate used to measure the total OPEB liability is 3.75%. The County's OPEB Plan is an unfunded plan, therefore the discount rate was set to the rate of tax-exempt, high-quality 20-year municipal bonds, as of the valuation date.

Note 11 – Other Post-Employment Benefits (continued)

Changes in total OPEB liability – Water Quality's allocated changes in the total OPEB liability for the years ended December 31, 2019 and 2018, were as follows (in thousands):

	2019	2018
Total OPEB liability - beginning of year	$ 1,533	$ 1,652
Service cost	30	29
Interest	57	57
Difference between expected and actual experience	-	46
Change of assumptions	-	(133)
Benefit payments	(69)	(72)
Implicit rate subsidy fulfilled	(20)	(19)
Other changes	(5)	(27)
Net changes	(7)	(119)
Total OPEB liability - end of year	$ 1,526	$ 1,533

Sensitivity of the net OPEB liability to changes in the discount rate – The table below presents Water Quality's proportionate share of the net OPEB liability as well as what Water Quality's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.75%) or one percentage point higher (4.75%) than the current rate (in thousands).

Year	1% Decrease (2.75%)	Current Discount Rate (3.75%)	1% Increase (4.75%)
2019	$ 1,665	$ 1,526	$ 1,406
2018	1,676	1,533	1,407

Sensitivity of the net OPEB lability to changes in the healthcare cost trend rates – The table below presents Water Quality's proportionate share of the net OPEB liability as well as what Water Quality's proportionate share of the net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (6.00%) or one percentage point higher (8.00%) than current healthcare cost trend rates rate (in thousands).

Year	1% Decrease (6.00% Decreasing to 2.84%)	Trend Rate (7.00% Decreasing to 3.84%)	1% Increase (8.00% Decreasing to 4.84%%)
2019	$ 1,381	$ 1,526	$ 1,697
2018	1,396	1,533	1,691

Note 11 – Other Post-Employment Benefits (continued)

Deferred outflows of resources and deferred inflows of resources – At December 31, 2019 and 2018, Water Quality reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources (in thousands):

	2019		2018	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 36	$ -	$ 41	$ -
Changes of assumptions	-	104	-	119
Total	$ 36	$ 104	$ 41	$ 119

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB in the years ended December 31, 2019 and 2018 will be recognized as OPEB expense as follows (in thousands):

2019 Year Ending December 31,	Amount
2020	$ (9)
2021	(9)
2022	(9)
2023	(9)
2024	(9)
Thereafter	(23)

2018 Year Ending December 31,	Amount
2019	(9)
2020	(9)
2021	(9)
2022	(9)
2023	(9)
Thereafter	(33)

Note 12 – 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 $3.0 million and due to other funds of $24 thousand at December 31, 2019. Water Quality reported total due from other funds of $2.5 million and due to other funds of $37 thousand at December 31, 2018.

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 2019 and 2018, the transfers from Water Quality to other funds were $960 thousand and $982 thousand, respectively.

Note 13 – 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 $93.3 million on active construction contracts as of December 31, 2019.

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 have agreed with EPA to amend the administrative order on a number of occasions to conduct additional studies, and have most recently negotiated a further amendment to design the remedy for one portion of the river. 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. 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. 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 the County and Water Quality will be responsible for the cost of such remediation.

Note 13 – Commitments and Contingencies (continued)

- A potential requirement for more cleanup in the area contaminated when the Denny Way combined sewer outflow was replaced in 2005. Water Quality has performed interim cleanup costing $3.6 million to comply with a formal agreement with the Washington State Department of Ecology (DOE). Water Quality has recently engaged in negotiations with DOE to prepare a remedial investigation, feasibility study and draft cleanup action plan, and to implement what may be an interim or final cleanup action. It is unclear what final remedy DOE may select. 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 the 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 (RI/FS) required by the EPA. The supplemental RI/FS is now complete and awaiting final approval from EPA. A three-way agreement with the Port, the City and the County allocates to Water Quality a one-third pro rata share of the study costs although the costs may 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 for the cost of the study. The EPA will not determine if, or the nature of, any additional remediation until the study is completed and approved. The County and three other PRP have negotiated a memorandum of agreements to implement a search for other responsible parties.

- A claim submitted by the County against a contractor and its performance bond surety over the project to repair and replace two miles of pipeline serving the rapidly developing area in the vicinity of Canyon Park. Pursuant to an agreement with DOE, Water Quality had to install a bypass system because the capital project was not completed by the onset of the 2016 wet season. The contractor submitted a request for change order of approximately $1.5 million based on its assertion that the contract dewatering and open-faced shield tunneling specifications were defective. The contractor also asserted that it was constructively suspended and stopped tunneling. Water Quality found the contractor in default, terminated the contract, made demand upon the performance bond surety, and procured a $20.0 million completion contract. Water Quality's additional costs to complete the project and to repair consequential damages amounted to approximately $28.0 million. In December 2016, the County initiated a suit in King County Superior Court to recover the additional costs to complete the project from the contractor and its insurance company. The contractor has counter claimed for approximately $10 million asserting its change order claims and wrongful termination. Pre-trial motions were appealed to Washington State Supreme Court, and upon mandate back to King County Superior Court a new case schedule has been ordered and the trial date is set for March 2021.

Note 14 – Subsequent Event

In late March of 2020, Washington’s Governor issued a stay-at-home order and the closing of all non-essential businesses in response to the COVID-19 pandemic. The “Stay Home-Stay Healthy” proclamation limited work activities to only those that are essential to protect public health and safety, in order to slow the spread of the COVID-19 virus. Despite the challenges brought by COVID-19, wastewater treatment is an essential service. The Water Quality enterprise is driven by its mission to protect public health and will continue to treat our region’s sewage and ensure its infrastructure’s resiliency. While it is too early to assess the financial impacts resulting from COVID-19 the Water Quality enterprise is developing mitigation strategies as the scale of impacts are better understood.

Required Supplementary 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)

	2019	2018	2017	2016	2015
County's proportion of the net pension liability	8.25%	8.56%	8.45%	8.90%	8.76%
County's proportionate share of the net pension liability	$ 317,333	$ 382,129	$ 400,803	$ 477,872	$ 458,477
Covered payroll	$ 10,835	$ 13,346	$ 15,426	$ 18,793	$ 22,880
County's proportionate share of the net pension liability as a percentage of covered payroll	2928.78%	2863.25%	2598.23%	2542.82%	2243.04%
Plan fiduciary net position as a percentage of the total pension liability	67.12%	63.22%	61.24%	57.03%	59.10%

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

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)

	2019	2018	2017	2016	2015
County's proportion of the net pension liability	10.06%	10.29%	10.14%	10.52%	10.36%
County's proportionate share of the net pension liability	$ 97,735	$ 175,728	$ 352,361	$ 529,855	$ 370,294
Covered payroll	$ 1,144,724	$ 1,072,968	$ 995,800	$ 953,254	$ 949,860
County's proportionate share of the net pension liability as a percentage of covered payroll	8.54%	16.38%	35.38%	55.58%	39.68%
Plan fiduciary net position as a percentage of the total pension liability	97.77%	95.77%	90.97%	85.82%	89.20%

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

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

	2019	2018	2017	2016	2015
Contractually required contributions	$ 1,145	$ 1,448	$ 1,738	$ 1,901	$ 2,076
Contributions in relation to the contractually required contributions	1,145	1,448	1,738	1,901	2,076
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
Covered payroll	$ 8,918	$ 11,362	$ 14,569	$ 17,003	$ 20,440
Contributions as a percentage of covered payroll	12.84%	12.74%	11.93%	11.18%	10.16%

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

Schedule of the County's Contributions
Public Employees' Retirement System (PERS) Plan 2/3
For the Year Ended December 31*
(dollars in thousands)

	2019	2018	2017	2016	2015
Contractually required contributions	$ 152,683	$ 140,712	$ 123,333	$ 109,269	$ 95,176
Contributions in relation to the contractually required contributions	152,683	140,712	123,333	109,269	95,176
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
Covered payroll	$ 1,188,641	$ 1,031,418	$ 1,031,418	$ 977,342	$ 933,304
Contributions as a percentage of covered payroll	12.85%	12.75%	11.96%	11.18%	10.20%

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

Notes to Pension Required Supplementary Information

The Office of the State Actuary (OSA) calculates the actuarially determined contributions (ADC) based on the results of an actuarial valuation consistent with the state's funding policy defined in Chapter 41.45 the Revised Code of Washington (RCW).

Consistent with the state's contribution-rate adoption process, the results of an actuarial valuation with an odd-numbered year valuation date determine the ADC for the biennium that ensues two years later. For example, the actuarial valuation with a June 30, 2015, valuation date, completed in the fall of 2016, determines the ADC for the period beginning July 1, 2017, and ending June 30, 2019.

OSA calculates the ADC consistent with the methods described above. Adopted contribution rates could be different pending the actions of the governing bodies. For instance, for the period beginning July 1, 2017, and ending June 30, 2019, the contribution rates the Pension Funding Council adopted, which the Legislature did not change, reflect a phasing in of the increase to contribution rates that resulted from a change to the mortality assumption. This is the second of three biennia over which this increase is expected to be phased-in for PERS 1, PERS 2/3, and other pension plans.

For cost-sharing plans, OSA calculates the contractually required contributions (CRC) using the same assumptions and methods as the ADC, except the CRC reflect the adopted contribution rates for the time period shown, which might differ from the contribution rates produced for the ADC.

Schedule of the County's Changes in Total OPEB Liability and Related Ratios
For the Year Ended December 31*
(dollars in thousands)

	2019	2018
Total OPEB liability - beginning of year	$ 111,412	$ 118,120
Service cost	2,155	2,092
Interest	4,138	4,147
Changes of benefit terms	-	-
Differences between expected and actual experience	-	3,332
Changes of assumptions	(4,953)	(9,652)
Benefit payments	(1,480)	(5,244)
Implicit rate subsidy fulfilled	-	(1,383)
Other changes	-	-
Net change in total OPEB liability	(140)	(6,708)
Total OPEB liability - end of year	$ 111,272	$ 111,412
Covered-employee payroll	$ 1,219,237	$ 1,217,867
Total OPEB liability as a percentage of covered payroll	9.13%	9.15%

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

Notes to OPEB Required Supplementary Information

The plan does not have assets in trusts or equivalent arrangements and is funded on a pay-as-you-go basis. Potential factors that may significantly affect trends in amounts reported include changes to the discount rate, health care trend rates, salary projections, and participation percentages.

Other Information

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.

Coverage (1.15 required by covenant, adopted policy 1.25)	1.85

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)	1.58

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)	1.44

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. In 2019, short-term interest rates rose to 2.11 percent in 2019 from 2.07 percent in 2018.

Coverage (1.10 required by covenant)	14.10

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)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential customer and residential customer Equivalents (RCEs) (annual average, rounded)	704,400	707,300	708,900	718,160	725,844	736,090	756,430	756,916	760,571	763,436
Percentage annual change	0.09%	0.41%	0.23%	1.31%	1.07%	1.41%	2.76%	0.06%	0.48%	0.00%
Operating revenues										
Sewage disposal fees	$ 269,498	$ 306,430	$ 307,143	$ 342,850	$ 346,591	$ 371,253	$ 381,513	$ 401,650	$ 403,589	$ 415,279
Rate stabilization	(15,814)	(25,523)	13,923	10,350	18,000	(12,000)	-	-	-	-
Capacity charge revenues	41,363	48,693	51,411	58,660	59,522	62,479	71,200	82,615	86,836	102,146
Other operating revenues	9,778	7,830	9,398	10,126	11,675	11,674	11,828	18,308	19,125	19,024
Total Operating Revenues	304,825	337,430	381,875	421,986	435,788	433,406	464,541	502,573	509,550	536,449
Operating and maintenance expenses [1]	103,682	103,995	114,939	117,183	122,014	127,211	138,698	142,263	139,585	143,834
Add: GAAP adjustment [2]	-	-	-	-	2,187	1,715	(2,377)	5,936	13,004	10,438
Net operating and maintenance expenses	103,682	103,995	114,939	117,183	124,201	128,926	136,321	148,199	152,589	154,272
Net operating revenue	201,143	233,435	266,936	304,803	311,587	304,480	328,220	354,374	356,961	382,177
Interest income [3]	3,426	2,725	1,697	2,682	2,822	2,863	4,549	6,055	8,956	10,765
Net revenue available for debt service	204,569	236,160	268,633	307,485	314,409	307,343	332,769	360,429	365,917	392,942
Debt service										
Parity bonds	118,817	132,664	157,117	172,959	175,463	167,694	160,957	159,761	163,967	171,321
Parity lien obligations	26,838	32,910	38,626	43,064	42,876	40,348	53,164	52,650	49,121	41,529
Subordinate debt service	12,182	12,769	14,087	15,039	17,477	18,318	21,316	26,277	33,139	35,174
Total debt service	$ 157,837	$ 178,343	$ 209,830	$ 231,062	$ 235,816	$ 226,360	$ 235,437	$ 238,688	$ 246,227	$ 248,024
Debt service coverage										
On parity bonds	1.72	1.78	1.71	1.78	1.79	1.83	2.07	2.26	2.23	2.29
On parity bonds and parity lien obligations	1.40	1.43	1.42	1.36	1.44	1.48	1.55	1.70	1.72	1.85
On all sewer system obligations	1.30	1.32	1.28	1.33	1.33	1.36	1.41	1.51	1.49	1.58

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.

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Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

The Metropolitan King County Council
Seattle, Washington

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the King County Water Quality Enterprise Fund, which comprise the statement of net position as of December 31, 2019, and the related statements of revenues, expenses, and changes in net position and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated April 30, 2020.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the King County Water Quality Enterprise Fund’s internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the King County Water Quality Enterprise Fund’s internal control. Accordingly, we do not express an opinion on the effectiveness of the King County Water Quality Enterprise Fund’s internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the King County Water Quality Enterprise Fund's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Moss Adams LLP

Seattle, Washington
April 30, 2020

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APPENDIX D

SUMMARY OF KING COUNTY'S INVESTMENT POLICY

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SUMMARY OF KING COUNTY'S INVESTMENT POLICY

Additional discussion of recent developments pertaining to the King County Investment Pool can be found under "King County—King County Investment Pool" in the body of this Official Statement.

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 110 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 inter-local agreement that governs their participation in the Investment Pool, and, to exit the Investment Pool, a district must provide the required notice prior to their 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 June 30, 2020, the Investment Pool had a balance of $8.1 billion and an effective duration of 0.99 years, and 51.3% 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% in commercial paper and corporate notes with a maximum of 5% per issuer across investment types;

(vi) up to 20% in general obligation municipal bonds with a maximum of 5% per issuer;

(vii) up to 25% 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% 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:

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

The investment policy also includes 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 the 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 the Federal National Mortgage Association, the Federal Home Loan Bank, the Federal Farm Credit Bank, and the Federal Home Loan Mortgage Corporation.

APPENDIX E

CONTINUING DISCLOSURE UNDERTAKING

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CONTINUING DISCLOSURE UNDERTAKING

Annual Disclosure Report. The County will agree in a Continuing Disclosure Certificate to be executed at the time of issuance of the Bonds 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 2021 for the fiscal year ended December 31, 2020:

(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, which statements will not be audited, except that if and when audited financial statements are otherwise prepared and available to the County, they will be provided;

(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 11—"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.

If not provided as part of the Annual Financial Information discussed above, the County will provide to the MSRB the County's audited financial statements prepared in accordance with BARS when and if available.

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.

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;

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

(xv) incurrence of a financial obligation of the County, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the County, any of which affect security holders, if material; and

(xvi) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the County, any of which reflect financial difficulties.

For the purposes of notices (xv) and (xvi), "financial obligation" means a (i) debt obligation, (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) guarantee of (i) or (ii). The term "financial obligation" does not include municipal securities as to which a final official statement has been provided to the MSRB consistent with SEC Rule 15c2-12 ("Rule 15c2-12").

Solely for purposes of disclosure and not intending to modify the undertaking, the County advises with reference to items (iii), (x), and (xiv) that no debt service reserves secure payment of the Bonds, no property secures repayment of the Bonds, and there is no trustee for the Bonds.

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 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.

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APPENDIX F

DEMOGRAPHIC AND ECONOMIC INFORMATION

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DEMOGRAPHIC AND ECONOMIC INFORMATION

King County is the largest county in Washington in population, number of cities and employment, and the twelfth most populated county in the United States. Of Washington's population, nearly 30% reside in King County, and of the County's population, 34% live in the City of Seattle. Seattle is the largest city in the Pacific Northwest and, as the County seat, is the center of the County's economic activity. Bellevue is the State's fifth largest city and the second largest in the County, and is the center of the County's eastside business and residential area.

See "Other Considerations—COVID-19 Pandemic" in this Official Statement.

Population

Historical and current population figures for the State of Washington, the County, the two largest cities in the County, and the unincorporated areas of the County are given below.

POPULATION

Year	Washington	King County	Seattle	Bellevue	Unincorporated King County
1980 (1)	4,130,163	1,269,749	493,846	73,903	503,100
1990 (1)	4,866,692	1,507,319	516,259	86,874	NA
2000 (1)	5,894,121	1,737,034	563,374	109,827	349,773
2010 (1)	6,724,540	1,931,249	608,660	122,363	325,000
2011 (2)	6,767,900	1,942,600	612,100	123,400	285,265
2012 (2)	6,817,770	1,957,000	616,500	124,600	255,720
2013 (2)	6,882,400	1,981,900	626,600	132,100	253,100
2014 (2)	6,968,170	2,017,250	640,500	134,400	252,050
2015 (2)	7,061,410	2,052,800	662,400	135,000	253,280
2016 (2)	7,183,700	2,105,000	686,800	139,400	245,920
2017 (2)	7,310,300	2,153,700	713,700	140,700	247,060
2018 (2)	7,427,570	2,190,200	730,400	142,400	247,240
2019 (2)	7,546,410	2,226,300	747,300	145,300	248,275
2020 (2)	7,656,200	2,260,800	761,100	148,100	249,100

(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 County, the State, and the United States.

PER CAPITA INCOME

	2014	2015	2016	2017	2018
Seattle MD	$ 65,785	$ 68,792	$ 71,903	$ 75,973	$ 81,201
King County	72,644	76,122	79,742	84,542	90,438
State of Washington	51,518	53,840	55,884	58,550	62,026
United States	47,058	48,978	49,870	51,885	54,446

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 King County. The value of public construction is not included in this table.

KING COUNTY
RESIDENTIAL BUILDING PERMIT VALUES

	New Single Family Units		New Multi-Family Units		
Year	Number	Value($)	Number	Value($)	Total Value($)
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
2018	4,442	1,747,483,826	14,018	1,642,109,582	3,389,593,408
2019	3,777	1,494,505,945	14,142	2,071,136,054	3,565,641,999
2019(1)	1,221	482,637,552	4,522	667,870,417	1,150,507,969
2020(1)	983	396,058,440	2,928	409,146,474	805,204,914

(1) Estimates with imputations through April.

Source: U.S. Bureau of the Census

Retail Activity

The following table presents taxable retail sales in King County and Seattle.

THE CITY OF SEATTLE AND KING COUNTY
TAXABLE RETAIL SALES

Year	King County	City of Seattle
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
2018	69,018,354,390	28,292,069,881
2019	72,830,045,964	29,959,051,892

Source: Quarterly Business Review , Washington State Department of Revenue

Employment

The following table presents approximate total employment in Washington State as of December 31, 2019 (unless otherwise noted) for certain major employers in the Puget Sound area.

PUGET SOUND
MAJOR EMPLOYERS

Employer	Employees
The Boeing Company	71,800
Amazon.com Inc.	60,000
Microsoft Corp.	55,100
Joint Base Lewis-McChord	54,000(1)
University of Washington Seattle	46,800
Providence Health & Services	43,000(2)
Safeway Inc. & Albertsons LLC	21,300(2)
Wal-Mart Stores, Inc.	19,400
Costco Wholesale Corp.	18,000
MultiCare Health System	17,200
Fred Meyer Stores	16,200
King County Government	15,900
City of Seattle	15,800
Starbucks Corp.	14,000
CHI Franciscan Health	12,500
Seattle Public Schools	11,900
Kaiser Permanente	10,000
Alaska Air Group Inc.	9,600
Nordstrom, Inc.	9,200
Virginia Mason Health System	9,100

(1) 40,000 are service members and 14,000 are civilian employees.

(2) As of May 31, 2019; more recent data not available.

Source: Puget Sound Business Journal, Publication Date June 19, 2020.

KING COUNTY
RESIDENT CIVILIAN LABOR FORCE AND EMPLOYMENT
AND NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT[(1)]

	Annual Average				
	2015	**2016**	**2017**	**2018**	**2019**
Civilian Labor Force	1,184,240	1,213,744	1,238,090	1,264,754	1,290,480
Total Employment	1,134,979	1,167,122	1,194,955	1,224,648	1,254,638
Total Unemployment	49,261	46,622	43,135	40,106	35,842
Percent of Labor Force	4.2%	3.8%	3.5%	3.2%	2.8%

NAICS INDUSTRY	**2015**	**2016**	**2017**	**2018**	**2019**
Total Nonfarm	1,312,083	1,357,433	1,398,225	1,433,158	1,468,958
Total Private	1,137,950	1,179,242	1,216,892	1,254,625	1,293,125
Goods Producing	175,233	177,692	178,150	181,958	186,650
Mining and Logging	575	525	533	500	500
Construction	66,808	71,217	74,342	78,108	79,942
Manufacturing	107,858	105,967	103,283	103,333	106,183
Service Providing	1,136,850	1,179,742	1,220,075	1,251,200	1,282,308
Trade, Transportation, and Utilities	244,425	254,142	268,325	274,642	281,025
Information	88,875	96,200	102,817	110,917	121,192
Financial Activities	69,767	70,642	71,450	73,708	75,233
Professional and Business Services	216,017	222,750	227,792	233,092	238,658
Educational and Health Services	167,008	174,042	179,142	185,842	189,617
Leisure and Hospitality	130,108	135,683	140,775	145,050	147,942
Other Services	46,517	48,092	48,442	49,417	52,808
Government	174,133	178,192	181,333	178,533	175,833
Workers in Labor/Management Disputes	0	0	0	0	0

	Apr. 2020
Civilian Labor Force	1,252,303
Total Employment	1,066,218
Total Unemployment	186,085
Percent of Labor Force	14.9%

(1) Columns may not add to totals due to rounding.
Source: Washington State Employment Security Department.

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APPENDIX G

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.