OFFICIAL STATEMENT

New Issue **Moody's Rating: Aaa**
Book-Entry Only **S&P Rating: AA+**
(See "Other Bond Information—Ratings on the Bonds.")

In the opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation, Seattle, Washington ("Bond Counsel"), under existing statutes, regulations, rulings, and judicial decisions, and assuming the accuracy of certain representations and compliance with certain covenants and requirements described herein, interest (and original issue discount, if any) on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of calculating the federal alternative minimum tax imposed on individuals and corporations. See "Legal and Tax Information—Tax Matters."

$93,260,000
THE CITY OF SEATTLE, WASHINGTON
WATER SYSTEM IMPROVEMENT AND REFUNDING REVENUE BONDS, 2022
(GREEN BONDS)

DATED: DATE OF INITIAL DELIVERY **DUE: SEPTEMBER 1, AS SHOWN ON PAGE i**

The City of Seattle, Washington (the "City"), will issue its Water System Improvement and Refunding Revenue Bonds, 2022 (the "Bonds"), as fully registered bonds under a book-entry only system, registered in the name of the Securities Depository.

The Depository Trust Company, New York, New York ("DTC") will act as initial Securities Depository for the Bonds. Individual purchases of the Bonds will be made in Book-Entry Form, in the denomination of $5,000 or any integral multiple thereof within a single maturity. Purchasers will not receive certificates representing their interest in the Bonds. Interest on the Bonds is payable semiannually on each March 1 and September 1, beginning September 1, 2022. The principal of and interest on the Bonds are payable by the fiscal agent of the State of Washington (the "Bond Registrar") (currently U.S. Bank Trust Company, National Association), to DTC, which is obligated in turn to remit such payments to its participants for subsequent disbursement to Beneficial Owners of the Bonds, as described in "Description of the Bonds—Registration and Book-Entry Form" and in Appendix E.

The Bonds are being issued to pay for part of the costs of various projects of the City's Water System, to refund certain outstanding obligations of the Water System, and to pay the administrative costs of issuing the Bonds and the costs of administering the Refunding Plan. See "Use of Proceeds."

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

The Bonds are special limited obligations of the City payable from and secured solely by the Net Revenue of the Water System and by money in the Parity Bond Account and the subaccounts therein (including the Reserve Subaccount). Net Revenue is pledged to make the payments into the Parity Bond Account and the Reserve Subaccount required by the Bond Documents, which pledge constitutes a lien and charge upon the Net Revenue prior and superior to all other liens and charges whatsoever. The Bonds are on a parity with the Outstanding Parity Bonds and all Future Parity Bonds, without preference or priority of right or lien. Upon the redemption or defeasance of certain of the Outstanding Parity Bonds, the Bond Documents provide that the Bonds will cease to be secured by the Reserve Subaccount. See "Security for the Bonds."

The Bonds have been identified as "Green Bonds" by Kestrel Verifiers. See "Description of the Bonds—Designation of Bonds as Green Bonds."

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The Bonds do not constitute general obligations of the City, the State of Washington (the "State"), or any political subdivision of the State, or a lien or charge upon any general fund or upon any money or other property of the City, the State, or any political subdivision of the State not specifically pledged thereto by the legislation authorizing the issuance of the Bonds. Neither the full faith and credit nor the taxing power of the City, nor any revenues of the City derived from sources other than the Water System, are pledged to the payment of the Bonds.

The Bonds are offered for delivery by the Purchaser, when, as, and if issued, subject to the approving legal opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation, Seattle, Washington, Bond Counsel. The form of Bond Counsel's opinion is attached hereto as Appendix B. Bond Counsel will also act as Disclosure Counsel to the City. It is expected that the Bonds will be available for delivery at DTC's facilities in New York, New York, or delivered to the Bond Registrar on behalf of DTC for closing by Fast Automated Securities Transfer, on or about July 28, 2022.

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 12, 2022

The information in this Official Statement has been compiled from official and other sources considered reliable and, while not guaranteed as to accuracy, is believed by the City to be correct as of its date. The City makes no representation regarding the accuracy or completeness of the information in Appendix E—Book-Entry Transfer System, which has been obtained from DTC's website, or other information provided by parties other than the City. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made by use of this Official Statement shall, under any circumstances, create any implication that there has been no change in the affairs of the City since the date hereof.

No dealer, broker, salesperson, or other person has been authorized by the City 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 information or representations must not be relied upon as having been authorized by the City. This Official Statement does not constitute an offer to sell or a 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 Bonds have not been registered under the Securities Act of 1933, as amended, and the Bond Documents have not been qualified under the Trust Indenture Act of 1939, as amended, in reliance upon exemptions contained in such acts. The Bonds have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, the Securities and Exchange Commission has not confirmed the accuracy or determined the adequacy of this Official Statement. Any representation to the contrary may be a criminal offense.

The presentation of certain information, including tables of revenues and expenses, is intended to show recent historic information and is not intended to indicate future or continuing trends in the financial position or other affairs of the City. No representation is made that past experience, as it might be shown by such financial and other information, will necessarily continue or be repeated in the future.

The information set forth in the Water Fund's 2021 Audited Financial Statements, which are included as Appendix C, speaks only as of the date of those statements and is subject to revision or restatement in accordance with applicable accounting principles and procedures. The City specifically disclaims any obligation to update this information except to the extent described under "Continuing Disclosure Agreement."

Certain statements contained in this Official Statement do not reflect historical facts, but rather are forecasts and "forward-looking statements." No assurance can be given that the future results shown herein will be achieved, and actual results may differ materially from the forecasts shown. In this respect, the words "estimate," "forecast," "project," "anticipate," "expect," "intend," "believe," and other similar expressions are intended to identify forward-looking statements. The forward-looking statements in this Official Statement are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in or implied by such statements. All estimates, projections, forecasts, assumptions, and other forward-looking statements are expressly qualified in their entirety by the cautionary statements set forth in this Official Statement. These forward-looking statements speak only as of the date they were prepared. The City specifically disclaims any obligation to update any forward-looking statements to reflect occurrences or unanticipated events or circumstances after the date of this Official Statement, except as otherwise expressly provided in "Continuing Disclosure Agreement."

The order and placement of materials in this Official Statement, including the appendices, are not to be deemed to be a determination of relevance, materiality, or importance, and this Official Statement, including the appendices, must be considered in its entirety. The offering of the Bonds is made only by means of this entire Official Statement.

The website of the City or any City department or agency is not part of this Official Statement, and investors should not rely on information presented on the City'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

$93,260,000
THE CITY OF SEATTLE, WASHINGTON
WATER SYSTEM IMPROVEMENT AND REFUNDING REVENUE BONDS, 2022
(GREEN BONDS)

SERIAL BONDS

Due September 1	Amounts	Interest Rates	Yields	Prices	CUSIP Numbers
2022	$ 900,000	5.00%	1.28%	100.338	812728 WV1
2023	17,305,000	5.00%	1.53%	103.741	812728 WW9
2024	8,890,000	5.00%	1.80%	106.538	812728 WX7
2025	9,330,000	5.00%	1.92%	109.200	812728 WY5
2026	740,000	5.00%	1.99%	111.769	812728 WZ2
2027	1,255,000	5.00%	2.09%	113.984	812728 XA6
2028	820,000	5.00%	2.24%	115.632	812728 XB4
2029	8,695,000	5.00%	2.35%	117.215	812728 XC2
2030	9,660,000	5.00%	2.40%	119.016	812728 XD0
2031	925,000	5.00%	2.50%	120.216	812728 XE8
2032	975,000	5.00%	2.54%	121.775	812728 XF5
2033	1,020,000	5.00%	2.62% (1)	120.982	812728 XG3
2034	1,070,000	5.00%	2.70% (1)	120.196	812728 XH1
2035	1,125,000	5.00%	2.78% (1)	119.416	812728 XJ7
2036	1,180,000	5.00%	2.83% (1)	118.931	812728 XK4
2037	1,240,000	5.00%	2.87% (1)	118.545	812728 XL2
2038	1,305,000	5.00%	2.91% (1)	118.160	812728 XM0
2039	1,370,000	5.00%	2.95% (1)	117.777	812728 XN8
2040	1,435,000	5.00%	3.00% (1)	117.300	812728 XP3
2041	1,510,000	5.00%	3.06% (1)	116.731	812728 XQ1
2042	1,585,000	5.00%	3.09% (1)	116.448	812728 XR9
2043	1,665,000	5.00%	3.12% (1)	116.165	812728 XS7
2044	1,745,000	5.00%	3.15% (1)	115.884	812728 XT5
2045	1,835,000	5.00%	3.18% (1)	115.603	812728 XU2
2046	1,925,000	5.00%	3.21% (1)	115.323	812728 XV0

TERM BONDS

Due September 1	Amounts	Interest Rates	Yields	Prices	CUSIP Numbers
2048	$ 4,145,000	5.00%	3.25% (1)	114.951	812728 XX6
2052	9,610,000	5.00%	3.30% (1)	114.488	812728 YB3

(1) Calculated to the September 1,2032, par call date.

THE CITY OF SEATTLE

MAYOR AND CITY COUNCIL

Bruce A. Harrell	Mayor

Council Member	**Term Expiration**
Lisa Herbold	2023
Debora Juarez	2023
Andrew Lewis	2023
Tammy Morales	2023
Teresa Mosqueda	2025
Sara Nelson	2025
Alex Pedersen	2023
Kshama Sawant	2023
Dan Strauss	2023

CITY ADMINISTRATION

Glen M. Lee[(1)]	Director of Finance
Ann Davison	City Attorney

SEATTLE PUBLIC UTILITIES

Andrew Lee	General Manager/Chief Executive Officer
Paula Laschober	Chief Financial Officer/Deputy Director of Financial and Risk Services
Idris Beauregard	Deputy Director of People, Culture, and Community
Keri Burchard-Juarez	Deputy Director for Project Delivery and Engineering
Ellen Stewart	Interim Deputy Director for Drainage and Wastewater Line of Business
Jeff Fowler	Deputy Director for Solid Waste Line of Business
Alex Chen	Deputy Director for Water Line of Business and Shared Services

BOND COUNSEL

Stradling Yocca Carlson & Rauth, a Professional Corporation
Seattle, Washington

MUNICIPAL ADVISOR

Piper Sandler & Co.
Seattle, Washington

BOND REGISTRAR

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

(1) On May 23, 2022, it was announced that Mr. Lee will be leaving the City in mid-2022 upon his confirmation of an appointment as the new Chief Financial Officer for the District of Columbia. Plans for his replacement are being developed as of the date of this Official Statement.

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OFFICIAL STATEMENT

$93,260,000
THE CITY OF SEATTLE, WASHINGTON
WATER SYSTEM IMPROVEMENT AND REFUNDING REVENUE BONDS, 2022
(GREEN BONDS)

INTRODUCTION

The purpose of this Official Statement, which includes the cover, inside cover, and appendices, is to set forth certain information concerning The City of Seattle, Washington (the "City"), a municipal corporation duly organized and existing under and by virtue of the laws of the State of Washington (the "State"), in connection with the offering of $93,260,000 aggregate principal amount of its Water System Improvement and Refunding Revenue Bonds, 2022 (Green Bonds) (the "Bonds"). This Official Statement contains certain information related to such offering and sale concerning the City, the Bonds, Seattle Public Utilities ("SPU"), and the City's water system (the "Water System").

Appendix A to this Official Statement is a copy of the Bond Ordinance, as defined below under "Description of the Bonds—Authorization for the Bonds." Appendix B is the form of legal opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation, Seattle, Washington ("Bond Counsel"). Appendix C is the audited financial statements of the Water Fund as of and for the fiscal year ended December 31, 2021 (the "2021 Audited Financial Statements"). Appendix D provides demographic and economic information for the City. Appendix E is a description provided on its website by The Depository Trust Company, New York, New York ("DTC"), of DTC procedures with respect to book-entry bonds. Appendix F is the Second Party Opinion of Kestrel Verifiers on the designation of the Bonds as Green Bonds. Capitalized terms that are not defined herein have the meanings set forth in the Bond Ordinance attached as Appendix A and in the Bond Documents (defined below).

All of the summaries of provisions of the Washington State Constitution (the "State Constitution") and laws of the State, of ordinances and resolutions of the City, and of other documents contained in this Official Statement, copies of which may be obtained from the City upon request, are subject to the complete provisions thereof and do not purport to be complete statements of such laws or documents. A full review should be made of the entire Official Statement. The offering of the Bonds to prospective investors is made only by means of the entire Official Statement.

Some of the information presented reflects time periods affected by the COVID-19 pandemic, which began in early 2020 and is ongoing. Historical data may not necessarily predict near-term trends accurately. See more specific information set forth throughout this Official Statement and particularly under "Seattle Public Utilities—Operating and Fiscal Impacts of COVID-19" and "Other Considerations—Global Health Emergency Risk and COVID-19 Pandemic."

Certain forecast information provided in this Official Statement was prepared by Seattle Public Utilities. Any forecast information speaks only as of the date it was prepared and the reader should exercise caution in relying on such information. Actual results could differ materially.

DESCRIPTION OF THE BONDS

Authorization for the Bonds

The Bonds are to be issued by the City pursuant to the State Constitution, chapters 35.92 and 39.53 of the Revised Code of Washington ("RCW"), the Seattle City Charter, Ordinance 126483, passed by the City Council on November 22, 2021 (the "Bond Ordinance"), and Ordinance 125714, passed by the City Council on November 19, 2018, delegating to the Director of the Finance Division of the City's Department of Finance and Administrative Services (the "Director of Finance") the authority to execute, on behalf of the City, a certificate of bid award, a pricing certificate ("Pricing Certificate"), and other documents (collectively, the "Bond Documents") in accordance with the parameters set forth in the Bond Ordinance.

Ordinance 126483 authorized the issuance of water system bonds in a maximum aggregate principal amount not to exceed $88,000,000. The authorization expires on December 31, 2024. The new-money portion of the Bonds is the first issuance under this authorization and is in the amount of $58,730,000 of this authorization, leaving $29,270,000 available under the authorization. In addition, the City has approximately $218,910,000 remaining under an original authorization of $280,000,000 established under Ordinance 126225, passed by the City Council on November 23, 2020, and expiring December 31, 2023. The City currently has no plans to issue additional bonds under either of these ordinances.

Principal Amounts, Dates, Interest Rates, and Maturities

The Bonds will be dated the date of their initial issuance and delivery. The Bonds will mature on September 1 in the years and amounts set forth on page i of this Official Statement. Interest on the Bonds is payable semiannually on each March 1 and September 1, beginning September 1, 2022, at the rates set forth on page i of this Official Statement. Interest on the Bonds will be computed on the basis of a 360-day year consisting of twelve 30-day months.

Registration and Book-Entry Form

Registrar and Paying Agent. The Bonds will be issued only in registered form as to both principal and interest. The fiscal agent for the State, currently U.S. Bank Trust Company, National Association, in Seattle, Washington (or such other fiscal agent or agents as the State may from time to time designate) will act as registrar and paying agent for the Bonds (the "Bond Registrar").

Book-Entry Form. The Bonds will be held fully immobilized in Book-Entry Form, registered in the name of the Securities Depository (defined in the Bond Documents as the Depository Trust Company, New York, New York ("DTC"), or any successor thereto) in accordance with the provisions of the Letter of Representations. Neither the City nor the Bond Registrar will have any responsibility or obligation to participants of the Securities Depository or the persons for whom they act as nominees with respect to the Bonds regarding the accuracy of any records maintained by the Securities Depository or its participants of any amount in respect of principal of or interest on the Bonds, or any notice which is permitted or required to be given to Registered Owners under the Bond Ordinance (except such notice as is required to be given by the Bond Registrar to the Securities Depository). Registered ownership of a Bond initially held in Book-Entry Form, or any portion thereof, may not be transferred except (i) to any successor Securities Depository, (ii) to any substitute Securities Depository appointed by the City or such substitute Securities Depository's successor, or (iii) to any person if the Bond is no longer held in Book-Entry Form. For information about DTC and its book-entry system, see Appendix E—Book-Entry Transfer System. The City makes no representation as to the accuracy or completeness of the information in Appendix E obtained from DTC. Purchasers of the Bonds should confirm this information with DTC or its participants.

Termination of Book-Entry System. Upon the resignation of the Securities Depository from its functions as depository, or upon a determination by the Director of Finance to discontinue services of the Securities Depository, the Director of Finance may appoint a substitute Securities Depository. If the Securities Depository resigns from its functions as depository and no substitute Securities Depository can be obtained, or if the Director of Finance determines not to utilize a Securities Depository, then the Bonds no longer will be held in book-entry form and ownership may be transferred only as provided in the Bond Ordinance.

Lost or Stolen Bonds. In case any Bond is lost, stolen, or destroyed, the Bond Registrar may authenticate and deliver a new bond or bonds of like amount, date, tenor, and effect to the Registered Owner(s) thereof upon the Registered Owner(s)' paying the expenses and charges of the City in connection therewith and upon filing with the Bond Registrar evidence satisfactory to the Bond Registrar that such bond or bonds were actually lost, stolen, or destroyed and of Registered Ownership thereof, and upon furnishing the City with indemnity satisfactory to both.

Payment of Bonds

Principal of and interest on each Bond is payable in the manner set forth in the Letter of Representations. No Bonds will be subject to acceleration under any circumstances.

Interest on each Bond not held in Book-Entry Form is payable by electronic transfer on the interest payment date, or by check or draft of the Bond Registrar mailed on the interest payment date to the Registered Owner at the address appearing on the Bond Register on the Record Date. The City, however, is not required to make electronic transfers except pursuant to a request by a Registered Owner in writing received at least ten days prior to the Record Date and at the sole expense of the Registered Owner. Principal of each Bond not held in Book-Entry Form is payable upon presentation and surrender of the Bond by the Registered Owner to the Bond Registrar.

The Bond Ordinance defines "Record Date" as, in the case of each interest or principal payment date, the Bond Registrar's close of business on the 15th day of the month preceding the interest or principal payment date. With regard to redemption of a Bond prior to its maturity, the Record Date means the Bond Registrar's close of business on the day prior to the date on which the Bond Registrar sends the notice of redemption to the Registered Owner(s) of the affected Bonds.

Redemption of Bonds

Optional Redemption. The Bonds maturing on and before September 1, 2032, are not subject to redemption prior to maturity. The City reserves the right and option to redeem Bonds maturing on and after September 1, 2033, prior to their stated maturity dates at any time on and after September 1, 2032, as a whole or in part, at a price equal to 100% of the stated principal amount to be redeemed plus accrued interest to the date fixed for redemption.

Mandatory Redemption. If not redeemed or purchased at the City's option prior to maturity, the Bonds designated as Term Bonds must be redeemed, at a price equal to 100% of the principal amount to be redeemed plus accrued interest, on September 1 in the years and principal amounts as follows:

2048 TERM BONDS	
Years	**Amounts**
2047	$ 2,020,000
2048(1)	2,125,000

2052 TERM BONDS	
Years	**Amounts**
2049	$ 2,230,000
2050	2,340,000
2051	2,460,000
2052(1)	2,580,000

(1) Maturity.

If the City optionally redeems or purchases Term Bonds prior to maturity, the principal amount of that Term Bonds so redeemed or purchased (irrespective of their actual redemption or purchase prices) will be credited against the remaining mandatory redemption installment payments as directed by the Director of Finance. In the absence of direction by the Director of Finance, credit will be allocated to each mandatory redemption installment payment for that Bond on a *pro rata* basis.

Selection of Bonds for Redemption. If fewer than all of the outstanding Bonds are to be redeemed at the option of the City, the Director of Finance will select the maturity or maturities to be redeemed. If less than all of the principal amount of a maturity of the Bonds is to be redeemed and such maturity is held in Book-Entry Form, the portion of such maturity to be redeemed will be selected for redemption by the Securities Depository in accordance with the Letter of Representations, and if such maturity is not then held in Book-Entry Form, the portion of such maturity to be redeemed will be selected by the Bond Registrar at random in such manner as the Bond Registrar determines.

All or a portion of the principal amount of any Bond that is to be redeemed may be redeemed in denominations of $5,000 or integral multiples thereof within a maturity of the Bonds ("Authorized Denominations"). If less than all of the outstanding principal amount of any Bond is redeemed, upon surrender of that Bond to the Bond Registrar, there will be issued to the Registered Owner, without charge, a new Bond (or Bonds, at the option of the Registered Owner) of the same maturity and interest rate in any Authorized Denomination in the aggregate principal amount to remain outstanding.

Notice of Redemption. The City must cause notice of any intended redemption of Bonds to be given 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 of any Bond to be redeemed at the address appearing on the Bond Register on the Record Date, and that notice requirement will be deemed to have been fulfilled when notice has been mailed as so provided, whether or not it is actually received by the Owner of any Bond. Interest on Bonds called for redemption will cease to accrue on the date fixed for redemption unless the Bond or Bonds called are not redeemed when presented pursuant to the call. See "—Registration and Book-Entry Form" and Appendix E.

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

Purchase

The City reserves the right and option to purchase any or all of the Bonds offered to the City at any time at any price acceptable to the City plus accrued interest to the date of purchase.

Failure to Pay Bonds

If any Bond is not paid when properly presented at its maturity or redemption date, the City will be obligated to pay interest on that Bond at the same rate provided on that Bond from and after its maturity or redemption date until that Bond, principal, premium, if any, and interest, is paid in full or until sufficient money for its payment in full is on deposit in the Water System Parity Bond Account (the "Parity Bond Account"), and that Bond has been called for payment by giving notice of that call to the Registered Owner of that Bond.

Refunding or Defeasance of Bonds

The City may issue refunding bonds pursuant to the laws of the State or use money available from any other lawful source (i) to pay when due the principal of (including premium, if any) and interest on any Bond or portion thereof included in a refunding or defeasance plan (the "Defeased Bonds"), (ii) to redeem and retire, release, refund, or defease the Defeased Bonds, and (iii) to pay the costs of such refunding or defeasance. If money and/or Government Obligations (defined below) maturing at a time or times and in an amount sufficient, together with known earned income from the investment thereof, to redeem and retire, release, refund, or defease the Defeased Bonds in accordance with their terms, are set aside in a special trust fund or escrow account irrevocably pledged to such redemption, retirement, or defeasance (the "Trust Account"), then all right and interest of the Owners of the Defeased Bonds in the covenants of the Bond Ordinance and in Net Revenue (defined under "Security for the Bonds—Pledge of Net Revenue") and the funds and accounts pledged to the payment of such Defeased Bonds, other than the right to receive the funds so set aside and pledged, will cease and become void. Such Owners thereafter have the right to receive payment of the principal of and interest or redemption price on the Defeased Bonds from the Trust Account. After the Trust Account is established and fully funded, the Defeased Bonds will be deemed no longer outstanding and the Director of Finance may then apply any money in any other fund or account established for the payment or redemption of the Defeased Bonds to any lawful purposes. Notice of refunding or defeasance will be given, and selection of Bonds for any partial refunding or defeasance will be conducted, in the manner set forth in the Bond Ordinance for the redemption of Bonds.

The term "Government Obligations" is defined in the Bond Ordinance to include any securities that are then permissible investments under the State law definition of "government obligations" under RCW 39.53.010. In the Pricing Certificate, the City has limited eligibility to the following types of securities (provided that such securities are then permissible under the applicable statute): (i) direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America, and bank certificates of deposit secured by such obligations; (ii) bonds, debentures, notes, participation certificates, or other obligations issued by the Banks for Cooperatives, the Federal Intermediate Credit Bank, the Federal Home Loan Bank system, the Export-Import Bank of the United States, Federal Land Banks, or the Federal National Mortgage Association; (iii) public housing bonds and project notes fully secured by contracts with the United States; and (iv) obligations of financial institutions insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation, to the extent insured or to the extent guaranteed as permitted under any other provision of State law.

Defaults and Remedies; No Acceleration of the Bonds

The Bond Ordinance does not enumerate events of default or remedies upon an event of default. In the event of a default, Bond owners would be permitted to pursue remedies permitted by State law. See "—Failure to Pay Bonds" above and "Security for the Bonds" below.

The Bonds are not subject to acceleration upon the occurrence of a default. The City, therefore, would be liable only for principal and interest payments as they become due. In the event of multiple defaults in payment of principal of or interest on the Bonds, the Registered Owners would be required to bring a separate action for each such payment not made. This could give rise to a difference in interests between Registered Owners of earlier and later maturing Bonds.

Designation of Bonds as Green Bonds

The Bonds have been designated as "Green Bonds" at the election of the Purchaser of the Bonds (see "Other Bond Information—Purchaser of the Bonds"). Through the competitive sale process, the Purchaser elected at its own expense to add this label, which was pre-qualified by Kestrel Verifiers. Kestrel Verifiers is a Climate Bonds Initiative ("CBI") Approved Verifier. As such, Kestrel Verifiers is qualified to evaluate bonds to ensure conformance with the International Capital Market Association ("ICMA") Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines, and the CBI Standards and Criteria.

The City makes no representation regarding the applicability of or suitability of the Green Bonds designation. The term "Green Bonds" is neither defined in, nor related to, the Bond Ordinance or the Bond Documents. The Green Bonds designation is solely for identification purposes and is not intended to provide or imply that the owners of the Bonds are entitled to any security other than that described under "Security for the Bonds."

The Bond Ordinance permits the City to change the specifications of the capital improvement plan financed with proceeds of the Bonds, including substitution, cancellation, and significant alteration of projects. There can be no assurances that any revisions to the capital improvement plan will have equivalent environmental benefits. The City is under no contractual or other legal obligation to ensure compliance with any legal or other principles relating to the "Green Bonds" designation. The City has made no commitment to provide ongoing reporting or information regarding the designation or compliance with the Green Bond principles.

Per the ICMA, "Green Bonds" are any type of bond instrument where the proceeds will be exclusively applied to finance or refinance, in part or in full, new and/or existing eligible Green Projects and which are aligned with the four core components of the Green Bonds Principles. The four core components are: (i) use of proceeds; (ii) process for project evaluation and selection; (iii) management of proceeds; and (iv) reporting.

Kestrel Verifiers has determined that the Bonds are in conformance with the four components of the ICMA Green Bond Principles, as described in Kestrel Verifiers' "Second Party Opinion," which is attached hereto as Appendix F.

Through the competitive sale process, the Purchaser of the Bonds elected to add these labels, which were pre-qualified by Kestrel Verifiers.

Independent Second Party Opinion on Green Bond Designation and Disclaimer. For over 20 years, Kestrel Verifiers has been consulting in sustainable finance. Kestrel Verifiers, a division of Kestrel 360, Inc., is an Approved Verifier accredited by the Climate Bonds Initiative ("CBI") and an Observer for the ICMA Green Bond Principles and Social Bond Principles. Kestrel Verifiers reviews transactions in all asset classes worldwide for alignment with ICMA Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines, and CBI Standards and criteria.

The Second Party Opinion issued by Kestrel Verifiers does not and is not intended to make any representation or give any assurance with respect to any other matter relating to the Bonds. Designations by Kestrel Verifiers are not a recommendation to any person to purchase, hold, or sell the Bonds. Such labeling does not address the market price or suitability of these Bonds for a particular investor and does not and is not in any way intended to address the likelihood of timely payment of interest or principal when due.

The opinion of Kestrel Verifiers reflects only the views of Kestrel Verifiers. Any explanation of the significance of the opinion may be obtained from Kestrel Verifiers, whose opinion was based upon Kestrel Verifiers' own investigation, studies, assumptions, and criteria. The City made no application to Kestrel or any other green bond verifier for the purpose of obtaining the designation. However, the City did respond to requests for certain information from Kestrel Verifiers with respect to the Bonds, SPU, and the capital improvement plan. In issuing the Second Party Opinion, Kestrel Verifiers has assumed and relied upon the accuracy and completeness of the information made publicly available by the City or that was otherwise available to Kestrel Verifiers. There is no assurance that the designation will be retained for any given period of time or that the designation will not be revised, suspended, or withdrawn by Kestrel Verifiers if, in their judgment, circumstances so warrant. Any such revision, suspension, or withdrawal could affect the market price of the Bonds.

USE OF PROCEEDS

Purpose

The Bonds are being issued (i) to pay for part of the costs of various projects of the City's Water System, (ii) to refund, certain of the Water System's outstanding obligations (described below under "—Refunding Plan"), and (iii) to pay the costs of issuing the Bonds and the costs of administering the Refunding Plan.

Sources and Uses of Funds

The proceeds of the Bonds will be applied as follows:

TABLE 1
SOURCES AND USES OF FUNDS

SOURCES OF FUNDS	
Stated Principal Amount of the Bonds	$ 93,260,000.00
Original Issue Premium	11,697,512.35
Total Sources of Funds	$ 104,957,512.35
USES OF FUNDS	
Construction Account Deposit	$ 68,000,000.00
Refunding Escrow Deposit	36,301,805.08
Costs of Issuance(1)	655,707.27
Total Uses of Funds	$ 104,957,512.35

(1) Includes legal fees, financial advisory and rating agency fees, printing costs, underwriter's discount, and other costs of issuing the Bonds and the costs of administering the Refunding Plan.

Refunding Plan

A portion of the proceeds of the Bonds will be used to carry out a current refunding of a portion of the City's Water System Refunding Revenue Bonds, 2012 (the "Refunded Bonds"), as shown below, to achieve debt service savings. The Refunded Bonds will be called on the date and at the redemption price shown in the table below.

TABLE 2
REFUNDED BONDS

Water System Refunding Revenue Bonds, 2012, Dated 5/30/2012

	Maturity	Interest Rate	Par Amount	Call Date	Call Price	CUSIP
Serial	9/1/2023	5.000%	$ 17,010,000	9/1/2022	100	812728 SB0
	9/1/2024	5.000%	8,580,000	9/1/2022	100	812728 SC8
	9/1/2025	5.000%	9,010,000	9/1/2022	100	812728 SD6
	9/1/2027	4.000%	875,000	9/1/2022	100	812728 WU3
	Total		$ 35,475,000			

The City will enter into a Refunding Trust Agreement with U.S. Bank Trust Company, National Association, as Refunding Trustee, upon the delivery of the Bonds, to provide for the refunding of the Refunded Bonds. The Refunding Trust Agreement creates an irrevocable trust fund to be held by the Refunding Trustee and to be applied solely to the payment of the Refunded Bonds. A portion of the proceeds of the Bonds will be deposited with the Refunding Trustee as money or invested in direct obligations of the United States of America (the "Escrow Securities") that will mature and bear interest at rates sufficient to pay the principal of and accrued interest coming due on the redemption date of the Refunded Bonds.

The money, Escrow Securities (if any), and earnings thereon will be held solely for the benefit of the registered owners of the Refunded Bonds.

The mathematical accuracy of the computations of the adequacy of the money and maturing principal amounts of and interest on the Escrow Securities, if any, to be held by the Refunding Trustee to pay principal of and interest on the Refunded Bonds as described above will be verified by Causey Demgen & Moore P.C., independent certified public accountants.

SECURITY FOR THE BONDS

Pledge of Net Revenue

The Bonds are special limited obligations of the City payable from and secured solely by the Net Revenue of the Water System and by money in the Parity Bond Account and the subaccounts therein (including the Reserve Subaccount). Net Revenue is pledged to make the payments in respect of the Parity Bonds into the Parity Bond Account and the Reserve Subaccount required by the Bond Documents, which pledge constitutes a lien and charge upon such Net Revenue prior and superior to all other liens and charges whatsoever. The Bonds are on a parity with the Outstanding Parity Bonds and all Future Parity Bonds, without preference or priority of right or lien. Upon the redemption or defeasance of certain of the Outstanding Parity Bonds, the Bond Documents provide that the Bonds will cease to be secured by the Reserve Subaccount. See "Reserve Subaccount" below. The City has covenanted that for as long as any Bond is outstanding, it will issue Future Parity Bonds only in accordance with the Bond Documents. See "—Additional Obligations" and Appendix A—Bond Ordinance.

The City has reserved the right to combine the Water System, including its funds and accounts, with other City utility systems, funds, and accounts. See "—Combined Utility Systems."

The Bonds do not constitute general obligations of the City, the State, or any political subdivision of the State, or a lien or charge upon any general fund or upon any money or other property of the City, the State, or any political subdivision of the State not specifically pledged thereto by the Bond Documents. Neither the full faith and credit nor the taxing power of the City, nor any revenues of the City derived from sources other than the Water System, are pledged to the payment of the Bonds.

The Parity Bond Account has been created and is maintained as a separate account within the Water Fund for the sole purpose of paying the principal of and premium, if any, and interest on the Parity Bonds, including the Bonds, as the same become due. The City has agreed to pay into the Parity Bond Account, on or prior to the respective dates on which principal and interest are payable, all utility local improvement district ("ULID") assessments on their collection (except for ULID assessments deposited in a construction account) and certain amounts from the Net Revenue of the Water System sufficient to pay such principal and interest when due. See Appendix A—Bond Ordinance.

Reserve Subaccount

The Reserve Subaccount has been created and maintained as a subaccount within the Parity Bond Account for the purpose of securing the payment of the principal of and interest on all Parity Bonds outstanding. The City has covenanted that it will, so long as any Covered Parity Bonds are outstanding, maintain the Reserve Subaccount at the lesser of (i) Maximum Annual Debt Service on all Parity Bonds outstanding at the time of calculation or (ii) 125% of Average Annual Debt Service on all Parity Bonds outstanding at the time of calculation (the "Reserve Requirement"). Under the Bond Documents, the City must fund any increase in the Reserve Requirement due to the issuance of the Bonds by a deposit of Parity Bond proceeds, Net Revenue in no more than five annual installments, or a Reserve Security. See Appendix A—Bond Ordinance.

From and after the Reserve Covenant Date (as defined below), the Reserve Subaccount will secure only such Parity Bonds as are designated as "Covered Parity Bonds" and the Reserve Requirement will be calculated based on debt service relating to Covered Parity Bonds only. In the Bond Documents, the Bonds are designated as Parity Bonds that are not Covered Parity Bonds and after the Reserve Covenant Date, the Bonds will no longer be secured by the amounts on deposit in the Reserve Subaccount. See Appendix A—Bond Ordinance for definitions of Covered Parity Bonds and Reserve Requirement.

The Reserve Covenant Date is the earlier to occur of (i) the date on which all of the currently outstanding Water System Revenue Bonds, 2010A (Taxable Build America Bonds-Direct Payment) (the "2010A Bonds"); Water System Refunding Revenue Bonds, 2012 (the "2012 Bonds"); and Water System Improvement and Refunding Revenue Bonds, 2015 (the "2015 Bonds"), are defeased in full; or (ii) the date on which the City has obtained consents of the requisite percentage of Registered Owners of Parity Bonds then-outstanding. ***As of the date hereof, the City has not obtained consents from any Registered Owners of currently outstanding Parity Bonds. However, purchasers of the Bonds are deemed to have given their consent as of the issue date for the Bonds and will be added to any other consents obtained in the future.***

Upon the issuance of the Bonds, the Reserve Subaccount is expected to be funded as shown in the following table. Under the Bond Documents, each of the surety policies shown in the following table qualifies as a Reserve Security in order to satisfy the Reserve Requirement, as each issuer was assigned a credit rating in the two highest rating categories at the time of issuance. See Appendix A—Bond Ordinance for definitions of Reserve Security and Qualified Insurance.

TABLE 3
RESERVE SUBACCOUNT SUMMARY

Surety Provider	Surety Bonds	Expiration Date	Current Ratings Moody's	S&P
AMBAC	$19,069,616	12/01/2023	Withdrawn	
NPFG[1]	3,783,203	08/01/2026	Baa2	NR
AMBAC	5,397,000	10/01/2027	Withdrawn	
NPFG[1]	4,431,090	03/01/2029	Baa2	NR
NPFG[1]	9,440,403	07/01/2029	Baa2	NR
NPFG[1]	1,279,360	11/01/2031	Baa2	NR
NPFG[2]	4,256,356	09/01/2033	Baa2	NR
NPFG[2]	3,474,371	09/01/2034	Baa2	NR
Assured Guaranty[3]	3,110,214	02/01/2037	A3	AA
Total Surety Bonds	$54,241,613			
Cash Deposits				
Existing Cash Deposit	$20,884,236			
Total Cash and Surety Bonds	$75,125,849			
Reserve Fund Requirement	$40,437,046			

(1) National Public Finance Guarantee Corp., a wholly-owned subsidiary of MBIA, Inc. ("NPFG"). Surety originally provided by Financial Guaranty Insurance Company.

(2) Surety originally provided by MBIA.

(3) Surety originally provided by Financial Security Assurance Inc.

Outstanding Parity Bonds

The outstanding 2010A Bonds, 2012 Bonds (a portion of which are designated as the Refunded Bonds), 2015 Bonds, Water System Improvement and Refunding Revenue Bonds, 2017 (the "2017 Bonds"), and Water System Improvement and Refunding Revenue Bonds, 2021 (Green Bonds) (the "2021 Bonds"), issued by the City and secured by revenues of the Water System on a parity with the Bonds collectively are referred to as the "Outstanding Parity Bonds." The Outstanding Parity Bonds, the Bonds, and any Future Parity Bonds collectively are referred to as the "Parity Bonds." The following table provides a summary of the Outstanding Parity Bonds.

TABLE 4
OUTSTANDING PARITY BONDS

Bond Description	Original Par Amount	Outstanding Principal on 6/30/2022
2010A Bonds	$ 109,080,000	$ 98,680,000
2012 Bonds[1]	238,770,000	62,660,000
2015 Bonds	340,840,000	228,200,000
2017 Bonds	194,685,000	173,645,000
2021 Bonds	82,220,000	82,220,000
Total	$ 965,595,000	$ 645,405,000

(1) Certain maturities of the 2012 Bonds are the Refunded Bonds, which will be refunded with a portion of the proceeds of the Bonds. See "Use of Proceeds—Refunding Plan."

State Loan Program Obligations

The City has seven currently outstanding agreements with the Washington State Department of Ecology ("Ecology") for very low interest rate loans. These loans were provided through the State's Drinking Water State Revolving Fund ("DWSRF") program, which is funded with a combination of State and federal Clean Water Act dollars. The loans are used by the City to pay for the construction of capital improvements.

The City's currently outstanding loans are identified in the table below. All outstanding loans are secured by a lien on Net Revenue of the Water System that is junior to the lien of the Parity Bonds. The documents for each loan differ slightly from one another in various respects. While some of the programmatic documents contain language purporting to permit acceleration, the State Attorney General's Office has indicated that none of these provisions would be enforced in the event of a default. Certain of the loan documents and a State statute relating to the revolving fund loans funded by federal grants purport to permit the State to recapture loan debt service payments from other funds payable to the borrower by the State to make the revolving fund whole in the event of a payment default. It is not clear whether such a provision would be enforceable or, if such recapture were to occur, what funds would be charged or how it would be treated from an accounting standpoint.

TABLE 5
STATE LOAN PROGRAM OBLIGATIONS
(AS OF DECEMBER 31,2021)

Facility	Year of Agreement	Amount Outstanding	Interest Rate
Myrtle Reservoir	2005	$ 897,778	1.50%
Beacon Hill Reservoir	2007	1,063,158	1.50%
West Seattle Reservoir	2008	956,842	1.50%
Maple Leaf Reservoir	2010	1,290,799	1.50%
Maple Leaf Reservoir ARRA	2010	4,037,967	1.00%
Chester Morse Lake Pump Plant	2014	9,696,000	1.50%
Chester Morse Lake Pump Plant	2016	4,784,210	1.50%
Total		$ 22,726,754	

Additional Obligations

Future Parity Bonds. The City reserves the right to issue Future Parity Bonds and to enter into Parity Payment Agreements for any lawful purpose of the Water System or to refund a portion of the Parity Bonds upon satisfaction of certain conditions set forth in the Bond Documents. Among other conditions, the City must have on file at the time of the issuance of the Future Parity Bonds:

(i) a certificate of the Director of Finance demonstrating that, during any 12 consecutive months out of the immediately preceding 24 months, Adjusted Net Revenue (as defined in Appendix A—Bond Ordinance) was at least equal to 1.25 times the Adjusted Annual Debt Service (the "Coverage Requirement") for all Parity Bonds plus the Future Parity Bonds to be issued (using Average Annual Debt Service on such proposed Future Parity Bonds as the assumed debt service for those proposed bonds during such 12-month period), or

(ii) a certificate of the Director of Finance and the General Manager of SPU demonstrating that, in their opinion, Adjusted Net Revenue (taking into account certain permitted revenue adjustments) will be at least equal to the Coverage Requirement for the five fiscal years next following the earlier of (a) the end of the period during which interest on those Future Parity Bonds is to be capitalized or, if no interest is capitalized, the fiscal year in which the Future Parity Bonds are issued, or (b) the date on which substantially all new facilities financed with those Future Parity Bonds are expected to commence operations.

If the Future Parity Bonds proposed to be issued are for the sole purpose of refunding Parity Bonds, no such coverage certification will be required if the Adjusted Annual Debt Service on the Parity Bonds after the issuance of the Future Parity Bonds is not, for any year in which the Parity Bonds being refunded were outstanding, more than $5,000 over the Adjusted Annual Debt Service on the Parity Bonds prior to the issuance of those Future Parity Bonds. See Appendix A—Bond Ordinance.

Future Subordinate Lien Bonds. In the Bond Documents, the City has reserved the right to issue revenue bonds or other obligations having a lien on Net Revenue subordinate to the lien of the Parity Bonds.

Parity Payment Agreements. The City may enter into Parity Payment Agreements secured by a pledge of and lien on Net Revenue on a parity with the Parity Bonds, subject to the satisfaction of the requirements for the issuance of Future Parity Bonds. See Appendix A—Bond Ordinance. The Bond Ordinance provides that purchasers of the Bonds have consented to the adoption by the City of future supplemental or amendatory ordinances or resolutions that would permit the City to treat reimbursement obligations under a Qualified Letter of Credit or Qualified Insurance (excluding Reserve Securities) as Parity Payment Agreements. See Appendix A—Bond Ordinance.

Contract Resource Obligations. The City may at any time enter into one or more Contract Resource Obligations for the acquisition, from facilities to be constructed, of water supply, transmission, or other commodity or service. The City may determine that all payments under those Contract Resource Obligations (including payments prior to the time such supply or service is being provided or during suspension or after termination of supply or service) will be an Operation and Maintenance Expense, upon compliance with certain requirements of the Bond Documents. See Appendix A—Bond Ordinance.

Rate Covenant

The City has covenanted to establish, maintain, revise as necessary, and collect rates and charges for water service that will produce Adjusted Net Revenue of the Water System in each fiscal year at least equal to the Coverage Requirement. The definitions of Adjusted Gross Revenue and Adjusted Annual Debt Service in the Bond Documents provide for adjustments for deposits to and withdrawals from the Rate Stabilization Account and for ULID Assessments. See Appendix A—Bond Ordinance.

Rate Stabilization Account

The Rate Stabilization Account was originally created by the City as a separate account in the Water Fund pursuant to Ordinance 118974 and was subsequently renamed the "Revenue Stabilization Subfund" by Ordinance 120875. The City may at any time, as determined by the Director of Finance, deposit in the Rate Stabilization Account Gross Revenue and any other money received by the Water System and available to be used therefor and may withdraw any or all of the money from that account for inclusion in Adjusted Gross Revenue for any fiscal year of the City. Such deposits and withdrawals may be made up to and including the date 90 days after the end of the fiscal year for which the deposit or withdrawal will be included as Adjusted Gross Revenue. No deposit of Gross Revenue may be made into the Rate Stabilization Account to the extent that such deposit would prevent the City from meeting the Coverage Requirement in the relevant fiscal year.

As of December 31, 2021, the balance in the Rate Stabilization Account was $42.0 million. See "Water System—Financial Policies" and Appendix A—Bond Ordinance.

Other Covenants

In the Bond Documents, the City has entered into other covenants, including those with respect to maintenance of the Water System, sale of the Water System, and preservation of tax exemption of interest on the Bonds. See Appendix A—Bond Ordinance.

Separate Utility Systems

The City has reserved the right to create, acquire, construct, finance, own, or operate one or more additional systems for water supply, transmission, or other commodity or service. The revenue of the separate utility system will not be included in Gross Revenue, and may be pledged to the payment of revenue obligations issued for the purposes of the separate system. Neither Gross Revenue nor Net Revenue of the Water System will be pledged to the payment of any obligations of the separate system, except as a Contract Resource Obligation in compliance with the Bond Documents or, with respect to Net Revenue, on a basis subordinate to the lien of the Parity Bonds on that Net Revenue. See Appendix A—Bond Ordinance.

Combined Utility Systems

The City has reserved the right to combine the Water System with other City utility systems, including their funds and accounts. See the definition of "Municipal Water System" in Appendix A—Bond Ordinance. Also see "Seattle Public Utilities—Administrative Structure" for a description of existing City utilities that have reserved the right to combine with other City utilities.

Debt Service Requirements

The following table shows the debt service scheduled to be paid from the Net Revenue of the Water System.

TABLE 6
DEBT SERVICE REQUIREMENTS[1]

	Outstanding Parity Bonds[2]			The Bonds			Total	State Loan Program	Total
Year	Principal	Interest	Total	Principal	Interest	Total	Parity Bonds	Obligations[3]	Debt Service
2022	$ 47,345,000	$ 30,120,214	$ 77,465,214	$ 900,000	$ 427,442	$ 1,327,442	$ 78,792,655	$ 2,370,646	$ 81,163,301
2023	33,455,000	26,849,295	60,304,295	17,305,000	4,618,000	21,923,000	82,227,295	2,341,733	84,569,027
2024	35,135,000	25,147,749	60,282,749	8,890,000	3,752,750	12,642,750	72,925,499	2,312,819	75,238,318
2025	36,840,000	23,352,109	60,192,109	9,330,000	3,308,250	12,638,250	72,830,359	2,283,905	75,114,264
2026	43,400,000	21,542,327	64,942,327	740,000	2,841,750	3,581,750	68,524,077	2,030,548	70,554,625
2027	41,150,000	19,419,051	60,569,051	1,255,000	2,804,750	4,059,750	64,628,801	1,792,369	66,421,170
2028	39,685,000	17,318,418	57,003,418	820,000	2,742,000	3,562,000	60,565,418	1,610,538	62,175,956
2029	43,570,000	15,395,258	58,965,258	8,695,000	2,701,000	11,396,000	70,361,258	1,590,573	71,951,831
2030	31,525,000	13,665,604	45,190,604	9,660,000	2,266,250	11,926,250	57,116,854	1,409,257	58,526,111
2031	33,005,000	12,099,405	45,104,405	925,000	1,783,250	2,708,250	47,812,655	1,391,712	49,204,367
2032	31,480,000	10,578,333	42,058,333	975,000	1,737,000	2,712,000	44,770,333	1,374,167	46,144,500
2033	28,275,000	9,302,665	37,577,665	1,020,000	1,688,250	2,708,250	40,285,915	989,534	41,275,449
2034	24,130,000	8,065,517	32,195,517	1,070,000	1,637,250	2,707,250	34,902,767	975,660	35,878,427
2035	22,205,000	6,987,360	29,192,360	1,125,000	1,583,750	2,708,750	31,901,110	961,786	32,862,895
2036	23,090,000	5,981,839	29,071,839	1,180,000	1,527,500	2,707,500	31,779,339	947,912	32,727,250
2037	24,005,000	4,936,365	28,941,365	1,240,000	1,468,500	2,708,500	31,649,865	615,090	32,264,955
2038	19,035,000	3,849,745	22,884,745	1,305,000	1,406,500	2,711,500	25,596,245	-	25,596,245
2039	13,410,000	3,084,688	16,494,688	1,370,000	1,341,250	2,711,250	19,205,938	-	19,205,938
2040	13,930,000	2,417,401	16,347,401	1,435,000	1,272,750	2,707,750	19,055,151	-	19,055,151
2041	7,120,000	1,724,300	8,844,300	1,510,000	1,201,000	2,711,000	11,555,300	-	11,555,300
2042	7,405,000	1,437,500	8,842,500	1,585,000	1,125,500	2,710,500	11,553,000	-	11,553,000
2043	7,700,000	1,139,300	8,839,300	1,665,000	1,046,250	2,711,250	11,550,550	-	11,550,550
2044	8,010,000	829,200	8,839,200	1,745,000	963,000	2,708,000	11,547,200	-	11,547,200
2045	8,340,000	506,500	8,846,500	1,835,000	875,750	2,710,750	11,557,250	-	11,557,250
2046	5,735,000	229,400	5,964,400	1,925,000	784,000	2,709,000	8,673,400	-	8,673,400
2047	-	-	-	2,020,000	687,750	2,707,750	2,707,750	-	2,707,750
2048	-	-	-	2,125,000	586,750	2,711,750	2,711,750	-	2,711,750
2049	-	-	-	2,230,000	480,500	2,710,500	2,710,500	-	2,710,500
2050	-	-	-	2,340,000	369,000	2,709,000	2,709,000	-	2,709,000
2051	-	-	-	2,460,000	252,000	2,712,000	2,712,000	-	2,712,000
2052	-	-	-	2,580,000	129,000	2,709,000	2,709,000	-	2,709,000
Total	$ 628,980,000	$ 265,979,541	$ 894,959,541	$ 93,260,000	$ 49,408,692	$142,668,692	$ 1,037,628,232	$ 24,998,249	$ 1,062,626,481

NOTES TO TABLE:

(1) Totals may not add due to rounding.

(2) Excludes the Refunded Bonds. Does not reflect the 35% federal interest rate subsidy associated with the 2010A Bonds. See "Treatment of Tax Credit Subsidy Payments Under the Bond Documents and Consent to Future Amendments."

(3) These loans are secured by a lien on Net Revenue of the Water System that is junior to the lien of the Parity Bonds.

Treatment of Tax Credit Subsidy Payments Under the Bond Documents and Consent to Future Amendments

Tax Credit Subsidy Bond Payments and Future Amendments to Bond Documents. The 2010A Bonds were issued as Build America Bonds. The Bond Documents authorizing the Outstanding Parity Bonds and the Bonds does not currently permit the City to net the Tax Credit Subsidy Payments received out of its calculation of Annual Debt Service for purposes of calculating whether the Coverage Requirement has been met, or to include the payments expected to be received as Gross Revenue for purposes of meeting the test for issuing Future Parity Bonds. The City includes the amounts actually received in respect of Tax Credit Subsidy Payments as "Other Income" in calculating current compliance with the Coverage Requirement.

The Bond Ordinance provides that purchasers of the Bonds have consented to the adoption by the City of future supplemental or amendatory ordinances or resolutions that would permit the tax credit subsidy payments to be netted against debt service to be paid in the future. See Appendix A—Bond Ordinance

Effect of Federal Sequestration. With respect to the City's outstanding 2010A Parity Bonds, the City is eligible for a tax credit subsidy payment of 35% of each interest payment due. As a result of federal sequestration, the interest subsidy payments from the federal government that came due in federal fiscal year 2021 were reduced by 5.7% ($115,355), and payments in federal fiscal year 2022 will also be reduced by 5.7% ($111,918). The City has sufficient cash available in the Water Fund to make timely debt service payments through its 2022 budget cycle. The City cannot predict how future legislative or budgetary measures could adversely affect the amount of the subsidy payment to the City.

SEATTLE PUBLIC UTILITIES

Administrative Structure

The City's water, drainage, wastewater, and solid waste utility services are consolidated administratively into a single entity known as Seattle Public Utilities. Within SPU, there are three separate funds: the Water Fund, the Drainage and Wastewater Fund, and the Solid Waste Fund. The City has reserved the right to combine the Water System, including the Water Fund, with other City utility systems, funds, and accounts in the future. The City also has reserved the right to combine the Drainage and Wastewater System (including the Drainage and Wastewater Fund) and the Solid Waste System (including the Solid Waste Fund) with other City utility systems, funds and accounts.

Management

SPU consists of the General Manager's Office, which includes groups dedicated to corporate policy and planning, corporate performance, and intergovernmental relations, and six Executive Branches. Of these Executive Branches, one group, People, Culture, and Community, provides City-wide services; two groups, Financial and Risk Services and Project Delivery and Engineering, provide utility-wide services; and three groups, Drainage and Wastewater, Solid Waste, and Water, are lines of business. SPU's organizational structure has been created by strategic business planning activities and priorities across multiple years. See "Water System—Strategic Business Plan." The General Manager administers SPU in accordance with policies established by the Mayor of the City (the "Mayor") and the City Council. Brief biographies of the members of SPU's executive management team follow.

Andrew Lee, PE, PMP, General Manager/Chief Executive Officer. Mr. Lee joined SPU in 2019 and currently is responsible for SPU's annual budget and oversight of its rates and utility funds, as well as conservation of the City's watersheds and compliance with federal and State water quality and environmental laws. He has more than 20 years of experience in utilities, having worked for SPU, the San Francisco Public Utilities Commission, Bellevue Utilities, Brown and Caldwell, and Olivia Chen Consultants (now AECOM). He has extensive experience in capital planning and program management, regulatory compliance and negotiations, asset management, and drainage, wastewater, and drinking water engineering, and is a member of the Project Management Institute.

Mr. Lee has a bachelor's degree in Civil and Environmental Engineering and a Master of Science degree in Environmental Engineering and Sciences, both from Stanford University. He is a licensed Professional Engineer in Washington and California and a certified Project and Program Management Professional.

Paula Laschober, Chief Financial Officer/Deputy Director of Financial and Risk Services. Ms. Laschober was appointed as CFO in 2019 and oversees the functions of finance, accounting, internal control, real property, contracts and procurement, and risk and quality assurance. Prior to joining SPU, she served for 30 years at Seattle City Light in financial services. Most recently, she was City Light's CFO, responsible for leadership and strategic direction of financial planning, rate setting, budgeting, accounting, internal audit, corporate performance and risk mitigation. She also managed City Light's information technology planning and strategy, via liaison with Seattle Information Technology ("Seattle IT"), a City department. Prior to joining City Light, she was a senior analyst with the utility consulting firm R.W. Beck and Associates in its Seattle headquarters office.

Ms. Laschober has a Master of Business Administration degree in Finance and a Ph.D. in Latin American Literature from the University of Washington.

Idris Beauregard. Deputy Director, People, Culture, and Community. Mr. Beauregard oversees the Community Affairs, Human Resources, Customer Response, Utility Accounts, and Clean Cities divisions. He has been with the City for more than 20 years. He began his City career at Seattle Parks and Recreation and joined SPU in 2013. Prior to taking on the deputy director role, he was the Clean City Division Director, overseeing illegal dumping and graffiti response, as well as encampment trash, sharps, RV remediation, homelessness, and anti- litter abatement programs.

Mr. Beauregard earned his bachelor's degree from the University of Washington and his Executive Master of Public Administration degree from the University of Washington's Evans School of Public Policy and Governance.

Keri Burchard-Juarez, PE, PMP, Deputy Director for Project Delivery and Engineering. Ms. Burchard-Juarez joined SPU in 2018 as the Deputy Director for Project Delivery and Engineering, overseeing the design and construction of drinking water, wastewater, drainage, and solid waste projects. In this role, she oversees Project Management and Controls, Engineering and Technical Services, Project Services, Construction Management, Development Services, and delivery of the Ship Canal Water Quality Project. Previously, she served as the Assistant Director for Engineering and Capital Project Delivery at the City of Austin, Texas, where she worked for 11 years. She started in Austin as a Project Manager, managing drainage and water treatment plant rehabilitation projects, then served as Manager of the Project Management Division. She played a significant role in delivering major infrastructure projects to Austin residents, including a new water treatment plant and a mile-long drainage tunnel through downtown. She also spent time in the private sector, designing public infrastructure and land development projects.

Ms. Burchard-Juarez earned a Bachelor of Science in Civil Engineering from the University of Texas at Austin. She is a licensed Professional Engineer in Texas and Washington and a certified Project Management Professional.

Ellen Stewart, Interim Deputy Director for Drainage and Wastewater Line of Business. Ms. Stewart oversees planning, program management, regulatory compliance, operations and maintenance, source control, and pollution prevention for the Drainage and Wastewater line of business. She started with SPU in 2001 as a Source Control Inspector and most recently served as the Division Director for the Source Control and Pollution Prevention Division, which includes regulatory compliance functions such as stormwater and wastewater source control, as well as outreach and engagement programs. Her expertise includes ensuring systems and processes are designed for efficiency and innovation.

Ms. Stewart has a Bachelor of Science degree in Aquatic Resources from the University of Vermont.

Jeff Fowler, PE, Deputy Director for Solid Waste Line of Business. Mr. Fowler is the Deputy Director of the Solid Waste line of business and Program and Planning Division. He oversees the management of two transfer stations, two household hazardous waste facilities, and multiple closed landfills, administration and compliance of SPU's solid waste collection contracts, and solid waste-related outreach and education. He has been with SPU for 23 years. Most recently, he was the Director of SPU Construction Management, responsible for contract administration and quality assurance on capital improvements.

Mr. Fowler has a Bachelor of Civil Engineering degree from Washington State University and a Master of Civil Engineering degree from the University of Washington. He is a licensed Professional Engineer in Washington.

Alex Chen, PE, Deputy Director for Water Line of Business and Shared Services. As the Deputy Director for the Water Line of Business and Shared Services since early 2020, Mr. Chen oversees SPU's drinking water system. He supervises SPU's Watershed Management Division, Water Quality Division, Water Planning and Program Management Division, Water Operations and System Maintenance Division, and Shared Services Maintenance Division. He has been at SPU since 2005, serving nine years as the drinking water treatment plants contract manager and five years as the Division Director for long-term asset management of the drinking water system as well as water supply operations. Prior to joining SPU, he spent seven years as a private design consultant, managing the design and construction of wastewater and drinking water reservoirs, pump stations, and treatment plants for a variety of utility clients, and four years as a treatment plant engineer for the East Bay Municipal Utility District.

Mr. Chen holds Bachelor of Science and Master of Science degrees in Civil/Environmental Engineering from Stanford University. He is a licensed Professional Engineer, a Water Treatment Plant Operator IV, and a Water Distribution Manager IV in Washington.

Employment Retirement System and Employee Relations

As of December 31, 2021, SPU has approximately 1,391 regular employees, approximately 80% of whom are represented under one of 14 labor agreements with the Coalition of City Unions. In 2021, the Civil Service Commission certified the Washington State Council of County and City Employees ("WSCCE") as the exclusive bargaining unit for SPU's Strategic Advisors and Managers to be effective on January 1, 2022. WSCCE and the City are currently negotiating the collective bargaining agreement. See "The City of Seattle—Labor Relations."

Almost all SPU employees are members of the Seattle City Employee Retirement System, which requires SPU, like all City departments, to make contributions equal to an actuarially determined percentage of covered payrolls. See "The City of Seattle—Pension Plans."

Operating and Fiscal Impacts of COVID-19 Pandemic

The City's financial performance has been and continues to be affected by the ongoing COVID-19 pandemic. COVID-19 remains a dominant influence on the local economy. The COVID-19 pandemic is ongoing, and the duration and severity of each outbreak and economic and other actions that may be taken by governmental authorities to contain or treat its impact remain uncertain. Reopening efforts implemented at any time may be reversed whenever conditions warrant.

The spread of COVID-19 continues to affect local, State, national, and global economic activity. In the City, the COVID-19 pandemic is ongoing and has resulted in significant public health emergency response costs and significant revenue reductions from previously budgeted and forecast levels. However, SPU was able to meet or exceed all financial policy targets in 2020 and 2021, and expects to meet or exceed all financial policy targets for 2022 and 2023. See "Water System—Management Discussion and Analysis of Operating Results" for additional detail.

See "Other Considerations—Global Health Emergency Risk and COVID-19 Pandemic" for a discussion of the Mayor's Proclamation of Civil Emergency, the Governor's State-wide "Stay Home-Stay Healthy" proclamation, and the State's move to Phase 3.

Operations. The COVID-19 pandemic and Mayor's Proclamation of Civil Emergency have significantly impacted each of SPU's enterprises. SPU's enterprise fund operations constitute "essential infrastructure" exempt from State and City Proclamations, as needed to maintain continuity of operations.

Prior to March 2022, much of SPU's workforce worked remotely to some extent; however, more than 60% of SPU's workforce reported to an SPU facility every day to ensure continuity of services. Beginning in March 2022, employees have begun transitioning to hybrid schedules, with specified days in the office. At the beginning of the pandemic, SPU established an Incident Command Team to standardize its programs, policies, and protocols to ensure the health and safety of its employees and to maintain operations. For on-site staff, SPU established enhanced cleaning and disinfecting procedures and social distancing for all facilities and vehicles, and mandatory health screening protocols for anyone reporting to sites or facilities and field work assignments. SPU continues to provide staff with updates and support intended to ensure compliance with City and State guidelines on office workspaces, including effective use of face coverings, access to personal protective equipment. and the programs mentioned above. For telecommuting staff, SPU updated its Telecommuting and Teleworking Policies, which include training for remote work technologies and other support to enable staff to work effectively and comfortably from home. This includes providing ergonomic workspace support such as chairs, laptops, monitors, and other technology to staff for their home-office setup.

SPU's ability to deliver water, sewer, stormwater, and solid waste services to its customers during the Proclamation period has not been impaired. Furthermore, SPU continues to monitor the pandemic's impacts on its operations and financial performance.

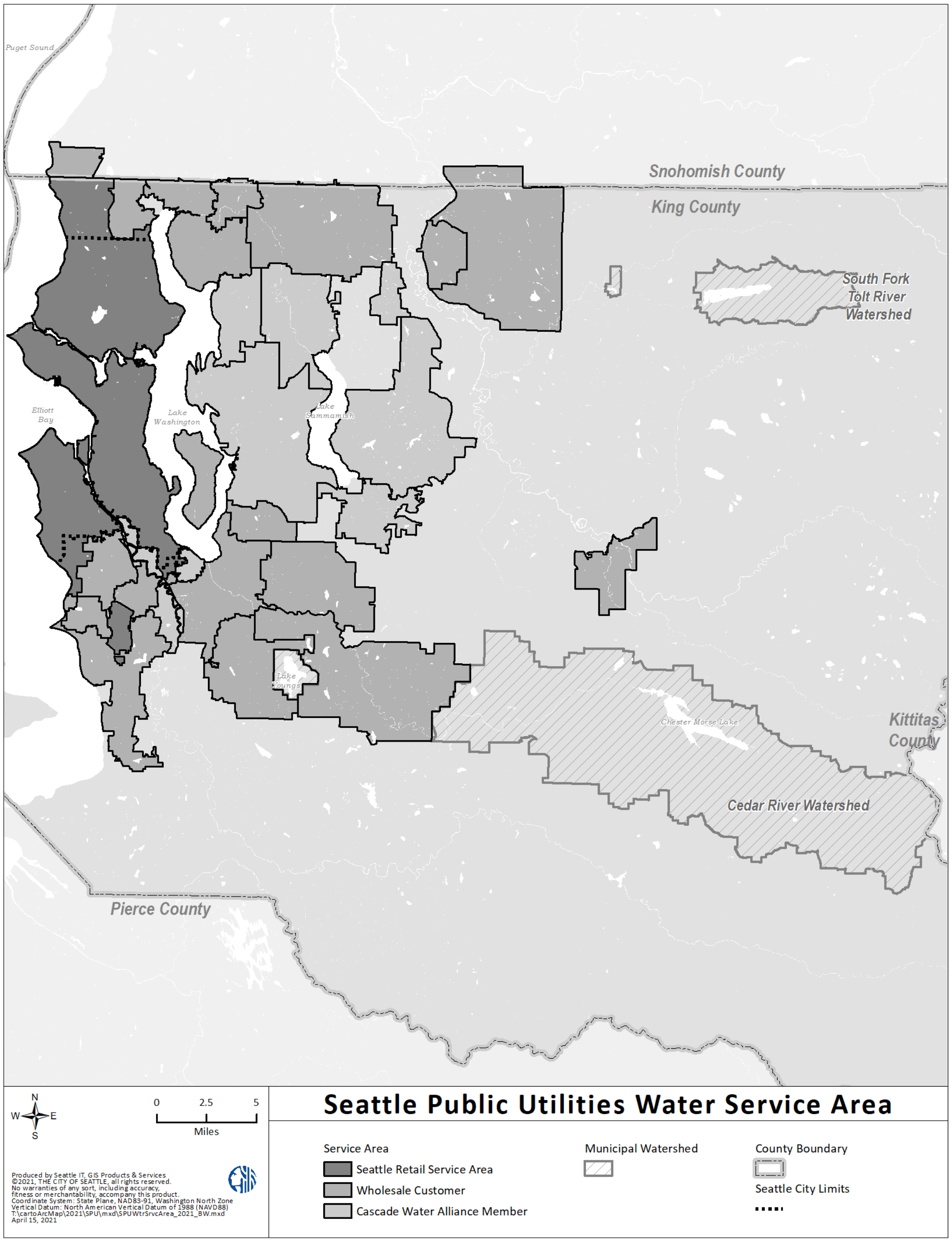
Utility Response and Impacts on Utility Services. SPU has experienced an increase in public health emergency response and other costs associated with mitigating the impacts of the COVID-19 pandemic on the residents of the City, including emergency response and utility discount program expansions.

WATER SYSTEM

General

The Water System was established in 1890. It currently includes two watershed sources of supply east of the City, the Cedar River Watershed and the South Fork Tolt Watershed, and two small well fields located immediately north of the Seattle-Tacoma International Airport (the "Seattle Well Fields"), as well as approximately 1,800 miles of pipeline and 327 million gallons ("MG") of storage capacity in treated water transmission and distribution reservoirs. The Water System's service area includes retail service to Seattle and portions of the Cities of Shoreline, Burien, Lake Forest Park, Mercer Island, and SeaTac, as well as a portion of unincorporated King County (the "direct service area"), and wholesale service to areas served by 17 suburban water districts and municipalities plus the Cascade Water Alliance ("Cascade") (together, the "Wholesale Customers") in King County (the "County") and south Snohomish County. See "Wholesale Customer Contracts" for a discussion of contracts with Wholesale Customers. The population of the Water System's direct service area is approximately 820,000, and the population indirectly served through the Wholesale Customers is approximately 741,000[1]. The map below shows the direct service area and the locations of the Wholesale Customers. A summary of operating statistics for the Water System follows.

(1) Estimate of 2021 population served is unchanged from 2020 estimate. Data used to estimate population are not expected to be available until late 2022 or early 2023.


Puget Sound
Snohomish County
King County
South Fork Tolt River Watershed
Elliott Bay
Lake Washington
Lake Sammamish
Chester Morse Lake
Kittitas County
Cedar River Watershed
Pierce County
N
W
E
S
0
2.5
5
Miles
Seattle Public Utilities Water Service Area
Service Area
Seattle Retail Service Area
Wholesale Customer
Cascade Water Alliance Member
Municipal Watershed
County Boundary
Seattle City Limits
Produced by Seattle IT, GIS Products & Services
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Coordinate System: State Plane, NAD83-91, Washington North Zone
Vertical Datum: North American Vertical Datum of 1988 (NAVD88)
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April 15, 2021

TABLE 7
WATER SYSTEM OPERATING STATISTICS

	2017	2018	2019	2020	2021
Population Served					
Retail	770,800	788,000	806,000	820,000	(5)
Wholesale (1)	707,200	718,000	729,000	741,000	(5)
Total Population Served	1,478,000	1,506,000	1,535,000	1,561,000	-
Water Sales Revenues ($000) (2)(3)					
Retail	$ 195,291	$ 200,313	$ 208,476	$ 207,590	$ 213,552
Wholesale	56,210	57,941	56,985	56,782	57,362
Total Water Sales Revenues	$ 251,501	$ 258,254	$ 265,461	$ 264,372	$ 270,914
Billed Water Consumption (MG) (3)					
Retail	20,312	20,233	19,889	18,882	19,522
Wholesale	22,905	22,987	22,128	21,712	23,328
Total Billed Water Consumption	43,217	43,220	42,017	40,594	42,849
Operating Costs ($ per MG)	$ 4,675	$ 4,924	$ 5,250	$ 5,246	$ 5,184
Gallons Used per Day per Capita (4)	80	79	75	71	75
Retail Meters in Use	195,331	196,634	197,747	198,726	200,152
Number of New Retail Meters	751	1,303	1,113	979	1,426
Total Water Diversions from Sources (MGD)	124.0	125.0	124.2	118.2	124.9
Non-Revenue	5.6	6.5	9.1	7.0	7.5
% Non-Revenue	4.5	5.2	7.3	5.9	6.0

(1) Estimated total population served by SPU's water supply. Because some Wholesale Customers obtain some of their water from sources other than SPU, this number is less than the total population of the shaded areas on the map on the previous page.

(2) Calculated on a revenue basis. Revenues represent payments from customers for service provided at published rates in each year as well as contractual payments from certain Wholesale Customers. Wholesale Customers pay a rate that represents only the costs of the regional system, while retail customers pay rates that cover the entire distribution system, which is expensive relative to the regional component. Revenues shown do not include the impact(s) of transfers to the Rate Stabilization Account or other credits or deferrals of income. See Table 16—Water System Operating Results.

(3) Revenue increases have resulted from increases in rates and seasonal consumption, where SPU utilizes an increasing step rate structure. Variations in billed water use are primarily associated with year-to-year variations in temperature and precipitation in the summer irrigation period. There has been no significant change in the geographic area served.

(4) Gallons used per day per capita in 2021 uses population estimates from 2020.

(5) Estimate of 2021 population served is unchanged from 2020 estimate. Data used to estimate population are not expected to be available until late 2022 or early 2023.

Source: Seattle Public Utilities

Comprehensive Planning

The SPU Water System Plan (the "Water System Plan") is a 20-year comprehensive plan for the Water System, which is updated every ten years on a rolling basis. The Water System Plan provides guidance for planning and operating the Water System, and includes objectives for the next 20 years in the areas of water quality, maintenance and rehabilitation, water conservation, and water supply.

SPU released the Public Review Draft of the 2019 Water System Plan on March 12, 2018. The plan, which contains changes to address the comments received from the public on the draft plan, was reviewed by the Mayor and the City Council. In October 2018, it was adopted by City Ordinance 125687.

The Water System Plan was approved by the County and the State Department of Health ("DOH") in 2019 and is valid until 2029.

In addition to the Water System Plan, SPU's seismic mitigation program is reducing the impact of seismic activity on system reliability. See "Seismic Impact on System Reliability."

Water Supply

The Water System's two surface water supply diversions are located on the Cedar River and on the South Fork of the Tolt River, each approximately 25 miles east of Seattle. The watershed areas upstream of the water supply intakes on these two rivers consist of approximately 104,000 acres of forest land in the Cascade Mountains of western Washington. Rainfall in the watersheds averages in excess of 100 inches annually. The snow pack at higher elevations averages five feet per year. Raw water storage capacity is 47,000 acre-feet in the Cedar River Watershed and approximately 56,000 acre-feet in the South Fork Tolt Watershed. A newly constructed floating pumping plant and refurbished existing barge-mounted pumping plant on Chester Morse Lake in the Cedar River Watershed provide access to an additional 27,000 acre-feet of stored water.

The City has diverted water from the Cedar River for use by the Water System since 1901. The City acquired this right by purchase, riparian right, appropriation, and other applicable laws. This claim of water rights, its relationship to instream flow requirements, and the effect of the City's diversion dam in blocking the passage of anadromous fish have been addressed in the Cedar River Watershed Habitat Conservation Plan (the "HCP"), a comprehensive, 50-year set of legal agreements with State and federal governments signed in 2000. See "—Endangered Species Act" for further information relating to the HCP. In 2006, in a comprehensive settlement with the Muckleshoot Indian Tribe regarding the Cedar River Watershed, the City agreed to further limits on its annual diversions. The agreement resolved long-standing issues between the City and the Muckleshoot Indian Tribe and strengthened the status of the City's water rights on the Cedar River. As part of the agreement, the City agreed to dedicate that portion of its water right above 124 million gallons per day ("MGD") to instream flows and to certain limits on its annual diversions from the Cedar River in perpetuity. In 2016, Ecology accepted the City's 35-year donation of a portion of its Cedar River Water Right Claim, 22,403 acre-feet per year, into the Washington State Trust Water Right Program, administered by Ecology. The donation satisfied the City's commitment to dedicate these flows to benefit instream flows.

The South Fork Tolt Reservoir, which came on line in 1964, provides 18.3 billion gallons (approximately 56,000 acre-feet) of storage. The City's water rights on the South Fork of the Tolt River were established by permits for water storage and water diversion granted by the State in 1957, with a priority date of July 14, 1936. The reservoir storage certificate was issued in 2003, but the diversion water right remains in permit status. The City's diversions from the South Fork of the Tolt River are not subject to instream flow restrictions established in 1979 for the Snohomish River under the Instream Resources Protection Program because of the earlier priority date. However, in 1989, the Federal Energy Regulatory Commission granted a 40-year license to Seattle City Light to build a hydroelectric power plant on the South Fork of the Tolt River, resulting in modifications to the terms of the original water permits, including the establishment of minimum instream flows. In 1997, Seattle City Light documented the full beneficial use of the water needed for the hydropower plant and received a certificate of water right. See "—Endangered Species Act."

In addition to the major surface water supplies, the City operates two small well fields in the City of SeaTac to provide drought capacity and emergency supply, as needed, under a temporary water right permit. The Riverton well field has two wells, and the Boulevard Park well field has one well. The three supply wells have a combined capacity of 10 MGD. The wells are operated under temporary permits from Ecology. The City has applied for permits that can be converted into water rights.

The City also has water rights applications on file with Ecology for potential future sources of supply, including the North Fork of the Tolt River and the Snoqualmie Aquifer. An evaluation of specific City water right claims, permits, and applications as called for in DOH planning guidelines indicates that the City does not need to apply for any new water rights within the next 20 years.

Future Water Supply and Conservation

At present, SPU has adequate supply resources to meet Water System demands under a wide range of weather conditions. Existing sources of supply owned by the City provide an average annual firm yield of 172 MGD. The current firm yield is based on an update completed in 2016 to include inflow datasets from October 1928 through March 2016 to represent current operating conditions, namely the use of the current spring refill target elevation of 1,563 feet for Chester Morse Lake and the use of a revised monthly demand distribution based upon the actual demand in 2006 through 2014. Demand in the service area has averaged approximately 122 MGD since 2010.

SPU's official water demand forecast was updated for the 2019 Water System Plan; it is slightly lower than the revised 2013 Water System Plan forecast and remains considerably below SPU's current firm yield of 172 MGD until well after 2060. Given the current firm yield estimate for SPU's existing supply resources, this forecast indicates that no new source of supply is needed before 2060.

While population has steadily risen in the service area, water demand has generally been decreasing due primarily to conservation. The total population of retail and wholesale customers in King and south Snohomish Counties currently served by SPU is about 1.6 million.

Since 1990, total water use has decreased by 26% while the number of people being served increased by 39% through 2020. Conservation has been encouraged through higher marginal rates in the summer peak season, utility water conservation programs, new State plumbing codes specifying efficiency standards for water fixtures, and improved Water System operations. In addition, the majority of new housing added recently has been higher density housing, which tends to use less water per capita.

SPU and 18 Wholesale Customers operate regional conservation programs collaboratively as the Saving Water Partnership. These regional conservation programs provide opportunities for customers within the direct service area and the service areas of participating Wholesale Customers. Additionally, the City has its own water conservation program to support low income households by offering rebates for toilets, common area clothes washers, and aerators to qualifying single-family, multi-family, and institutional low income residential buildings. Customers in the Utility Discount Program are referred to this latter program to help overcome first-cost barriers to installing water efficient fixtures and appliances. See "Water Rates—Low Income Assistance."

In 2003, the State Legislature passed a Municipal Water Law that resulted in the adoption of water use efficiency rules set by the DOH. The rules include planning requirements, distribution leakage standards, water use efficiency goal-setting, and performance reporting. SPU and the Saving Water Partnership have had a series of water use efficiency goals since 2003 and consistently met those goals. The most recent regional goal is documented in SPU's 2019 Water System Plan: for the period 2019-2028, keep the total average annual retail water use of Saving Water Partnership members under 110 MGD through 2028, despite forecasted population growth, by reducing per capita water use. In 2021, the Saving Water Partnership, with the support of residential and commercial customers, met the goal, using 95.5 MGD.

In the 2019 Water System Plan update, SPU considered the potential uncertainties associated with demand forecasts, as well as the potential impacts future climate change may have on its water supplies and demands, in determining that no significant investments in new sources are needed before 2060. See "—Climate Change."

In addition to new conservation programs, several potential water resources were identified in the 2019 Water System Plan, should they be needed in the future. These include:

(i) *Permanent Cedar Drawdown*: Access storage in Chester Morse Lake below elevation 1,532 feet for normal supply using Morse Lake Pump Plant.

(ii) *South Fork Tolt Reservoir Drawdown*: Draw an additional 50 feet to elevation 1,660 feet, the lowest intake level, which may require changes at the Tolt Water Treatment Facility.

(iii) *Lake Youngs Drawdown:* Use 28 feet of storage in Lake Youngs to access an additional 17,390 acre-feet, which will likely require the addition of filtration at the water treatment facilities.

(iv) *North Fork Tolt River Diversion:* Construct a small diversion on the North Fork Tolt in addition to drawdown of the South Fork Tolt to elevation 1,660 feet.

(v) *Snoqualmie Aquifer:* Development of the Snoqualmie Aquifer with a deep well, new river intake, filtration plant, pump station, and an interconnection to SPU's Tolt pipeline.

(vi) *Cedar High Dam:* Construct a new and higher dam at the current Overflow Dike location at the Chester Morse Reservoir.

(vii) *Desalination:* Construct a desalination plant to use saltwater pumped from Puget Sound.

(viii) *Reclaimed Water:* Develop one or more reclaimed water projects to reuse wastewater.

(ix) *Distributed Systems:* Construct multiple small systems throughout the service area to offset potable water use, such as greywater and rainwater harvesting systems.

(x) *Regional Interties:* Construct interties with adjacent regional water suppliers to access water from those sources.

These new resource alternatives vary in the amount of new supply provided, capital and operating costs, and level of effort needed to develop. SPU has not yet selected any of these potential resources for development as a preferred next source of supply.

Endangered Species Act

In 1999, the National Marine Fisheries Service ("NMFS") listed the Puget Sound Chinook salmon, which migrate through waterways within and adjacent to the City, as a "threatened species" under the Endangered Species Act ("ESA"). NMFS subsequently finalized a "4(d) rule" extending the ESA's prohibition against "take" to Puget Sound Chinook salmon. This rule enables jurisdictions to submit plans that, if approved, would limit the application of the general prohibition to activities covered in the plan. Eligible activities include certain municipal, residential, commercial, and industrial development activities, certain road maintenance activities, and certain forestry activities. ESA-listed species within the City's water operational area include not only Chinook salmon, but bull trout, steelhead, northern spotted owls, and marbled murrelets.

In an effort to reduce uncertainty with regard to its largest water supply source, the Cedar River, the City developed the HCP with the U.S. Fish and Wildlife Service ("USFWS") and NMFS, among other parties, in 2000. The HCP specifies the measures the City will undertake to minimize and mitigate potential impacts on listed species in the Cedar River Watershed. The HCP commits the City to spend about $116 million (in 2021 dollars) to improve conditions for fish and wildlife within the Cedar River Watershed through the year 2050. See "Watershed Management Policies" and "Capital Improvement Program." While these measures include commitments to instream flow levels, the Water System's estimated firm yield is not expected to be impacted adversely by the HCP. The incidental take permit, which the City was issued when the HCP was approved, protects the City from ESA liability resulting from potential impacts of the Water System's Cedar River operations on listed species and approximately 76 other species of fish, mammals, birds, and amphibians known to be present and potentially affected by the City's water supply and hydroelectric and land management activities.

The second major Water System supply is drawn from the South Fork of the Tolt River with the aid of a dam. Streamflow downstream from the impoundment is affected by dam operations and water diversions, with potential impacts on Chinook salmon and steelhead, which are both listed under the ESA as threatened. A 2008 study investigating fish populations in the South Fork Tolt Reservoir and its tributaries identified cutthroat trout as the only salmonid species upstream of the South Fork Tolt Dam. The City, various tribes, and several federal agencies entered into the Tolt River Settlement Agreement in 1988, which included commitments for instream flows and habitat improvements intended to mitigate for impacts caused by the City's water supply and power generation operations. Over the next six years, SPU will join Seattle City Light in re-licensing its hydropower project on the Tolt River. This process will be led by the Federal Energy Regulatory Commission and may result in updated commitments made by the City to mitigate for the potential impact of water and hydroelectric operations on ESA-listed species.

To further manage legal risks, the City invests in aquatic resources research and monitoring in its major waterways and participates in regional watershed planning and salmon recovery in the Cedar River, the Snohomish/Tolt Rivers, and the Green/Duwamish Rivers. As a result, the City has assembled substantial, long-term data sets and coauthored scientific papers on Chinook salmon, sockeye salmon, coho salmon, steelhead/rainbow trout, and bull trout.

The City and SPU expect that additional funding will be needed to support habitat restoration programs that address salmon-related policy objectives. Funding for these programs is expected to come from a variety of sources, including City water rates, drainage and wastewater rates, taxes or fees imposed by other local jurisdictions, and federal and State grants.

Transmission Facilities

The transmission facilities of the Water System consist of multiple primary transmission lines from the Cedar River, one transmission line and substantial portions of a second line from the Tolt River ("Tolt 1" and "Tolt 2," respectively), and a network of supply mains throughout the service area. In all, there are approximately 160 miles of primarily concrete or steel pipelines ranging in diameter from 30 to 96 inches.

After two segments of Tolt 1 ruptured in the late 1980s, most of the pipeline was replaced or sliplined (sliding a new smaller pipe inside an existing larger pipe) by 2005, except for the first two miles where the new Tolt 2 had already been built. In addition, for both reliability and new capacity, approximately 18 miles of Tolt 2 were constructed beginning at the Tolt Regulating Basin and running parallel to and interconnecting with Tolt 1 at several locations. SPU is also expanding its cathodic protection program to extend the service life of both steel and concrete cylinder pipelines.

To assist in maintaining water flow to the distribution portion of the Water System, the transmission system includes two regulating basins, seven covered storage reservoirs, four elevated tanks, one standpipe, and two control works surge tanks to provide drinking water storage. In addition, there are 15 transmission pumping stations with a total rated capacity of more than 180,000 gallons per minute ("GPM"). The following table shows the hydraulic capacities of the primary transmission lines and the transmission regulating basins and reservoirs of the Water System.

TABLE 8

HYDRAULIC CAPACITY OF INDIVIDUAL COMPONENTS OF THE TRANSMISSION SYSTEM(1)

Facility	Capacity
Transmission Lines (MGD)	
Cedar River	200
Tolt River	135
Total	335
Raw Water Storage Facilities (MG)	
Lake Youngs (regulating basin)	4,812
Tolt Regulating Basin	312
Total	5,124
Treated Water Storage Facilities (MG)	
Transmission Reservoirs	215
Elevated Tank and Other Storage	7
Total	222

(1) Treatment capacity is 120 MGD on the Tolt River source and 180 MGD on the Cedar River source. Equalizing reservoirs (clearwells) at the outlet of the treatment plants (7.4 MG on the Tolt River source and 20 MG on the Cedar River source) make it possible to deliver higher flow rates as needed into the transmission system for several hours. Averaged over several days, though, effective transmission capacity cannot exceed treatment capacity, as all water must be treated.

Source: Seattle Public Utilities

During the month of record maximum consumption, July 1985, the transmission lines delivered an average of 301 MGD. Water delivery by transmission pipelines on peak days at present typically does not exceed 200 MGD.

In 2009, Tolt 1 and Tolt 2 were found to cross an ancient deep-seated (approximately 100-ft) landslide complex located between the Tolt Regulating Basin and the Tolt Water Treatment Facility. The 1,300-foot wide slope had been stable for many decades, dating to at least the completion of the pipelines across it. The potential for renewed instability was therefore unknown. Beginning in about 2000, new, slow-creeping slope movement was reinitiated, probably due to both new logging in upland areas above the slope and erosion by the North Fork Tolt River at its toe. This slope movement has affected both pipelines for the past 20 years. Since 2009, Tolt 1 has been unused most of the time, in order to reduce the risk of new small joint leaks triggered by the ground movement and aggravated slope instability. A 48-inch double ball joint expansion sleeve was installed on the newer steel Tolt 2 to allow the pipeline to better accommodate the slow-creeping slide. The designed 14-degree maximum movement radius of the pipe joint was reaching its terminus after eight years, and the joint was excavated and reset in October 2017 to provide flexibility for another ten years or more at the then-current rate of ground movement.

In addition, SPU initiated an on-going survey and inclinometer monitoring program to monitor the slope and pipeline movement since the issue became known in 2009. Information from multiple geological and geotechnical experts in 2014-2016 indicated that the potential for sudden, large catastrophic slope failure was low. This modeling and evaluation work also pointed to seasonal groundwater pressures as playing a major role in the annual slow-creeping (1-2 inches/year) slope movement.

In 2017, SPU installed a series of five engineered logjams on the streambank at the toe of the slope to armor it against continued erosion. In 2020, SPU constructed a system of 85 horizontal groundwater drains near the toe of the unstable slope in an effort to lower groundwater levels, which consultant geotechnical experts suggested would significantly slow or stop the movement. This work was completed in November 2020. Results through February 2022 indicate that groundwater levels have been lowered by an average of 20 feet and have not substantially risen since then. In the two winter seasons now completed since the execution of the project, total slope movement has ranged across multiple inclinometers from 0.01 inches to 0.24 inches total movement (total movement before the drains were completed was one to two inches annually).

The past damages to Tolt 1 from slope movement in this area are now being planned to be remedied through a 2,550-foot long sliplining with a high-density polyethylene plastic pipe. The construction contract for this work has been awarded and is expected to be completed in 2022. Once completed, SPU anticipates the available use of Tolt 1 for regular daily use or bypass operations as desired. Tolt 1 is being slip-lined for reliability purposes primarily; Tolt 2 has sufficient capacity to match the capacity of the Tolt Treatment Plant.

SPU has also prepared an emergency response plan to provide water service should the landslide prevent water deliveries through the Tolt pipelines for any extended period of time. One key component of the response would be to deliver water from the Cedar River system, including use of the pump station at Tolt Eastside Supply Line Junction, to deliver Cedar River water to wholesale customers along the Tolt pipelines. SPU is able to serve all of its customers via the Cedar River system when the Tolt River system is off-line, except during the month of peak water use. A Tolt River system outage during the peak month would require some level of water use curtailment. However, the risk for such an event has been very low because the slide moves minimally or not at all during the dry weather summer period and should now be infinitesimal with the effect of the groundwater drains in greatly reducing slope movement across the slide area.

Storage and Distribution

Storage of water within the distribution portion of the Water System is accomplished through the use of six covered distribution reservoirs, five standpipes, and one elevated tank, with capacities as follows:

TABLE 9
CURRENT CAPACITY OF DISTRIBUTION RESERVOIRS (MG)

Reservoirs	97.0
Standpipes	7.0
Elevated Tank	1.0
Total	105.0

Source: Seattle Public Utilities

The adequacy of SPU's distribution and transmission storage volumes has been demonstrated by using a computerized hydraulic model of the Water System to simulate a suite of emergency and peak demand conditions and other analyses.

The distribution system consists of approximately 1,690 miles of predominantly cast iron and ductile iron pipe with some concrete cylinder and steel pipe. To assist in maintaining adequate pressure within the distribution system, there are 16 electric and hydraulic pumping stations (36 individual pump units) with a total rated pumping capacity of more than 100,000 GPM.

The storage and distribution facilities and conservation incentives have met the needs of the expanding population in the service area. Peak day consumption levels as high as 329 MG and 348 MG were recorded on June 29, 1987, and July 15, 1970, respectively. However, since 2003, peak daily consumption has been less than 250 MG.

Leakage from the distribution system is low, as evidenced by SPU's low distribution system leakage ("DSL") number. DSL must be calculated annually and reported to both DOH and SPU's retail customers. The compliance threshold is 10% or less and is based on a rolling three-year average. DSL is calculated as water produced and purchased minus "authorized consumption," which includes water sold at retail and wholesale, as well as authorized system uses such as reservoir cleaning and flushing. The table below shows the three most recent years of DSL data. For 2021, the annual DSL was 5.9% and the three-year average was 6.2%, which is well below the maximum allowed of 10%.

TABLE 10
DISTRIBUTION SYSTEM LEAKAGE

	2019		**2020**		**2021**	
Component	**MG**	**MGD**	**MG**	**MGD**	**MG**	**MGD**
Total Produced	45,224	123.9	43,143	118.2	45,589	124.9
Told Sold	42,017	115.1	40,595	111.2	42,849	117.4
Sold at Wholesale	22,128	60.6	21,712	59.5	23,328	63.9
Sold at Retail	19,889	54.5	18,882	51.7	19,522	53.5
Authorized System Uses	107	0.3	52	0.1	67	2.0
DSL Volume (one year)	3,100	8.5	2,496	6.8	2,672	7.3
DSL as % of Total Produced (one year)	6.9%		5.8%		5.9%	
DSL as % of Total Produced (three-year average)	5.5%		5.9%		6.2%	

To reduce missed revenue opportunities, SPU has adopted focused meter testing and meter replacement programs to assure the accuracy of its billing meters. SPU operates approximately 200,000 billing meters, of which 5,550 are large (three-inch to 24-inch), and the rest are small (3/4-inch to two-inch). SPU conducts periodic tests of statistically significant samples of small meters and generally has found that these meters tend to remain accurate until sudden and complete failure occurs, which is rapidly detected and the failed meters replaced. Because large meters tend to gradually lose accuracy with use, SPU has a goal to test every large retail meter at least once in every five years. SPU has not been able to meet this goal for all meters due to limited resources and the relatively high cost of meter testing. The average rate of large meter testing is currently once every eight to ten years. However, SPU has made progress toward this goal by focusing on meters showing greater consumption where accuracy improvement as a result of testing would translate into higher revenue recovery. High-use meters are tested between twice a year and once in five years, based on a combination of size and annual volume of water passing through the meter.

SPU also has an on-going large meter replacement program to replace failing and obsolete meters and certain high-use meters where improved accuracy is likely to translate to revenues sufficient to cover the replacement in three years or less. Approximately 46% of the large meter stock has been replaced in the past 15 years. The remaining older meters are low-use, and the cost of replacement is unlikely to be recovered through increased revenues. Instead, these older low-use mechanical meters are gradually replaced as they fail.

City of Shoreline. SPU currently serves approximately 11,000 retail customers in the City of Shoreline, directly north of Seattle, through its distribution system. This represents approximately half of the population of the City of Shoreline. In 2009, the City of Shoreline requested to begin negotiations to acquire SPU's water distribution system to provide retail service within its city limits and to establish its own municipal water utility. In early 2015, after several years of discussion, the City determined that a sale is not in the best interests of Seattle ratepayers, and ended discussions with Shoreline over the water system assets sale. Instead, SPU and the City of Shoreline passed ordinances to extend the franchise through 2026 with amendments that address some of the interests Shoreline expressed during the acquisition discussions.

Seismic Impact on System Reliability

A comprehensive seismic evaluation of the Water System was completed by a consultant in 1990. This evaluation considered two levels of probabilistic seismic ground motions. Lower level ground motions were defined to have an approximately 40% probability of exceedance in 50 years or an average return interval of 100 years. Upper level ground motions corresponded to the building code design ground motions at that time, with a 10% probability of exceedance in 50 years or an average return interval of 472 years. Based on the findings of the 1990 study, many critical facilities were seismically upgraded.

The 1965 and 2001 Puget Sound earthquakes demonstrated that the SPU water system can withstand moderate earthquakes with relatively minor damage. However, during the 1990s, it became apparent to seismologists that the seismicity of the Puget Sound area was much higher than previously believed and that the Seattle Fault Zone that runs through Seattle and Bellevue was seismically active. Additionally, the 1990 study was unsure whether large M9.0 Cascadia subduction zone earthquakes were possible off the Pacific Northwest coast. These M9.0 earthquakes, which would produce strong shaking in the Puget Sound region, are now believed to occur with a 500-year average return interval. Earthquakes much larger than the 1965 and 2001 events have occurred in the past and will occur in the future in the Seattle area. The most recent M9.0 earthquake occurred in 1700. Building code, seismic ground motions, and seismic design requirements in the Puget Sound region were significantly increased to reflect the increased seismic hazard posed by these larger earthquakes.

In 2018, SPU completed an updated water system seismic study to reflect hazards from a Seattle Fault earthquake and incorporate the latest seismic code updates. SPU is currently implementing the recommendations from the 2018 study. An earthquake mitigation plan to further improve facility and system performance during and after a major earthquake has been developed, and SPU is moving forward with projects to improve the seismic resiliency of its pipelines and facilities. SPU is also evaluating potential transmission pipeline seismic upgrades in vulnerable locations. Seismic retrofits will be carried out on its Riverton and Eastside concrete reservoirs in the next several years, as well as on the Magnolia elevated steel water storage tanks. SPU previously brought four of its major in-town reservoirs up to seismic standards as part of its open reservoir covering program.

Following through on additional recommendations from the 2018 seismic study, SPU completed an earthquake-specific hazard response plan in 2020 to help mitigate earthquake damage. SPU is beginning the process of acquiring more emergency repair materials such as pipe repair clamps and pipe segments so that earthquake pipe damage can be more quickly repaired in the immediate aftermath of a large seismic event. SPU has also been installing earthquake-resistant pipe for new pipelines that are in liquefaction- and landslide-susceptible areas and for critical pipelines that serve essential facilities or are essential for firefighting.

In addition to the seismic upgrades SPU has completed, SPU has two reservoirs in reserve, if needed for emergency water supply after a major earthquake, to provide only critical emergency water resources for SPU customers. In 2014, SPU removed its remaining two open storage facilities, the Roosevelt and Volunteer Reservoirs, from service. In the event of a major earthquake, the reservoirs can be reconnected to provide a vital source for emergency water and firefighting purposes.

Water Quality

SPU has a comprehensive source-to-tap water quality management program. Water quality is ensured through an integrated effort of source protection, state-of-the-art treatment, and ongoing monitoring throughout the Water System for potential microbial and chemical contaminants.

SPU owns more than 99% of the Cedar River Watershed and 70% of the South Fork Tolt Watershed (the other 30% is U.S. Forest Service land) above the intake points. Protection of the two watersheds from agricultural, industrial, and recreational activities helps ensure that high-quality water is delivered to the Seattle area. In addition to the two primary surface sources, the Seattle Well Fields periodically provide a small portion of the City's water supply. These wells are deep and afford natural protection from contamination.

On the Cedar River source, water is screened and fluoridated at the Landsburg Cedar River Diversion facilities before traveling through transmission pipelines to Lake Youngs. Primary treatment for the source is provided by the Cedar Treatment Facility at the outlet of Lake Youngs, which was commissioned in 2004 with a maximum treatment capacity of 180 MGD. The Cedar Treatment Facility is operated under a long-term contract with Jacobs. The plant treatment processes include ozonation, ultraviolet light disinfection, pH adjustment, and chlorination.

The treatment plant on the Tolt source, commissioned in 2001, has a maximum treatment capacity of 120 MGD. The Tolt Treatment Facility is operated under a long-term contract with American Water/CDM. The plant provides primary treatment for the Tolt source using treatment processes including ozonation, direct filtration, pH and alkalinity adjustment, fluoridation, and chlorination.

When the Seattle Well Fields are in operation, treatment includes chlorination, fluoridation, and pH adjustment. The intent of treatment is to protect public health and to comply with treatment and monitoring requirements of the DOH. SPU operates a water quality laboratory accredited by Ecology for bacteriological and chemical analyses to help ensure compliance with drinking water standards.

As an operator of a public water system, SPU must comply with treatment and monitoring requirements of the Safe Drinking Water Act of 1974 as amended and any additional requirements as specified by the DOH. Water quality parameters and regulations of particular significance are discussed below.

Surface Water Treatment. The federal Surface Water Treatment Rule established filtration and disinfection requirements for public water systems utilizing surface sources. Since startup of the Tolt Treatment Facility in 2001, the Tolt source has been treated to meet these requirements.

The Surface Water Treatment Rule also established criteria for unfiltered systems with a Limited Alternative to Filtration ("LAF"), including (i) watershed protection and management, (ii) raw water quality, (iii) treatment efficiency and redundancy, and (iv) some aspects of distribution system water quality. SPU began operation of the Cedar Treatment Facility under the requirements of the LAF in 2004 and continues to operate the Cedar Treatment Facility in accordance with such requirements.

In 2006, the United States Environmental Protection Agency (the "EPA") issued the Long-Term 2 Enhanced Surface Water Treatment Rule, which requires higher levels of treatment for water sources with higher levels of *Cryptosporidium*. SPU conducted monitoring for *Cryptosporidium* in the Tolt and Cedar sources over the years with results showing extremely low levels and no change of water treatment required. SPU conducted additional *Cryptosporidium* monitoring in 2015 and 2016 which verified continued low levels.

Lead and Copper. The City meets the requirements of the current Lead and Copper Rule ("LCR") and qualifies for reduced levels of monitoring for lead and copper. A revised Lead and Copper Rule was published by EPA in early 2021 and includes new requirements that will take effect in October 2024. The primary focus of the revised rule is lead service line removal, which does not impact SPU. However, new tap sampling requirements may need to be implemented for the direct service area, and school and childcare testing was added as a new requirement. SPU does not anticipate experiencing difficulties in complying with the new requirements of the LCR.

SPU utilizes corrosion control treatment to reduce the potential for lead leaching from plumbing materials into drinking water. SPU optimized its corrosion control parameters more than a decade ago and continuously monitors water chemistry at its treatment facilities and collects routine samples throughout the distribution system to ensure appropriate water pH and alkalinity at ten distribution system locations. Results are reported regularly to the DOH. In addition, SPU maintains a State-accredited analytical laboratory that performs the testing above in addition to most of the regulatory testing for SPU's Wholesale Customers. Lead and copper have not been detected in the source water.

Lead in water normally comes from plumbing materials, primarily from corrosion of lead solder used to connect copper pipes and corrosion of brass fixtures that contain lead. SPU recognized this as a potential problem over 30 years ago and has been treating the water to reduce its corrosiveness since the early 1980s. The City was the first municipality in the nation to ban the use of lead solder in potable plumbing systems. The steps taken in the last two decades to reduce the corrosiveness of the water have been successful in reducing lead levels at customer taps.

In 2016, a Governor's directive tasked the DOH to work with stakeholders, including SPU, to develop policy and budgetary proposals to identify and remove lead service lines and components from certain public water systems over the next 15 years; this is ongoing. SPU did not historically, and does not currently, install lead water mains or lead service lines in the water distribution system. SPU maintains a database of water mains and service lines that provides documentation of location, installation date, and material type. Water meter type and location are documented as well. Meters are generally made of brass, and some older meters use an alloy that does contain lead. Any new meter installation by SPU must utilize lead-free brass that meets EPA requirements. The majority of service lines (the pipe connecting a water main to an individual meter) are made of copper or plastic. A small percentage (approximately 4%) is made of galvanized steel. Based on historical maintenance and repair records, SPU believes approximately 20-25% of the galvanized steel service lines utilized a lead gooseneck connecting the main to the service line. The water main and service line records (some dating back more than a century) do not include information on which specific galvanized steel service connections had lead goosenecks installed. These are removed whenever encountered during leak repair or other construction activities.

SPU has surveyed the records described and the presence of lead components in the distribution system appears limited to those described above. SPU also maintains a "Research Your Water Service Line" Map Tool available on its website that provides a basic illustration of the water service lines to all properties served by SPU. The Map Tool includes information about the service line pipe material, *e.g.,* copper, plastic or galvanized steel, for the portion of the water service line that SPU owns and maintains (generally from the SPU water main to a point a few feet beyond the service line's water meter).

Total Coliform Rule. SPU has been continuously in compliance with the Total Coliform Rule. The Total Coliform Rule requires monitoring to demonstrate that a water system is operating and maintaining its distribution system in a way that minimizes the risk of bacterial intrusion or regrowth. SPU collects required monthly samples from its retail service area distribution system and tests for coliforms, which are naturally present in the environment and are used as an indicator of whether other, potentially harmful bacteria may be present. In April 2016, the Revised Total Coliform Rule took effect nationally for public water systems, adding a requirement for system assessments with corrective action when coliform contamination is detected. No assessments have been triggered for SPU.

Disinfection Byproducts. The use of disinfectants, such as chlorine, to provide protection against microbes in water can result in the formation of disinfection byproducts ("DBPs") when the disinfectants react with organic matter in the water. SPU meets current regulatory standards under Stage 2 DBP Rules.

Arsenic. EPA's maximum contaminant level for arsenic is ten parts per billion ("ppb"). Testing of the City's two primary drinking water sources, the Cedar and Tolt sources, indicates that arsenic is not present above one part per billion, the analytic detection limits. Naturally occurring arsenic concentrations in the Seattle Well Fields ranged from 1.7 to 7.9 ppb when the wells were last operated in 2015. The wells are used seasonally during some dryer years and otherwise remain inactive. When they are operated, water is blended with surface supplies prior to delivery to customers. Arsenic results remain below regulatory limits.

Unregulated Contaminants Monitoring Rule ("UMCR"). UCMR data is used to report information about new contaminants that may be regulated in the future. EPA requires SPU to monitor contaminants that do not have defined health-based standards. EPA uses this information to determine the occurrence of contaminants in drinking water systems, which may lead to future regulations. The contaminants monitored are selected through a data-driven process that considers adverse health effects (potency and severity) and occurrence (prevalence and magnitude), but additional health information is needed to know whether the contaminants pose a health risk.

The most recent round of UCMR data, UCMR4, was collected in 2018 and 2019. Of the 30 compounds analyzed, SPU detected six in its drinking water. Five of the six are disinfection by-products that are already monitored under the DBP rules, and were found in levels below current standards. These are known collectively as haloacetic acids.

The sixth parameter was manganese, detected at roughly 1.5 parts per billion (compared to the current secondary maximum contaminant level of 50 parts per billion). SPU will continue to monitor as required by the UCMR rules. UCMR5 monitoring will begin in 2023, and will include 30 parameters from the group of perfluoralkyl substance ("PFAS") compounds.

Perfluorinated Compounds ("PFCs"). PFCs such as PFAS and perfluorooctanoic acid are currently not regulated in drinking water by EPA, but new regulations are being developed, at both the federal and State level. Monitoring for several PFCs in 2015 and 2018 showed no detections for the City's surface water supplies. The Seattle Well Field was monitored in 2018, and two of the three wells had no detections. Trace detections of several PFAS compounds were measured in the third well, but at levels well below the current health advisory level of 70 parts per trillion, and below the State's proposed advisory levels currently under development. SPU expects to be able to comply with the new PFC/PFAS regulations currently under development.

Watershed Management Policies

SPU carries out programs of watershed resource management, fire protection, and the protection of water resources within the Cedar River and South Fork Tolt Watersheds. Seattle City Light also operates small hydroelectric plants in the Cedar River and South Fork Tolt Watersheds.

A land exchange with the U.S. Forest Service in 1996 completed the consolidated ownership of the watersheds by the City, which now owns approximately 91,500 acres after more than a century of land acquisitions. The City's ownership of the Cedar River Watershed has resulted in careful forest management, protection of fish and wildlife habitat, watershed management-relevant research, education, and other programs that are based upon comprehensive management policies adopted in 1989 to guide the secondary uses of the watershed, including forest management, habitat protection, research, education, managed recreation outside hydrographic boundaries, fire suppression, and trespass control. In 2000, the City committed to discontinuing timber harvesting for commercial purposes over the 50-year lifespan of the Cedar River Watershed HCP. While trees may be cut, timber harvests are allowed only for forest restoration purposes that benefit fish or wildlife populations and support the goals and objectives of the HCP.

The HCP provides the City with legal coverage for its drinking water and hydroelectric operations in the Cedar River Watershed under the ESA. It commits the City to improving fish and wildlife habitat, including providing salmonid passage at the Landsburg diversion dam, ecological and restoration thinning and planting of more than 17,000 acres of second growth forest, restoration of riparian, wetland, and stream habitats, the abandonment of more than 200 miles of logging roads in the watershed, road improvements and maintenance of the remaining 400 miles of watershed forest roads, and long-term monitoring. See "Water Supply."

A watershed management plan was developed for the South Fork Tolt Watershed in 2008 to provide a long-term framework for managing the land and natural resources in this watershed. SPU has carried out the plan's recommended restoration actions, and ongoing activities in this watershed relate primarily to access security, forest management, and road maintenance.

Wholesale Customer Contracts

Wholesale Customers consist of 17 water districts and municipalities served under individual contracts and Cascade, a consortium of seven municipalities and water districts that includes five that were formerly served under individual contracts. There are also two customers with emergency intertie agreements and one raw water customer.

Wholesale Customers pay a rate that represents only the costs of the regional system, while retail customers pay rates that cover the entire distribution system. In 2021, approximately 22% of water sales revenue was derived from sales to Wholesale Customers.

Since 2001, 17 Wholesale Customers, representing about 55% of total Wholesale Customer consumption and 30% of total Water System consumption, have signed fixed block or full and partial requirements contracts that expire January 1, 2062. The full and partial requirements contracts include amendment periods where the parties may opt to review and change certain contract terms and conditions in 2022 and 2042. The City and the full and partial requirements Wholesale Customers began the review of certain contract terms in 2021 to determine if any amendments are desired in 2022 under the first amendment period. This review period has been extended one year by mutual agreement, with potential amendments becoming effective in 2023. The full and partial requirements contracts obligate the City to meet the Wholesale Customers' demand that is not already met by their independent sources of supply, and the customers pay a consumption-based rate for this variable demand. The single fixed block customer pays an annual price for a set amount of water (a block of water) regardless of how much water it consumes, up to the block amount. Any excess use incurs a penalty.

The full and partial contracts also allow the development by Wholesale Customers of alternative sources of water and the reduction of purchases from the City. One customer, Highline Water District, gave notice under the contract in 2011 that it intends to reduce purchases from the City by an amount up to two MGD (approximately 975,900 hundred cubic feet ("ccf")), expected to be effective August 1, 2016. However, due to delays in the timing of completing the acquisition of the alternate supply, the district has not yet implemented the reduction.

SPU signed a 50-year declining block sales contract with Cascade in 2003 that capped Cascade's demand from the Water System at 30.3 MGD through 2023, when the block volume would begin to decline in five-year increments until the end of the contract. In 2013, the contract was amended, which allows Cascade to delay its planned development of Lake Tapps in Pierce County as a future potable water supply for its members. The amendment increased Cascade's block size to 33.3 MGD through 2039, after which the block begins to decline in yearly increments until the end of the contract. The amendment also included lump sum payments from Cascade of $5.0 million in 2013, $12.0 million in 2018, and $5.0 million in 2024. Cascade's 2021 demand represents about 44% of total Wholesale Customer consumption and 24% of Water System consumption. Cascade pays an annual price for its block of water, regardless of how much water it consumes, up to the block amount. Any excess use incurs a penalty. In 2020, Cascade requested that the City consider selling it additional increments of surplus water that would extend the date at which Cascade's block would begin to decline to sometime past 2039. The City's declining block contract does not obligate the City to sell any additional surplus water to Cascade or any further extensions, unless by mutual agreement. The City began discussions with Cascade in 2022.

In 2008, SPU signed a 60-year partial requirements contract with the City of North Bend to provide untreated water for North Bend's use in supplementing stream flows affected by its well operation. This contract has a cap of 1.1 MGD. Water deliveries began in 2009.

In 2011, two Wholesale Customers (Lake Forest Park Water District and the City of Edmonds) signed emergency intertie agreements with Seattle to replace their previous wholesale supply contracts that were scheduled to expire at the end of 2011. These customers have alternate supplies and did not purchase water from Seattle on a regular basis, and the contracts more appropriately reflect this status. The contracts expire in 2062.

The Office of the City Auditor conducted an audit of Wholesale Customer water sales to ensure that internal controls over the billing- and payment-related processes are adequate and conducted in accordance with City and department policies and procedures. Results were released in 2018. The City Auditor concluded that SPU's billing of wholesale customers was generally accurate and complete, but found that certain internal controls needed to be improved. Nineteen internal control recommendations were issued relating to billing adjustment approval and authorization, accuracy of meter reads, current cycle consumption adjustments, and annual meter read verifications. SPU has implemented 16 recommendations and is working on implementing the remainder.

The following table lists consumption in hundred cubic feet by individual Wholesale Customers and revenues generated by water sales to individual Wholesale Customers in 2021.

TABLE 11
ANNUAL WATER SALES TO WHOLESALE CUSTOMERS IN 2021[(1)]

Wholesale Customer	Consumption(ccf)	Revenue
Cascade Water Alliance	13,878,236	$21,351,878
Northshore Utility District[(2)]	2,727,882	5,332,912
Highline Water District[(3)]	2,276,533	4,845,591
Woodinville Water District[(2)]	1,949,280	4,076,856
Soos Creek Water and Sewer District[(2)]	1,971,709	3,915,466
Water District #20[(2)]	1,239,774	2,590,614
City of Mercer Island[(2)]	1,059,931	2,222,931
Cedar River Water and Sewer District	994,480	2,042,030
North City Water District[(2)(4)]	782,394	1,596,916
Water District #90	863,734	1,479,947
City of Bothell[(2)]	711,655	1,472,517
Coal Creek Water and Sewer District[(2)]	676,027	1,383,267
Water District #49[(2)]	623,663	1,311,016
Water District #125[(2)]	616,193	1,257,598
Olympic View Water and Sewer District	389,833	845,387
City of Duvall[(2)]	287,954	587,195
Water District #119[(2)]	121,484	248,255
City of Renton	15,997	188,659
City of North Bend	39,169	96,320
Lake Forest Park Water District	131	5,182
City of Edmonds	12	4,648
Total	31,226,071	$56,855,186

(1) Figures are 2021 metered water consumption and associated revenue from SPU records, not net of certain credits, accruals, and allowances included in the Water System's audited financial statements. Certain customer contracts also include a payment due when they connect new retail customers to their system.

(2) Indicates Wholesale Customers that buy all their water from SPU.

(3) Highline Water District has given notice under the contract that it intends to reduce purchases from the City by an amount up to 975,900 ccf beginning in 2016. The reduction has been delayed, with an unknown effective date. If this were effective at 2021 rates, it would have resulted in a reduction in revenue to SPU of approximately $2.1 million.

(4) Formerly Shoreline Water District.

Totals may not add due to rounding.

Source: Seattle Public Utilities

Major Retail Water Users

There are no major water-intensive retail customers in the service area representing more than 5% of total Water System sales revenue. The Water System's ten largest retail water users in 2021 are shown below.

TABLE 12
2021 LARGEST WATER CUSTOMERS

	2021 Revenue ($000)	% of Water Sales Revenue
City of Seattle	$ 4,972	1.91%
Port of Seattle	3,926	1.51%
University of Washington	3,922	1.50%
Seattle Housing Authority	2,611	1.00%
King County	1,371	0.53%
Equity Residential Properties	1,201	0.46%
Nucor Steel	1,081	0.41%
Marriott International Inc	765	0.29%
Seattle Public Schools	698	0.27%
Certainteed Gypsum	647	0.25%
Total-Ten Largest Customers	$ 21,194	8.13%

Water Rates

Establishment of Rates. Water rates are proposed by the Mayor, reviewed by the City Council and adopted by ordinance after public hearings. The City Council has exclusive authority to set rates and charges for water services. The City is not subject to the rate-making jurisdiction of the Washington Utilities and Transportation Commission or any other State or federal agency.

In May 2021, the City Council approved an update to SPU's Strategic Business Plan (see "—Strategic Business Plan"). In connection with the Strategic Business Plan, new rates for 2022-2023 were approved in September 2021. Major drivers of the Rate Study recommendations included revised demand projections, increased operational and maintenance expense, the Water System's capital improvement program (the "CIP") (see "Capital Improvement Program"), and financial policy targets. In addition, retail rates were set to recover revenue reductions expected from the low-income discount program.

The following table shows historical system-wide water rate increases for the last six years.

TABLE 13
SYSTEM-WIDE WATER RATE ADJUSTMENTS

Year	Rate Adjustment
2016	2.5%
2017	3.1
2018	1.3
2019	4.2
2020	1.6
2021(1)	(2.5)

(1) Decrease in 2021 reflects an adjustment in wholesale rates to reflect past overpayments of allocated costs in accordance with wholesale contracts. In addition, the proportion of wholesale consumption, which is billed at lower rates, increased in 2021. See "—Wholesale Customer Contracts" for more information. Retail rates did not change in 2021.

Source: Seattle Public Utilities

The following table shows the rates effective January 2022

TABLE 14
MONTHLY WATER RATES EFFECTIVE IN 2022

	Residential[(1)]	Commercial[(1)]	Wholesale
Commodity Charge ($ per ccf)			
Winter (eight months)	$ 5.56	$ 5.52	$ 1.67
Summer (four months)		7.01	2.50
Up to 5 ccf	5.71	n/a	n/a
Next 13 ccf	7.06	n/a	n/a
Over 18 ccf	11.80	n/a	n/a
Basic Service Charge ($ per month)[(2)]			
3/4"	$ 19.00	$ 18.85	n/a
1"	19.60	19.45	n/a
1 1/2"	30.20	29.95	n/a
2"	33.45	33.20	n/a
4"	177.45	176.05	n/a

(1) Retail rates for customers outside the City limits and not within the City of Shoreline, the City of Lake Forest Park, or the City of Burien are 14% higher than in the table above. Rates for customers within the City of Shoreline and the City of Lake Forest Park are 21% higher than in the table above. Rates for customers within the City of Burien are 24% higher than in the table above.

(2) The Basic Service Charge is based on the size of the customer's meter. Rates for larger meters are not shown.

Source: Seattle Public Utilities

Rate Structure. Both retail and wholesale rates are seasonally differentiated; the summer residential rate has an inclining block structure. The structure and basis for rates to Wholesale Customers served through master meters are governed by the Wholesale Customer contracts and differ for each Wholesale Customer.

Low-Income Assistance. The City assists qualified low-income retail customers with their water bills by providing a 50% discount. Income guidelines vary depending on the number of people in the household and monthly and annual income. Income limits are updated every January and are based on 70% of the State median income. Currently, about 28,000 water customers receive a discount. In addition to the discount program, SPU also has an Emergency Assistance Program ("EAP") to assist customers in immediate need of bill relief. The EAP allowance is limited to $477 per allowance for 2022. Most customers are permitted one allowance per year; households with children are permitted two allowances per calendar year. The EAP allowance is income limited to 80% of State median income. Rate proposals include the financial impact of both programs.

Rate Comparisons. SPU's water rates have risen faster than the rate of inflation over the past five years and now are above the average of other cities of its size. The following table shows representative water bills for SPU compared to other cities in the region as of January 1, 2022.

TABLE 15
REGIONAL COMPARISONS
(RATES IN EFFECT AS OF JANUARY 1, 2022)

City	Monthly Bill
Bellevue WA	$ 73.47
Kirkland WA	54.35
Portland OR	48.39
Seattle WA	**47.04**
Issaquah WA	45.69
Tacoma WA	44.72
Everett WA	42.46
Redmond WA	32.98

Source: Survey by SPU of rates in effect on January 1, 2022, in each respective city.

Utility Taxes. The City's retail rates include the cost of paying the State public utility tax (5.029%) and City utility tax (15.54%). Currently, most of SPU's retail service areas in other municipal jurisdictions (Shoreline and Lake Forest Park) are not subject to any additional local utility taxes. Beginning in 2021, revenues in the City of Burien are subject to an 8.0% water utility tax. In 2014, the court of appeals in *City of Wenatchee v. Chelan Public Utility District No. 1*, 181 Wash. App. 326, 325 P.3d 419 (2014), found that a code city could impose a utility tax on another municipality providing utility services within its boundaries on revenues from the other municipality's proprietary activities. If Shoreline and Lake Forest Park were to levy local utility taxes on SPU in the future, SPU's retail rates in those jurisdictions would need to be adjusted to include the costs of paying the additional local utility tax.

Billing

The City's utility billing function is co-managed by both SPU and Seattle City Light. SPU provides customer service through a call center and walk-in center, although access to the walk-in center has been restricted due to the COVID-19 pandemic. Seattle City Light operates and manages the billing system. SPU and Seattle City Light bill and reimburse each other for these services.

SPU accounts are billed bimonthly for residential and small commercial customers and monthly for larger accounts. Inside the City, residential customers receive a combined utility bill that itemizes amounts due for water, wastewater, and solid waste services, while commercial customers receive a combined utility bill that itemizes amounts due for water and wastewater. Customers outside the City receive bills for water only. Payments received from the combined utility bills are allocated to the appropriate funds. If a payment received from a customer is insufficient to cover the total amount due and payable under the combined utility bill, that payment is credited first to the Solid Waste Fund. The balance of the payment is then credited to the Drainage and Wastewater Fund and then, if funds are available, to the Water Fund. Past-due customers receive a water shut-off notice. By State law, water may be shut off when an account is delinquent, and outstanding balances are considered a lien on the property. Delinquent charges bear interest at the rate of 12% per annum. Due to the COVID-19 pandemic, SPU temporarily stopped charging the delinquency fee and temporarily stopped shutting off service. The State moratorium on utility shut offs ended on July 31, 2021; however, the City's moratorium on utility shut offs was extended past that period and ended on April 15, 2022. SPU expects to resume delinquency charges by the end of 2023, and will remain in compliance with applicable Governor Proclamations. Total 90-day-plus outstanding balances for SPU billed water, wastewater, and solid waste services were $17.2 million (approximately 2% of annual direct service revenue billed by SPU) as of March 31, 2022, compared to $3.3 million as of March 31, 2020. These figures include all outstanding amounts going back to 2009. While the City has waived late fees and interest on outstanding bills through 2023, customer payment plans are being arranged for all customers through intensive outreach, and disconnections will begin again in August 2022.

In 2020, SPU revised its leak adjustment policy. The policy now provides retail customers a 100% adjustment for up to two billing periods for any leak-related charges that go above the customer's normal consumption.

Financial Policies

The Mayor and City Council have adopted resolutions establishing financial policies for SPU, including the Water System. In accordance with these policies, water rates are set to achieve generally positive net income, cash balances equal to 30 days of operating expenses, 20% of capital expenditures financed with current revenue, and a minimum debt service coverage ratio on fixed rate long-term Parity Bonds of 1.70 times annual debt service. All targets have been met or exceeded since 2012. In September 2021, the City Council approved water rate increases consistent with the City's financial policies for the period 2022 through 2023. See "—Water Rates."

In 2002, the City by ordinance adopted policies for maintaining funding of the Rate Stabilization Account at a minimum balance of $9.0 million. As of December 31, 2021, the balance in the Rate Stabilization Account was $42.0 million. See "Security for the Bonds—Rate Stabilization Account."

Under the City Charter, City taxes on the Water System may be paid only after provision has been made for debt service and obligations of the Water System as well as for necessary betterments and replacements for the current year.

Financial Performance and Projections

Table 16—Water System Operating Results shows actual revenues and expenses of the Water System for the years 2017 through 2021 and projected results for 2022 and 2023. Footnotes for the table are on the following page. Projections for 2022 and 2023 reflect adopted rate increases effective January 1, 2022.

SPU does not as a matter of course make public projections as to future sales, earnings, or other results. However, the management of SPU has prepared the prospective financial information as set forth below in Table 16—Water System Operating Results" and under "Capital Improvement Program" to provide readers of this Official Statement with information related to projected revenues and expenses of the Water System. The accompanying prospective financial information was not prepared with a view toward public disclosure or 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 SPU's management, was prepared on a reasonable basis, reflects the best currently available estimates and judgments, and presents, to the best of management's knowledge and belief, the expected course of action and the expected future financial performance of the Water System. However, this information is not fact and should not be relied upon as being necessarily indicative of future results, and potential purchasers of the Bonds and the readers of this Official Statement are cautioned not to place undue reliance on the prospective financial information.

Neither SPU's independent auditors, Moss Adams LLP, nor the State auditor nor any other independent accountants have compiled, examined, or performed any procedures with respect to this Official Statement or any financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information, and they assume no responsibility for, and disclaim any association with, this Official Statement and such information.

The financial statements of the Water Fund as of and for the fiscal year ended December 31, 2021, included herein as Appendix C, have been audited by Moss Adams LLP, independent auditors, as stated in its report appearing herein. SPU has not requested that Moss Adams LLP provide permission for inclusion of its report on the audited financial statements in this Official Statement, and Moss Adams LLP has not performed, since the date of its report included herein, 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.

The debt service coverage calculations set forth below are intended to reflect compliance with the rate covenant and the Future Parity Bond covenant contained in the Bond Documents and described under "Security for the Bonds" and for no other purpose. Such calculations reflect the application of generally accepted accounting principles as applied to financial results and may reflect non-recurring or extraordinary accounting transactions permitted under the Bond Documents and generally accepted accounting principles.

In providing a rating on the Bonds, certain rating agencies may have performed independent calculations of coverage ratios using their own internal formulas and methodology which may not reflect the provisions of the Bond Documents. See "Other Bond Information—Ratings on the Bonds." The City makes no representation as to any such calculations, and such calculations should not be construed as a representation by the City as to past or future compliance with any bond covenants or the availability of particular revenues for the payment of debt service, or for any other purpose.

TABLE 16
WATER SYSTEM OPERATING RESULTS
($000)

	2017	2018	2019	2020	2021	Projected 2022[9]	2023[9]
Operating Revenue							
Residential/Commercial Services	$ 195,291	$ 207,963	$ 210,994	$ 207,590	$ 213,552	$ 222,861	$ 230,909
Wholesale Services	56,210	70,048	56,985	56,782	57,362	55,679	57,580
Other	16,596	11,926	15,547	14,206	13,585	12,596	12,811
(Deposits to)/Withdrawals from Rate Stabilization Account [1	(5,200)	(7,650)	(2,518)	-	19,000	-	-
Total Operating Revenue	$ 262,896	$ 282,287	$ 281,008	$ 278,578	$ 303,499	$ 291,136	$ 301,300
Operating Expenses							
Other Operations and Maintenance [2]	$ 107,469	$ 107,605	$ 118,975	$ 112,855	$ 118,675	$ 140,217	$ 154,195
City Taxes [3]	32,924	33,784	34,468	34,020	35,036	35,937	37,205
Taxes Other Than City Taxes	9,208	13,061	12,278	12,081	12,691	12,215	12,638
Total Operating Expenses	$ 149,601	$ 154,450	$ 165,721	$ 158,956	$ 166,402	$ 188,370	$ 204,038
Net Operating Income	$ 113,295	$ 127,837	$ 115,287	$ 119,622	$ 137,097	$ 102,767	$ 97,262
Adjustments							
Add: Capital Contributions Connection Charge	$ 2,735	$ 3,232	$ 5,196	$ 4,770	$ 4,613	$ 4,818	$ 4,938
Add: City Taxes [4]	32,924	33,784	34,468	34,020	35,036	35,937	37,205
Add: Investment Interest	2,535	3,180	4,563	2,931	2,261	1,337	1,295
Less: Reserve Subaccount Earnings	(343)	(366)	(510)	(360)	(303)	(385)	(482)
Add: BABs Subsidy	1,966	1,998	1,984	1,937	1,885	1,865	1,805
Add: Net Other Nonoperating Revenues (Expenses)	1,319	13,597	5,940	2,203	5,876	1,244	1,269
Add: Net Proceeds from Sale on Assets	1,412	563	181	113	423	-	-
Total Adjustments	$ 42,549	$ 55,990	$ 51,821	$ 45,614	$ 49,792	$ 44,816	$ 46,030
Net Revenue Available for Debt Service [5]	$ 155,844	$ 183,827	$ 167,107	$ 165,236	$ 186,889	$ 147,583	$ 143,292
Annual Debt Service [6]							
Annual Debt Service [6]	$ 79,824	$ 81,293	$ 81,340	$ 81,725	$ 82,409	$ 78,348	$ 82,552
Less: Reserve Subaccount Earnings [7]	(343)	(366)	(510)	(360)	(303)	(385)	(482)
Adjusted Annual Debt Service	$ 79,482	$ 80,927	$ 80,830	$ 81,365	$ 82,107	$ 77,963	$ 82,070
Coverage [8]	1.96	2.27	2.07	2.03	2.28	1.89	1.75

Notes to table on following page.

NOTES TO TABLE:

(1) Withdrawals from the Rate Stabilization Account are added to and deposits are deducted from Operating Revenues, in accordance with Statement of Financial Accounting Standards No. 71 of the Financial Accounting Standards Board. Withdrawals from the Rate Stabilization Account are available for payment of debt service and increase debt service coverage. Deposits to the Rate Stabilization Account reduce revenue available for payment of debt service and lower debt service coverage. See "Security for the Bonds—Rate Stabilization Account."

(2) Excludes non-cash accounting entries for depreciation, amortization, and unfunded net pension expense resulting from the implementation of Governmental Accounting Standards Board ("GASB") Statement No. 68 ("GASB 68").

(3) The City currently levies a tax of 15.54% upon total gross income of the Water System from its retail business within and outside the City.

(4) Under the City Charter, City taxes on the Water System may be paid only after ample provisions have been made for debt service and obligations of the Water System as well as for necessary betterments and replacements for the current year. See "Financial Policies."

(5) See the Bond Ordinance for the definition of Adjusted Net Revenue.

(6) Assumes the issuance of the Bonds, the refunding of the Refunded Bonds, and a planned defeasance of higher-coupon debt later in 2022. Annual Debt Service is the debt service on all Parity Bonds outstanding, and does not include debt service on DWSRF loans. See "Security for the Bonds—State Loan Program Obligations."

(7) Earnings from interest in the Reserve Subaccount are not included in the calculation of debt service coverage. Earnings are subtracted from annual debt service for the purpose of this calculation.

(8) Calculated in accordance with the Bond Documents, including adjustments to the Coverage Requirement definition and related definitions and covenants. Therefore, the ratios displayed may differ from those set forth in prior official statements and disclosure documents, in order to track the revised definitions in the Bond Documents as now in effect. Such calculations are performed in accordance with the definitions of the terms Adjusted Annual Debt Service, Adjusted Net Revenue, and certain other terms as provided in the Bond Documents. See Appendix A—Bond Ordinance.

(9) Revenues for 2022 and 2023 are projected in the 2021-2026 Strategic Business Plan. Rate increases to meet the 2022 and 2023 targets have been adopted by the City Council.

Source: Seattle Public Utilities

Operating revenues are generated primarily from wholesale and retail water sales. The water sales revenue increase of 9% from 2017 to 2021 is due primarily to rate increases. The decrease in wholesale revenues in 2022 is due to the return of past overpayments in accordance with wholesale contracts. Changes in other operating revenue are primarily due to demand in tap installations and the resulting installation fee revenue. These demand increases are due largely to economic conditions.

Operating results during the period 2017 through 2021 were affected by a variety of factors, including deposits to the Rate Stabilization Account in 2017, 2018, and 2019, a withdrawal from the Rate Stabilization Account in 2021, a continued strong demand for new taps and other development-related revenue, the refunding of certain Parity Bonds in 2017 and 2021, and defeasance of certain parity bonds in 2021.

Management Discussion and Analysis of Operating Results

This section provides a brief discussion of operating results for the period 2017 through 2021 based on information in Table 16 and the Management's Discussion and Analysis included in Appendix C—2021 Audited Financial Statements of the Water Fund.

Between 2017 and 2021, the Water System met or exceeded all financial policy targets. Debt service coverage was maintained well above policy targets, and operating cash balances grew from $55 million at the end of 2017 to $103 million in 2021. SPU expects to meet or exceed all financial policy targets for 2022 and 2023. Figures for 2022 and 2023 incorporate rates that have been adopted by ordinance. See "—Water Rates."

Both operating and non-operating revenue performance has been strong. Water System financial forecasts assume two major sources of revenue: water sales and development-related revenue. Water demand forecasts assume continued per-capita declines with in-fill development and water efficiency increases related to conservation initiatives. Per-capita declines are assumed to be partially mitigated by increasing population and economic activity. Development-related forecasts assume continued new housing development and redevelopment of existing commercial properties. The Seattle area has experienced significant economic growth since the 2008 Great Recession, with a five-year compound real GDP growth rate for the period 2016-2020 of 4.6%[(1)], and a five-year compound annual population growth rate for the same period of 2.2%[(1)]. This economic and population growth allowed consumption to remain relatively flat in the years prior to the COVID-19 pandemic. System-wide consumption fell 3.4% in 2020 and rebounded to prior levels in 2021. The prolonged economic expansion also provided the utility with higher than anticipated development-related revenue, as net new service installations averaged more than 1,100 per year.

The COVID-19 pandemic did not have a major impact on the financial performance of the Water System. Water demand fell 3.4% from 2019 to 2020, similar to variations caused by summer weather and not uncommon between years. The pandemic did, however, change demand patterns between retail customer classes. As more people worked from home and fewer commuted to the City's downtown core, residential demand increased approximately 6%. General service demand, which includes commercial and industrial customers, decreased approximately 15%. A portion of the decrease can be attributed to changing work patterns, and much of the rest can be attributed to decreased economic activity from stay-at-home orders. As the pandemic progressed through 2021, there was a small regression to historic demand patterns between retail customer classes. Residential consumption increased again in 2021 by 2%, though much of that can be attributed to an historically hot summer. Commercial consumption increased 4% in 2021. Overall billed consumption in 2021, including wholesale, increased 5.2%, and was equal to the average demand of the three years prior to the pandemic. Revenue forecasts for 2022 and 2023 take this demand shift into account.

Overall demand is modeled to remain flat through 2023. Regional water conservation programs and other water use reductions are expected to continue offsetting the impact of population and employment growth on water demand.

Strategic Business Plan

In 2020 and the first part of 2021, SPU worked with customers and employees to update the Strategic Business Plan to guide its work from 2021 through 2026. The Strategic Business Plan is a six-year plan updated triennially. The Plan Update outlines new investments, cost savings, and a retail rate path for the six-year period, and is an update of the 2018-2023 Plan. The Plan grew out of SPU's efforts to provide greater rate predictability to its customers, while still making important investments for the future. The Strategic Business Plan Update was adopted by the City Council in May 2021. Through that adoption, the Council endorsed an average annual rate increase of 4.2% for all funds taken together.

Capital Improvement Program

Capital investments are guided by the Water System Plan and multi-year CIP, which is developed within the framework of the Water System Plan and included in the capital improvement program of the City as a whole. The CIP is reviewed, revised, and adopted annually by the Mayor and City Council as part of the City's budget process. The CIP identifies facility needs and financing for rehabilitation, enhancement, and expansion of the Water System. Currently the main areas of focus are to rehabilitate the water distribution system, ensure seismic resiliency, and make water quality improvements.

The City expects to issue approximately $548 million in long-term debt for the CIP during the period 2022 through 2027. Annual debt service is expected to rise from approximately $82 million in 2021 to approximately $94 million in 2027. In addition, the City expects to take advantage of opportunities to refund prior debt for savings purposes as such opportunities arise.

The CIP is organized into eight program areas: (i) Distribution, (ii) Transmission, (iii) Watershed Stewardship, (iv) Water Quality and Treatment, (v) Water Resources, (vi) Habitat Conservation, (vii) Shared Cost Projects, and (viii) Technology. The amount shown for each program area is based on the adopted CIP. The table below shows the adopted CIP for 2022 through 2027 along with planned funding sources.

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(1) BEA series CAGDP1, 2015-2019 for the Seattle-Tacoma-Bellevue MSA

TABLE 17
ADOPTED WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM
(Amounts in Thousands of Nominal Dollars)

	2022	2023	2024	2025	2026	2027	Total
Program Area							
Distribution	$ 35,688	$ 44,375	$ 50,675	$ 51,248	$ 59,406	$ 70,448	$ 311,840
Transmission	16,514	12,604	17,623	22,368	9,407	7,639	86,155
Watershed Stewardship	2,170	414	335	328	958	425	4,630
Water Quality and Treatment	3,605	2,120	5,261	23,750	20,250	23,000	77,986
Water Resources	7,053	10,646	9,989	30,970	28,375	15,764	102,797
Habitat Conservation	2,604	1,126	1,030	925	1,058	75	6,818
Shared Cost Projects(1)	24,088	28,218	43,372	32,374	16,261	17,652	161,965
Technology	4,244	4,244	4,244	4,243	4,244	4,244	25,463
Total Adopted CIP	$ 95,966	$ 103,747	$ 132,529	$ 166,206	$ 139,959	$ 139,247	$ 777,654
Adjustment for Additional CIP(2)	(20,166)	9,778	(7,569)	(41,615)	(7,646)	(2,364)	(69,581)
Total Projected CIP(3)	$ 75,800	$ 113,525	$ 124,960	$ 124,591	$ 132,313	$ 136,883	$ 708,073
Funding Sources							
Debt Financing							
Outstanding Bonds	$ 46,156	$ -	$ -	$ -	$ -	$ -	$ 46,156
The Bonds(3)	4,542	43,360	-	-	-	-	47,902
Future Parity Bonds	-	44,238	95,804	99,674	105,662	109,503	454,881
Total Debt Financing	$ 50,698	$ 87,598	$ 95,804	$ 99,674	$ 105,662	$ 109,503	$ 548,939
Revenue Financing							
Internally Generated Funds	$ 19,897	$ 20,592	$ 23,688	$ 19,312	$ 20,906	$ 21,491	$ 125,887
Grants and Reimbursements	5,205	5,335	5,468	5,605	5,745	5,889	33,247
Total Revenue Financing	$ 25,102	$ 25,927	$ 29,156	$ 24,917	$ 26,651	$ 27,380	$ 159,134
Total Funding Sources	$ 75,800	$ 113,525	$ 124,960	$ 124,591	$ 132,313	$ 136,883	$ 708,073

Notes to table on following page.

NOTES TO TABLE:

(1) Includes projects that affect the Water System, but involve more than a water purpose and are typically funded from multiple sources. See "Shared Cost Projects" below.

(2) Adjustments reflect timing shifts and revisions to adopted CIP.

(3) Does not include deposits to the Reserve Subaccount. There is no planned deposit from the Bonds.

The development of the CIP balances financial capacity with the demands of rehabilitation, improvement, water quality, and expansion. Through the late 1990s and the 2000s, SPU steadily expanded the CIP, raised rates, and increased its long-term borrowing. In managing the CIP, SPU has emphasized efficient project design and careful staging of improvements within the 20-year time frame of the Water System Plan. In the period 2022-2027, SPU expects the financial requirements for these projects to be met from Net Revenue of the Water System and the proceeds of Parity Bonds. Approximately 78% of projected CIP spending is expected to be financed by the issuance of Parity Bonds, including the Bonds.

Shared Cost Projects. The Shared Cost Projects program area includes Seattle Department of Transportation ("SDOT") projects (including Move Seattle projects) and represents approximately 20% of the total CIP. SPU's scope is limited to the impact on its utility systems and is typically governed by agreements with lead or coordinating City departments and State agencies. As a result, SPU has less control over the ultimate timing and expenditures associated with its portion of these projects.

It is likely that more transportation projects or other multi-agency projects will be proposed in the future, and SPU will work with SDOT and other agencies to fully understand the potential impacts of these projects on the Water System.

Risk Management and Quality Assurance

The Risk and Quality Assurance Program ("RQA") was first established in 2004 and became a separate division in 2011. While housed in the Financial and Risk Services branch, the program reports to a Policy and Risk and Quality Assurance Board, which consists of the SPU General Manager, the Executive Team, program staff, and a representative from the City Attorney's Office. In 2016, the Safety, Security, Emergency Management, Privacy/PCI, and Customer Appeals programs were brought into the RQA division to enable better alignment and synergy of the overall mission of reducing risk to the organization. The program's goals are to:

(i) provide strategic advice to SPU's Executive Team and guide the development of policies that enable SPU to be more efficient and effective in meeting customer expectations;

(ii) assess planned and ongoing business practices and procedures to recognize threats and opportunities;

(iii) recommend measures to ensure sufficient internal controls are in place to reduce risks to SPU's employees, customers, and assets;

(iv) investigate, advise, and respond to legal requests and filings on behalf of SPU;

(v) conduct internal investigations, assessments, and audits to ensure that SPU is complying with regulations, policies, and procedures; and

(vi) develop, implement, and review plans that ensure that SPU is protected in the event of harmful incidents or emergencies.

Emergency Management and Security. The Emergency Management program uses an all-hazards program to identify and analyze risks to the Water System's critical assets and systems and to invest in the development of emergency plans, including training employees for improved response.

SPU's security program is based on a layered-defense system, to deter, detect, delay, and respond. It is comprised of fencing, a key management system, cyber locks (for certain assets), security guard patrols, and an integrated system that includes access control devices, door and hatch contacts, alarms, closed circuit television, and around-the-clock monitoring for all critical water system assets. Additional physical security measures are in place at the Cedar River and South Fork Tolt Watersheds. SPU conducts vulnerability and risk assessments, invests in mitigation and security countermeasures, and partners with local, State, and federal agencies to coordinate planning and response activities.

SPU has developed and equipped a wildland fire crew to attack and suppress wildland fires that may threaten the Cedar River or South Fork Tolt Watersheds.

See "The City of Seattle—Risk Management" for a discussion of the City's risk management practices.

Climate Change

Climate change is projected to have wide-ranging impacts in the Central Puget Sound, including, but not limited to, shifts in the region's water and hydrologic cycle, increases in air temperature, and rising water levels along the marine shoreline. SPU's climate policy work draws on the planning and analysis expertise in each of SPU's lines of business to assess the implications of a changing climate on SPU's assets, services, and business functions and developing adaptation options that can be integrated into SPU's operations, capital planning, and overall decision-making processes. SPU's enterprise-wide climate work focuses on building collaborative partnerships to share and enhance knowledge, engaging in applied research to advance SPU's understanding of the implications of climate change, and fostering an enabling environment to support implementation. In addition, SPU's climate policy team is responsible for managing SPU's carbon neutrality initiative, focused on reducing greenhouse gas emissions associated with SPU's operations.

In partnership with SPU's climate policy team, the Water Planning and Program Management Division has been carrying out sophisticated climate impact assessments of the water supply since 2002. The most recent study, focused on identifying water supply vulnerabilities and adaptation strategies, was completed in 2018. In that study, SPU used 40 climate scenarios, obtained through a collaborative research project with the Climate Impacts Research Consortium at Oregon State University to assess impacts on supply and operations. Analysis of the operational adaptation strategies identified and included in the 2019 Water System Plan (early reservoir refill, higher reservoir refill, lower reservoir drawdown, and optimized use of reservoir storage) indicates that no significant investments in new sources of water supply to address the potential impacts of climate change are needed before 2060. See "Future Water Supply and Conservation." SPU has begun a multi-year effort to model and understand future supply system uncertainties and vulnerabilities and to develop an adaptive management strategy for meeting supply system objectives under a range of future scenarios.

SPU is a founding member of the Water Utility Climate Alliance ("WUCA"), a group of 12 large urban water utilities that collaborates on climate research, decision-making, and adaptation. SPU has engaged in a WUCA project to survey water utilities to assess awareness of ecosystems in providing essential utility services, and continues to assess how climate change may affect municipal watershed ecosystems and impact water quality and supply. The utility completed a watershed climate vulnerability assessment and recommended actions to improve resilience to floods, drought, and wildfire. Key recommendations included forest adaptation strategies such as thinning and planting diverse climate-adapted species and improving road crossings over streams to ensure capacity for peak flow flood events. SPU conducts wildfire risk management on an ongoing basis, with successful prevention and suppression programs, and continues to assess how wildfire risk may change with longer, warmer summers and the consequent impacts on water quality and supply to ensure appropriate post-wildfire response strategies. SPU is developing a forest management plan for the Cedar River Watershed that advances multiple objectives, including climate adaptation of forest ecosystems and wildfire risk reduction around critical assets.

The utility is also active in regional and national climate policy development and leadership focused on urban water resilience via the Puget Sound Climate Preparedness Collaborative, King County-Cities Climate Collaboration, and the U.S. Water Alliance.

THE CITY OF SEATTLE

The following provides general information about the City.

Municipal Government

Incorporated in 1869, the City is the largest city in the Pacific Northwest and is the County seat.

The City is a general purpose government that provides a broad range of services typical of local municipalities, such as streets, parks, libraries, human services, law enforcement, firefighting and emergency medical services, planning, zoning, animal control, municipal court, and utilities. The City owns and operates water, electric, solid waste, and drainage and wastewater utilities, although the County provides wastewater treatment service. The County also provides certain services throughout the County and within the City, including courts of general jurisdiction, felony prosecution and defense, jail, public health, and transit services.

The City is organized under the mayor-council form of government and operates under its City Charter. The Mayor, the city attorney, and the Municipal Court judges are all elected to four-year terms. The nine City Council members are elected to staggered four-year terms.

Mayor. The Mayor serves as the chief executive officer of the City. The Mayor presents to the City Council annual statements of the financial and governmental affairs of the City, budgets, and capital improvement plans. The Mayor signs, or causes to be signed on behalf of the City, all deeds, contracts, and other instruments.

City Council. As the policy-making legislative body of the City, the City Council sets tax levies and utility rates, makes appropriations, and adopts and approves the annual operating budget and capital improvement plans for the City. The City Council members serve on a full-time basis.

Municipal Court. The State Constitution provides for the existence of county superior courts as the courts of general jurisdiction and authorizes the State Legislature to create other courts of limited jurisdiction. The Seattle Municipal Court has limited jurisdiction over a variety of cases, including misdemeanor criminal cases, traffic and parking infractions, collection of fines, violation of no-contact or domestic violence protection orders, and civil actions for enforcement of City fire and housing codes. The Municipal Court has seven judges. Municipal Court employees report to the judges.

Budgeting and Forecasting

The City Budget Office. The City Budget Office ("CBO") is within the executive branch and the Budget Director is appointed by the Mayor. The CBO is responsible for developing and monitoring the City's annual budget, carrying out budget-related functions, and overseeing fiscal policy and financial planning activities. The CBO provides strategic analysis in relation to the use of revenues, debt, and long-term issues. The department also provides technical assistance, training, and support to City departments in performing financial functions.

City operations are guided by a budget prepared under the direction of the Mayor by the CBO pursuant to State statute (chapter 35.32A RCW). (See "—Municipal Budget.") In prior years, the City's annual budget has been based in part on General Fund revenue forecasts prepared by the CBO; in 2022 much of the forecasting function transitions to the Office of Economic and Revenue Forecasts. See "—The Office of Economic and Revenue Forecasts." The CBO will continue to be responsible for coordinating with departments to forecast and project all other General Fund revenues, including a variety of excise taxes and public utility taxes, license and service fees, fines, inter- and intra-governmental charges, transfers and shared revenues, grants, interest earnings, and other lesser revenue items.

The Office of Economic and Revenue Forecasts. The Forecast Office was created in July 2021, pursuant to Ordinance 126395. The Forecast Office provides an independent source for the economic and revenue forecasts that underlie the City's annual budget process. The Forecast Office reports to the Economic and Revenue Forecast Council (the "Forecast Council"), which includes equal representation from the Legislative and Executive branches of City government. The following elected and appointed officials (or their designees) comprise the Forecast Council: the Mayor, the Director of Finance, the Council President, and the Chair of the City Council Finance Committee. The Forecast Council selects one member to serve as Chair of the Forecast Council annually.

The Forecast Office is tasked with preparing three revenue forecasts each year, to be delivered in April, August, and November. The forecasts that are developed by the Director of the Forecast Office and approved by the Forecast Council serve as the official City economic and revenue forecasts and as the basis for the estimates of revenues described in State statutes governing budgeting. The Mayor or City Council has the authority to deviate from the official forecasts.

Forecasts informing the City's annual budget proposals through the 2022 budget were performed by the CBO. Beginning with the April 2022 Revenue and Budget Update and the 2023 budget cycle, the forecasting function is now performed by the Forecast Office, including forecasting the largest and most economically-dependent general government revenue sources, including sales tax, B&O tax, property tax, private utility taxes, and the new Payroll Expense Tax. The CBO will continue to be responsible for coordinating with departments to forecast and project all other General Fund revenues, including a variety of excise taxes and public utility taxes, license and service fees, fines, inter- and intra-governmental charges, transfers and shared revenues, grants, interest earnings, and other lesser revenue items.

In addition, the Forecast Office's responsibilities are to staff the Forecast Council, develop economic and revenue forecasts, conduct special studies at the request of the Forecast Council, and provide *ad hoc* analytical support on economic and revenue estimation for legislative and executive staff consistent with the work program.

Municipal Budget. City operations are guided by a budget prepared under the direction of the Mayor by the CBO pursuant to State statute (chapter 35.32A RCW). The proposed budget is submitted to the City Council by the Mayor each year not later than 90 days prior to the beginning of the next fiscal year. Currently the fiscal year of the City is January 1 through December 31. The City Council considers the proposed budget, holds public hearings on its contents, and may alter and revise the budget at its discretion, subject to the State requirement that budgeted revenues must at least equal expenditures. The City Council is required to adopt a balanced budget at least 30 days before the beginning of the next fiscal year, which may be amended or supplemented from time to time by ordinance. The Mayor may choose to approve the City Council's budget, veto it, or permit it to become law without the Mayor's signature. The Mayor does not have line-item veto power.

The 2022 budget was adopted by Ordinance 126490 and was passed by the City Council on November 22, 2021. The City's adopted General Fund budget was approximately $1.607 billion in 2021 and is approximately $1.585 billion in 2022.

Fiscal Reserves

Emergency Fund. Under the authority of RCW 35.32A.060, the City maintains the EMF of the General Fund. The EMF is the principal reserve for the City to draw upon when certain unanticipated expenses occur during the fiscal year. Eligible expenses include costs related to storms or other natural disasters. State law limits the amount of money the City can set aside in this reserve to $0.375 per $1,000 of assessed value of property within the City. Prior to 2017, the City's practice had been to fully fund the emergency reserve to this maximum limit. In 2017, the City modified the existing financial policies for the EMF to establish a minimum balance of $60 million and to adjust that minimum each year with the rate of inflation. This policy struck a balance between ensuring that resources will be available to address unanticipated expenditures and making resources available to address current needs.

Due to the COVID-19 pandemic and related economic downturn, the City's revenue forecasts were significantly reduced from prior expectations. Additionally, the City will continue to realize significant expenses to address response and recovery through 2022. City policy was amended in 2021 to require that the City return to making contributions to satisfy the target balance within a period of five years, or sooner if practically possible after a severe event requiring deep or multi-year spending from the reserve.

In response to the ongoing COVID-19 pandemic, the City withdrew a net $12.8 million from the EMF in 2020 and an additional net $18.5 million in 2021. These uses reduced the reserve balance to $33.7 million at the end of 2021. Improving economic conditions are expected to allow for the replenishment of reserves to begin in 2022 with the intent to replenish the Emergency Fund to its minimum required balance within five years, and sooner if practically possible.

Revenue Stabilization Fund. The City maintains the RSF in the General Fund to be used for revenue stabilization for future City operations and to fund activities that would otherwise be reduced in scope, suspended, or eliminated due to unanticipated shortfalls in General Fund revenues.

Certain required transfers into and restrictions on expenditures from the RSF are set forth in the Seattle Municipal Code ("SMC"). All expenditures from the RSF require an ordinance, adopted following consideration of projections and recommendations for at least partial replenishment within four years. The RSF is funded by (i) one-time transfers authorized by ordinance, (ii) automatic annual transfers of 0.50% of forecast General Fund tax revenues, and (iii) upon completion of fiscal year accounting, automatic transfer of 50% of the ending balance in the General Fund, less encumbrances, carryforwards as authorized by ordinance or State law, and planned reserve amounts reflected in the adopted budget, that is in excess of the latest revised estimate of the unreserved ending fund balance for that closed fiscal year (as published in the adopted budget). The phrase "tax revenues" means all tax revenues deposited into the General Fund, including but not limited to tax revenue from the regular property tax levy, business and occupation tax, utility business taxes, the portion of admissions tax not dedicated to the Arts and Culture Fund, leasehold excise tax, gambling taxes, and sales and use taxes.

The SMC also provides that automatic transfers will be suspended to the extent that the balance in the RSF exceeds 5% of the forecast General Fund tax revenues for the year, and when forecasts underlying the adopted budget anticipate a nominal decline in General Fund revenues, as compared to the revenue forecasts underlying the adopted budget for the fiscal year immediately prior. Automatic transfers remain suspended until positive revenue growth is reflected in the revenue forecasts underlying the adopted budget and are reinstated at a level of 0.25% of General Fund tax revenues in the first year showing such recovery, followed by 0.50% thereafter.

In response to the ongoing COVID-19 pandemic, the City withdrew a net $26.0 million from the RSF in 2020 and an additional net $25.7 million in 2021. These uses reduced the reserve balance to $6.0 million at the end of 2021. Based on the automatic transfer mechanism described above, the City will make a deposit of $56 million to the RSF in 2022.

The City does not plan to draw on either of the reserves in 2022. The City plans to fund the combined RSF and Emergency Fund to $130 million by year-end 2024.

Financial Management

City financial management functions are provided by the Department of Finance and Administrative Services.

Accounting. The accounting and reporting policies of the City conform to generally accepted accounting principles for municipal governments and are regulated by the State Auditor's Office, which maintains a resident staff at the City to perform a continual current audit as well as an annual, post-fiscal year audit of City financial operations. The Accounting Services Division of the Department of Finance and Administrative Services maintains general supervision over the accounting functions of the City.

Auditing. The State Auditor is required to examine the affairs of all local governments at least once every three years; the City is audited annually. The examination must include, among other things, the financial condition and resources of the City, compliance with the State Constitution and laws of the State, and the methods and accuracy of the accounts and reports of the City. Reports of the State Auditor's examinations are required to be filed in the office of the State Auditor and in the Department of Finance and Administrative Services.

The State Auditor's Office has authority to conduct independent performance audits of State and local government entities. The Office of the City Auditor also reviews the performance of a wide variety of City activities such as span of control, City-wide collections, special events permitting, and specific departmental activities.

Investments

Authorized Investments. Chapter 35.39 RCW permits the investment by cities and towns of their inactive funds or other funds in excess of current needs in the following: United States bonds, United States certificates of indebtedness, State bonds or warrants, general obligation or utility revenue bonds of their own or of any other city or town in the State, their own bonds or warrants of a local improvement district that are within the protection of the local improvement guaranty fund law, and any other investment authorized by law for any other taxing district. Under chapter 39.59 RCW, a city or town also may invest in the following: bonds of the State or any local government in the State; general obligation bonds of any other state or local government of any other state that have at the time of the investment one of the three highest credit ratings of a nationally recognized rating agency; registered warrants of a local government in the same county as the government making the investment; certificates, notes, or bonds of the United States, or other obligations of the United States or its agencies, or of any corporation wholly owned by the government of the United States; or United States dollar-denominated bonds, notes, or other obligations that are issued or guaranteed by supranational institutions, provided that, at the time of investment, the institution has the United States government as its largest shareholder; Federal Home Loan bank notes and bonds, Federal Land Bank bonds and Federal National Mortgage Association notes, debentures, and guaranteed certificates of participation, or the obligations of any other government-sponsored corporation whose obligations are or may become eligible as collateral for advances to member banks as determined by the Board of Governors of the Federal Reserve system; bankers' acceptances purchased on the secondary market; commercial paper purchased in the secondary market, provided that any local government of the State that invests in such commercial paper must adhere to the investment policies and procedures adopted by the Washington State Investment Board; and corporate notes purchased on the secondary market, provided that any local government of the State that invests in such notes must adhere to the investment policies and procedures adopted by the Washington State Investment Board.

Money available for investment may be invested on an individual fund basis or may, unless otherwise restricted by law, be commingled within one common investment portfolio. All income derived from such investment may be either apportioned to and used by the various participating funds or used for the benefit of the general government in accordance with City ordinances or resolutions.

Authorized Investments for Bond Proceeds. Funds derived from the sale of bonds or other instruments of indebtedness will be invested or used in such manner as the initiating ordinances, resolutions, or bond covenants may lawfully prescribe.

City Investments. The information in this section does not pertain to pension funds that are administered by the City (see "Pension Plans") and certain refunding bond proceeds that are administered by trustee service providers.

All cash-related transactions for the City, including its utilities, are administered by the Department of Finance and Administrative Services. Investments of temporarily idle cash may be made, according to existing City Council-approved policies, by the Treasury Services Division of the Department of Finance and Administrative Services in securities described above under "Authorized Investments."

State statutes, City ordinances, and Department of Finance and Administrative Services policies require the City to minimize market risks by safekeeping all purchased securities according to governmental standards for public institutions and by maintaining safety and liquidity above consideration for returns. Current City investment policies require periodic reporting on the City's investment portfolio to the Mayor and the City Council. The City's investment operations are reviewed by the City Auditor and by the State Auditor.

As of December 31, 2021, the City Treasury's pooled investment portfolio, which excludes pensions, totaled $2,821 million market value. The City's investment portfolio consists solely of City funds. As of December 31, 2021, the annualized earnings yield of the City's investment portfolio was 1.20% for the month and 1.36% for the year. As of December 31, 2021, the weighted average maturity of the City's investments was 786 days. Approximately 27%, or $759 million, was invested in securities with maturities of three months or less.

Investments were allocated as follows, by market value:

U.S. Government Agencies	26%
U.S. Government[(1)]	26%
State and Local Government Investment Pool	20%
U.S. Government Agency Mortgage-Backed	13%
Municipal Bonds	7%
Repurchase Agreements	4%
Corporate Bonds	3%
Supranational	1%
Commercial Paper	0%

(1) Includes FDIC-backed and U.S. Department of Housing and Urban Development securities.

Note: may not add to 100% due to rounding.

Interfund Loans. The City is authorized to make interfund loans from the City's common investment portfolio to individual funds, bearing interest payable by the borrowing fund. The Director of Finance may approve interfund loans for a duration of up to 90 days. Loans of a longer duration require City Council approval.

As of December 31, 2021, the City had outstanding three interfund loans totaling approximately $199.8 million, in amounts ranging from $15.7 million to $160.0 million. In accordance with its plan, the largest of these is in the process of full repayment with only accrued interest still outstanding. As of March 18, 2022, the City had outstanding four interfund loans totaling approximately $54.7 million, in amounts ranging from $345,000 to $24.2 million.

Risk Management

The City purchases excess liability insurance to address general, automobile, professional, public official, and other exposures. Currently the City's excess liability policy provides $20 million limits above a $10 million self-insured retention per occurrence, but coverage excludes partial or complete failure of any of the City's hydroelectric dams. The City also purchases all risk property insurance, including earthquake and flood perils, that provides up to $500 million in limits subject to a schedule of deductibles and sublimits. Earthquakes and floods are subject to annual aggregate limits of $100 million. City hydroelectric generation and transmission equipment and certain other utility systems and equipment are not covered by the property insurance policy. In 2019, the City began purchasing cyber insurance to cover business interruption, system failure, data asset protection, event management, and privacy and network security liability.

The City insures a primary level of fiduciary, crime liability, inland marine, and various commercial general liability, medical, accidental death and dismemberment, and miscellaneous exposures. Surety bonds are purchased for certain public officials and notaries.

Pension Plans

The information below describes pension plans available to City employees generally. City employees are eligible for coverage by one of the following defined benefit pension plans: Seattle City Employees' Retirement System ("SCERS"), Firefighters' Pension Fund, Police Relief and Pension Fund, and the Law Enforcement Officers' and Fire Fighters' Retirement System ("LEOFF"). The first three are administered by the City and are reported as pension trust funds as part of the City's reporting entity. The State administers LEOFF through the State Department of Retirement Systems ("DRS").

Pursuant to an agreement with various City labor unions, the City Council passed legislation in August 2016 that created a new defined benefit retirement plan, SCERS Plan 2 ("SCERS 2"), covering non-uniformed employees. The new plan is open to employees first hired on or after January 1, 2017. SCERS 2 includes, among other adjustments to SCERS Plan 1 ("SCERS 1"), a slight decrease in benefit levels, raising the minimum retirement age, and deferring retirement eligibility by increasing the age-plus-years-of-service required for retirement with full benefits. The City expects SCERS 2 to provide a more cost-effective method for the City to provide retirement benefits to its employees. It does not affect uniformed employees. The historical information provided in this section relates only to SCERS 1.

Additional detail on the existing plans is available from SCERS and DRS on their respective websites (SCERS: *http://www.seattle.gov/retirement/*; DRS: *http://www.drs.wa.gov/*).

Permanent non-uniformed City employees and certain grandfathered employees of the County (and a predecessor agency of the County) are eligible for membership in SCERS. Newly-hired uniformed police and fire personnel are generally eligible for membership in LEOFF. The Seattle Firefighters' Pension Fund and Police Relief and Pension Fund have been closed to new members since 1977.

GASB 67/68 Reporting. Governmental Accounting Standards Board ("GASB") Statements No. 67 ("GASB 67") and 68 ("GASB 68") modified the accounting and financial reporting of pensions by pension plans (GASB 67) and by state and local government employers (GASB 68), but did not alter the funding requirements under State law and City ordinance for members, employers, or the State. The SCERS annual financial statements for the fiscal year ended December 31, 2020, and DRS's Annual Comprehensive Financial Report for LEOFF for the fiscal year ended June 30, 2021, were prepared in accordance with GASB 67.

The 2021 Audited Financial Statements of the Water Fund, attached as Appendix C, were prepared in accordance with GASB 68. As of December 31, 2021, the Water Fund reported a liability of $65.4 million, representing its proportionate share of NPL for SCERS. The NPL was measured as of December 31, 2021, and the TPL used to calculate the NPL was determined by the actuarial valuation as of December 31, 2020. The Water Fund's proportion of the NPL was based on contributions to SCERS during the fiscal year ended December 31, 2020. As of December 31, 2021, the Water Fund's proportion was 5.85%. Schedules of the Water Fund's proportionate share of NPL and of the Water Fund's contributions are provided as required supplementary information to the Water Fund's 2021 Audited Financial Statements.

Seattle City Employees' Retirement System. SCERS is a cost-sharing multiple-employer defined benefit public employee retirement plan, administered in accordance with SMC 4.36, by the Retirement System Board of Administration (the "Board"). The Board consists of seven members, including the Chair of the Finance Committee of the City Council, the City's Director of Finance, the City's Human Resources Director, two active members and one retired member of the system, and one outside board member who is appointed by the other six board members. Elected and appointed Board members serve for three-year terms.

SCERS is a pension trust fund of the City and provides retirement, death, and disability benefits under SCERS 1 and SCERS 2. Employees first entering the system on or after January 1, 2017, are enrolled in SCERS 2, with limited exceptions for certain exempt employees and those with service credit prior to January 1, 2017. Members already enrolled in SCERS 1 do not currently have an option to switch to SCERS 2.

Under SCERS 1, retirement benefits vest after five years of credited service, while death and disability benefits vest after ten years of service. Retirement benefits are calculated as 2% multiplied by years of creditable service, multiplied by average salary, based on the highest 24 consecutive months. The benefit is actuarially reduced for early retirement. Under SCERS 2, retirement benefits vest after five years of credited service, while death and disability benefits vest after ten years of service. Retirement benefits are calculated as 1.75% multiplied by years of creditable service, multiplied by average salary, based on the highest 60 consecutive months. The benefit is actuarially reduced for early retirement.

According to the most recent actuarial valuation (with a valuation date as of January 1, 2022), which was approved by the Board on June 9, 2022 (the "2021 Actuarial Valuation"), there were 7,317 retirees and beneficiaries receiving benefits, and 9,045 active members of SCERS. There are an additional 1,556 terminated employees in SCERS who are vested and entitled to future benefits and another 1,442 who are not vested and not entitled to benefits beyond contributions and accumulated interest. From January 1, 2021, to January 1, 2022, the net number of active members in SCERS decreased by 2.6%, the net number of retirees receiving benefits increased by 2.7%, and the net number of vested terminated members increased by 8.20%.

Certain demographic data from the 2021 Actuarial Valuation are shown below:

TABLE 18
PLAN MEMBER DEMOGRAPHIC INFORMATION, SCERS

	Retirees and Beneficiaries Receiving Benefits		Active Employees	
Age Range	**Number**	**Percent**	**Number**	**Percent**
<25	-		75	0.8%
25-39	-		2,369	26.2%
40-49	8 (1)	0.1% (1)	2,343	25.9%
50-59	239	3.3%	2,614	28.9%
60-69	2,405	33.3%	1,493	16.5%
70+	4,573	63.3%	151	1.7%

(1) Includes everyone under the age of 50.

Source: 2021 Actuarial Valuation

FINANCIAL CONDITION AND ACTUARIAL VALUATIONS. As a department of the City, SCERS is subject to the City's internal control structure and is required by SMC 4.36.505E to transmit a report to the City Council annually regarding the financial condition of SCERS (the "SCERS Annual Report"). The most recent SCERS Annual Report, for the years ended December 31, 2020, and December 31, 2019, was transmitted on June 28, 2021, by CliftonLarsonAllen LLP.

Milliman Inc., as consulting actuary, has evaluated the funding status of SCERS annually since 2010. The most recent actuarial report, the 2021 Actuarial Valuation (with a valuation date as of January 1, 2022), is available on the City's website at:

http://www.seattle.gov/retirement/about-us/board-of-administration#actuarialreports.

At its July 2018 meeting, the Board adopted new assumptions to be used for the 2018 Actuarial Valuation. The assumptions were based on the 2018 Investigation of Experience Report. The adopted assumptions included a decrease in the investment return assumption, a decrease in the consumer price inflation assumption, and an overall increase in life expectancies. The following summarizes some key assumptions utilized in the 2021 Actuarial Valuation and compares those to the assumptions used in the last three actuarial valuations. In March 2022, the Board reduced the 30-year investment expectation to 6.75% following recommendations in the 2022 Experience Study. This change was incorporated into the 2021 Actuarial Valuation (with a valuation date as of January 1, 2022). Employer contribution rates are projected to remain about the same over the next several years due to deferred recognition of higher than expected investment returns offset by the impact of lower return expectations for the future. The average employee contribution rate is expected to continue to decline due to the growing proportion of SCERS 2 members.

TABLE 19
ACTUARIAL ASSUMPTIONS

	2021	**2020**	**2019**	**2018**	**2017**
Investment return	6.75%	7.25%	7.25%	7.25%	7.50%
Price inflation	2.60%	2.75%	2.75%	2.75%	3.25%
Wage growth (price inflation plus wage inflation)	3.35%	3.50%	3.50%	3.50%	4.00%
Expected annual average membership growth	0.25%	0.50%	0.50%	0.50%	0.50%
Interest on member contributions made on or after January 1, 2012(1)	3.85%	4.00%	4.00%	4.00%	4.75%

(1) Contributions made prior to January 1, 2012, are assumed to accrue interest at 5.75%.

Source: 2021, 2020, 2019, 2018, and 2017 Actuarial Valuations

As of January 1, 2022 (as set forth in the 2021 Actuarial Valuation), the actuarial value of net assets available for benefits was $3,717.2 million and the actuarial accrued liability was $4,959.0 million. An Unfunded Actuarial Accrued Liability ("UAAL") exists to the extent that actuarial accrued liability exceeds plan assets. Per the 2021 Actuarial Valuation, the UAAL decreased from $1,327.3 million as of January 1, 2021, to $1,241.8 million as of January 1, 2022. The funding ratio increased from 71.6% as of January 1, 2021, to 75.0% as of January 1, 2022, which increase was primarily due to realizing a greater than assumed investment return but partially offset by a decrease in the assumed investment rate in the future. For the year ended December 31, 2021, SCERS assets experienced an investment gain of about 16.8% on a market basis (net of investment expenses), a rate of return greater than the assumed rate of 7.25% for 2021. The result is an actuarial gain on assets for 2020, but only one-fifth of this gain was recognized in the current year actuarial value of assets ("AVA"). To improve its ability to manage short-term market volatility, the City has adopted a five-year asset smoothing methodology that recognizes the asset gain or loss occurring in each year evenly over a five-year period. Under this methodology, combined with prior years' asset gains and losses, the 2021 return was a positive 12.0% on an actuarial value basis.

The following table provides historical plan funding information for SCERS:

TABLE 20
HISTORICAL SCERS SCHEDULE OF FUNDING PROGRESS (1)
($000,000)

Actuarial Valuation Date (January 1)	Actuarial Value of Assets (AVA)(2)	Actuarial Accrued Liability (AAL)(3)	Unfunded AAL (UAAL)	Funding Ratio	Covered Payroll(4)	UAAL as % of Covered Payroll
2013	1,920.1	3,025.3	(1,105.2)	63.5%	567.8	194.6%
2014	2,094.3	3,260.1	(1,165.8)	64.2%	597.9	195.0%
2015	2,266.7	3,432.6	(1,165.9)	66.0%	630.9	184.8%
2016	2,397.1	3,605.1	(1,208.0)	66.5%	641.7	188.2%
2017	2,564.1	3,766.4	(1,202.3)	68.1%	708.6	169.7%
2018	2,755.2	3,941.8	(1,186.6)	69.9%	733.3	161.8%
2019	2,877.4	4,216.7	(1,339.3)	68.2%	779.1	171.9%
2020	3,040.7	4,411.1	(1,370.4)	68.9%	819.7	167.2%
2021	3,345.8	4,673.1	(1,327.3)	71.6%	878.2	151.1%
2022	3,717.2	4,959.0	(1,241.8)	75.0%	876.4	141.7%

(1) For accounting purposes under GASB 67/68, UAAL is replaced with net pension liabilities. However, because the City continues to set its contribution rates based on an actuarially required contribution based on the UAAL and funding ratios calculated under the pre-GASB 67/68 methodology, both methods are currently reported in the SCERS actuarial valuations and annual reports.

(2) Based on five-year asset smoothing.

(3) Actuarial present value of benefits less actuarial present value of future normal cost. Based on Entry Age Actuarial Cost Method, defined below under "SCERS Contribution Rates."

(4) Covered Payroll shown for the prior calendar year; includes compensation paid to all active employees on which contributions are calculated.

Source: Annual Actuarial Valuation Reports

In accordance with GASB 67, the 2020 SCERS audited financial statements included a calculation of TPL and NPL based on the actuarial valuation dated as of January 1, 2020, rolled forward using generally accepted actuarial procedures (assuming a 7.25% investment rate of return and 3.50% salary increases) to December 31, 2020, as follows: TPL was calculated to be $4,620.5 million, plan fiduciary net position ("Plan Net Position") was calculated to be $3,641.5 million, and NPL was calculated to be $979.0 million, for a funding ratio (Plan Net Position as a percentage of TPL) of 78.8%. A Schedule of the Water Fund's Proportionate Share of the Net Pension Liability and Schedule of the Water Fund's Contributions is set forth in the required supplementary information in Appendix C—2021 Audited Financial Statements of the Water Fund.

SCERS CONTRIBUTION RATES. Member and employer contribution rates for SCERS 1 and SCERS 2 are established separately by SMC 4.36. The SMC provides that the City contribution for SCERS 1 must match the normal contributions of SCERS 1 members and does not permit the employer rate to drop below the employee rate. There is no similar restriction in the SMC with respect to SCERS 2. The SMC also requires that the City contribute, in excess of the matching contributions, no less than the amount determined by the most recent actuarial valuation that is required to fully fund the plan. Contribution rates are recommended annually by the Board, based on the system's actuarial valuation. Benefit and contribution rates are set by the City Council.

The Actuarially Required Contribution ("ARC") rate is based on amortizing the required contribution over 30 years, meaning that the total contribution rate must be sufficient to pay for the costs of benefits earned during the current year, as well as the annual cost of amortizing the plan's UAAL over 30 years. The City Council may from time to time set the amortization period by resolution, and in 2013, it passed a resolution to close the 30-year amortization period for calculating UAAL as of the January 1, 2013, actuarial valuation. As a result, for purposes of the 2021 Actuarial Valuation calculation, a 21-year amortization period was used. This policy may be revised by the City Council in future years. The 2021 Actuarial Valuation was prepared using the Entry Age Normal Cost ("EANC") method. Under the EANC method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percent of the individual's projected compensation between entry age into the system and assumed exit age (*e.g.*, termination or retirement).

Current and historical contribution rates for SCERS, based on a percentage of employee compensation (exclusive of overtime), are shown in the table below.

TABLE 21
EMPLOYER AND EMPLOYEE SCERS CONTRIBUTION RATES

Calendar Years (beginning Jan. 1)	Employer Rate	Employee Rate	Total Contribution Rate	Total ARC(1)	% of Total ARC Contributed	Total ARC per GASB 27(2)	% of Total ARC Contributed per GASB 27
2014	14.31%	10.03%	24.34%	24.34%	100%	25.63%	95%
2015	15.73%	10.03%	25.76%	25.76%	100%	26.38%	98%
2016	15.23%	10.03%	25.26%	25.26%	100%	N/A	N/A
2017	15.29%	10.03%	25.32%	25.32%	100%	N/A	N/A
2018	15.23% (3)	10.03%	25.26%	25.00%	101% (3)	N/A	N/A
2019	15.26% (3)	9.85% (4)	25.11%	24.40% (5)	103% (3)	N/A	N/A
2020	16.14%	9.65% (4)	25.79%	25.79% (5)	100%	N/A	N/A
2021	16.10%	9.46% (4)	25.56%	25.56% (5)	100%	N/A	N/A
2022	16.10% (3)	9.35% (4)	25.45%	24.68% (5)	103% (3)	N/A	N/A
2023	15.82%	9.24% (4)	25.06%	25.06% (5)	100%	N/A	N/A

(1) Reflects total actuarial required contribution (*i.e.*, employer plus employee contribution rates). Since November 21, 2011, this rate has been used for City budgeting purposes.

(2) The primary difference between the Total ARC calculation and that calculated under GASB Statement No. 27 is that the Total ARC calculation uses a 0.50% membership growth assumption, while GASB specifies an assumption of no membership growth. The GASB rate calculations take into account the lag between the determination of the ARC and the expected contribution date associated with that determination (for example, contribution rates for calendar year 2012 were based on the ARC determined as part of the January 1, 2011, actuarial valuation). Beginning in 2016, GASB Statement No. 27 was superseded by GASB 68, so this calculation is no longer performed.

(3) The City contribution rate is intentionally more than the total ARC in an effort to reduce a projected increase in future contribution rates.

(4) Reflects a blended employee contribution rate based on rates for SCERS 1 and SCERS 2 members.

(5) Since 2019, the ARC reflects a blended normal cost for SCERS 1 and SCERS 2.

Source: Seattle Municipal Code; Annual Budgets; Annual Actuarial Valuation Reports

In 2011, the City Council adopted Resolution 31334, affirming the City's intent to fully fund the annual ARC each year with its budget. See Table 21—Employer and Employee SCERS Contribution Rates and Table 22—Projected Actuarially Required Total Contribution Rates for SCERS by Employer and Employee."

The City's contracts with all labor unions that represent SCERS members limit the ability of the City to pass on increases to pension contribution rates to the employee portion. Prior contracts permitted 1% increases in 2011 and 2012 to be reflected in the employee contribution rates, but have eliminated any additional cost-sharing. Future increases to pension contribution rates will be reflected in the City's employer contribution.

As indicated in Table 21, the Total ARC is increasing to 25.06% as a percent of payroll beginning in January 1, 2023. This compares to the 24.68% Total ARC in the current year. The employees' share will average 9.24% between SCERS 1 and SCERS 2. The employer's share needed to meet the Total ARC is increasing from 15.33% to 15.82%. However, as indicated in Table 18, in anticipation of an increase to the employer's cost in 2023, the City maintained an employer rate of 16.10% in 2022 that was above what was necessary to meet the Total ARC. As a result, the City expects to reduce its employer contribution rate for 2023 to 15.82%, in order to meet the projected Total ARC in 2023.

Projected total actuarially required contribution rates for SCERS reported in the 2021 Actuarial Valuation are shown in the table below:

TABLE 22
PROJECTED ACTUARIALLY REQUIRED TOTAL CONTRIBUTION RATES FOR SCERS BY EMPLOYER AND EMPLOYEE

Contribution Year[1]	Assuming 6.75% Returns	Confidence Range[2]
2023	15.82%	15.82-15.82
2024	14.99%	13.57-16.33
2025	13.43%	9.59-17.06
2026	12.42%	9.24-18.83
2027	11.94%	9.24-21.53
2028	11.93%	9.24-25.04

(1) Contribution year lags valuation year by one. For example, contribution year 2023 is based on the 2021 Actuarial Valuation (as of January 1, 2022) results, amortized over 21 years beginning in 2022 if the contribution rate change takes place in 2023.

(2) Confidence range for asset returns between the 5th and 95th percentile.

Source: 2021 Actuarial Valuation

Employer contributions were $141.0 million in 2020 and $139.5 million in 2021. Employer contributions from the Water Fund were $8.3 million in 2020 and $8.2 million in 2021. The employer share for employees of each of the utility funds is allocated to and paid out of the funds of each respective utility.

INVESTMENT OF SCERS PLAN FUNDS. In accordance with chapter 35.39 RCW, the Board has established an investment policy for the systematic administration of SCERS funds. The investment of SCERS funds is governed primarily by the prudent investor rule, as set forth in RCW 35.39.060. SCERS invests retirement funds for the long term, anticipating both good and poor performing financial markets. Contributions into SCERS 1 and SCERS 2 are invested together.

The market value of SCERS' net assets increased by $493.3 million (13.5%) during 2021, including member and employer contributions of $221.3 million and net gain from investment activity totaling $522.8 million. Deductions increased by $14.4 million in 2021, primarily attributed to a $8.9 million increase in retiree benefit payments and a $5.9 million increase in the amount of contributions refunded, offset by reductions in the amount of contributions refunded and administrative expenses.

Table 23 shows the historical market value of SCERS' assets (as of each December 31). Table 24 shows the historical investment returns on SCERS for the last ten years.

TABLE 23
SCERS MARKET VALUE OF ASSETS

Year (As of December 31)	Market Value of Assets (MVA)[(1)]
2012	$ 1,951.4
2013	2,216.9
2014	2,322.7
2015	2,313.0
2016	2,488.5
2017	2,852.9
2018	2,717.4
2019	3,149.9
2020	3,641.5
2021	4,134.8

(1) In millions.

Source: SCERS Actuarial Valuations

TABLE 24
SCERS INVESTMENT RETURNS

Year (As of December 31)	One-Year Annualized Return[(1)]
2012	12.8%
2013	15.0%
2014	5.3%
2015	0.1%
2016	8.4%
2017	15.7%
2018	-3.7%
2019	17.2%
2020	12.6%
2021	16.8%

(1) Calculated net of fees.

Source: SCERS

Table 25 below shows the historical distribution of SCERS investments for the years 2018-2022.

TABLE 25
HISTORICAL SCERS DISTRIBUTION OF INVESTMENTS BY CLASS

Investment Categories (January 1)	2022	2021	2020	2019	2018
Diversifying Strategies	0.0%	0.0%	0.0%	2.0%	1.9%
Fixed Income	23.8%	22.7%	26.7%	28.9%	24.6%
Infrastructure	1.9%	1.5%	1.2%	0.9%	0.4%
Private Equity	13.5%	13.2%	8.6%	8.1%	5.2%
Public Equity	50.1%	53.0%	53.1%	48.8%	57.1%
Real Estate	10.6%	9.7%	10.5%	11.3%	10.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: SCERS Actuarial Valuations

In accordance with SCERS' Investment Policy, the Board retains external investment managers to manage components of the SCERS portfolio. Managers have authority to determine investment strategy, security selection, and timing, subject to the Investment Policy, specific manager guidelines, legal restrictions, and other Board direction. Managers do not have authority to depart from their guidelines. These guidelines specify eligible investments, minimum diversification standards, and applicable investment restrictions necessary for diversification and risk control.

The Investment Policy defines eligible investments to include securities lending transactions. Through a custodial agent, SCERS participates in a securities lending program whereby securities are lent from the system's investment portfolio on a collateralized basis to third parties (primarily financial institutions) for the purpose of generating additional income to the system. The market value of the required collateral must meet or exceed 102% of the market value of the securities lent.

Firefighters' Pension Fund; Police Relief and Pension Fund. The Firefighters' Pension Fund and the Police Relief and Pension Fund are single-employer pension plans that were established by the City in compliance with chapters 41.18 and 41.20 RCW.

All City law enforcement officers and firefighters serving before March 1, 1970, are participants in these plans and may be eligible for a supplemental retirement benefit plus disability benefits under these plans. Some disability benefits may be available to such persons hired between March 1, 1970, and September 30, 1977. Since the effective date of LEOFF in 1970, no payroll for employees was covered under these City plans, and the primary liability for pension benefits for these City plans shifted from the City to the State LEOFF plan described below. The City remains liable for all benefits of employees in service at that time plus certain future benefits in excess of LEOFF benefits. Generally, benefits under the LEOFF system are greater than or equal to the benefits under the old City plan. However, because LEOFF benefits increase with the consumer price index (CPI-Seattle) while some City benefits increase with wages of current active members, the City's projected liabilities vary according to differences between wage and CPI increase assumptions.

These pension plans provide retirement benefits, death benefits, and certain medical benefits for eligible active and retired employees. Retirement benefits are determined under chapters 41.18 and 41.26 RCW for the Firefighters' Pension Fund and under chapters 41.20 and 41.26 RCW for the Police Relief and Pension Fund. As of January 1, 2022, membership in these plans consisted of 536 fire employees and survivors and 607 police employees and survivors. See "Other Post-Employment Benefits" below for a discussion of medical benefits paid to retirees.

In 2015, GASB released Statement No. 73 ("GASB 73"), replacing accounting requirements previously mandated under GASB Statements Nos. 25 and 27 for public pension plans that are not within the scope of GASB 68. The City has determined that both the Firefighters' Pension Fund and the Police Relief and Pension Fund are outside the scope of GASB 67 and GASB 68, and therefore the accounting and financial reporting for these pension plans has been prepared in accordance with GASB 73.

These pension plans do not issue separate financial reports. The most recent actuarial valuations, dated January 1, 2022, use the EANC method and value plan assets at fair value. The actuarial valuation for the firefighters' pension fund uses the following long-term actuarial assumptions: inflation rate (CPI), 2.50%; investment rate of return, 5.00%; and projected salary increases, 3.25%. The actuarial valuation for the Police Relief and Pension Fund uses the following long-term actuarial assumptions: inflation rate (CPI), 2.50%; investment rate of return, 2.00%; and projected salary increases, 3.25%. Postretirement benefit increases are projected based on salary increase assumptions for benefits that increase based on salary and based on CPI assumptions for benefits based on CPI.

Since both pension plans were closed to new members effective October 1, 1977, the City is not required to adopt a plan to fund the actuarial accrued liability of these plans. In 1994, the City established an actuarial fund for the Firefighters' Pension Fund and adopted a policy of fully funding the actuarial accrued liability ("AAL") by the year 2018 (which was subsequently extended to 2028). In accordance with GASB 73, the plan had a TPL of $118.3 million as of December 31, 2021, an increase of $3.7 million from the TPL of $114.6 million as of December 31, 2020. As of the January 1, 2022, valuation, the actuarial value of net assets available for benefits in the Firefighters' Pension Fund was $34.1 million, and the AAL was $86.7 million. As a result, the UAAL was $52.6 million and the funded ratio was 39.3%. In the January 1, 2021, actuarial valuation, the UAAL was $66.0 million and the funded ratio was 30.9%. The City's employer contribution to the fund in 2021 was $8.5 million; there were no current member contributions. Under State law, partial funding of the Firefighters' Pension Fund may be provided by an annual property tax levy of up to $0.225 per $1,000 of assessed value within the City. The City does not currently levy this additional property tax, but makes contributions out of the General Fund levy. The fund also receives a share of the State tax on fire insurance premiums.

The City funds the Police Relief and Pension Fund as benefits become due. In accordance with GASB 73, the plan had a TPL of $101.3 million as of December 31, 2021, an increase of $0.8 million from the TPL of $100.5 million as of December 31, 2020. As of the January 1, 2022, valuation, the actuarial value of net assets available for benefits in the Police Relief and Pension Fund was $21.1 million, and the actuarial value of future benefits was $95.1 million. As a result, the unfunded actuarial liability was $74.0 million and the funded ratio was 22.2%. In the January 1, 2021, actuarial valuation, the unfunded actuarial liability was $93.0 million and the funded ratio was 13.3%. The City's employer contribution to the fund in 2021 was $14.2 million; there were no current member contributions. The fund also receives police auction proceeds of unclaimed property.

Law Enforcement Officers' and Fire Fighters' Retirement System. Substantially all of the City's current uniformed firefighters and police officers are enrolled in LEOFF. LEOFF is a State-wide, multiple-employer defined benefit plan administered by the DRS. Contributions by employees, employers, and the State are based on gross wages. LEOFF participants who joined the system by September 30, 1977, are Plan 1 members. LEOFF participants who joined on or after October 1, 1977, are Plan 2 members. For all of the City's employees who are covered under LEOFF, the City contributed $17.7 million in 2020 and $17.1 million in 2019. The following table outlines the contribution rates of employees and employers under LEOFF.

TABLE 26
LEOFF CONTRIBUTION RATES EXPRESSED AS A PERCENTAGE OF COVERED PAYROLL
(AS OF JULY 1, 2021)

	Plan 1	Plan 2
Employer	0.18% (1)	5.30% (1)
Employee	0.00	8.53%
State	N/A	3.41%

(1) Includes a 0.18% DRS administrative expense rate.

Source: Washington State Department of Retirement Systems

While the City's current contributions represent its full current liability under the retirement systems, any unfunded pension benefit obligations could be reflected in future years as higher contribution rates. The State Actuary's website includes information regarding the values and funding levels for LEOFF.

According to the Office of the State Actuary's June 30, 2020, valuation, LEOFF had no UAAL. LEOFF Plan 1 had a funded ratio of 148% and LEOFF Plan 2 had a funded ratio of 113%. The assumptions used by the State Actuary in calculating the accrued actuarial assets and liabilities are a 7.5% annual rate of investment return for LEOFF Plan 1 and a 7.4% annual rate of investment return for LEOFF Plan 2, 3.70% general salary increases, 2.75% consumer price index increase, and annual growth in membership of 1.46%. Liabilities were valued using the EANC method and assets were valued using the AVA, which defers a portion of the annual investment gains or losses over a period of up to eight years. As of December 31, 2020, the City reported an asset of $276.1 million for its proportionate share of the net pension asset as follows: $67.2 million for LEOFF Plan 1 and $208.9 million for LEOFF Plan 2.

For additional information, see Note 11 to the City's 2021 Annual Comprehensive Financial Report, which is available on the City's website.

Other Post-Employment Benefits

The City has liability for two types of OPEB: (i) an implicit rate subsidy for health insurance covering employees retiring under SCERS 1, SCERS 2, or LEOFF Plan 2 and dependents of employees retiring under LEOFF Plan 1, and (ii) medical benefits for eligible beneficiaries of the City's Firefighters' Pension Fund and Police Relief and Pension Fund. The implicit rate subsidy 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.

Beginning with the fiscal year ended December 31, 2018, the City has assessed its OPEB liability in accordance with GASB Statement No. 75 ("GASB 75"). While GASB 75 requires reporting and disclosure of the unfunded OPEB liability, it does not require that it be funded.

The City funds its OPEB liabilities on a pay-as-you-go basis.

The City commissions a biennial valuation report on its OPEB liabilities associated with the implicit rate subsidy for health insurance covering employees retiring under the SCERS 1, SCERS 2, or LEOFF plans. The last valuation was based on a measurement date as of January 1, 2021, and was prepared in accordance with GASB 75. It showed the total OPEB liability for the implicit rate subsidy increased to $70.3 million from $63.6 million in the prior valuation. The City's GASB 75 annual expense in 2021 was calculated at $4.8 million, which compares to $4.5 million in 2020. The valuation of the OPEB liability associated with the City's Firefighters' Pension Fund and Police Relief and Pension Fund is updated annually. The most recent valuations were prepared in accordance with GASB 75. As of December 31, 2021, the total OPEB liability in the City's Firefighters' Pension Fund decreased to $290.6 million from $300.9 million. The annual OPEB expense for 2021 was $2.1 million and the estimated benefit payments were $12.4 million. As of December 31, 2021, the total OPEB liability in the Police Relief and Pension Fund decreased to $293.7 million from $308.6 million. The annual OPEB expense for 2021 was $1.1 million and the estimated benefit payments were $16.0 million.

For additional information regarding the City's OPEB liability, see Note 11 to the City's 2021 Annual Comprehensive Financial Report. For additional information regarding the Water Fund's portion of the City's OPEB liability, see Appendix C—2021 Audited Financial Statements of the Water Fund-Note 6.

State Paid Family and Medical Leave Insurance

On January 1, 2020, the State became the fifth state in the nation to offer paid family and medical leave benefits to workers all workers in the State, including State and local government employees. The Paid Family and Medical Leave program is a State-wide insurance program administered by the State Employment Security Department. It ensures paid leave for workers in the State when they need time off to give or receive care and for pre- and post-deployment time. Eligible workers are those who have worked at least 820 hours (equivalent to 20.5 full-time weeks) in the qualifying period before the leave begins. The program typically covers 12 weeks of leave (up to 18 weeks in certain circumstances). Workers receive up to $1,327 per week in 2022, depending on their income. The family leave benefit is funded solely by employee premiums while the medical leave benefit is funded by a mix of employer and employee premiums. Assessments for premiums began on January 1, 2019, and benefits became available to be taken starting January 1, 2020.

The City began paying assessments for premiums based on a percentage of wages on January 1, 2019. The initial rate of this assessment was 0.4% of wages that are subject to the federal social security tax. This rate increased to 0.6% on January 1, 2022, in accordance with a formula prescribed in State law, and was largely due to high utilization of the employee-funded family leave benefit. As a result, the employer share of the assessment only increased from 0.147% of Social Security wages to 0.161%. The City will continue to pay only the employer share of the 2022 assessment for most employees, estimated to be $2.7 million, approximately half of which will be paid from the General Subfund and the remainder will be paid by other funds.

State Long-Term Care Services and Supports Benefit Program

In 2019, State legislation created the Long-Term Services and Supports ("LTSS") Trust Program (the "WA Cares Program") to provide certain long-term care benefits to eligible beneficiaries. Benefits will be paid directly to LTSS providers on behalf of eligible beneficiaries. Administration of the WA Cares Program is divided among the State's Employment Security Department, Department of Social and Health Services, Health Care Authority, Office of the State Actuary, and Pension Funding Council, as well as two new bodies: the LTSS Trust Council and the LTSS Trust Commission.

As originally enacted, the WA Cares Program legislation imposed premiums on participating employees in the State, collected by employers through employee payroll deductions and remitted to the State. No employer contribution is required under State law. On January 27, 2022, Substitute House Bill 1732 ("SHB 1732") became effective, delaying implementation of the WA Cares Program, anticipating additional legislative adjustments to the program. Collection of premiums was scheduled to begin as of January 1, 2022, and benefits were to become available beginning January 1, 2025. Under SHB 1732, collection of premiums is delayed until July 1, 2023, and benefits are to become available beginning July 1, 2026. The delay is intended to provide opportunity for further review and amendment of the law prior to implementation, if necessary.

Premiums are assessed at a rate of 0.58% of each employee's wages within the State, and subject to adjustment every two years by the PFC based on actuarial studies and valuations to be performed by OSA to maintain financial solvency of the LTSS Trust, but not to exceed 0.58%. Employers are required to remit premiums on behalf of all employees other than employees who demonstrate that they have long-term care insurance. There is no employer contribution required under State law. Employees can request to exempt themselves from program participation. As of December 31, 2021, 467,919 exemption requests had been submitted. Under the originally enacted legislation, all individuals employed in the State may become eligible to receive the benefit when they have paid the LTSS trust premiums while working at least 500 hours per year for either ten years with at least five years uninterrupted, or three of the last six years. Program participants eligible to receive benefits must have been assessed by DSHS as needing assistance with at least three daily living tasks, must be at least 18 years old (and must not have been disabled before the age of 18), and must reside in the State. There is a lifetime cap on the benefit for any individual equal to 365 benefit units, which are assigned a dollar value adjusted annually at a rate not exceeding the Consumer Price Index. Employees can request to exempt themselves from program participation. As of December 31, 2021, 467,919 exemption requests had been submitted. Premiums are assessed at a rate of 0.58% of each employee's wages within the State, and subject to adjustment every two years by the PFC based on actuarial studies and valuations to be performed by OSA to maintain financial solvency of the LTSS Trust, but not to exceed 0.58%. Employers are required to remit premiums on behalf of all employees other than employees who demonstrate that they have long-term care insurance. There is no employer contribution required under State law. Collective bargaining agreements in effect prior to October 2017 are not required to be reopened or to apply the WA Cares Program requirements until the existing agreement is reopened, renegotiated, or expires.

Labor Relations

This information reflects the engagement of the Labor Relations Unit within the Seattle Department of Human Resources ("Labor Relations") with union representatives in response to the impacts of the COVID 19 emergency upon the City and the employees in the respective bargaining units. Since the Mayor's emergency declaration on March 3, 2020, Labor Relations has been actively addressing the impacts of the emergency on the workplace and working conditions of employees. Negotiation of the first Memorandum of Understanding ("MOU") providing the City with additional flexibility was concluded on May 28, 2020. Most City unions signed except for the sworn Public Safety employees (Police and Fire), Police Dispatchers, and Parking Enforcement Officers. Other agreements with unions have been reached since that date. Labor Relations have continued to work closely with all of the labor representatives to address the continuing impacts of the pandemic, along with other social and environmental crises that have affected the City and surrounding communities as well as the City's employees. Negotiating additional agreements related to the impacts of the pandemic and addressing the Mayor's vaccination mandate and other ongoing and evolving impacts of the pandemic are topics of regular weekly meetings between Labor Relations staff and all of the bargaining representatives.

In 2021, the new Protec17 bargaining unit, representing 14 Strategic Advisors in the Legislative Department, completed negotiations with the City for its initial collective bargaining agreement, which was subsequently adopted by the City Council and Mayor. Another new bargaining unit completed the certification process, also represented by Protec17, including about 31 Strategic Advisors in three small departments. It also completed negotiations with the City for its initial collective bargaining agreement, which was subsequently adopted by the City Council and Mayor.

As of January 2022, the City had 38 separate departments and offices with approximately 15,178 employees (including 11,287 regular and 3,891 temporary employees). Twenty-five different unions and 56 bargaining units represent the approximately 77% of regular City employees whose employment is governed by 34 different collective bargaining agreements (contracts).

In 2022, the City continued negotiations with the Seattle Police Management Association ("SPMA") for a new agreement to replace the contract that expired December 31, 2019. They reached a tentative agreement in early 2022 that, if ratified, will become effective by the end of the second quarter of 2022. In March 2020, both SPMA and Fire Chiefs Local 2898 negotiations were put on hiatus for a number of months due to the pandemic. Agreements on vaccine mandate impacts were reached with all unions except SPOG in September 2021. Several unions have filed unfair labor practices arising out of the vaccine mandate. Those administrative matters are pending before the State's Public Employment Relations Commission and the City is engaging in mediation with the unions on them.

Labor Relations is preparing to open negotiations with SPOG for a new contract to replace the contract that expired on December 31, 2020, as well as continuing negotiations with IBEW Local 77 on two separate contracts: Power Marketers (expired December 31, 2020) and Seattle Department of Transportation (expired January 22, 2021). These unions will continue to operate under their expired contracts until negotiations have been completed.

Looking ahead, 28 labor agreements that are either part of the Coalition of City Unions or "Coalition-like" unions have contracts expiring on December 31, 2022. These contracts include approximately 61% of the City's represented employees.

Emergency Management and Preparedness

The City's Office of Emergency Management ("OEM") is responsible for coordinating the City's response and resources during emergencies and disasters through close coordination with City departments and partner agencies. The OEM is taking a lead role in coordinating various aspects of the City's response to the COVID-19 pandemic. See "Other Considerations—Global Health Emergency Risk and COVID-19 Pandemic."

OEM prepares for emergencies; coordinates with regional, State, and federal response agencies; provides education to the community about emergency preparedness; plans for emergency recovery; and works to mitigate known hazards. It has identified, assessed, and planned for many types of hazards that may impact the City, including geophysical hazards (*e.g.*, earthquakes, landslides, tsunamis, seismic seiches, volcanic eruptions, and lahars), infectious disease outbreaks, intentional hazards (*e.g.*, terrorism, active shooter incidents, breaches in cyber security, and civil disorder), transportation incidents, fires, hazardous materials, infrastructure failure, and severe weather (*e.g.*, floods, snow, water shortages, and windstorms). However, the City cannot anticipate all potential hazards and their effects, including any potential impact on the economy of the City or the region.

The City's emergency management program was assessed by a third-party team of emergency management professionals according to the Emergency Management Accreditation Program standards and was accredited in 2016 and reaccredited in 2022.

If a disaster were to damage or destroy a substantial portion of the taxable property within the City, the assessed value of such property could be reduced, which could result in a reduction of property tax revenues. Other revenue sources, such as sales tax and lodging tax, could also be reduced. In addition, substantial financial and operational resources of the City could be required during any emergency event or disaster and could be diverted to the subsequent repair of damage to City infrastructure.

Climate Change

There are potential risks to the City associated with changes to the climate over time and from increases in the frequency, timing, and severity of extreme weather events. The City 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 identifying mitigation and adaptation actions to enhance the resilience of services and infrastructure.

In 2019, the City adopted Resolution 31895, committing to creating a "Green New Deal" for the City to address and mitigate the effects of climate change. The City has also developed more specific plans addressing utility operations (including drainage, water supply, solid waste, and the electric system) and community preparedness. The City is monitoring and will be documenting climate impacts and likely climate risks as they arise and has not quantified potential impacts on the City, its population, or its operations. Over time, the costs could be significant and could have a material adverse effect on the City's finances by requiring greater expenditures to counteract the effects of climate change. The City's Office of Sustainability and Environment ("OSE") coordinates implementation of the Seattle Green New Deal, the Seattle Climate Action Plan, and the Equity and Environment Initiative and plans and implements policies that transition buildings to 100% clean energy and advance zero carbon transportation.

The Green New Deal and climate-related investments in the Duwamish Valley represent climate-focused uses of the Payroll Expense Tax revenues available for 2022. In July 2021, the City Council adopted Ordinance 126393, which established a separate fund to receive Payroll Expense Tax revenues and set out a specific annual spending plan for these revenues for 2022 and beyond. This included formulas that would allocate the revenues between support of the overall General Fund and investments in four priority policy areas: affordable housing; economic recovery and assistance to small businesses, the Green New Deal, and the Equitable Development Initiative. The City's 2022 Adopted Budget includes \$14.3 million supporting the Green New Deal. This includes \$1.7 million to support conversions from oil-based home heating systems to electric heat pumps and \$4 million in energy-efficient capital improvements in the Georgetown and South Park neighborhoods. This funding also supports workforce development for clean energy jobs, vehicle electrification for industrial enterprises, and a reserve for climate actions that will be guided by recommendations from the Green New Deal Oversight Board.

The City adopted Resolution 31447 in June 2013 adopting a Climate Action Plan to provide long-term planning direction and guide climate protection and adaptation efforts through 2030. In April 2018, the Mayor's Office released an updated "Climate Action Plan" that focuses on a set of short- and long-term actions that provide a roadmap for the City to act on the leading contributors of greenhouse gases: transportation and buildings. The 2018 Climate Action Plan builds on prior studies and plans implemented by the Office of Sustainability and the Environment ("OSE") that detail strategies and actions that can be taken to improve the climate preparedness of City infrastructure and services and to facilitate coordination across City government. The OSE plans include sector-specific strategies for transportation; buildings, and energy (including specific energy consumption and greenhouse gas emissions reduction targets for City buildings); trees and green space; food access; a healthy environment; and environmental justice. The 2018 Climate Action Plan remains in place as of the date of this Official Statement.

In addition, City investments in capital projects continue to be guided by a set of key policies reflecting the City's values and priorities including for sustainable building. In February 2000, the City Council adopted a Sustainable Building Policy for the City (Resolution 30121) which articulated the City's commitment to environmental, economic, and social stewardship and set the expectation that new municipal facilities meet established green building standards. Specifically, it called for all new construction and major remodel projects over 5,000 square feet to achieve a LEED

Silver rating. When adopted, this policy was the first of its kind in the nation and represented a groundbreaking approach to demonstrating City leadership and transforming the marketplace.

Since 2000, the green building community has experienced exceptional growth in expertise and capacity. Recognizing this change, the City passed an updated Sustainable Buildings and Sites Policy (Resolution 31326) in 2011. The update represents a comprehensive approach that reflects advances in the green building industry, aligns the policy with the City's attention to climate change, addresses a greater range of project types, and ensures that the City continues to provide leadership that advances sustainable development in both the public and private sectors. The City's Sustainable Buildings and Sites Policy includes a number of requirements. These requirements include: for new construction, additions, and major renovation projects of 5,000 square feet or greater, the minimum required green building rating is LEED Gold; minimum requirements are established for energy and water efficiency, construction waste reductions, and bicycle amenities; and for tenant improvement projects of 5,000 square feet or greater, where the scope includes mechanical, electrical, and plumbing, the minimum required green building rating is LEED Gold. In addition to the above, City departments are encouraged to test new approaches and standards, such as the Living Building Challenge and the Sustainable SITES Initiative.

Cyber Security

Cyber security threats continue to become more sophisticated and are increasingly capable of impacting the confidentiality, integrity, and availability of City systems and applications, including those of critical controls systems. Seattle Information Technology ("Seattle IT"), a City department, working in conjunction with various City departments, has instituted and continues to institute processes, training, and controls to maintain the reliability of its systems and protect against cyber security threats as well as mitigate intrusions and plan for business continuity via data recovery. Cyber security incident response plans are reviewed regularly, and tabletop and other exercises are conducted annually to assess the effectiveness of those plans. Seattle IT and third-party professional services also conduct cyber security assessments with the intent to identify areas for continual improvement, and develop work plans to address issues and support the cyber security program. This includes technical vulnerability assessments, penetration testing, and risk assessments based on the National Institute of Standards and Technology ("NIST") 800-53a. Seattle IT continuously reviews and updates processes and technologies to mature security practices leveraging the NIST Cybersecurity Framework. Cyber security risks create potential liability for exposure of nonpublic information and could create various other operational risks. The City cannot anticipate the precise nature of any particular breach or the resulting consequences. It has had cyber security liability insurance coverage since October 2019. See "—Risk Management."

OTHER CONSIDERATIONS

Global Health Emergency Risk and COVID-19 Pandemic

Beginning in early 2020, the spread of COVID-19, the illness caused by the SARS-CoV-2 coronavirus and its variants has impacted economic conditions worldwide and has influenced the local economy as well as the revenues, expenditures, and general financial condition of the City.

The COVID-19 pandemic is ongoing, and the duration and severity of the each outbreak and economic and other actions that may be taken by governmental authorities to contain or treat its impact remain uncertain. Reopening efforts implemented at any time may be reversed whenever conditions warrant. Notwithstanding the foregoing, the COVID-19 pandemic has not affected the City's ability to pay debt service on its outstanding obligations, and the City does not currently believe that the pandemic will affect its ability to pay future debt service on its outstanding obligations, including the Bonds, going forward.

Public Health Responses. Beginning in March 2020, social distancing, stay-at-home, masking, and vaccination requirements were implemented at various times within the City. These requirements have been adjusted repeatedly throughout the pandemic. Following the recent decline of COVID-19 cases, several public health orders and directives have been rolled back or ended, although businesses and organizations may choose to implement their own policies. Currently, vaccination verification requirements have ended and masking requirements are limited to health and long-term care settings, transportation conveyances and hubs, and correctional facilities. Home test kits are increasingly available and may be requested monthly from the Washington State Department of Health. The City government resumed reopening plans in mid-March 2022.

City Response and Federal Funding Assistance. The City initially experienced an increase in public health emergency response and other costs associated with mitigating the impacts of the COVID-19 pandemic and providing testing and vaccination sites. The City continues to address a number of social issues exacerbated by the pandemic, including homelessness, housing insecurity, and financial hardships for nonprofits and small businesses. Certain costs incurred to implement these and other measures have been offset in part by the federal and State funds awarded to the City in 2020 and 2021. The City received $131 million through the Coronavirus Relief Fund through the Coronavirus Aid, Relief, and Economic Stabilization Act (the "CARES Act") to help navigate the impact of the COVID-19 outbreak, all of which was spent prior to December 31, 2021, as required by the U.S. Department of the Treasury.

The City was also awarded $232 million of Coronavirus State and Local Fiscal Recovery Funds ("CLFR") through the American Rescue Plan Act ("ARPA") of 2021 to help the City recover from the COVID-19 pandemic. In addition to CLFR funding, the City received other federal grants intended to aid vulnerable populations particularly impacted by the pandemic.

Public Safety Funding Considerations and Protests

The City experienced a high level of protest activity in 2020 following the death of George Floyd in Minneapolis. Peaceful demonstrations in Seattle were marred by incidents of looting, vandalism, arson, property damage, and injuries. The City continues to engage in litigation related to the 2020 demonstrations as of the date of this Official Statement. These demonstrations had the effect of placing renewed emphasis on calls to reform the City's approach to public safety. The Seattle Police Department ("SPD") has been engaged in various reform efforts for many years and is currently operating under a 2012 consent decree ("2012 Consent Decree") that was imposed in response to findings by the U.S. Department of Justice ("DOJ") in 2011 outlining a "pattern or practice" of unconstitutional use of force within SPD. As a result of the public concerns over SPD's response to the demonstrations, the City announced in 2020 that it would withdraw a petition filed in 2020 to terminate that plan, and instead continues to operate under the 2012 Consent Decree.

The SPD budget was the focus of ongoing discussion and deliberation by the Executive and the City Council in 2020. The SPD 2022 Adopted Budget reflects a 2.1% reduction to SPD's budget as compared to the 2021 Adopted Budget, and an 11.6% reduction in the size of the sworn officer positions, from 1,357 in 2021 to 1,200 in the 2022 Adopted Budget. The 2022 Adopted Budget also builds upon recent efforts to expand the City's approach to ensuring community safety through programs and approaches that expand beyond a traditional, uniformed police response.

Federal Policy Risk and Other Federal Funding Considerations

Federal Sequestration. The sequestration provisions of the Budget Control Act of 2011 ("Sequestration") have been in effect since 2013 and are currently scheduled to remain in effect through federal fiscal year ("FFY") 2029. This results in a slight reduction in the expected subsidy in respect of certain Build America Bonds and Recovery Zone Economic Development Bonds previously issued by the City. The City does not expect Sequestration to materially adversely affect its ability to make debt service payments in the current or future years.

Federal Grant Funding Conditions. The City receives federal financial assistance for specific purposes that are generally subject to review or audit by the grantor agencies. Entitlement to this assistance is generally conditioned upon compliance with the terms of grant agreements and applicable federal regulations, including the expenditure of assistance for allowable purposes. Any disallowance resulting from a review or audit may become a liability of the City.

Federal Shutdown Risk. Federal government shutdowns have occurred in the past and could occur in the future. A lengthy federal government shutdown poses potential direct risks to the City's receipt of revenues from federal sources and could have indirect impacts due to the shutdown's effect on general economic conditions. The City has not experienced material adverse impacts from the federal government shutdowns that have occurred in the past but can make no assurances that it would not be materially adversely affected by any future federal shutdown.

INITIATIVE AND REFERENDUM

State-Wide Measures

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 that legislation passed by the State Legislature be referred to the voters. Any law approved in this manner 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% (initiative) and 4% (referendum) 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 City 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 more 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.

Local Measures

Under the City Charter, Seattle voters may initiate City Charter amendments and local legislation, including modifications to existing legislation, and through referendum may prevent legislation passed by the City Council from becoming law.

LEGAL AND TAX INFORMATION

No Litigation Relating to the Bonds

There is no litigation pending with process properly served on the City questioning the validity of the Bonds or the power and authority of the City to issue the Bonds. There is no litigation pending or threatened which would materially affect the City’s ability to meet debt service requirements on the Bonds.

Other Litigation

Various lawsuits and claims are pending against the City involving claims for money damages. Based on its past experience, the City has concluded that its ability to pay principal of and interest on the Bonds on a timely basis will not be impaired by the aggregate amount of uninsured liabilities of the Water Fund and the timing of any anticipated payments of judgments that might result from suits and claims.

Approval of Counsel

Legal matters incident to the authorization, issuance, and sale of the Bonds by the City are subject to the approving legal opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation, Seattle, Washington, Bond Counsel. A form of the opinion of Bond Counsel with respect to the Bonds is attached hereto as Appendix B. The opinion of Bond Counsel is given based on factual representations made to Bond Counsel and under existing law as of the date of initial delivery of the Bonds. Bond Counsel assumes no obligation to revise or supplement its opinion to reflect any facts or circumstances that may thereafter come to its attention or any changes in law that may thereafter occur. The opinion of Bond Counsel is an expression of its professional judgment on the matters expressly addressed therein and do not constitute a guarantee of result. Bond Counsel will be compensated only upon the issuance and sale of the Bonds.

Limitations on Remedies and Municipal Bankruptcies

Any remedies available to the owners of the Bonds 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 City fails to comply with its covenants under the Bond Documents 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.

The rights and obligations under the Bonds and the Bond Documents 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 the exercise of judicial discretion in appropriate cases.

A municipality such as the City 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 cities) to voluntarily petition for relief under the 1898 federal bankruptcy statute that was superseded by the current Bankruptcy Code. The State Legislature has not amended the 1935 State statute to update the cross-reference to the current Bankruptcy Code, but Washington municipal corporations have nonetheless been permitted to seek relief under the Bankruptcy Code. A creditor cannot bring an involuntary bankruptcy proceeding under the Bankruptcy Code against a municipality, including the City. The federal bankruptcy courts have broad discretionary powers under the Bankruptcy Code.

The opinion to be delivered by Stradling Yocca Carlson & Rauth, a Professional Corporation, as Bond Counsel, concurrently with the issuance of the Bonds, will be subject to limitations regarding bankruptcy, reorganization, insolvency, fraudulent conveyance, moratorium, and other similar laws relating to or affecting creditors' rights. A copy of the proposed form of opinion of Bond Counsel is set forth in Appendix B.

Tax Matters

In the opinion of Bond Counsel, under existing statutes, regulations, rulings, and judicial decisions, and assuming the accuracy of certain representations and compliance with certain covenants and requirements described herein, interest (and original issue discount) on the Bonds is excluded from gross income for federal income tax purposes, and is not an item of tax preference for purposes of calculating the federal alternative minimum tax imposed on individuals.

The difference between the issue price of a Bond (the first price at which a substantial amount of the Bonds of a maturity is to be sold to the public) and the stated redemption price at maturity with respect to the Bond (to the extent the redemption price at maturity is greater than the issue price) constitutes original issue discount. Original issue discount accrues under a constant yield method, and original issue discount will accrue to a Beneficial Owner before receipt of cash attributable to such excludable income. The amount of original issue discount deemed received by a Beneficial Owner will increase the Beneficial Owner's basis in the applicable Bond. In the opinion of Bond Counsel, the amount of original issue discount that accrues to the Beneficial Owner of the Bond is excluded from gross income of such Beneficial Owner for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals.

Bond Counsel's opinion as to the exclusion from gross income for federal income tax purposes of interest (and original issue discount) on the Bonds is based upon certain representations of fact and certifications made by the City and others and is subject to the condition that the City complies 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 to assure that interest (and original issue discount) on the Bonds will not become includable in gross income for federal income tax purposes. Failure to comply with such requirements of the Code might cause the interest (and original issue discount) on the Bonds to be included in gross income for federal income tax purposes retroactive to the date of issuance of the Bonds. The City will covenant to comply with all such requirements.

The amount by which a Beneficial Owner's original basis for determining loss on sale or exchange in the applicable Bond (generally, the purchase price) exceeds the amount payable on maturity (or on an earlier call date) constitutes amortizable bond premium, which must be amortized under Section 171 of the Code; such amortizable bond premium reduces the Beneficial Owner's basis in the applicable Bond (and the amount of tax-exempt interest received), and is not deductible for federal income tax purposes. The basis reduction as a result of the amortization of bond premium may result in a Beneficial Owner realizing a taxable gain when a Bond is sold by the Beneficial Owner for an amount equal to or less (under certain circumstances) than the original cost of the Bond to the Beneficial Owner. Purchasers of the Bonds should consult their own tax advisors as to the treatment, computation and collateral consequences of amortizable bond premium.

The Internal Revenue Service (the "IRS") has initiated an expanded program for the auditing of tax-exempt bond issues, including both random and targeted audits. It is possible that the Bonds will be selected for audit by the IRS. It is also possible that the market value of the Bonds might be affected as a result of such an audit of the Bonds (or by an audit of similar bonds). No assurance can be given that in the course of an audit, as a result of an audit, or otherwise, Congress or the IRS might not change the Code (or interpretation thereof) subsequent to the issuance of the Bonds to the extent that it adversely affects the exclusion from gross income of interest (and original issue discount) on the Bonds or their market value.

SUBSEQUENT TO THE ISSUANCE OF THE BONDS THERE MIGHT BE FEDERAL, STATE, OR LOCAL STATUTORY CHANGES (OR JUDICIAL OR REGULATORY CHANGES TO OR INTERPRETATIONS OF FEDERAL, STATE, OR LOCAL LAW) THAT AFFECT THE FEDERAL, STATE, OR LOCAL TAX TREATMENT OF THE BONDS, INCLUDING THE IMPOSITION OF ADDITIONAL FEDERAL INCOME OR STATE TAXES ON OWNERS OF TAX-EXEMPT STATE OR LOCAL OBLIGATIONS, SUCH AS THE BONDS. THESE CHANGES COULD ADVERSELY AFFECT THE MARKET VALUE OR LIQUIDITY OF THE BONDS. NO ASSURANCE CAN BE GIVEN THAT SUBSEQUENT TO THE ISSUANCE OF THE BONDS STATUTORY CHANGES WILL NOT BE INTRODUCED OR ENACTED OR JUDICIAL OR REGULATORY INTERPRETATIONS WILL NOT OCCUR HAVING THE EFFECTS DESCRIBED ABOVE. BEFORE PURCHASING ANY OF THE BONDS, ALL POTENTIAL PURCHASERS SHOULD CONSULT THEIR TAX ADVISORS REGARDING POSSIBLE STATUTORY CHANGES OR JUDICIAL OR REGULATORY CHANGES OR INTERPRETATIONS, AND THEIR COLLATERAL TAX CONSEQUENCES RELATING TO THE BONDS.

Bond Counsel's opinion may be affected by actions taken (or not taken) or events occurring (or not occurring) after the date hereof. Bond Counsel has not undertaken to determine, or to inform any person, whether any such actions or events are taken or do occur. The Bond Ordinance and the Tax Certificate relating to the Bonds permit certain actions to be taken or to be omitted if a favorable opinion of a bond counsel is provided with respect thereto. Bond Counsel expresses no opinion as to the effect on the exclusion from gross income for federal income tax purposes of interest (or original issue discount) on any Bond if any such action is taken or omitted based upon the advice of counsel other than Bond Counsel.

Although Bond Counsel will render an opinion that interest (and original issue discount) on the Bonds is excluded from gross income for federal income tax purposes provided that the City continues to comply with certain requirements of the Code, the ownership of the Bonds and the accrual or receipt of interest (and original issue discount) with respect to the Bonds may otherwise affect the tax liability of certain persons. Bond Counsel expresses no opinion regarding any such tax consequences. Accordingly, before purchasing any of the Bonds, all potential purchasers should consult their tax advisors with respect to collateral tax consequences relating to the Bonds.

CONTINUING DISCLOSURE AGREEMENT

Basic Undertaking to Provide Annual Financial Information and Notice of Listed Events. To meet the requirements of United States Securities and Exchange Commission ("SEC") Rule 15c2-12(b)(5) ("Rule 15c2-12"), as applicable to a participating underwriter for the Bonds, the Director of Finance is authorized to execute the Continuing Disclosure Agreement (the "CDA") for the benefit of holders of the Bonds, as follows.

Annual Financial Information. The City undertakes to provide or cause to be provided, either directly or through a designated agent, to the Municipal Securities Rulemaking Board (the "MSRB"), in an electronic format as prescribed by the MSRB, accompanied by identifying information as prescribed by the MSRB:

(i) Annual financial information and operating data of the type included in this Official Statement and described below under "Type of Annual Financial Information Undertaken to be Provided." The timely filing of unaudited financial statements will satisfy the requirement and filing deadlines pertaining to filing annual financial statements described in the Bond Documents, provided that audited financial statements are to be filed if and when they are otherwise prepared and available to the City.

(ii) Timely notice (not in excess of ten business days after the occurrence of the event) of the occurrence of any of the following events with respect to the Bonds:

(a) principal and interest payment delinquencies;

(b) non-payment related defaults, if material;

(c) unscheduled draws on debt service reserves reflecting financial difficulties;

(d) unscheduled draws on credit enhancements reflecting financial difficulties;

(e) substitution of credit or liquidity providers, or their failure to perform;

(f) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notice of Proposed Issue (IRS Form 5701-TEB), 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;

(g) modifications to rights of holders of the Bonds, if material;

(h) Bond calls (other than scheduled mandatory redemptions of Term Bonds), if material, and tender offers;

(i) defeasances;

(j) release, substitution, or sale of property securing repayment of the Bonds, if material;

(k) rating changes;

(l) bankruptcy, insolvency, receivership, or similar event of the City, as such "Bankruptcy Events" are defined in Rule 15c2-12;

(m) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and

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

(o) 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

(p) 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.

(iii) Timely notice of a failure by the City to provide required annual financial information on or before the date specified below.

For purposes of the CDA, the term "financial obligation" means (i) a debt obligation; (ii) a 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) a 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 the Rule.

Type of Annual Financial Information Undertaken to be Provided. The annual financial information that the City undertakes to provide will consist of:

(i) annual financial statements of the Water System, prepared in accordance with applicable generally accepted accounting principles applicable to governmental units (except as otherwise noted therein), as such principles may be changed from time to time and as permitted by State law;

(ii) a statement of outstanding bonded debt secured by Net Revenue of the Water System;

(iii) debt service coverage ratios;

(iv) general customer statistics, such as number and type of customers and revenues by customer class; and

(v) current water rates.

Annual financial information, as described above, will be provided to the MSRB not later than the last day of the ninth month after the end of each fiscal year of the City (currently, a fiscal year ending December 31), as such fiscal year may be changed as permitted or required by State law, commencing with the City's fiscal year ended December 31, 2022. The annual financial information may be provided in a single document or multiple documents, and may be incorporated by specific reference to documents available to the public on the Internet website of the MSRB or filed with the SEC.

Amendment of CDA. The CDA is subject to amendment after the primary offering of the Bonds without the consent of any Owner or holder of any Bond, or any broker, dealer, municipal securities dealer, participating underwriter, rating agency, or the MSRB, under the circumstances and in the manner permitted by Rule 15c2-12, including:

(i) The amendment may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identify, nature, or status of the City, or type of business conducted;

(ii) The undertaking, as amended, would have complied with the requirements of the rule at the time of the primary offering, after taking into account any amendments or interpretations of the rule, as well as any change in circumstances; and

(iii) The amendment does not materially impair the interests of holders, as determined either by parties unaffiliated with the City (e.g., bond counsel or other counsel familiar with federal securities laws), or by approving vote of bondholders pursuant to the terms of the Bond Ordinance at the time of the amendment.

The City will give notice to the MSRB of the substance (or provide a copy) of any amendment to the CDA and a brief statement of the reasons for the amendment. If the amendment changes the type of annual financial information to be provided, the annual financial information containing the amended information will include a narrative explanation of the effect of that change on the type of information to be provided.

Termination of CDA. The City's obligations under the CDA will terminate upon the legal defeasance, prior repayment, or payment in full of all of the then outstanding Bonds. In addition, the City's obligations under the CDA will terminate if those provisions of Rule 15c2-12 that require the City to comply with the CDA become legally inapplicable in respect of the Bonds for any reason, as confirmed by an opinion of nationally recognized bond counsel or other counsel familiar with federal securities laws delivered to the City, and the City provides timely notice of such termination to the MSRB.

Remedy for Failure to Comply with CDA. The City has agreed to proceed with due diligence to cause any failure to comply with the CDA to be corrected as soon as practicable after the City learns of that failure. No failure by the City or any other obligated person to comply with the CDA will constitute a default in respect of the Bonds. The sole remedy of any Owner of a Bond will be to take such actions as that Owner deems necessary, including seeking an order of specific performance from an appropriate court, to compel the City or other obligated person to comply with the CDA.

Compliance with Continuing Disclosure Undertakings of the City. The City has entered into undertakings to provide annual information and the notice of the occurrence of certain events with respect to all bonds issued by the City subject to Rule 15c2-12. The City's review of its compliance during the past five years did not reveal any failure to comply, in a material respect, with any undertakings in effect during this time. Nonetheless, the City recently discovered that one table of Solid Waste utility operating statistics required by the continuing disclosure undertakings for certain outstanding Solid Waste utility revenue bonds had been omitted from its annual disclosure filings for the years ended December 31, 2017 and 2018, and has since remedied those filings.

OTHER BOND INFORMATION

Ratings on the Bonds

The Bonds have been rated "Aaa" and "AA+" by Moody's Investors Service, Inc. and S&P Global Ratings, respectively. In general, rating agencies base their ratings on rating materials furnished to them, which may include information provided by the City that is not included in this Official Statement, and on the rating agency's own investigations, studies, and assumptions. 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. No application was made to any other rating agency for the purpose of obtaining an additional rating on the Bonds. 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, suspended, or withdrawn entirely by the rating agencies if, in their judgment, circumstances so warrant. Any such downward revision, suspension, or withdrawal of the ratings will be likely to have an adverse effect on the market price of the Bonds.

Municipal Advisor

The City has retained Piper Sandler & Co., Seattle, Washington, as municipal advisor (the "Municipal Advisor") in connection with the preparation of the City'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 City, the Municipal Advisor may not participate in the underwriting of any City debt.

Purchaser of the Bonds

The Bonds are being purchased by Wells Fargo Bank, N.A. (the "Purchaser") at a price of $104,578,361.95 and will be reoffered at a price of $104,957,512.35. The Purchaser may offer and sell the Bonds to certain dealers (including dealers depositing the Bonds into investment trusts) and others at prices lower than the initial offering prices set forth on page i of this Official Statement, and such initial offering prices may be changed from time to time by the Purchaser. After the initial public offering, the public offering prices may be varied from time to time.

Conflicts of Interest

Some of the fees of the Municipal Advisor and Bond Counsel are contingent upon the sale of the Bonds. From time to time Bond Counsel serves as counsel to the Municipal Advisor and the Purchaser in matters unrelated to the Bonds. None of the members of the City Council or other officers of the City have any conflict of interest in the issuance of the Bonds that is prohibited by applicable law.

Official Statement

This Official Statement is not to be construed as a contract with the owners of any of the Bonds.

The City of Seattle

By: /s/ Glen M. Lee
Glen M. Lee
Director of Finance

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APPENDIX A

BOND ORDINANCE

Ordinance 126483, passed by the City Council on November 22, 2021, which is set forth in this appendix, authorized the issuance of the new money portion of the Bonds. Ordinance 125714, passed on November 19, 2018, authorized the issuance of the refunding portion of the Bonds and is substantially similar to Ordinance 126483.

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CITY OF SEATTLE

ORDINANCE 126483

COUNCIL BILL 120199

AN ORDINANCE relating to the municipal water system of The City of Seattle; adopting a system or plan of additions and betterments to and extensions of the existing municipal water system; authorizing the issuance and sale of water system revenue bonds in one or more series for the purposes of paying part of the cost of carrying out that system or plan, providing for the reserve requirement, and paying the costs of issuance of the bonds; providing parameters for the bond sale terms including conditions, covenants, and other sale terms; describing the lien of the bonds; creating certain accounts of the City relating to the bonds; amending certain definitions set forth in Ordinance 125714, the Omnibus Refunding Ordinance; authorizing the issuance of water system refunding revenue bonds; and ratifying and confirming certain prior acts.

WHEREAS, The City of Seattle (the "City") owns, maintains, and operates a municipal water system as part of Seattle Public Utilities (the "Municipal Water System"), which Municipal Water System has from time to time required various additions, improvements, betterments, and extensions; and

WHEREAS, the City desires to acquire and construct a system or plan of further additions, improvements, and betterments to, and extensions of the Municipal Water System (the "Plan of Additions") as described in this ordinance, and needs to borrow funds to pay a portion of the costs of carrying out such Plan of Additions; and

WHEREAS, the City currently has outstanding certain water system revenue bonds (as identified in Exhibit A to this ordinance, the "Outstanding Parity Bonds"). Pursuant to the ordinances authorizing their issuance (the "Outstanding Parity Bond Ordinances"), the City reserved the right to issue additional bonds ("Future Parity Bonds") having a charge and lien on the net revenue of the Municipal Water System on a parity of lien with those Outstanding Parity Bonds, and is permitted to issue such Future Parity Bonds upon satisfaction of certain conditions (the "Parity Conditions"); and

WHEREAS, the City has determined that it is in the best interest of the City and its ratepayers to authorize the issuance and sale, subject to the provisions of this ordinance, of water system revenue bonds as Parity Bonds to pay part of the cost of carrying out the Plan of Additions, to provide for the reserve requirement, and to pay the costs of issuance of those bonds; NOW, THEREFORE,

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. **Definitions**. In this ordinance, the following capitalized terms shall have the meanings set forth in this section:

"Accreted Value" means, with respect to any Capital Appreciation Bond, (a) as of any Valuation Date, the amount determined for such Valuation Date in accordance with the applicable Parity Bond Documents, and (b) as of any date other than a Valuation Date, the sum of (i) the Accreted Value on the preceding Valuation Date and (ii) the product of (A) a fraction, the numerator of which is the number of days having elapsed from the preceding Valuation Date and the denominator of which is the number of days from such preceding Valuation Date to the next succeeding Valuation Date, calculated based on the assumption that Accreted Value accrues during any semiannual period in equal daily amounts on the basis of a year of 12 30-day months, and (B) the difference between the Accreted Values for such Valuation Dates.

"Adjusted Annual Debt Service" for any fiscal year means Annual Debt Service minus (a) an amount equal to ULID Assessments due in that year and not delinquent, (b) an amount equal to earnings from investments in the Reserve Subaccount, and (c) Annual Debt Service provided for by Parity Bond proceeds.

"Adjusted Gross Revenue" means, for any period, Gross Revenue (a) plus withdrawals from the Rate Stabilization Account made during that period, and (b) minus ULID Assessments collected, earnings from investments in the Reserve Subaccount, and deposits into the Rate Stabilization Account made during that period.

"Adjusted Net Revenue" means Adjusted Gross Revenue less Operating and Maintenance Expense.

"Annual Debt Service" for any calendar year means the sum of the amounts required in such calendar year to pay the interest due in such calendar year on all Parity Bonds outstanding, excluding interest to be paid from the proceeds of the sale of Parity Bonds or other bonds; the principal of all outstanding Serial Bonds due in such calendar year; and the Sinking Fund Requirements, if any, for such calendar year. Additionally, for purposes of calculating and determining compliance with the Coverage Requirement, the Reserve Requirement and the conditions for the issuance of Future Parity Bonds and/or entering into Parity Payment Agreements, the following shall apply:

(a) **Calculation of Interest Due Generally.** Except as otherwise provided below, interest on any series of Parity Bonds shall be calculated based on the actual amount of accrued, accreted, or otherwise accumulated interest that is payable in respect of that series taken as a whole, at the rate or rates set forth in the applicable Parity Bond Documents.

(b) **Capital Appreciation Bonds.** For purposes of this definition, the principal and interest portions of the Accreted Value of Capital Appreciation Bonds becoming due at maturity or by virtue of a Sinking Fund Requirement shall be included in the calculations of accrued and unpaid and accruing interest or principal in such manner and during such period of time as is specified in the Parity Bond Documents applicable to such Capital Appreciation Bonds.

(c) **Variable Interest Rate Bonds.** The amount of interest deemed to be payable on any series of Variable Interest Rate Bonds shall be calculated on the assumption that the interest rate on those bonds would be equal to the rate that is 90 percent of the average RBI during the four calendar quarters preceding the quarter in which the calculation is made.

(d) **Interest on Parity Bonds With Respect to Which a Payment Agreement is in Force.** Debt service on Parity Bonds with respect to which a Payment Agreement is in force shall be based on the net economic effect on the City expected to be produced by the terms of the Parity Bonds and the terms of the Payment Agreement. For example, if the net economic effect of the Payment Agreement and a series of Parity Bonds otherwise bearing interest at a variable rate is to produce an obligation bearing interest at a fixed interest rate, the relevant series of bonds shall be treated as fixed interest rate bonds. And if the net economic effect of the Payment Agreement and a series of Parity Bonds otherwise bearing interest at a fixed rate is to produce an obligation bearing interest at a variable interest rate, the relevant series of bonds shall be treated as Variable Interest Rate Bonds. Accordingly, the amount of interest deemed to be payable on any Parity Bonds with respect to which a Payment Agreement is in force shall be an amount equal to the amount of interest that would be payable at the rate or rates stated in or determined pursuant to the applicable Parity Bond Documents, plus Payment Agreement Payments, minus Payment Agreement Receipts. For the purposes of calculating as nearly as practicable Payment Agreement Receipts and Payment Agreement Payments under a Payment Agreement that includes a variable rate component determined by reference to a pricing mechanism or index that is not the same as the pricing mechanism or index used to determine the variable rate interest component on the Parity Bonds to which the Payment Agreement is related, it shall be assumed that the fixed rate used in calculating Payment Agreement Payments will be equal to 105 percent of the fixed rate specified by the Payment Agreement and that the pricing mechanism or index specified by the Payment Agreement is the same as the pricing mechanism or index specified by the applicable Parity Bond Documents. Notwithstanding the other provisions of this definition, the City shall not be required to (but may in its discretion) take into account in determining Annual Debt Service the effects of any Payment Agreement that has a term of ten years or less.

(e) **Parity Payment Agreements.** For any period during which Payment Agreement Payments on a Parity Payment Agreement are taken into account in determining Annual Debt Service on related Parity Bonds under paragraph (d) of this definition, no additional debt service shall be taken into account with respect to that Parity Payment Agreement. However, for any Parity Payment Agreement during a period in which Payment Agreement Payments are not taken into account under paragraph (d) because the Parity Payment Agreement is not then related to any outstanding Parity Bonds, payments on that Parity Payment Agreement shall be taken into account as follows:

(i) **If City is Obligated to Make Payments Based on Fixed Rate.** If the City 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, it shall be assumed that payments by the City will be based on the assumed fixed payor rate, and that 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 Parity Payment Agreement during the four calendar quarters preceding the quarter in which the calculation is made.

(ii) **If City is Obligated to Make Payments Based on Variable Rate Index.** If the City 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, it shall be assumed that payments by the City will be based on a rate equal to the average rate determined by the variable rate index specified by the Parity Payment Agreement during the four calendar quarters preceding the quarter in which the calculation is made, and that the Qualified Counterparty will make payments based on the fixed rate specified by the Parity Payment Agreement.

(f) **Balloon Bonds.** For purposes of calculating debt service on any Balloon Bonds, it shall be assumed that the principal of those Balloon Bonds, together with interest thereon at a rate equal to the assumed RBI-based rate set forth in subsection (c) of this definition, will be amortized in equal annual installments over a term of 30 years.

(g) **Adjustments for Defeased Bonds**. For purposes of calculating and determining compliance with the Coverage Requirement, the Reserve Requirement, and the Parity Conditions, Annual Debt Service shall be adjusted as set forth in subsection 21(d) of this ordinance.

"Authorized Denomination" means $5,000 or any integral multiple thereof within a maturity of a Series, or such other minimum authorized denomination as may be specified in the applicable Bond Documents.

"Average Annual Debt Service" means, at the time of calculation, the sum of the Annual Debt Service remaining to be paid to the last scheduled maturity of the applicable series of Parity Bonds divided by the number of years such bonds are scheduled to remain outstanding.

"Balloon Bonds" means any series of Parity Bonds, the aggregate principal amount (including Sinking Fund Requirements) of which becomes due and payable in any calendar year in an amount that constitutes 25 percent or more of the initial aggregate principal amount of such series of Parity Bonds.

"Beneficial Owner" means, with regard to a Bond, the owner of any beneficial interest in that Bond.

"Bond Counsel" means a lawyer or a firm of lawyers, selected by the City, of nationally recognized standing in matters pertaining to bonds issued by states and their political subdivisions.

"Bond Documents" means (a)(i) with respect to any Series of the Bonds, this ordinance (including any amendatory or supplemental ordinances), and (ii) with respect to a series of Parity Bonds other than a Series of the Bonds, the applicable Parity Bond Ordinance(s); (b) the authenticated bond form; and (c) the written agreement(s) setting forth the Bond Sale Terms and additional terms, conditions, or covenants pursuant to which such bond was issued and sold, as set forth in any one or more of the following (if any): (i) a sale resolution, (ii) a bond purchase contract (as defined in the applicable authorizing ordinance), (iii) a bond indenture or a fiscal agent or paying agent agreement (other than the State fiscal agency contract), and (iv) a direct purchase or continuing covenant agreement.

"Bond Insurance" means any municipal bond insurance policy, guaranty, surety bond, or similar credit enhancement device providing for or securing the payment of all or part of the principal of and interest on any Parity Bonds, issued by an 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), or by any other financial institution qualified to provide such credit enhancement device.

"Bond Purchase Contract" means a written offer to purchase a Series of the Bonds pursuant to certain Bond Sale Terms, which offer has been accepted by the City in accordance with this ordinance. In the case of a competitive sale, the Purchaser's bid for a Series, together with the official notice of sale and a Pricing Certificate confirming the Bond Sale Terms, shall comprise the Bond Purchase Contract.

"Bond Register" means the books or records maintained by the Bond Registrar for the purpose of registering ownership of each Bond.

"Bond Registrar" means the Fiscal Agent (unless the Director of Finance appoints a different person to act as bond registrar with respect to a particular Series), or any successor bond registrar selected in accordance with the Registration Ordinance.

"Bond Sale Terms" means the terms and conditions for the sale of a Series of the Bonds approved by the Director of Finance consistent with the parameters set forth in Section 5 of this ordinance, including the amount, date or dates, denominations, interest rate or rates (or mechanism for determining the interest rate or rates), payment dates, final maturity, redemption rights, price, and other terms, conditions, or covenants. In connection with a negotiated sale or private placement, the Bond Sale Terms shall be set forth in the Bond Purchase Contract; in connection with a competitive sale, the Bond Sale Terms shall be set forth in a Pricing Certificate.

"Bonds" means the water system revenue bonds issued pursuant to this ordinance.

"Book-Entry Form" means a fully registered form in which physical bond certificates are registered only in the name of the Securities Depository (or its nominee), as Registered Owner, with the physical bond certificates held by and immobilized in the custody of the Securities Depository (or its designee), where the system for recording and identifying the transfer of the ownership interests of the Beneficial Owners in those Bonds is neither maintained by nor the responsibility of the City or the Bond Registrar.

"Capital Appreciation Bond" means any Parity Bond, all or a portion of the interest on which is compounded and accumulated at the rates or in the manner, and on the dates, set forth in the applicable Bond Documents and is payable only upon redemption or on the maturity date of such Parity Bond. A Parity Bond that is issued as a Capital Appreciation Bond, but which later converts to an obligation on which interest is paid periodically, shall be a Capital Appreciation Bond until the conversion date and thereafter shall no longer be a Capital Appreciation Bond, but shall be treated as having a principal amount equal to its Accreted Value on the conversion date. For purposes of computing the principal amount of Parity Bonds held by the Owner of any Capital Appreciation Bond in connection with any notice, consent, request, or demand, the principal amount of a Capital Appreciation Bond shall be deemed to be its Accreted Value at the time that such notice, consent, request, or demand is given or made.

"Capital Improvement Program" or **"CIP"** means those portions of the City's "2021-2026 Capital Improvement Program" relating to the Municipal Water System, adopted by Ordinance 126237, together with any previously adopted capital improvement program. For purposes of this ordinance, the CIP includes all amendments, updates, supplements, or replacements that may be adopted from time to time by ordinance.

"City" means The City of Seattle.

"City Council" means the City Council of the City, as duly and regularly constituted from time to time.

"Code" means the Internal Revenue Code of 1986, or any successor thereto, as amended at any time, and regulations thereunder.

"Construction Account" means the account or subaccount created in the Water System Construction Account within the Water Fund for the deposit of proceeds of the Bonds, pursuant to Section 12 of this ordinance.

"Continuing Disclosure Agreement" means, for each Series sold in an offering subject to federal securities regulations requiring a written undertaking to provide continuing disclosure, a continuing disclosure agreement entered into pursuant to Section 23 of this ordinance, in substantially the form attached to this ordinance as Exhibit B.

"Contract Resource Obligation" means an obligation of the City that is designated as a Contract Resource Obligation and is entered into in accordance with Section 20 of this ordinance.

"Coverage Requirement" means Adjusted Net Revenue equal to at least 1.25 times Adjusted Annual Debt Service on all Parity Bonds then outstanding.

"Covered Parity Bonds" means all Outstanding Parity Bonds, each Series of the Bonds, and each series of Future Parity Bonds. ***From and after the Reserve Covenant Date, the term "Covered Parity Bonds" shall exclude each series of Parity Bonds for which the applicable Bond Documents provide that, from and after the Reserve Covenant Date, such series shall no longer be treated as a series of Covered Parity Bonds and shall no longer be secured by the amounts in the Reserve Subaccount.***

"DTC" means The Depository Trust Company, New York, New York.

"Defeasible Bonds" means any outstanding Parity Bonds that are eligible to be defeased pursuant to the Omnibus Defeasance Ordinance.

"Director of Finance" means the Director of the Finance Division of the Department of Finance and Administrative Services, or any other officer who succeeds to substantially all of the responsibilities of that office.

"Event of Default" has the meaning assigned to that term in subsection 25(a) of this ordinance.

"Fiscal Agent" means the fiscal agent of the State, as the same may be designated by the State from time to time.

"Future Parity Bond Ordinance" means any ordinance passed by the City Council providing for the issuance and sale of a series of Future Parity Bonds, and any other ordinance amending or supplementing the provisions of any such ordinance.

"Future Parity Bonds" means, with reference to any Series, all revenue bonds and obligations of the Municipal Water System (other than that Series and any other Parity Bonds then outstanding), issued or entered into after the Issue Date of such Series, the payment of which constitutes a charge and lien on Net Revenue equal in priority with the charge and lien upon such revenue for the payment of the amounts required to be paid into the Parity Bond Account in accordance with Section 15 of this ordinance. Future Parity Bonds may include Parity Payment Agreements and any other obligations issued in compliance with the Parity Conditions.

"Government Obligations" means, unless otherwise limited in the Bond Documents for a particular Series of the Bonds, any government obligation as that term is defined in RCW 39.53.010, as amended at any time.

"Gross Revenue" means (a) all income, revenues, receipts and profits derived by the City through the ownership and operation of the Municipal Water System; (b) the proceeds received by the City directly or indirectly from the sale, lease or other disposition of any of the properties, rights or facilities of the Municipal Water System; (c) Payment Agreement Receipts, to the extent that such receipts are not offset by Payment Agreement Payments; and (d) the investment income earned on money held in any fund or account of the City, including any bond redemption funds and the accounts therein, in connection with the ownership and operation of the Municipal Water System. Gross Revenue does not include: (a) income derived from investments irrevocably pledged to the payment of any defeased bonds payable from Gross

Revenue; (b) investment income set aside for or earned on money in any fund or account created or maintained solely for the purpose of complying with the arbitrage rebate provisions of the Code; (c) any gifts, grants, donations, or other funds received by the City from any State or federal agency or other person if such gifts, grants, donations, or other funds are the subject of any limitation or reservation imposed by the donor or grantor or imposed by law or administrative regulation to which the donor or grantor is subject, limiting the application of such funds in a manner inconsistent with the application of Gross Revenue hereunder; (d) the proceeds of any borrowing for capital improvements (or the refinancing thereof); (e) the proceeds of any liability or other insurance, including but not limited to insurance proceeds compensating the City for the loss of a capital asset, but excluding business interruption insurance or other insurance of like nature insuring against the loss of revenues; (f) general *ad valorem* taxes, excise taxes and special assessments (other than ULID Assessments), including interest and penalties thereon; and (g) earnings of any separate utility system that may be created, acquired, or constructed by the City pursuant to Section 19 of this ordinance.

"Independent Utility Consultant" means an independent person or firm having a favorable reputation for skill and experience with municipal water systems of comparable size and character to the Municipal Water System in such areas as are relevant to the purpose for which they were retained.

"Issue Date" means, with respect to a Bond, the initial date on which that Bond is issued and delivered to the initial Purchaser in exchange for its purchase price.

"Letter of Representations" means the Blanket Issuer Letter of Representations between the City and DTC dated October 4, 2006, as amended at any time, or an agreement with a substitute or successor Securities Depository.

"MSRB" means the Municipal Securities Rulemaking Board.

"Maximum Annual Debt Service" means, at the time of calculation, the maximum amount of Annual Debt Service that shall become due in the current calendar year or in any future calendar year with respect to the Parity Bonds then outstanding.

"Municipal Water System" means the water system of the City as it now exists, and all additions thereto and betterments and extensions thereof at any time made, together with any utility systems of the City hereafter combined with the Municipal Water System. The Municipal Water System shall not include any separate utility system that may be created, acquired or constructed by the City as provided in Section 19 of this ordinance.

"Net Revenue" means, for any period, Gross Revenue less Operating and Maintenance Expense.

"**Omnibus Defeasance Ordinance**" means Ordinance 126226, as amended at any time, authorizing the defeasance of Defeasible Bonds (as such ordinance may be amended from time to time) or any future ordinance pursuant to which the Bonds (or any Series of the Bonds) are designated as Defeasible Bonds.

"**Omnibus Refunding Ordinance**" means Ordinance 125714, as amended at any time, authorizing the issuance of Refunding Parity Bonds (as such ordinance may be amended from time to time), or any future ordinance pursuant to which the Bonds (or any Series of the Bonds) are designated as "Refundable Bonds."

"Operating and Maintenance Expense" means all expenses incurred by the City in causing the Municipal Water System to be operated and maintained in good repair, working order and condition, including without limitation: (a) deposits, premiums, assessments or other payments for insurance, if any, on the Municipal Water System; (b) payments into pension funds; (c) State-imposed taxes; (d) amounts due under Contract Resource Obligations in accordance with Section 20 of this ordinance; (e) payments made to another person or entity for the receipt of water supply or transmission or other commodity or service; and (f) payments with respect to any other expenses of the Municipal Water System that are properly treated as Operating and Maintenance Expense under generally accepted accounting principles applicable to municipal corporations, including payments (other than payments out of proceeds of Parity Bonds or other obligations not issued to pay current expenses of the Municipal Water System) into reasonable reserves for items of operating or maintenance expense the payment of which is not immediately required. Operating and Maintenance Expense does not include: depreciation, amortization or other similar recognitions of non-cash expense items made for accounting purposes only including non-cash pension expense; taxes levied or imposed by the City or payments in lieu of City taxes; payments of claims or judgments; or capital additions or capital replacements of the Municipal Water System.

"Outstanding Parity Bond Ordinances" means those ordinances authorizing the issuance and sale of the Outstanding Parity Bonds, as identified in Exhibit A to this ordinance.

"Outstanding Parity Bonds" means those outstanding Parity Bonds identified in Exhibit A to this ordinance. When used in reference to a particular date (or in reference to a particular series of Parity Bonds), Outstanding Parity Bonds shall mean those Parity Bonds, including any Parity Bonds issued subsequent to the effective date of this ordinance, that are outstanding as of that date (or as of the Issue Date of the referenced series of Parity Bonds).

"Owner" means, without distinction, the Registered Owner and the Beneficial Owner of a Bond.

"Parity Bond Account" means the Water Revenue Parity Bond Account created by Ordinance 116705 in the Water Fund for the purpose of paying and securing payment of the principal of and interest on Parity Bonds.

"Parity Bond Documents" means those Bond Documents applicable to a series of Parity Bonds.

"Parity Bond Ordinance" means any ordinance passed by the City Council providing for the issuance and sale of a series of Parity Bonds, and any other ordinance amending or supplementing the provisions of any Parity Bond Ordinance.

"Parity Bonds" means the Outstanding Parity Bonds, each Series of the Bonds, and any Future Parity Bonds then outstanding. Parity Bonds may include Parity Payment Agreements in accordance with Section 17 of this ordinance.

"Parity Certificate" means a certificate delivered pursuant to Section 17 of this ordinance for purposes of satisfying the Parity Conditions in connection with the issuance of Future Parity Bonds.

"Parity Conditions" means (a) for purposes of establishing that a Series of the Bonds may be issued on parity with the Parity Bonds outstanding as of the Issue Date of such Series, the conditions for issuing Future Parity Bonds set forth in the Parity Bond Ordinances relating to those Parity Bonds that are then outstanding; and (b) for purposes of issuing Future Parity Bonds on parity with a Series of the Bonds, the conditions described in subsection (a) of this definition together with the conditions set forth in Section 17 of this ordinance.

"Parity Payment Agreement" means a Payment Agreement that is entered into in compliance with the Parity Conditions and under which the City's payment obligations are expressly stated to constitute a charge and lien on Net Revenue equal in rank with the charge and lien upon such Net Revenue required to be paid into the Parity Bond Account to pay and secure the payment of interest on Parity Bonds. For purposes of determining percentages of ownership of Parity Bonds under this ordinance or under applicable Parity Bond Documents, Parity Payment Agreements shall be deemed to have no principal amount, and any notice, consent, or similar rights (if any) shall be determined only as set forth in the applicable Parity Payment Agreement.

"Payment Agreement" means a written agreement entered into by the City and a Qualified Counterparty, as authorized by any applicable laws of the State, for the purpose of managing or reducing the City's exposure to fluctuations or levels of interest rates, or for other interest rate, investment, or asset or liability management purposes, and that provides for (i) an exchange of payments based on interest rates, ceilings, or floors on such payments; (ii) options on such payments; (iii) any combination of the foregoing; or (iv) any similar device. A Payment Agreement may be entered into on either a current or forward basis. A Payment Agreement must be entered into in connection with (or incidental to) the issuance, incurring, or carrying of particular bonds, notes, bond anticipation notes, commercial paper, or other obligations for borrowed money (which may include leases, installment purchase contracts, or other similar financing agreements or certificates of participation in any of the foregoing).

"Payment Agreement Payments" means the amounts periodically required to be paid by the City to a Qualified Counterparty pursuant to a Payment Agreement.

"Payment Agreement Receipts" means the amounts periodically required to be paid by a Qualified Counterparty to the City pursuant to a Payment Agreement.

"Permitted Investments" means any investments or investment agreements permitted for the investment of City funds under the laws of the State, as amended from time to time.

"Plan of Additions" means, together, the CIP and the Water System Plan, as modified from time to time. The Plan of Additions includes (a) the purchase and installation of all materials, supplies, appliances, equipment and facilities; (b) the acquisition of all permits, franchises, property and property rights, and other capital assets; and (c) all engineering, consulting and other professional services and studies (whether performed by the City or by other public or private entities), each as necessary or convenient to carry out the Plan of Additions. The Plan of Additions includes all amendments, updates, supplements or replacements to the CIP or the Water System Plan, all of which automatically shall constitute amendments to the Plan of Additions. The Plan of Additions also may be modified to include other improvements, without amending the CIP or the Water System Plan, if the City determines by ordinance that those amendments or other improvements constitute a system or plan of additions to or betterments or extensions of the Municipal Water System.

"Pricing Certificate" means a certificate executed by the Director of Finance as of the pricing date confirming the Bond Sale Terms for the sale of a Series of Bonds to the Purchaser in a competitive sale, in accordance with the parameters set forth in Section 5 of this ordinance.

"Principal and Interest Subaccount" means the subaccount of that name created in the Parity Bond Account for the payment of the principal of and interest on Parity Bonds.

"Purchaser" means the entity or entities who have been selected by the Director of Finance in accordance with this ordinance to serve as underwriter, purchaser or successful bidder in a sale of any Series.

"Qualified Counterparty" means a party (other than the City or a party related to the City) who is the other party to a Payment Agreement, (a)(i) whose senior debt obligations are rated in one of the three highest rating categories of each Rating Agency (without regard to any gradations within a rating category), or (ii) whose obligations under the Payment Agreement are guaranteed for the entire term of the Payment Agreement by a bond insurer or other institution that has been assigned a credit rating in one of the two highest rating categories of each Rating Agency; 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 Bond Insurance that, as of the time of issuance of such credit enhancement device, is provided by an entity rated in one of the two highest rating categories (without regard to any gradations within a rating category) by at least two nationally recognized rating agencies.

"Qualified Letter of Credit" means any letter of credit, standby bond purchase agreement, or other liquidity facility issued by a financial institution for the account of the City in connection with the issuance of any Parity Bonds, which institution maintains an office, agency or branch in the United States and, as of the time of issuance of such instrument, is rated in one of the two highest rating categories (without regard to any gradations within such rating categories) by at least two nationally recognized rating agencies.

"RBI" means *The Bond Buyer* Revenue Bond Index or comparable index, or, if no comparable index can be obtained, 80 percent of the interest rate for actively traded 30-year United States Treasury obligations.

"Rate Stabilization Account" means the account of that name created in the Water Fund pursuant to Ordinance 116705 and redesignated for accounting purposes as the Revenue Stabilization Subfund of the Water Fund pursuant to Ordinance 120875.

"Rating Agency" means any nationally recognized rating agency then maintaining a rating on a series of then outstanding Parity Bonds at the request of the City.

“Record Date” means, unless otherwise defined in the Bond Documents, in the case of each interest or principal payment date, the Bond Registrar’s close of business on the 15th day of the month preceding the interest or principal payment date. With regard to redemption of a Bond prior to its maturity, the Record Date shall mean the Bond Registrar’s close of business on the day prior to the date on which the Bond Registrar sends the notice of redemption to the Registered Owner(s) of the affected Bonds.

“Refundable Bonds” means Parity Bonds that may be refunded pursuant to the Omnibus Refunding Ordinance. For purposes of this definition, each Series of the Bonds issued pursuant to this ordinance is designated as a series of Refundable Bonds.

“Refunding Parity Bonds” means Future Parity Bonds that satisfy the applicable Parity Conditions and are issued pursuant to the Omnibus Refunding Ordinance, or other Future Parity Bond Ordinance, for the purpose of refunding any Refundable Bonds.

“Registered Owner” means, with respect to a Bond, the person in whose name that Bond is registered on the Bond Register. For so long as a Series of the Bonds is in Book-Entry Form under the Letter of Representations, the Registered Owner of such Series shall mean the Securities Depository.

“Registration Ordinance” means Ordinance 111724 establishing a system of registration for the City’s bonds and other obligations pursuant to Seattle Municipal Code Chapter 5.10, as amended at any time.

“Reserve Covenant Date” means the earlier of (a) the date on which the City has obtained consents of the requisite percentage of Registered Owners of the Parity Bonds then outstanding, in accordance with the provisions of the applicable Outstanding Parity Bond Documents; or (b) the date on which all of the following Outstanding Parity Bonds have been redeemed or defeased: Water System Revenue Bonds, 2010A (Taxable Build America Bonds – Direct Payment); Water System Improvement and Refunding Revenue Bonds, 2010B; Water System Refunding Revenue Bonds, 2012; and Water System Improvement and Refunding Revenue Bonds, 2015.

"**Reserve Requirement**" means the lesser of (a) Maximum Annual Debt Service on all Parity Bonds outstanding at the time of calculation, or (b) 1.25 times Average Annual Debt Service on all Parity Bonds outstanding at the time of calculation. In no event shall the Reserve Requirement exceed 10 percent of the proceeds of each series of Parity Bonds then outstanding, determined as of the Issue Date of each such series. ***From and after the Reserve Covenant Date, the Reserve Requirement shall mean the lesser of (a) Maximum Annual Debt Service on all Covered Parity Bonds outstanding at the time of calculation, or (b) 1.25 times Average Annual Debt Service on all Covered Parity Bonds outstanding at the time of calculation. In no event shall the Reserve Requirement exceed the sum of 10 percent of the proceeds of each series of Covered Parity Bonds then outstanding, determined as of the Issue Date of each such series.***

"Reserve Security" means any Qualified Insurance or Qualified Letter of Credit obtained by the City to satisfy part or all of the Reserve Requirement, and which is not cancelable on less than three years' notice.

"Reserve Subaccount" means the subaccount of that name created in the Parity Bond Account for the purpose of securing the payment of the principal of and interest on Parity Bonds.

"Rule 15c2-12" means Rule 15c2-12 promulgated by the SEC under the Securities Exchange Act of 1934, as amended.

"SEC" means the United States Securities and Exchange Commission.

"Securities Depository" means DTC, any successor thereto, any substitute securities depository selected by the City, or the nominee of any of the foregoing. Any successor or substitute Securities Depository must be qualified under applicable laws and regulations to provide the services proposed to be provided by it.

"Serial Bonds" means Parity Bonds maturing in specified years, for which no Sinking Fund Requirements are mandated.

"Series" means a series of the Bonds issued pursuant to this ordinance.

"Sinking Fund Account" means any account created in the Parity Bond Account to amortize the principal or make mandatory redemptions of Term Bonds.

"Sinking Fund Requirement" means, for any calendar year, the principal amount and premium, if any, of Term Bonds required to be purchased, redeemed, paid at maturity or paid into any Sinking Fund Account for such calendar year, as established pursuant to the Bond Documents relating to such Term Bonds.

"State" means the State of Washington.

"State Auditor" means the office of the Auditor of the State or such other department or office of the State authorized and directed by State law to make audits.

"Tax Credit Subsidy Bond" means any Taxable Bond that is designated by the City as a tax credit bond pursuant to the Code, and which is further designated as a "qualified bond" under Section 6431 or similar provision of the Code, and with respect to which the City is eligible to claim a Tax Credit Subsidy Payment.

"Tax Credit Subsidy Payment" means a payment by the federal government with respect to a Tax Credit Subsidy Bond.

"Tax-Exempt Bond" means any Parity Bond, the interest on which is intended, as of the Issue Date, to be excludable from gross income for federal income tax purposes.

"Taxable Bond" means any Parity Bond, the interest on which is not intended, as of the Issue Date, to be excludable from gross income for federal income tax purposes.

"Term Bond" means any Parity Bond that is issued subject to mandatory redemption prior to its maturity in Sinking Fund Requirements.

"ULID" means a utility local improvement district of the City created for the acquisition or construction of additions to and betterments and extensions of the Municipal Water System.

"ULID Assessments" means all assessments levied and collected in a ULID, if and only if those assessments are pledged to be paid into the Parity Bond Account, in which case they shall be included in Gross Revenue. ULID Assessments shall include all installments of principal, payments of interest, and penalties and interest on delinquencies, but shall not include any prepaid assessments paid into a construction fund or account.

"Valuation Date" means, with respect to any Capital Appreciation Bond, the date or dates, determined as set forth in the Parity Bond Documents relating to the relevant series of Parity Bonds, on which specific Accreted Values are assigned to that Capital Appreciation Bond.

"Variable Interest Rate" means any interest rate that fluctuates during the stated term of a Parity Bond (or during a stated period during which the Parity Bond is designated as a Variable Interest Rate Bond), whether due to a remarketing, a market index reset, or other mechanism set forth in the applicable Bond Documents. The Bond Documents for any Series of the Bonds bearing interest at a Variable Interest Rate shall set forth: (a) the available method(s) of computing interest (the "interest rate modes"); (b) the particular period or periods of time (or manner of determining such period or periods of time) for which each value of such Variable

Interest Rate (or each interest rate mode) shall remain in effect; (c) provisions for conversion from one interest rate mode to another and for setting or resetting the interest rates; and (d) the time or times upon which any change in such Variable Interest Rate (or any conversion of interest rate modes) shall become effective.

"Variable Interest Rate Bond" means, for any period of time, any Parity Bond that bears interest at a Variable Interest Rate during that period. A Parity Bond shall not be treated as a Variable Interest Rate Bond if the net economic effect of: (a) interest rates on a particular series of Parity Bonds, as set forth in the applicable Bond Documents, and (b) either (i) interest rates on another series of Parity Bonds issued at substantially the same time, or (ii) a Payment Agreement related to that particular series of Parity Bonds, is to produce obligations that bear interest at a fixed rate. A Parity Bond with respect to which a Payment Agreement is in force shall be treated as a Variable Interest Rate Bond if the net economic effect of the Payment Agreement is to produce an obligation that bears interest at a Variable Interest Rate.

"Water Fund" means the fund of that name into which is paid the Gross Revenue of the Municipal Water System.

"Water System Plan" means the long-range water system plan known as the 2013 Water System Plan adopted by the City in Ordinance 124071, as that plan may be amended, updated, supplemented, or replaced from time to time.

Section 2. **Adoption of Plan of Additions**. The City specifies, adopts, and orders the Plan of Additions to be carried out as generally provided for in the documents comprising the Plan of Additions. The estimated cost of the Plan of Additions, as near as may be determined, is declared to be $727 million, of which approximately $88 million is expected to be financed from proceeds of the Bonds and investment earnings thereon.

Section 3. **Authorization of Bonds; Due Regard Finding**.

(a) **The Bonds**. The City is authorized to issue Municipal Water System revenue bonds, payable from the sources described in Section 13 of this ordinance, in the maximum principal amount stated in Section 5 of this ordinance, to provide funds (a) to pay part of the cost of carrying out the Plan of Additions; (b) to provide for the Reserve Requirement (if any); (c) to capitalize interest on (if necessary) and pay the costs of issuance of the Bonds; and (d) for other Municipal Water System purposes approved by ordinance. The Bonds may be issued in one or more Series and may be combined with other Municipal Water System revenue bonds (including Refunding Parity Bonds) authorized separately. The Bonds shall be designated Water System Revenue Bonds and shall be numbered separately and shall have any name, year, and series or other label as deemed necessary or appropriate by the Director of Finance.

(b) **City Council Finding**. The City Council finds that, in creating the Parity Bond Account and in fixing the amounts to be paid into it in accordance with this ordinance and the parameters for the Bond Sale Terms set forth in Section 5 of this ordinance, the City Council has exercised due regard for the cost of operation and maintenance of the Municipal Water System, and is not setting aside into the Parity Bond Account a greater amount than in the judgment of the City Council, based on the rates established from time to time consistent with subsection 16(b) of this ordinance, will be sufficient, in the judgment of the City Council, to meet all expenses of operation and maintenance of the Municipal Water System and to provide the amounts previously pledged for the payment of all outstanding obligations payable out of Gross Revenues and pledged for the payment of the Bonds. Therefore, the City Council finds that the issuance and sale of the Bonds is in the best interest of the City and in the public interest.

Section 4. **Manner of Sale of Bonds**. The Director of Finance may provide for the sale of each Series by competitive sale, negotiated sale, limited offering, or private placement and may select and enter into agreements with remarketing agents or providers of liquidity with respect to Variable Interest Rate Bonds. The Purchaser of each Series shall be chosen through a selection process acceptable to the Director of Finance. The Director of Finance is authorized to specify a date and time of sale and a date and time for the delivery of each Series; in the case of a competitive sale, to provide an official notice of sale including bid parameters and other bid requirements, and to provide for the use of an electronic bidding mechanism; to determine matters relating to a forward or delayed delivery of the Bonds; and to determine such other matters and take such other action as, in the Director's determination, may be necessary, appropriate, or desirable in order to carry out the sale of each Series. Each Series must be sold on Bond Sale Terms consistent with the parameters set forth in Section 5 of this ordinance.

Section 5. **Appointment of Designated Representative; Bond Sale Terms**.

(a) **Designated Representative**. The Director of Finance is appointed to serve as the City's designated representative in connection with the issuance and sale of the Bonds in accordance with RCW 39.46.040(2) and this ordinance.

(b) **Parameters for Bond Sale Terms**. The Director of Finance is authorized to approve, on behalf of the City, Bond Sale Terms for the sale of the Bonds in one or more Series, and, in connection with each such sale, to execute a Bond Purchase Contract (or, in the case of a competitive sale, a Pricing Certificate) confirming the Bond Sale Terms and such related agreements as may be necessary or desirable, consistent with the following parameters:

(i) **Maximum Principal Amount**. The maximum aggregate principal amount of all Series of the Bonds authorized by this ordinance is not to exceed $88 million.

(ii) **Date or Dates**. Each Bond shall be dated its Issue Date, as determined by the Director of Finance. The initial Issue Date (without restricting any reissuance date with respect to a Series of Variable Interest Rate Bonds) may be no later than December 31, 2024.

(iii) **Denominations.** The Bonds shall be issued in Authorized Denominations.

(iv) **Interest Rate(s)**. Each Bond shall bear interest from its Issue Date or from the most recent date to which interest has been paid or duly provided, whichever is later, unless otherwise provided in the Bond Documents. Each Series of the Bonds shall bear interest at one or more fixed interest rates or Variable Interest Rates. The net interest cost for any fixed rate Series may not exceed a rate of 10 percent per annum. The Bond Documents for any Series may provide for multiple interest rates and interest rate modes, and may provide conditions and mechanisms for the Director of Finance to effect a conversion from one mode to another. Nothing in this ordinance shall be interpreted to prevent the Bond Documents for any Series from including a provision for adjustments to interest rates during the term of the Series upon the occurrence of certain events specified in the applicable Bond Documents.

(v) **Payment Dates**. Interest shall be payable on dates acceptable to the Director of Finance. Principal shall be payable on dates acceptable to the Director of Finance, which shall include payment at the maturity of each Bond, in accordance with any Sinking Fund Requirements applicable to Term Bonds, and otherwise in accordance with any redemption or tender provisions.

(vi) **Final Maturity**. Each Bond shall mature no later than 40 years after its Issue Date.

(vii) **Redemption Prior to Maturity**. The Bond Sale Terms may include redemption and tender provisions, as determined by the Director of Finance in the Director's discretion, consistent with Section 8 of this ordinance and subject to the following:

(A) **Optional Redemption**. The Director of Finance may designate any Bond as subject to optional redemption prior to its maturity. Any Bond that is subject to optional redemption prior to maturity must be callable on at least one or more dates occurring not more than 10½ years after the Issue Date, consistent with subsection 8(a) of this ordinance.

(B) **Mandatory Redemption**. The Director of Finance may designate any Bond as a Term Bond, subject to mandatory redemption prior to its maturity on the dates and in principal payment amounts set forth in Sinking Fund Requirements, consistent with subsection 8(b) of this ordinance.

(C) **Extraordinary Redemptions**. The Director of Finance may designate any Bond as subject to extraordinary optional redemption or extraordinary mandatory redemption upon the occurrence of an extraordinary event, as such event or events may be set forth in the applicable Bond Documents, consistent with subsection 8(c) of this ordinance.

(D) **Tender Options**. The Director of Finance may designate any Variable Interest Rate Bond as subject to tender options, as set forth in the applicable Bond Documents.

(viii) **Price**. The Director of Finance may approve in the Bond Sale Terms an aggregate purchase price for each Series of the Bonds that is, in the Director's judgment, the price that produces the most advantageous borrowing cost for the City, consistent with the parameters set forth in this ordinance and in any applicable bid documents.

(ix) **Other Terms and Conditions**.

(A) **Expected Life of Capital Facilities**. As of the Issue Date of each Series, the Director of Finance must additionally find to the Director's satisfaction that the average expected life of the capital facilities to be financed with the proceeds (or allocable share of proceeds) of that Series must exceed the weighted average maturity of such Series (or share thereof) allocated to financing those capital facilities.

(B) **Parity Conditions Satisfied**. As of the Issue Date of each Series, the Director of Finance must find that the Parity Conditions have been met or otherwise satisfied, so that such Series is permitted to be issued as Parity Bonds.

(C) **Additional Terms, Conditions, and Agreements**. The Bond Sale Terms for any Series may provide for Bond Insurance, a Reserve Security, Qualified Letter of Credit, credit enhancement, or for any other Payment Agreement as the Director of Finance may find necessary or desirable. The Bond Sale Terms for any Series may provide for multiple interest rate modes and may include provisions for conversion from any interest rate mode to any other mode. To that end, the Bond Sale Terms may include such additional terms, conditions, and covenants as may be necessary or desirable, including but not limited to: restrictions on investment of Bond proceeds and pledged funds (including any escrow established for the defeasance of the Bonds); provisions for the conversion of interest rate modes; provisions for the reimbursement of a credit enhancement provider or Qualified Counterparty; and requirements to give notice to or obtain the consent of a credit enhancement provider or a Qualified Counterparty. The Director of Finance is authorized to execute, on behalf of the City, such additional certificates and agreements as may be necessary or desirable to reflect such terms, conditions, and covenants.

(D) **Reserve Requirement**. The Bond Sale Terms must establish whether the Series is to be treated as Covered Parity Bonds and must establish the method of providing for the Reserve Requirement, consistent with Section 15 of this ordinance.

(E) **Tax Status of the Bonds**. The Director of Finance may determine that any Series of the Bonds may be designated or qualified as Tax-Exempt Bonds, Taxable Bonds, or Tax Credit Subsidy Bonds, consistent with Section 22 of this ordinance.

Section 6. **Bond Registrar; Registration and Transfer of Bonds**.

(a) **Registration of Bonds; Bond Registrar**. The Bonds shall be issued only in registered form as to both principal and interest and shall be recorded on the Bond Register. The Fiscal Agent is appointed to act as Bond Registrar for each Series of the Bonds, unless otherwise determined by the Director of Finance.

(b) **Transfer and Exchange of Bonds**. The Bond Registrar shall keep, or cause to be kept, sufficient books for the registration and transfer of the Bonds, which shall be open to inspection by the City at all times. The Bond Register shall contain the name and mailing address of the Registered Owner of each Bond and the principal amount and number of each of the Bonds held by each Registered Owner.

The Bond Registrar is authorized, on behalf of the City, to authenticate and deliver Bonds transferred or exchanged in accordance with the provisions of the Bonds and this ordinance, to serve as the City's paying agent for the Bonds and to carry out all of the Bond Registrar's powers and duties under this ordinance and the Registration Ordinance.

The Bond Registrar shall be responsible for its representations contained in the Bond Registrar's certificate of authentication on the Bonds. The Bond Registrar may become an Owner of Bonds with the same rights it would have if it were not the Bond Registrar and, to the extent permitted by law, may act as depository for and permit any of its officers or directors to act as members of, or in any other capacity with respect to, any committee formed to protect the rights of Owners.

Bonds surrendered to the Bond Registrar may be exchanged for Bonds in any Authorized Denomination of an equal aggregate principal amount and of the same Series, interest rate and maturity. Bonds may be transferred only if endorsed in the manner provided thereon and surrendered to the Bond Registrar. Any exchange or transfer shall be without cost to an Owner or transferee. The Bond Registrar shall not be obligated to exchange or transfer any Bond during the period between the Record Date and the corresponding interest payment or principal redemption date.

(c) **Securities Depository; Book-Entry Form**. Unless otherwise determined by the Director of Finance, the Bonds initially shall be issued in Book-Entry Form and registered in the name of the Securities Depository. The Bonds so registered shall be held fully immobilized in Book-Entry Form by the Securities Depository in accordance with the provisions of the Letter of Representations. Neither the City nor the Bond Registrar shall have any responsibility or obligation to participants of the Securities Depository or the persons for whom they act as nominees with respect to the Bonds regarding the accuracy of any records maintained by the Securities Depository or its participants of any amount in respect of principal of or interest on the Bonds, or any notice that is permitted or required to be given to Registered Owners hereunder (except such notice as is required to be given by the Bond Registrar to the Securities Depository). Registered ownership of a Bond initially held in Book-Entry Form, or any portion thereof, may not be transferred except: (i) to any successor Securities Depository; (ii) to any substitute Securities Depository appointed by the City or such substitute Securities Depository's successor; or (iii) to any person if the Bond is no longer held in Book-Entry Form.

Upon the resignation of the Securities Depository from its functions as depository, or upon a determination by the Director of Finance to discontinue utilizing the then-current Securities Depository, the Director of Finance may appoint a substitute Securities Depository. If the Securities Depository resigns from its functions as depository and no substitute Securities Depository can be obtained, or if the Director of Finance determines not to utilize a Securities Depository, then the Bonds shall no longer be held in Book-Entry Form and ownership may be transferred only as provided herein.

Nothing in this ordinance shall prevent the Bond Sale Terms from providing that a Series of the Bonds shall be issued in certificated form without utilizing a Securities Depository, and that the Bonds of such Series shall be registered as of their Issue Date in the names of the Owners thereof, in which case ownership may be transferred only as provided in this ordinance.

(d) **Lost or Stolen Bonds**. In case any Bond shall be lost, stolen or destroyed, the Bond Registrar may authenticate and deliver a new bond or bonds of like amount, date, tenor, and effect to the Registered Owner(s) thereof upon the Registered Owner(s)' paying the expenses and charges of the City in connection therewith and upon filing with the Bond Registrar evidence satisfactory to the Bond Registrar that such bond or bonds were actually lost, stolen or destroyed and of Registered Ownership thereof, and upon furnishing the City with indemnity satisfactory to both.

Section 7. **Payment of Bonds**.

(a) **Payment**. Each Bond shall be payable in lawful money of the United States of America on the dates and in the amounts as provided in the Bond Documents applicable to that

Series. Principal of and interest on each Bond issued as a Parity Bond shall be payable solely out of the Parity Bond Account and shall not be a general obligation of the City. No Bonds of any Series shall be subject to acceleration under any circumstances.

(b) **Bonds Held In Book-Entry Form**. Principal of and interest on each Bond held in Book-Entry Form shall be payable in the manner set forth in the Letter of Representations.

(c) **Bonds Not Held In Book-Entry Form**. Interest on each Bond not held in Book-Entry Form shall be payable by electronic transfer on the interest payment date, or by check or draft of the Bond Registrar mailed on the interest payment date to the Registered Owner at the address appearing on the Bond Register on the Record Date. The City, however, is not required to make electronic transfers except pursuant to a request by a Registered Owner in writing received at least ten days prior to the Record Date and at the sole expense of the Registered Owner. Principal of each Bond not held in Book-Entry Form shall be payable upon presentation and surrender of the Bond by the Registered Owner to the Bond Registrar.

Section 8. **Redemption and Purchase of Bonds**.

(a) **Optional Redemption**. All or some of the Bonds may be subject to redemption prior to their stated maturity dates at the option of the City at the times and on the terms set forth in the applicable Bond Documents.

(b) **Mandatory Redemption**. All or some of the Bonds of any Series may be designated as Term Bonds, subject to mandatory redemption in Sinking Fund Requirements, as set forth in the applicable Bond Documents. If not redeemed or purchased at the City's option prior to maturity, Term Bonds (if any) must be redeemed, at a price equal to 100 percent of the principal amount to be redeemed plus accrued interest, on the dates and in the years and Sinking Fund Requirements as set forth in the applicable Bond Documents. If the City optionally redeems or purchases a Term Bond prior to maturity, the principal amount of that Term Bond that is so redeemed or purchased (irrespective of its redemption or purchase price) shall be credited against the remaining Sinking Fund Requirements for that Term Bond in the manner as directed by the Director of Finance. In the absence of direction by the Director of Finance, credit shall be allocated to the remaining Sinking Fund Requirements for that Term Bond on a *pro rata* basis.

(c) **Extraordinary Redemption Provisions**. All or some of the Bonds of any Series may be subject to extraordinary optional or extraordinary mandatory redemption prior to maturity upon the occurrence of an extraordinary event, at the prices, in the principal amounts, and on the dates, all as set forth in the applicable Bond Documents.

(d) **Selection of Bonds for Redemption; Partial Redemption**. If fewer than all of the outstanding Bonds of a Series are to be redeemed at the option of the City, the Director of Finance shall select the maturity or maturities to be redeemed. If less than all of the principal amount of a maturity of the selected Series is to be redeemed and, if such Series is held in Book-Entry Form, the portion of such maturity to be redeemed shall be selected for redemption by the Securities Depository in accordance with the Letter of Representations. If the Series is not then held in Book-Entry Form, the portion of such maturity to be redeemed shall be selected by the Bond Registrar randomly in such manner as the Bond Registrar shall determine. All or a portion of the principal amount of any Bond that is to be redeemed may be redeemed in any applicable Authorized Denomination. If less than all of the outstanding principal amount of any Bond is redeemed, upon surrender of that Bond to the Bond Registrar there shall be issued to the Registered Owner, without charge, a new Bond (or Bonds, at the option of the Registered Owner) of the same Series, maturity, and interest rate in any Authorized Denomination in the aggregate principal amount to remain outstanding.

(e) **Purchase**. The City reserves the right and option to purchase any or all of the Bonds at any time at any price acceptable to the City plus accrued interest to the date of purchase.

Section 9. **Notice of Redemption; Rescission of Notice**. Unless otherwise set forth in the applicable Bond Documents, the City must cause notice of any intended redemption of Bonds to be given not fewer than 20 nor more than 60 days prior to the date fixed for redemption by first class mail, postage prepaid, to the Registered Owner of any Bond to be redeemed at the address appearing on the Bond Register on the Record Date, and the requirements of this sentence shall be deemed to have been fulfilled when notice has been mailed as so provided, whether or not it is actually received by the Owner of any Bond. Interest on Bonds called for redemption shall cease to accrue on the date fixed for redemption unless the Bond or Bonds called are not redeemed when presented pursuant to the call.

In the case of an optional or extraordinary optional redemption, the notice may state that the City retains the right to rescind the redemption notice and the related optional redemption of Bonds by giving a notice of rescission to the affected Registered Owners at any time on or prior to the scheduled optional redemption date. Any notice of optional redemption that is rescinded by the Director of Finance shall be of no effect, and the Bonds for which the notice of optional redemption has been rescinded shall remain outstanding.

Section 10. **Failure to Pay Bonds**. If any Bond is not paid when properly presented at its maturity or redemption date, the City shall be obligated to pay, solely from the Parity Bond Account and the other sources pledged in this ordinance, interest on that Bond at the same rate provided on that Bond from and after its maturity or redemption date until that Bond, including principal, redemption premium (if any), and interest, is paid in full or until sufficient money for its payment in full is on deposit in the Parity Bond Account and that Bond has been called for payment by giving notice of that call to the Registered Owner of that Bond.

Section 11. **Form and Execution of Bonds**. The Bonds shall be typed, printed, or reproduced in a form consistent with the provisions of this ordinance and State law; shall be signed by the Mayor and Director of Finance, either or both of whose signatures may be manual or in facsimile; and the seal of the City or a facsimile reproduction thereof shall be impressed or printed thereon.

Only Bonds bearing a certificate of authentication in substantially the following form (with the designation, year, and Series adjusted consistent with this ordinance), manually signed by the Bond Registrar, shall be valid or obligatory for any purpose or entitled to the benefits of this ordinance: "This Bond is one of the fully registered The City of Seattle, Washington, [Water System Revenue Bonds], [Year], [Series], described in [this ordinance]." The authorized signing of a certificate of authentication shall be conclusive evidence that the Bond so authenticated has been duly executed, authenticated, and delivered and is entitled to the benefits of this ordinance.

If any officer whose manual or facsimile signature appears on a Bond ceases to be an officer of the City authorized to sign bonds before the Bond bearing the officer's manual or facsimile signature is authenticated or delivered by the Bond Registrar or issued by the City, that Bond nevertheless may be authenticated, delivered, and issued and, when authenticated, issued, and delivered, shall be as binding on the City as though that person had continued to be an officer of the City authorized to sign bonds. Any Bond also may be signed on behalf of the City by any person who, on the actual date of signing of the Bond, is an officer of the City authorized to sign bonds, although the person did not hold the required office on the date of issuance of that Series of the Bonds.

Section 12. **Construction Account; Deposit of Proceeds**. An account to be known as the Water System Construction Subaccount, 2022, is created in the Water System Construction Account within the Water Fund. After depositing accrued interest (if any) into the Principal and Interest Subaccount and depositing amounts necessary to provide for the Reserve Requirement (if any) into the Reserve Subaccount, the remaining principal proceeds of the sale of a Series of the Bonds shall be deposited into the Construction Account (or such other fund or account as may be directed by the Director of Finance) to be used (a) to pay part of the costs of carrying out the Plan of Additions, and (b) to pay capitalized interest on (if necessary) and the costs of issuance of the Series. Until needed to pay such costs, the City may invest principal proceeds and interest thereon temporarily in any Permitted Investments, and the investment earnings may, as determined by the Director of Finance, be either (a) retained in the Construction Account to be spent for the purposes of that account, or (b) deposited in the Parity Bond Account.

Section 13. **Security for the Bonds; Parity with Outstanding Parity Bonds**. The Bonds shall be special limited obligations of the City payable from and secured solely by the Net Revenue (including all ULID Assessments, if any) and money in the Parity Bond Account and the subaccounts therein, ***except that from and after the Reserve Covenant Date, money in the Reserve Subaccount shall secure only Covered Parity Bonds***. The Net Revenue (including all ULID Assessments, if any) is pledged to make the payments into the Parity Bond Account required by this ordinance. This pledge constitutes a charge and lien upon such Net Revenue prior and superior to all other liens and charges whatsoever.

The Bonds shall be issued on parity with the Outstanding Parity Bonds and all Future Parity Bonds, without regard to date of issuance or authorization and without preference or priority of right or lien. Nothing in this ordinance prevents the City from issuing revenue bonds or other obligations that are a charge or lien upon Net Revenue subordinate to the payments required to be made from Net Revenue into the Parity Bond Account and the subaccounts therein. The City covenants that, for as long as any Bond is outstanding, it will not issue any other revenue obligations (or create any special fund or account therefor), that will have any priority over or that will rank on a parity with the payments required in respect of the Parity Bonds, and that it will issue Future Parity Bonds only accordance with Section 17 of this ordinance.

The Bonds shall not constitute general obligations of the City, the State, or any political subdivision of the State or a charge upon any general fund or upon any money or other property of the City, the State, or any political subdivision of the State not specifically pledged by this ordinance.

Section 14. **Priority Expenditure of Gross Revenue; Flow of Funds**. Gross Revenue shall be deposited as received in the Water Fund and used for the following purposes only in the following order of priority:

(a) To pay the Operating and Maintenance Expense;

(b) To make all payments into the Principal and Interest Subaccount required to be made in order to pay the interest on and principal of all Parity Bonds (including all net payments on Parity Payment Agreements) when due, and to make payments due under any agreement with a provider of a Reserve Security which agreement requires those payments to be treated on a parity of lien with the Parity Bonds;

(c) To make all payments required to be made (i) into the Reserve Subaccount with respect to Covered Parity Bonds, (ii) under any agreement with a provider of a Reserve Security, which agreement requires those payments to be treated on a parity of lien with the payments required to be made into the Reserve Subaccount, and (iii) ***until the Reserve Covenant Date, into a special account in the Water Fund in accordance with the second paragraph in subsection 15(a)(ii) of this ordinance***;

(d) To make all payments required to be made into any revenue bond, note, warrant or other revenue obligation redemption fund, debt service account, or reserve account created to pay and secure the payment of the principal of and interest on any revenue bonds or short-term obligations of the City having a charge and lien upon Net Revenue subordinate to the lien thereon for the payment of the principal of and interest on the Parity Bonds; and

(e) Without priority, to any of the following purposes: to retire by redemption or purchase any outstanding revenue bonds or revenue obligations of the Municipal Water System; to make necessary additions, betterments, improvements or repairs to, or extensions and replacements of the Municipal Water System; to pay City taxes or other payments in lieu of taxes payable from Gross Revenue; to make deposits to the Rate Stabilization Account; or for any other lawful Municipal Water System purposes.

Section 15. **Parity Bond Account**. A special account of the City known as the Parity Bond Account has been previously created and shall be maintained as a separate account within the Water Fund, for the sole purpose of paying the principal of and premium, if any, and interest on the Parity Bonds as the same shall become due. The Parity Bond Account consists of the Principal and Interest Subaccount and the Reserve Subaccount, and may additionally include such subaccounts as the Director of Finance may deem necessary, so long as the maintenance of such subaccounts does not conflict with the rights of the owners of Parity Bonds. Principal of, premium (if any) and interest on the Parity Bonds shall be payable out of the Parity Bond Account.

(a) **Required Payments Into the Parity Bond Account**. So long as any Parity Bonds are outstanding (including amounts required under any Parity Payment Agreement), the City shall set aside and pay into the Parity Bond Account all ULID Assessments on their collection and, out of Net Revenue, certain fixed amounts without regard to any fixed proportion, namely:

(i) Into the Principal and Interest Subaccount on or before each date on which interest on or principal of Parity Bonds (including Sinking Fund Requirements and net payments under any Parity Payment Agreements) shall become due and payable, an amount that will be sufficient, together with other money on deposit therein, to pay such principal, interest, Sinking Fund Requirements, and net payments then due on Parity Payment Agreements as the same shall become due; and

(ii) Into the Reserve Subaccount, an amount necessary to provide for the Reserve Requirement within the time and in the manner required by this ordinance and the Bond Sale Terms. The amount necessary, if any, to satisfy the Reserve Requirement upon the issuance of a Series of the Bonds may be funded (A) on the Issue Date by a deposit of bond sale proceeds, available funds of the Municipal Water System, or a Reserve Security; or (B) in annual installments from Net Revenue so that the Reserve Requirement is fully funded by no later than the fifth anniversary of the Issue Date of such series. The manner of funding the Reserve Requirement for the Bonds shall be set forth in the Bond Sale Terms.

Until the Reserve Covenant Date, the requirements of this paragraph apply: On receipt of a notice of cancellation of any Reserve Security used to satisfy all or any part of the Reserve Requirement, the City shall either (A) substitute a Reserve Security in the amount required to make up the deficiency created in the Reserve Subaccount, or (B) create a special account in the Water Fund and deposit therein, on or before the 25th day of each of the

36 succeeding calendar months (commencing with the 25th day of the calendar month next following the date of the notice) 1/36 of the amount sufficient, together with other money and investments on deposit in the Reserve Subaccount, to equal the Reserve Requirement that will be in effect as of the date the cancellation becomes effective. Amounts on deposit in that special account shall not be available to pay debt service on Parity Bonds or for any other purpose of the City, and shall be transferred to the Reserve Subaccount on the effective date of any cancellation of a Reserve Security to make up all or part of the deficiency caused thereby. Amounts in that special account or in the Reserve Subaccount may be transferred back to the Water Fund and used for any purpose if and when a substitute Reserve Security is obtained. ***From and after the Reserve Covenant Date, the foregoing paragraph shall no longer be of any force or effect.***

To meet the required payments to be made into the Parity Bond Account, the Director of Finance may transfer any money from any funds or accounts of the City legally available therefor, except bond redemption funds, refunding escrow funds or defeasance funds. The Director of Finance may provide for the purchase, redemption, or defeasance of any Parity Bonds by the use of money on deposit in any subaccount in the Parity Bond Account as long as the money remaining in those subaccounts is sufficient to satisfy the required deposits in those subaccounts for the remaining Parity Bonds.

(b) **Reserve Subaccount**. The Reserve Subaccount previously has been created and maintained as a subaccount within the Parity Bond Account for the purpose of securing the payment of the principal of and interest on all Parity Bonds outstanding (including amounts due under any Parity Payment Agreements if required under such agreement). The City covenants that it will at all times, so long as any Covered Parity Bonds are outstanding, maintain the Reserve Subaccount at the Reserve Requirement (taking into account scheduled payments to fund the Reserve Requirement over time), as it is adjusted from time to time, except for withdrawals as authorized by this ordinance. Any withdrawals authorized below from subaccounts within the Reserve Subaccount shall be made on a pro rata basis except if the provider of a Reserve Security requires all cash and investments in the Reserve Subaccount to be withdrawn before draws on the Reserve Security, or unless the City receives an opinion of Bond Counsel to the effect that such pro rata withdrawal is not required to maintain the exclusion of interest on the Parity Bonds then outstanding from gross income for federal income tax purposes.

(i) **Use of Reserve Subaccount for Payment of Debt Service**. In the event of a deficiency in the Principal and Interest Subaccount to meet current installments of either principal (including Sinking Fund Requirements) or interest (including amounts payable under any Parity Payment Agreement), the Director of Finance may make withdrawals of money or proceeds of Reserve Security in the Reserve Subaccount. ***From and after the Reserve Covenant Date, the Reserve Subaccount shall secure the payment of principal of and interest on Covered Parity Bonds only and the withdrawals authorized by this paragraph shall be limited to the amounts necessary to meet maturing installments of either principal (or Sinking Fund Requirements) or interest (including net payments under Parity Payment Agreements) with respect only to Covered Parity Bonds.*** Any deficiency created in the Reserve Subaccount by reason of any such withdrawal or claim against a Reserve Security shall then be made up from the ULID Assessments and Net Revenue first available after making necessary provisions for the required payments into the Principal and Interest Subaccount.

(ii) **Application of Funds in Reserve Subaccount**. The money in the Reserve Subaccount may be applied to the payment of the last outstanding Covered Parity Bonds, and when the total amount in the Parity Bond Account (including investment earnings) equals the total amount of principal and interest for all then-outstanding Covered Parity Bonds to the last maturity thereof, no further payment need be made into the Parity Bond Account in respect of the Covered Parity Bonds. Money in the Reserve Subaccount (including investment earnings) in excess of the Reserve Requirement may be withdrawn and deposited in the Principal and Interest Subaccount and spent for the purpose of retiring Covered Parity Bonds or may be deposited in any other fund or account and spent for any other lawful Municipal Water System purpose.

(c) **Investment of Money in Parity Bond Account.** All money in the Parity Bond Account may be kept in cash or invested in Permitted Investments maturing not later than the date when needed (for investments in the Principal and Interest Subaccount) or the last maturity of any outstanding Parity Bonds (for investments in the Reserve Subaccount). In no event shall any money in the Parity Bond Account or any other money reasonably expected to be used to pay principal of and/or interest on the Parity Bonds be invested at a yield that would cause any Series issued as Tax-Exempt Bonds or Tax Credit Subsidy Bonds to be arbitrage bonds within the meaning of Section 148 of the Code. Income from investments in the Principal and Interest Subaccount shall be deposited in that subaccount. Income from investments in the Reserve Subaccount shall be deposited in that subaccount until the amount therein is equal to the Reserve Requirement for all Parity Bonds, and thereafter shall be deposited in the Principal and Interest Subaccount. Notwithstanding the provisions for deposit or retention of earnings in the Parity Bond Account, any earnings that are subject to a federal tax or rebate requirement may be withdrawn from the Parity Bond Account for deposit in a separate fund or account for that purpose. If no longer required for such rebate, money in that separate fund or account shall be returned to the Parity Bond Account.

(d) **Failure to Deposit Money in Parity Bond Account**. If the City fails to set aside and pay into the Parity Bond Account, or the subaccounts therein, the amounts set forth in this ordinance, the registered owner of any of the outstanding Parity Bonds may bring action against the City for failure to make the required deposits to the Parity Bond Account only in accordance with Section 25 of this ordinance regarding Events of Default.

Section 16. **Parity Bond Covenants**. The City covenants with the Owner of each Bond at any time outstanding, as follows:

(a) **Operation and Maintenance**. The City will pay all Operating and Maintenance Expense and otherwise meet the obligations of the City under this ordinance. It will at all times maintain and keep the Municipal Water System in good repair, working order and condition, and will make all necessary and proper additions, betterments, renewals and repairs thereto, and improvements, replacements and extensions thereof, so that at all times the business carried on in connection therewith will be properly and advantageously conducted, and will at all times operate or cause to be operated the Municipal Water System and the business in connection therewith in an efficient manner and at a reasonable cost.

(b) **Establishment and Collection of Rates and Charges**. The City will establish, maintain, revise as necessary, and collect rates and charges for services and facilities provided by the Municipal Water System so that the Adjusted Net Revenue in each fiscal year will be at least equal to the Coverage Requirement. The failure of the City to comply with this covenant shall not be an Event of Default if the City promptly retains an Independent Utility Consultant to recommend to the City Council adjustments in the rates of the Municipal Water System necessary to meet the requirements of this covenant and if the City Council adopts the recommended modifications within 180 days of the date the failure became known to the City Council.

(c) **Sale or Disposition of the Municipal Water System**. The City may sell, transfer or otherwise dispose of any of the works, plant, properties, facilities or other part of the Municipal Water System or any real or personal property comprising a part of the Municipal Water System consistent only with one or more of the following:

(i) The City in its discretion may carry out such a sale, transfer, or disposition (each, a "transfer") if the facilities or property transferred are not material to the operation of the Municipal Water System, or shall have become unserviceable, inadequate, obsolete, or unfit to be used in the operation of the Municipal Water System or are no longer necessary, material or useful to the operation of the Municipal Water System; or

(ii) The City in its discretion may carry out such a transfer if the aggregate depreciated cost value of the facilities or property being transferred under this subsection in any fiscal year comprises no more than 5 percent of the total assets of the Municipal Water System; or

(iii) The City in its discretion may carry out such a transfer if the proceeds from such transfer are used to acquire new useful operating facilities or properties of the Municipal Water System, or are used to retire outstanding Parity Bonds or other revenue obligations of the Municipal Water System, if, at the time of such transfer, the City has on file a certificate of both the Director of Finance and the Director of Seattle Public Utilities (or any officer who succeeds to substantially all of the responsibilities of either office) demonstrating that, in their opinion, upon such transfer and the use of proceeds of the transfer as proposed by the City, the remaining facilities of the Municipal Water System will retain their operational integrity and, based on the financial statements for the most recent fiscal year available, the proposed transfer would not prevent the Municipal Water System from complying with the Coverage Requirement during the five fiscal years following the fiscal year in which the transfer is to occur. The certificate shall take into account (A) the reduction in revenue and expenses, if any, resulting from the transfer; (B) the use of any proceeds of the transfer for the redemption of Parity Bonds, (C) the estimate of revenue from customers anticipated to be served by any additions to and betterments and extensions of the Municipal Water System financed in part by the proposed portion of the proceeds of the transfer, and (D) any other adjustment permitted in the preparation of a certificate under subsection 17(a)(vi) of this ordinance. Before such a transfer, the City also must obtain confirmation from each of the Rating Agencies to the effect that the rating then in effect will not be reduced or withdrawn upon such transfer.

(d) **Books and Records**. The City will keep proper books, records and accounts with respect to the operations, income, and expenditures of the Municipal Water System in accordance with generally accepted accounting practices relating to municipal utilities and any applicable rules and regulations prescribed by the State, and will cause those books, records and accounts to be audited on an annual basis by the State Auditor (or, if such audit is not made by the State Auditor within 270 days after the close of any fiscal year of the City, by a certified public accountant selected by the City). It will prepare annual financial and operating statements as soon as practicable after the close of each fiscal year showing in reasonable detail the financial condition of the Municipal Water System as of the close of the previous year and the income and expenses for such year, including the amounts paid into the Parity Bond Account and into any and all special funds or accounts created pursuant to the provisions of this ordinance, the status of all funds and accounts as of the end of such year, and the amounts expended for maintenance, renewals, replacements and capital additions to the Municipal Water System. Such statements shall be sent to the owner of any Parity Bond upon written request received by the City. The City may charge a reasonable cost for providing such financial statements.

(e) **Liens Upon the Municipal Water System**. Except as otherwise provided in this ordinance, it will not at any time create or permit to accrue or to exist any lien or other encumbrance or indebtedness upon the Gross Revenue or any part thereof prior or superior to the lien thereon for the payment of the Parity Bonds, and will pay and discharge, or cause to be paid and discharged, any and all lawful claims for labor, materials or supplies that, if unpaid, might become a lien or charge upon the Gross Revenue or any part thereof, prior or superior to, or on a parity with, the lien of the Parity Bonds, or which might impair the security of the Parity Bonds.

(f) **Collection of Delinquent Accounts; No Free Service**. On at least an annual basis, the City will determine all accounts that are delinquent and will take such actions as the City determines are reasonably necessary to enforce payment of those delinquent accounts. Except to aid the poor or infirm and for fire-fighting purposes, it will not furnish or supply or permit the furnishing or supplying of any service or facility in connection with the operation of the Municipal Water System free of charge to any person, firm, or corporation, public or private.

(g) **Maintenance of Insurance**. The City will at all times carry fire and extended coverage, public liability and property damage and such other forms of insurance with responsible insurers and with policies payable to the City on such of the buildings, equipment, works, plants, facilities, and properties of the Municipal Water System as are ordinarily carried by municipal or privately owned utilities engaged in the operation of like systems, and against such claims for damages as are ordinarily carried by municipal or privately owned utilities engaged in the operation of like systems, or it will self-insure or participate in an insurance pool or pools with reserves adequate, in the reasonable judgment of the City, to protect the Municipal Water System against loss.

(h) **Condemnation Awards and Insurance Proceeds**. If the City receives any condemnation awards or proceeds of an insurance policy in connection with any loss of or damage to any property of the Municipal Water System, it shall apply the condemnation award or insurance proceeds, in the City's sole discretion, either (i) to the cost of replacing or repairing the lost or damaged properties, (ii) to the payment, purchase, or redemption of Parity Bonds, or (iii) to the cost of improvements to the Municipal Water System.

Section 17. **Future Parity Bonds**

(a) **Issuance of Future Parity Bonds**. The City reserves the right to issue Future Parity Bonds and to enter into Parity Payment Agreements for any lawful purpose of the Municipal Water System (including for the purpose of refunding a portion of the then-outstanding Parity Bonds) only if, at the time of the issuance of such series of Future Parity Bonds (or upon the effective date of the Parity Payment Agreement), the following conditions are satisfied:

(i) There must be no deficiency in the Parity Bond Account, and no Event of Default with respect to any Parity Bonds shall have occurred and be continuing.

(ii) The Bond Documents for the proposed Future Parity Bonds must provide that all ULID Assessments shall be paid directly into the Parity Bond Account.

(iii) The Bond Documents for the proposed Future Parity Bonds must provide for the payment of the principal thereof and the interest thereon out of the Parity Bond Account.

(iv) The Bond Documents for the proposed Future Parity Bonds must provide for the payment of any Sinking Fund Requirements from money in the Principal and Interest Subaccount.

(v) For each series of Future Parity Bonds that is to be issued as a series of Covered Parity Bonds, the Bond Documents must provide for the deposit into the Reserve Subaccount of an amount, if any, necessary to fund the Reserve Requirement upon the issuance of those Future Parity Bonds (if any), which requirement may be satisfied: (A) by a deposit, made on the Issue Date of such series, of proceeds of that series of Future Parity Bonds or other money legally available for such purpose; (B) by obtaining one or more Reserve Securities (or a deposit of cash plus Reserve Securities) available to be drawn upon in specific amounts to be paid into the Reserve Subaccount and credited against the deposits required to be maintained in the Reserve Subaccount; or (C) by a deposit of amounts necessary to fund the Reserve Requirement from ULID Assessments and Net Revenue within five years from the date of issuance of those Future Parity Bonds, in five approximately equal annual payments. Immediately prior to the issuance of Future Parity Bonds, amounts then deposited in the Reserve Subaccount shall be valued as determined on the most recent annual financial report of the City applicable to the Drainage and Wastewater System, and the additional amounts, if any, required to be deposited into the Reserve Subaccount to satisfy the Reserve Requirement shall be based on that valuation.

(vi) There must be on file with the City a Parity Certificate as described in subsection (b). However, if the proposed Future Parity Bonds (or any portion thereof) are to be issued for the purpose of refunding outstanding Parity Bonds (referred to as the “Refunding Parity Bonds”), no Parity Certificate shall be required as to that portion issued for refunding purposes if the Director of Finance finds and certifies that the Adjusted Annual Debt Service on the refunding portion of the proposed Refunding Parity Bonds is not more than $5,000 greater than the Adjusted Annual Debt Service on the Parity Bonds to be refunded thereby. Alternatively, Refunding Parity Bonds may be issued upon delivery of a Parity Certificate.

(b) **Parity Certificate**. A Parity Certificate required under subsection (a)(vi) may be provided as follows:

(i) A certificate may be prepared and signed by the Director of Finance, demonstrating that during any 12 consecutive calendar months out of the immediately preceding 24 calendar months Adjusted Net Revenue was at least equal to the Coverage Requirement for all Parity Bonds plus the Future Parity Bonds proposed to be issued (and assuming that the debt service of the proposed Future Parity Bonds for that 12-month period was the Average Annual Debt Service for those proposed Future Parity Bonds); or

(ii) A certificate may be prepared and signed by both the Director of Finance and the Director of Seattle Public Utilities (or any officer who succeeds to substantially all of the responsibilities of either office), demonstrating that, in their opinion, Adjusted Net Revenue for the five fiscal years next following the earlier of (A) the end of the period during which interest on those Future Parity Bonds is to be capitalized or, if no interest is capitalized, the fiscal year in which the Future Parity Bonds are issued, or (B) the date on which substantially all the new facilities financed with those Future Parity Bonds are expected to commence operations, such Adjusted Net Revenue, further adjusted as provided in paragraphs (1) through (4) below, will be at least equal to the Coverage Requirement. That certificate may take into account the following adjustments:

(1) Any changes in rates in effect and being charged, or rates expected to be charged in accordance with a program of specific rates, rate levels or increases in overall rate revenue approved by ordinance or resolution;

(2) Net revenue from customers of the Municipal Water System who have become customers during the 12-consecutive-month period or thereafter, and their estimate of net revenue from any customers to be connected to the Municipal Water System who have paid the required connection charges, adjusted to reflect one year's net revenue from those customers;

(3) Their estimate of net revenue from customers anticipated to be served by facilities or improvements financed in substantial part by those Future Parity Bonds (or additional Parity Bonds expected to be issued during the five-year period); and

(4) Net revenue from any person, firm, corporation, or municipal corporation under any executed contract for water or other utility service, which revenue was not included in historical Net Revenue of the Municipal Water System.

(c) **Other Provisions**. Nothing contained in this ordinance shall prevent the City from issuing Future Parity Bonds to refund maturing Parity Bonds, money for the payment of which is not otherwise available, or revenue bonds that are a charge or lien upon Net Revenue subordinate to the charge or lien of the Parity Bonds, or from pledging to pay Net Revenue and/or assessments levied for ULID improvements constructed from the proceeds of subordinate lien bonds into a bond redemption fund created for the payment of the principal of and interest on subordinate lien bonds.

(d) **Effect of Issuance of Future Parity Bonds**. If the Parity Conditions are met and complied with at the time of the issuance of such Future Parity Bonds, then payments into the Parity Bond Fund with respect to such Future Parity Bonds shall rank equally with the payments out of the Net Revenue required to be made into the Parity Bond Fund by this ordinance. Nothing set forth herein shall prevent the City from (i) issuing revenue bonds or other obligations that are a charge upon the Net Revenue junior and inferior to the payments required to be made therefrom into the Parity Bond Fund for the payment of the Parity Bonds, provided that such subordinate bonds may not be subject to acceleration under any circumstances; or (ii) issuing Refunding Parity Bonds for the purpose of refunding Outstanding Parity Bonds, upon compliance with the Parity Conditions set forth in this section.

(e) **Reserve Requirement; Election Not to Designate Bonds as Covered Parity Bonds**. Notwithstanding anything in this section to the contrary, the City may elect, by reflecting such election in the Bond Sale Terms relating to the issuance or sale of a series of Future Parity Bonds, that, from and after the Reserve Covenant Date, such series shall not be deemed to be a series of Covered Parity Bonds, shall not be secured by the amounts in the Reserve Account, and shall be excluded from the calculation of the Reserve Requirement.

Section 18. **Rate Stabilization Account**. The Rate Stabilization Account has been created as a separate account in the Water Fund. The City may at any time, as determined by the Director of Finance and consistent with the flow of funds set forth in Section 14 of this ordinance, deposit in the Rate Stabilization Account Gross Revenue and any other money received by the Municipal Water System and available for this purpose. The Director of Finance may, upon authorization by the City Council, withdraw any or all of the money in the Rate Stabilization Account for inclusion in Adjusted Gross Revenue for any fiscal year of the City. Such deposits or withdrawals may be made up to and including the date 90 days after the end of the fiscal year for which the deposit or withdrawal will be included as Adjusted Gross Revenue. No deposit of Gross Revenue may be made into the Rate Stabilization Account to the extent that such deposit would prevent the City from meeting the Coverage Requirement in the relevant fiscal year.

Section 19. **Separate Utility Systems**. The City may create, acquire, construct, finance, own or operate one or more additional systems for water supply, transmission or other commodity or service relating to the Municipal Water System. The revenue of that separate utility system shall not be included in Gross Revenue and may be pledged to the payment of revenue obligations issued to purchase, construct, condemn or otherwise acquire or expand the separate utility system. Neither Gross Revenue nor Net Revenue shall be pledged by the City to the payment of any obligations of a separate utility system except (a) as a Contract Resource Obligation, upon compliance with Section 20 of this ordinance, or (b) with respect to Net Revenue, on a basis subordinate to the lien of the Parity Bonds on that Net Revenue.

Section 20. **Contract Resource Obligations**. The City may at any time enter into one or more Contract Resource Obligations for the acquisition, from facilities to be constructed, of water supply, transmission, or other commodity or service relating to the Municipal Water System, as follows:

(a) The City may determine that, and may agree under a Contract Resource Obligation to provide that, all payments under that Contract Resource Obligation (including payments prior to the time that water supply or transmission or other commodity or service is being provided, or during a suspension or after termination of supply or service) shall be an Operating and Maintenance Expense if the following requirements are met at the time such a Contract Resource Obligation is entered into:

(i) No Event of Default has occurred and is continuing; and

(ii) There shall be on file a certificate of an Independent Utility Consultant stating that (A) the payments to be made by the City in connection with the Contract Resource Obligation are reasonable for the supply or transmission rendered; (B) the source of any new supply and any facilities to be constructed to provide the supply or transmission are sound from a water or other supply or transmission planning standpoint, are technically and economically feasible in accordance with prudent utility practice, and are likely to provide such supply or transmission no later than a date set forth in the Independent Utility Consultant's certification; and (C) the Adjusted Net Revenue (further adjusted by the Independent Utility Consultant's estimate of the payments to be made in accordance with the Contract Resource Obligation) for the five fiscal years following the year in which the Contract Resource Obligation is incurred, as such Adjusted Net Revenue is estimated by the Independent Utility Consultant in accordance with the provisions of and adjustments permitted in subsection 17(b)(ii) of this ordinance, will be at least equal to the Coverage Requirement.

(b) Payments required to be made under Contract Resource Obligations shall not be subject to acceleration.

(c) Nothing in this section shall be deemed to prevent the City from entering into other agreements for the acquisition of water supply, transmission or other commodity or service from existing facilities and from treating those payments as an Operating and Maintenance Expense. Nothing in this section shall be deemed to prevent the City from entering into other agreements for the acquisition of water supply, transmission, or other commodity or service from facilities to be constructed and from agreeing to make payments with respect thereto, such payments constituting a charge and lien on Net Revenue subordinate to that of the Parity Bonds.

Section 21. **Refunding and Defeasance of the Bonds**.

(a) **Bonds Designated as Refundable and Defeasible Bonds**. Each Series of the Bonds is hereby designated as a series of "Refundable Bonds" for purposes of the Omnibus Refunding Ordinance and as "Defeasible Bonds" for purposes of the Omnibus Defeasance Ordinance.

(b) **Refunding; Defeasance**. The City may issue Refunding Parity Bonds pursuant to the laws of the State or use money available from any other lawful source (i) to pay when due the principal of (including premium, if any) and interest on any Bond, or any portion thereof, included in a refunding or defeasance plan (the "Defeased Bonds"); (ii) to redeem and retire, release, refund, or defease the Defeased Bonds; and (iii) to pay the costs of such refunding or defeasance. If money and/or Government Obligations maturing at a time or times and in an amount sufficient (together with known earned income from the investment thereof) to redeem and retire, release, refund, or defease the Defeased Bonds in accordance with their terms is set aside in a special trust fund or escrow account irrevocably pledged to such redemption, retirement, or defeasance (the "Trust Account"), then all right and interest of the Owners of the Defeased Bonds in the covenants of this ordinance and in Net Revenue and the funds and accounts pledged to the payment of such Defeased Bonds, other than the right to receive the funds so set aside and pledged, thereafter shall cease and become void. Such Owners thereafter shall have the right to receive payment of the principal of and interest or redemption price on the Defeased Bonds from the Trust Account. After establishing and fully funding such a Trust Account, the Defeased Bonds shall be deemed to be no longer outstanding, and the Director of Finance may then apply any money in any other fund or account established for the payment or redemption of the Defeased Bonds to any lawful purpose.

(c) **Notice of Defeasance or Refunding**. Unless otherwise specified in the Bond Documents, notice of refunding or defeasance shall be given, and selection of Bonds for any partial refunding or defeasance shall be conducted, in the manner set forth in this ordinance for the redemption of Bonds.

(d) **Annual Debt Service Calculation Adjustments for Defeased Bonds.** If the refunding or defeasance plan provides (i) that the Defeased Bonds (or the Refunding Parity Bonds issued to redeem those Defeased Bonds) are to be secured by money and/or Government Obligations pending the redemption of the Defeased Bonds, and (ii) that certain money and/or Government Obligations are pledged irrevocably for the redemption of the Defeased Bonds, then only the debt service on such Bonds that are not Defeased Bonds (and any Refunding Parity Bonds, the payment of which is not so secured by the refunding plan) shall be included in the calculation of Annual Debt Service.

Section 22. **Provisions Relating to Federal Tax Issues**. The Bond Documents may include such additional terms and covenants relating to federal tax matters as the Director of Finance deems necessary or appropriate, including the following:

(a) **Tax-Exempt Bonds**. For each Series of the Bonds issued as Tax-Exempt Bonds, the City covenants that it will take all actions, consistent with the terms of such Series as set forth in the applicable Bond Documents, that are reasonably within its power and necessary to prevent interest on that Series from being included in gross income for federal income tax purposes. The City further covenants that it will neither take any action nor make or permit any use of gross proceeds of that Series (or other funds of the City treated as gross proceeds of that Series) at any time during the term of such Series that will cause interest on such Series to be included in gross income for federal income tax purposes. The City also covenants that, to the extent the arbitrage rebate requirement of Section 148 of the Code is applicable to any Series issued as Tax-Exempt Bonds, it will take all actions necessary to comply (or to be treated as having complied) with that requirement in connection with that Series (including the calculation and payment of any penalties that the City may elect to pay as an alternative to calculating rebatable arbitrage and the payment of any other penalties if required under Section 148 of the Code) to prevent interest on such Series from being included in gross income for federal income tax purposes.

(b) **Taxable Bonds; Tax Credit Subsidy Bonds**. For each Series of the Bonds issued as Taxable Bonds or as Tax Credit Subsidy Bonds, the Director of Finance is authorized to make provision in the Bonds and other Bond Documents, to execute additional written agreements, and to make additional covenants on behalf of the City, all as the Director may deem necessary or appropriate in order to obtain, maintain, and administer such tax status. In the case of Tax Credit Subsidy Bonds, such additional covenants and agreement may include (without limiting the generality of the foregoing) those necessary in order for the City (i) to receive from the United States Treasury the applicable Tax Credit Subsidy Payments in respect of such Tax Credit Subsidy Bonds, and (ii) to ensure that such Series otherwise becomes and remains eligible for tax benefits under the Code.

Section 23. **Official Statement; Continuing Disclosure**

(a) **Preliminary Official Statement**. The Director of Finance and other appropriate City officials are directed to cause the preparation of and review the form of a preliminary official statement in connection with each sale of one or more Series to the public. For the sole purpose of the Purchaser's compliance with paragraph (b)(1) of Rule 15c2-12, the Director of Finance is authorized to deem that preliminary official statement final as of its date, except for the omission of information permitted to be omitted by Rule 15c2-12. The City approves the distribution to potential purchasers of the Bonds of a preliminary official statement that has been deemed final in accordance with this subsection (a).

(b) **Final Official Statement**. The City approves the preparation of a final official statement for each sale of one or more Series to be sold to the public in the form of the preliminary official statement with such additions, modifications and amendments as the Director of Finance deems necessary or desirable, and further authorizes the Director of Finance to execute and deliver such final official statement to the Purchaser. The City authorizes and approves the distribution by the Purchaser of that final official statement to purchasers and potential purchasers of the Bonds.

(c) **Undertaking to Provide Continuing Disclosure**. To meet the requirements of paragraph (b)(5) of Rule 15c2-12, as applicable to a participating underwriter for a Series of the Bonds, the Director of Finance is authorized to execute a written Continuing Disclosure Agreement with respect to that Series, in substantially the form attached to this ordinance as Exhibit B.

Section 24. **Supplemental or Amendatory Bond Documents**. This ordinance and the other applicable Bond Documents for any particular Series of the Bonds may not be supplemented or amended in any respect subsequent to the Issue Date of such Series, except in accordance with and subject to the provisions of this section.

(a) **Amendments Without Bond Owner Consent**. From time to time and at any time, without the consent of or notice to any owners of Parity Bonds, the City may supplement or amend the Bond Documents applicable to any Series of the Bonds for any of the purposes set forth in this subsection (a). Any such supplement or amendment may be passed, adopted, or otherwise approved by the City, without requiring the consent of the registered owners of any Parity Bonds, but may become effective only upon receipt by the City of an opinion of Bond Counsel stating that such supplement or amendment is authorized or permitted by this ordinance and, upon the effective date thereof, will be valid and binding upon the City in accordance with its terms, and will not adversely affect the exclusion from gross income for federal income tax purposes of interest on the affected Series of the Bonds, if such Series was issued and sold as Tax-Exempt Bonds. The types of supplements and amendments permitted under this subsection (a) are as follows:

(i) To cure any formal defect, omission, inconsistency, or ambiguity in the Bond Documents for such Series in a manner not adverse to the owners of any Parity Bonds;

(ii) To impose upon the Bond Registrar (with its consent) for the benefit of the owners of Parity Bonds any additional rights, remedies, powers, authority, security, liabilities, or duties which may lawfully be granted, conferred, or imposed and which are not contrary to or inconsistent with such Bond Documents as theretofore in effect;

(iii) To add to the covenants and agreements of, and limitations and restrictions upon, the City in the Bond Documents, other covenants, agreements, limitations and restrictions to be observed by the City which are not contrary to or inconsistent with such Bond Documents as theretofore in effect;

(iv) To confirm, as further assurance, any pledge under (and the subjection to any claim, lien, or pledge created or to be created by) such Bond Documents on any other money, securities, or funds;

(v) To alter the Authorized Denominations of a Series of the Bonds and to make correlative amendments and modifications to the applicable Bond Documents regarding (A) exchangeability of such Bonds for Bonds of different authorized denominations, (B) redemptions of portions of Bonds of particular authorized denominations, and (C) similar amendments and modifications of a technical nature;

(vi) To comply with any future federal law or interpretation to preserve the exclusion of the interest on any Series of the Bonds issued and sold as Tax-Exempt Bonds from gross income for federal income tax purposes and the entitlement of the City to receive from the United States Treasury the applicable Tax Credit Subsidy Payments in respect of any Series of the Bonds issued and sold as Tax Credit Subsidy Bonds;

(vii) To modify, alter, amend, or supplement the Bond Documents in any other respect which is not materially adverse to the owners of the Parity Bonds and which does not involve a change described in subsection (c); and

(viii) To add to the covenants and agreements of (or limitations and restrictions upon) the City set forth in any Bond Documents, such additional or alternative covenants, agreements, limitations, or restrictions to be observed by the City as the City may determine are necessary or convenient to accommodate a provider of Qualified Insurance or provider of a Reserve Security and are not materially adverse to the owners of the Parity Bonds.

(b) **Amendments With Bond Owner Consent**. With the consent of registered owners of not less than 60 percent in aggregate principal amount of the Parity Bonds then outstanding, the City may pass, adopt, or otherwise approve any supplement or amendment (other than amendments requiring unanimous consent as set forth in subsection (c)) to any Bond Document that is deemed necessary or desirable by the City for the purpose of modifying, altering, amending, supplementing, or rescinding, in any particular, any of the terms or provisions contained in such Bond Document other than those terms and provisions described in subsection (c).

(c) **Amendments Prohibited Except Upon Unanimous Consent**. Unless approved in writing by or on behalf of the registered owner of each Parity Bond then outstanding, nothing contained in this section shall permit, or be construed as permitting (i) a change in the times, amounts, or currency of payment of the principal of or interest on any outstanding Parity Bond,

(ii) a reduction in the principal amount or redemption price of any outstanding Parity Bond, (iii) a change in the method of determining the rate of interest thereon (other than a conversion to a new interest rate mode in accordance with the applicable Bond Documents), (iv) a preference or priority of any Parity Bond over any other Parity Bond, or (v) a reduction in the percentage of the aggregate principal amount of the then-outstanding Parity Bonds required to effect a change under subsection (b).

(d) **Notice to Bond Owners**. If at any time the City passes, adopts, or otherwise approves a supplement or amendment for any of the purposes of subsection (b) or (c), the Bond Registrar shall cause notice of the proposed supplement or amendment to be given by first class mail (i) to all registered owners of the then outstanding Parity Bonds, (ii) to each provider of Bond Insurance or a Reserve Security, and (iii) to each Rating Agency. Such notice shall briefly set forth the nature of the proposed supplement or amendment and shall state that a copy is on file at the office of the City Clerk for inspection by all owners of the then outstanding Parity Bonds.

(e) **Effective Date; Consents**. Any supplement or amendment, substantially as described in the notice mailed pursuant to subsection (d), may go into effect upon delivery to the Bond Registrar of (i) the required consents, in writing, of registered owners of the Parity Bonds, and (ii) an opinion of Bond Counsel stating that such supplement or amendment is authorized or permitted by this ordinance. Upon the effective date thereof, such supplement or amendment will be valid and binding upon the City in accordance with its terms and will not adversely affect the exclusion from gross income for federal income tax purposes of interest on any Tax-Exempt Bonds.

If registered owners of not less than the percentage of Parity Bonds required by this section shall have consented to and approved such a supplement or amendment, no owner of any Parity Bond shall have any right (i) to object to the passage, adoption, or approval of such supplement or amendment, (ii) to object to any of the terms and provisions contained therein or the operation thereof, (iii) in any manner to question the propriety of the passage, adoption, or approval thereof, (iv) to enjoin or restrain the City from passing, adopting, or otherwise approving the same, or (v) to enjoin or restrain the City, any authorized official thereof, or the Bond Registrar from taking any action pursuant to the provisions thereof. For purposes of determining whether consents representing the requisite percentage of principal amount of Parity Bonds have been obtained, the Accreted Value of Capital Appreciation Bonds shall be deemed to be the principal amount. It shall not be necessary to obtain approval of the particular form of any proposed supplement, but it shall be sufficient if the consent shall approve the substance thereof.

(f) **Effect of Amendment**. Upon the effective date of any supplement or amendment, this ordinance (or the relevant Bond Document, if not set forth herein) shall be deemed to be modified and amended in accordance therewith, and the respective rights, duties and obligations of the City and all owners of Parity Bonds then outstanding shall thereafter be determined, exercised, and enforced in accordance with and subject in all respects to such modifications and amendments. All the terms and conditions of any such supplement or amendment shall be deemed to be a part of this ordinance and the Bond Documents for any and all purposes.

(g) **Special Amendments**. If and to the extent that it is determined that the written consent of Registered Owners of the Bonds is required under subsection (b) or (c), the Registered Owners from time to time of the Bonds, by taking and holding the same, are hereby deemed to have consented to any supplement or amendment to the Bond Documents effecting any one or more of the following changes:

(i) When calculating "Annual Debt Service" to permit or require Tax Credit Subsidy Payments expected to be received by the City in any period to be credited against amounts required to be paid in respect of interest on the Parity Bonds in that period or

(ii) To permit or require Tax Credit Subsidy Payments to be deposited into the Principal and Interest Subaccount and credited against the Net Revenue otherwise required to be deposited into the Principal and Interest Subaccount; and

(iii) To permit the reimbursement obligations of the City under any Qualified Letter of Credit or Qualified Insurance (other than a Qualified Letter of Credit or Qualified Insurance obtained to satisfy all or part of the Reserve Requirement) to be secured by a lien and charge on Net Revenue equal in rank with the lien and charge upon such Net Revenue required to be paid into the Parity Bond Account to pay and secure the payment of the principal of and interest on Parity Bonds.

Section 25. **Defaults and Remedies**

(a) **Events of Default**. Each of the following shall constitute an Event of Default with respect to the Bonds:

(i) If a default is made in the payment of the principal of or interest on any of the Bonds when the same shall become due and payable; or

(ii) If the City defaults in the observance and performance of any other of the covenants, conditions and agreements on the part of the City set forth in this ordinance or the applicable Bond Documents (except as otherwise provided in this ordinance or in such Bond Documents) and such default or defaults have continued for a period of six months after the City has received from the Bond Owners' Trustee (as defined in this section) or from the registered owners of not less than 25 percent in principal amount of the Parity Bonds a written notice specifying and demanding the cure of such default. However, if the default in the observance and performance of any other of the covenants, conditions and agreements is one which cannot be completely remedied within the six months after written notice has been given, it shall not be an Event of Default with respect to the Bonds as long as the City has taken active steps within the six months after written notice has been given to remedy the default and is diligently pursuing such remedy.

Notwithstanding anything in this section to the contrary, the failure of the City or any obligated person to comply with the Continuing Disclosure Agreement shall not constitute an Event of Default, and the sole remedy of any holder of a Bond shall be to seek an order of specific performance from an appropriate court to compel the City to comply with the Continuing Disclosure Agreement.

(b) **Bond Owners' Trustee**. So long as such Event of Default has not been remedied, a trustee (the "Bond Owners' Trustee") may be appointed by the registered owners of 25 percent in principal amount of the then outstanding Parity Bonds, by an instrument or concurrent instruments in writing signed and acknowledged by such registered owners of the Parity Bonds or by their attorneys-in-fact duly authorized and delivered to such Bond Owners' Trustee, notification thereof being given to the City. That appointment shall become effective immediately upon acceptance thereof by the Bond Owners' Trustee. Any Bond Owners' Trustee appointed under the provisions of this subsection shall be a bank or trust company organized under the laws of the State of Washington or the State of New York or a national banking association. The bank or trust company acting as Bond Owners' Trustee may be removed at any time, and a successor Bond Owners' Trustee may be appointed, by the registered owners of a majority in principal amount of the Parity Bonds, by an instrument or concurrent instruments in writing signed and acknowledged by such registered owners of the Parity Bonds or by their attorneys-in-fact duly authorized. The Bond Owners' Trustee may require such security and indemnity as may be reasonable against the costs, expenses, and liabilities that may be incurred in the performance of its duties.

In the event that any Event of Default in the sole judgment of the Bond Owners' Trustee is cured and the Bond Owners' Trustee furnishes to the City a certificate so stating, that Event of Default shall be conclusively deemed to be cured and the City, the Bond Owners' Trustee and the registered owners of the Parity Bonds shall be restored to the same rights and position which they would have held if no Event of Default had occurred.

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

(c) **Suits at Law or in Equity**. Upon the occurrence of an Event of Default and during the continuance thereof, the Bond Owners' Trustee may, and upon the written request of the registered owners of not less than 25 percent in principal amount of the Parity Bonds outstanding shall, take such steps and institute such suits, actions, or other proceedings, all as it may deem appropriate for the protection and enforcement of the rights of the registered owners of the Parity Bonds, to collect any amounts due and owing to or from the City, or to obtain other appropriate relief, and may enforce the specific performance of any covenant, agreement, or condition contained in this ordinance or set forth in any of the Parity Bond Documents.

Nothing contained in this section shall, in any event or under any circumstance, be deemed to authorize the acceleration of the maturity of principal on the Parity Bonds, and the remedy of acceleration is expressly denied to the registered owners of the Parity Bonds under any circumstances including, without limitation, upon the occurrence and continuance of an Event of Default.

Any action, suit, or other proceeding instituted by the Bond Owners' Trustee hereunder shall be brought in its name as the Bond Owners' Trustee and all such rights of action upon or under any of the Parity Bonds or the provisions of this ordinance may be enforced by the Bond Owners' Trustee without the possession of any of those Parity Bonds and without the production of the same at any trial or proceedings relative thereto except where otherwise required by law. Any such suit, action, or proceeding instituted by the Bond Owners' Trustee shall be brought for the ratable benefit of all of the registered owners of those Parity Bonds, subject to the provisions of this ordinance. The respective registered owners of the Parity Bonds, by taking and holding the same, shall be conclusively deemed irrevocably to appoint the Bond Owners' Trustee the true and lawful trustee of the respective registered owners of those Parity Bonds, with authority to institute any such action, suit, or proceeding; to receive as trustee and deposit in trust any sums becoming distributable on account of those Parity Bonds; to execute any paper or documents for the receipt of money; and to do all acts with respect thereto that the registered owner might have done in person. Nothing in this ordinance shall be deemed to authorize or empower the Bond Owners' Trustee to consent to accept or adopt, on behalf of any owner of the Parity Bonds, any plan of reorganization or adjustment affecting the Parity Bonds or any right of any registered owner thereof, or to authorize or empower the Bond Owners' Trustee to vote the claims of the registered owners thereof in any receivership, insolvency, liquidation, bankruptcy, reorganization, or other proceeding to which the City is a party.

(d) **Application of Money Collected by Bond Owners' Trustee**. Any money collected by the Bond Owners' Trustee at any time pursuant to this section shall be applied in the following order of priority:

(i) to the payment of the charges, expenses, advances, and compensation of the Bond Owners' Trustee and the charges, expenses, counsel fees, disbursements, and compensation of its agents and attorneys;

(ii) to the payment to the persons entitled thereto of all installments of interest then due on the Parity Bonds in the order of maturity of such installments and, if the amount available shall not be sufficient to pay in full any installment or installments maturing on the same date, then to the payment thereof ratably, according to the amounts due thereon to the persons entitled thereto, without any discrimination or preference; and

(iii) to the payment to the persons entitled thereto of the unpaid principal amounts of any Parity Bonds which shall have become due (other than Parity Bonds previously called for redemption for the payment of which money is held pursuant to the provisions of the applicable Bond Documents), whether at maturity or by proceedings for redemption or otherwise, in the order of their due dates and, if the amount available shall not be sufficient to pay in full the principal amounts due on the same date, then to the payment thereof ratably, according to the principal amounts due thereon to the persons entitled thereto, without any discrimination or preference.

(e) **Duties and Obligations of Bond Owners' Trustee**. The Bond Owners' Trustee shall not be liable except for the performance of such duties as are specifically set forth herein. During an Event of Default, the Bond Owners' Trustee shall exercise such of the rights and powers vested in it hereby, and shall use the same degree of care and skill in its exercise, as a prudent person would exercise or use under the circumstances in the conduct of that person's own affairs. The Bond Owners' Trustee shall have no liability for any act or omission to act hereunder except for the Bond Owners' Trustee's own negligent action, its own negligent failure to act or its own willful misconduct. The duties and obligations of the Bond Owners' Trustee shall be determined solely by the express provisions of this ordinance, and no implied powers, duties or obligations of the Bond Owners' Trustee shall be read into this ordinance.

The Bond Owners' Trustee shall not be required to expend or risk its own funds or otherwise incur individual liability in the performance of any of its duties or in the exercise of any of its rights or powers as the Bond Owners' Trustee, except as may result from its own negligent action, its own negligent failure to act or its own willful misconduct.

The Bond Owners' Trustee shall not be bound to recognize any person as a registered owner of any Parity Bond until registered ownership, if disputed, has been established to its reasonable satisfaction.

The Bond Owners' Trustee may consult with counsel and the opinion of such counsel shall be full and complete authorization and protection in respect of any action taken or suffered by it hereunder in good faith and in accordance with the opinion of such counsel. The Bond Owners' Trustee shall not be answerable for any neglect or default of any person, firm or corporation employed and selected by it with reasonable care.

(f) **Suits by Individual Parity Bond Owners Restricted**. No owner of any one or more Parity Bonds shall have any right to institute any action, suit or proceeding at law or in equity for the enforcement of same unless:

(i) an Event of Default has happened and is continuing; and

(ii) a Bond Owners' Trustee has been appointed; and

(iii) such owner previously shall have given to the Bond Owners' Trustee written notice of the Event of Default on account of which such suit, action or proceeding is to be instituted; and

(iv) the registered owners of 25 percent in principal amount of the Parity Bonds, after the occurrence of such Event of Default, have made written request of the Bond Owners' Trustee and have afforded the Bond Owners' Trustee a reasonable opportunity to institute such suit, action or proceeding; and

(v) there have been offered to the Bond Owners' Trustee security and indemnity satisfactory to it against the costs, expenses, and liabilities to be incurred therein or thereby; and

(vi) the Bond Owners' Trustee has refused or neglected to comply with such request within a reasonable time.

No owner of any Parity Bond shall have any right in any manner whatever by action to affect or impair the obligation of the City to pay from Net Revenue the principal of and interest on such Parity Bonds to the respective registered owners thereof when due.

Section 26. **General Authorization**. In addition to the specific authorizations in this ordinance, the Mayor and the Director of Finance and each of the other appropriate officers of the City are each authorized and directed to do everything such officer may judge necessary, appropriate, or desirable in order to carry out the terms and provisions of, and complete the transactions contemplated by, this ordinance. In particular and without limiting the foregoing:

(a) The Director of Finance, in the Director's discretion and without further action by the City Council, (i) may issue requests for proposals to provide underwriting services or financing facilities (including, without limitation, Qualified Insurance, a Qualified Letter of Credit, or other credit support or liquidity facility), and may execute engagement letters and other agreements with underwriters and other financial institutions (including providers of liquidity or credit support) based on responses to such requests; (ii) may select and make decisions regarding the Bond Registrar, fiscal or paying agents, and any Securities Depository for each Series of the Bonds; (iii) may take any and all actions necessary or convenient to provide for the conversion of interest rate modes for any Series in accordance with the applicable Bond Documents; and (iv) may take such actions on behalf of the City as are necessary or appropriate for the City to designate, qualify, or maintain the tax-exempt treatment with respect to any Series issued as Tax-Exempt Bonds, to receive from the United States Treasury the applicable Tax Credit Subsidy Payments in respect of any Series issued as Tax Credit Subsidy Bonds, and to otherwise receive any other federal tax benefits relating to any Series of the Bonds that are available to the City; and

(b) The Mayor and the Director of Finance are each separately authorized to execute and deliver (i) any and all contracts or other documents as are consistent with this ordinance and for which the City's approval is necessary or to which the City is a party (including but not limited to agreements with escrow agents, refunding trustees, liquidity or credit support providers, providers of Qualified Insurance or Reserve Securities, remarketing agents, underwriters, lenders or other financial institutions, fiscal or paying agents, Qualified Counterparties, custodians, and the Bond Registrar); and (ii) such other contracts or documents incidental to: the issuance and sale of any Series of the Bonds; the establishment of the interest rate or rates on a Bond; or the conversion, tender, purchase, remarketing, or redemption of a Bond, as may in the Mayor's or Director's judgment be necessary or appropriate.

Section 27. **Amendment of Omnibus Refunding Ordinance**. The following definition in the Omnibus Refunding Ordinance is amended to read as set forth in this section. Amendments are shown as revisions to Ordinance 125714, and amendments are marked using double underlining to indicate added text and using double parentheses and strikethrough formatting to indicate deleted text.

(a) **Amendments to Section 1**. The following definition is amended as follows:

* * *

"**Refundable Bonds**" means each series of Parity Bonds and outstanding subordinate obligations of the Water System that have been designated, or may in the future be designated, as refundable under this ordinance, including: (a) each series of Outstanding Parity Bonds listed in Exhibit A; (b) each Series of the Bonds issued pursuant to this ordinance; ((~~and~~)) (c) each other series of Future Parity Bonds so designated by the City; and (d) all outstanding subordinate obligations of the Water System, including the outstanding State loans listed on Exhibit C to this amendatory ordinance, and all future loan agreements entered into pursuant to chapter 39.69 RCW.

* * *

(b) The amendments set forth in this section are intended to supplement the Omnibus Refunding Ordinance in a manner that is not materially adverse to the owners of the Outstanding Parity Bonds. Nonetheless, any amendment set forth in this section that is found by a court of competent jurisdiction to materially adversely affect owners of outstanding Parity Bonds shall be of no force or effect, and the provisions of the Omnibus Refunding Ordinance prior to the effective date of this amendatory ordinance shall continue in effect as to such outstanding Parity Bonds.

Section 28. **Severability**. The provisions of this ordinance are declared to be separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section, subsection, or portion of this ordinance, or the invalidity of its application to any person or circumstance, does not affect the validity of the remainder of this ordinance or the validity of its application to other persons or circumstances.

Section 29. **Ratification of Prior Acts**. Any action consistent with the authority of this ordinance taken after its passage and prior to its effective date is ratified and confirmed.

Section 30. **Section Headings**. Section headings in this ordinance are nonsubstantive.

Section 31. **Effective Date**. This ordinance shall take effect and be in force 30 days after its approval by the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020.

Passed by the City Council the 22nd day of November, 2021, and signed by me in open session in authentication of its passage this 22nd day of November, 2021.

____

President ____________ of the City Council

☑ Approved / ☐ returned unsigned / ☐ vetoed this 2nd day of December, 2021.

____

Jenny A. Durkan, Mayor

Filed by me this 2nd day of December, 2021.

____

Monica Martinez Simmons, City Clerk

(Seal)

Exhibits:
Exhibit A – List of Outstanding Parity Bonds
Exhibit B – Form of Continuing Disclosure Agreement
Exhibit C – List of Outstanding Subordinate Obligations Designated as Refundable Bonds

EXHIBIT A

OUTSTANDING WATER PARITY BONDS

			Bond Legislation		
Issue Name	**Dated Date**	**Original Par Amount**	**New Money Ord.**	**Refunding Ord.**	**Bond Sale Res.**
Water System Revenue Bonds, 2010A (Taxable Build America Bonds – Direct Payment)	1/21/2010	$109,080,000	Ord. 123168	- -	Res. 31182
Water System Refunding Revenue Bonds, 2012	5/30/2012	$238,770,000	- -	Ord. 121939 (as amended by Ord. 122837)	Res. 31382
Water System Improvement and Refunding Revenue Bonds, 2015	6/10/2015	$340,840,000	Ord. 124340	Ord. 124339 (amending and restating Ord. 121939)	Res. 31586
Water System Improvement and Refunding Revenue Bonds, 2017	1/25/2017	$194,685,000	Ord. 125183	Ord. 124339 (amending and restating (Ord. 121939) as amended by Ord. 125183	Res. 31726
Water System Improvement and Refunding Revenue Bonds, 2021 (Green Bonds)	6/17/2021	$82,220,000	Ord. 125713 (as amended by Ord. 126225)	Ord. 125714	- -

EXHIBIT B

FORM OF CONTINUING DISCLOSURE AGREEMENT

The City of Seattle, Washington (the "City") makes the following written undertaking (the "Undertaking") for the benefit of the Owners of the City's Water System Revenue Bonds, [Year] [Series] (the "Bonds"), for the sole purpose of assisting the underwriter for the Bonds, in meeting the requirements of paragraph (b)(5) of Rule 15c2-12 (the "Rule"), as applicable to a participating underwriter for the Bonds. Capitalized terms used but not defined below shall have the meanings given in Ordinance ________ (the "Bond Ordinance").

(a) Undertaking to Provide Annual Financial Information and Notice of Listed Events. The City undertakes to provide or cause to be provided, either directly or through a designated agent, to the Municipal Securities Rulemaking Board (the "MSRB"), in an electronic format as prescribed by the MSRB, accompanied by identifying information as prescribed by the MSRB:

(i) Annual financial information and operating data regarding the Water System (the "Water System") of the type included in the final official statement for the Bonds and described in subsection (b) of this section ("annual financial information"). The timely filing of unaudited financial statements shall satisfy the requirements and filing deadlines pertaining to the filing of annual financial statements under subsection (b), provided that audited financial statements are to be filed if and when they are otherwise prepared and available to the City.

(ii) Timely notice (not in excess of 10 business days after the occurrence of the event) of the occurrence of any of the following events with respect to the Bonds: (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notice 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; (7) modifications to rights of holders of the Bonds, if material; (8) Bond calls (other than scheduled mandatory redemptions of Term Bonds), if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the Bonds, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership or similar event of the City, as such "Bankruptcy Events" are defined in the Rule; (13) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City 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; (14) appointment of a successor or additional trustee or the change of name of a trustee, if material; (15) incurrence of a financial obligation of the City, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the City, any of which affect holders of the Bonds, if material; and (16) any default, event of acceleration, termination event, modification of terms, or other similar event under the terms of a financial obligation of the City, any of which reflect financial difficulties.

For purposes of this Undertaking, the term "financial obligation" shall mean a debt obligation; derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or a guarantee of either a debt obligation or a derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation. The term "financial obligation" does not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

(iii) Timely notice of a failure by the City to provide required annual financial information on or before the date specified in subsection (b) of this section.

(b) Type of Annual Financial Information Undertaken to be Provided. The annual financial information and operating data that the City undertakes to provide in subsection (a) of this section:

(i) Shall consist of (1) annual financial statements of the Water System prepared in accordance with applicable generally accepted accounting principles applicable to governmental units (except as otherwise noted therein), as such principles may be changed from time to time and as permitted by applicable state law; (2) a statement of outstanding bonded debt secured by Net Revenue of the Water System; (3) debt service coverage ratios; (4) general customer statistics, such as number and type of customers and revenues by customer class; and (5) current water rates;

(ii) Shall be provided not later than the last day of the ninth month after the end of each fiscal year of the City (currently, a fiscal year ending December 31), as such fiscal year may be changed as required or permitted by state law, commencing with the City's fiscal year ending December 31, 20__; and

(iii) May be provided in a single document or multiple documents, and may be incorporated by specific reference to documents available to the public on the Internet website of the MSRB or filed with the Securities and Exchange Commission.

(c) Amendment of Undertaking. This Undertaking is subject to amendment after the primary offering of the Bonds without the consent of any Owner or holder of any Bond, or of any broker, dealer, municipal securities dealer, participating underwriter, rating agency or the MSRB, under the circumstances and in the manner permitted by the Rule, including:

(i) The amendment may only 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 City, or type of business conducted by the City;

(ii) The Undertaking, as amended, would have complied with the requirements of the Rule at the time of the primary offering, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(iii) The amendment does not materially impair the interests of holders, as determined either by parties unaffiliated with the City (e.g., bond counsel or other counsel familiar with federal securities laws), or by an approving vote of bondholders pursuant to the terms of the Bond Ordinance at the time of the amendment.

The City will give notice to the MSRB of the substance (or provide a copy) of any amendment to this Undertaking and a brief statement of the reasons for the amendment. If the amendment changes the type of annual financial information to be provided, the annual financial information containing the amended financial information will include a narrative explanation of the effect of that change on the type of information to be provided.

(d) Beneficiaries. This Undertaking shall inure to the benefit of the City and any Owner of Bonds, and shall not inure to the benefit of or create any rights in any other person.

(e) Termination of Undertaking. The City's obligations under this Undertaking shall terminate upon the legal defeasance, prior redemption, or payment in full of all of the Bonds. In addition, the City's obligations under this Undertaking shall terminate if those provisions of the Rule that require the City to comply with this Undertaking become legally inapplicable in respect of the Bonds for any reason, as confirmed by an opinion of nationally recognized bond counsel or other counsel familiar with federal securities laws delivered to the City, and the City provides timely notice of such termination to the MSRB.

(f) Remedy for Failure to Comply with Undertaking. As soon as practicable after the City learns of any material failure to comply with this Undertaking, the City will proceed with due diligence to cause such noncompliance to be corrected. No failure by the City or other obligated person to comply with this Undertaking shall constitute a default in respect of the Bonds. The sole remedy of any Owner of a Bond shall be to take such actions as that Owner deems necessary, including seeking an order of specific performance from an appropriate court, to compel the City or other obligated person to comply with this Undertaking.

(g) Designation of Official Responsible to Administer Undertaking. The Director of Finance of the City (or such other officer of the City who may in the future perform the duties of that office) or his or her designee is the person designated, in accordance with the Bond Ordinance, to carry out this Undertaking of the City in respect of the Bonds set forth in this section and in accordance with the Rule, including, without limitation, the following actions:

(i) Preparing and filing the annual financial information undertaken to be provided;

(ii) Determining whether any event specified in subsection (a)(ii) has occurred, assessing its materiality, where necessary, with respect to the Bonds, and preparing and disseminating any required notice of its occurrence;

(iii) Determining whether any person other than the City is an “obligated person” within the meaning of the Rule with respect to the Bonds, and obtaining from such person an undertaking to provide any annual financial information and notice of listed events for that person in accordance with the Rule;

(iv) Selecting, engaging and compensating designated agents and consultants, including but not limited to financial advisors and legal counsel, to assist and advise the City in carrying out this Undertaking; and

(v) Effecting any necessary amendment of the Undertaking.

EXHIBIT C

LIST OF OUTSTANDING SUBORDINATE OBLIGATIONS DESIGNATED AS REFUNDABLE BONDS

Loan Name/Reference	Project Description	Year of Agreement	Maximum Loan Amount
04-65104-030	Myrtle Reservoir	2005	$4,040,000
05-96300-022	Beacon Hill Reservoir	2007	4,040,000
06-96300-020	West Seattle Reservoir	2008	3,030,000
DM09-952-028	Maple Leaf Reservoir	2010	3,030,000
DM09-952-072	Maple Leaf Reservoir ARRA	2010	7,341,758
DM13-952-135	Chester Morse Lake Pump Plant	2014	12,120,000
DM16-952-009	Chester Morse Lake Pump Plant	2016	6,060,000

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APPENDIX B

FORM OF BOND COUNSEL OPINION

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Stradling Yocca Carlson & Rauth
A Professional Corporation
601 Union Street, Suite 2424
Seattle, WA 98101
206 829 3000
stradlinglaw.com

[Date of Approving Opinion]

The City of Seattle, Washington

Re: The City of Seattle, Washington
$93,260,000 Water System Improvement and Refunding Revenue Bonds, 2022

We have served as bond counsel to The City of Seattle, Washington (the "City"), in connection with the issuance of the above referenced bonds (the "Bonds"). In our capacity as bond counsel, we have examined such law and such certified proceedings and other documents as we have deemed necessary to render this opinion. As to matters of fact material to this opinion, we have relied upon representations contained in the certified proceedings and other certifications of public officials furnished to us.

The Bonds are issued by the City pursuant to Ordinance 126483 (the "New Money Ordinance") and Ordinance 125714 (the "Refunding Bond Ordinance," and together with the New Money Ordinance, the "Bond Ordinances") to provide funds (i) to pay for part of the costs of various projects of the Municipal Water System, (ii) to make a deposit into the Reserve Subaccount, if necessary, (iii) refund certain of the City's outstanding Water System Refunding Revenue Bonds, 2012, and (iv) to pay the costs of issuing the Bonds and administering the Refunding Plan, all as set forth in the Bond Documents (as that term is defined in the Bond Ordinances).

Reference is made to the Bond Ordinances for the definitions of capitalized terms used and not otherwise defined herein.

Under the Internal Revenue Code of 1986, as amended (the "Code"), the City is required to comply with certain requirements after the date of issuance of the Bonds in order to maintain the exclusion of the interest on the Bonds from gross income for federal income tax purposes, including, without limitation, requirements concerning the qualified use of Bond proceeds and the facilities financed or refinanced with Bond proceeds, limitations on investing gross proceeds of the Bonds in higher yielding investments in certain circumstances and the arbitrage rebate requirement to the extent applicable to the Bonds. The City has covenanted in the Bond Ordinances to comply with those requirements, but if the City fails to comply with those requirements, interest on the Bonds could become taxable retroactive to the date of issuance of the Bonds. We have not undertaken and do not undertake to monitor the City's compliance with such requirements.

As of the date of initial delivery of the Bonds to the purchaser thereof and full payment therefor, it is our opinion that under existing law:

1. The City is a duly organized and legally existing first class city under the laws of the State of Washington.

2. The City has duly authorized and approved the Bond Ordinances, and the Bonds are issued in full compliance with the provisions of the Constitution and laws of the State of Washington, the Bond Ordinances and other ordinances and resolutions of the City relating thereto.

3. The Bonds constitute valid obligations of the City payable solely out of the Net Revenue of the Municipal Water System and money in the Water Revenue Parity Bond Account and the subaccounts therein (including the Reserve Subaccount, but only until such time as the Bonds are no longer "Covered Parity Bonds" under the Bond Documents), except only to the extent that enforcement of payment may be limited by bankruptcy, insolvency or other laws affecting creditors' rights and by principles of equity if equitable remedies are sought.

4. The Bonds are not general obligations of the City.

5. Assuming compliance by the City after the date of issuance of the Bonds with applicable requirements of the Code, under existing statutes, regulations, rulings and judicial decisions, the interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of calculating the federal alternative minimum tax imposed on individuals.

This opinion is given as of the date hereof, and we assume no obligation to 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.

We express no opinion herein concerning the completeness or accuracy of any official statement, offering circular or other sales or disclosure material relating to the issuance of the Bonds or otherwise used in connection with the Bonds. We bring to your attention the fact that the foregoing opinions are expressions of our professional judgment on the matters expressly addressed and do not constitute guarantees of result.

Respectfully submitted,

APPENDIX C

2021 AUDITED FINANCIAL STATEMENTS OF THE WATER FUND

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

SEATTLE PUBLIC UTILITIES – WATER FUND (AN ENTERPRISE FUND OF THE CITY OF SEATTLE)

December 31, 2021 and 2020

MOSSADAMS

Table of Contents

Report of Independent Auditors

To the Director of Seattle Public Utilities
Water Fund
Seattle, Washington

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Seattle Public Utilities – Water Fund (the Fund), which comprise the statements of net position as of December 31, 2021 and 2020, 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.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Fund as of December 31, 2021 and 2020, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Fund and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Financial Reporting Entity

As discussed in Note 1, the financial statements present only the Fund and do not purport to, and do not, present fairly the financial position of City of Seattle, Washington, as of December 31, 2021 and 2020, the related changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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 Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Fund's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings and certain internal control–related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of Seattle Public Utilities' proportionate share of the net pension liability, schedule of Seattle Public Utilities' contributions, and the schedule of Seattle Public Utilities' proportionate share of the OPEB liability and related ratios (collectively, required supplementary information) be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic 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 basic financial statements, and other knowledge we obtained during our audit of the basic 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

Management is responsible for the other information as listed in the table of contents. The other information comprises the water fund debt service coverage calculation, water system operating statistics, major retail water customers, and water rates but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 29, 2022, 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 29, 2022

As management of Seattle Public Utilities (SPU), a department of the City of Seattle (the City), we offer readers of SPU's financial statements this narrative overview and analysis of the financial activities of the Water Fund (the Fund) for the fiscal years ended December 31, 2021 and 2020. The revenues, expenses, assets, deferred outflows and inflows of resources, liabilities, and deferred inflows of resources of Seattle's water system are recorded in the Fund, the functions of which are primarily supported by user fees and charges to customers. The financial situation of other aspects of Seattle City government, including other utility services and general government operations, are reported elsewhere.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Fund's financial statements. The financial statements include Management's Discussion and Analysis and basic financial statements with accompanying notes.

Basic financial statements – The basic financial statements of the Fund report information like the presentation used by private sector companies. These statements offer short-term and long-term financial information about its activities. The basic financial statements begin on page 13 of this report and are comprised of three components: (1) statements of net position, (2) statements of revenues, expenses, and changes in net position, and (3) statements of cash flows.

The statements of net position present information, as of December 31, 2021 and 2020, on all the Fund's assets, deferred outflows of resources, liabilities and deferred inflows of resources. The difference between assets combined with deferred outflows of resources and liabilities combined with deferred inflows of resources is reported as net position. They also provide information about the nature and amounts of investments in resources (assets and deferred outflows of resources), obligations to the Fund's creditors (liabilities and deferred inflows of resources) and provide the basis for assessing the liquidity and financial flexibility of the Fund.

The statements of revenues, expenses, and changes in net position present changes in the Fund's net position for the years ended December 31, 2021 and 2020. All changes in net position are reported when the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. These statements reflect the results of the Fund's operations for the years identified to provide information about the Fund's credit worthiness and its ability to successfully recover all its costs through service fees and other charges.

The statements of cash flows are required to provide information about the Fund's cash receipts and cash payments during the years ended December 31, 2021 and 2020, and to provide answers to questions about sources, uses, and impacts to cash. These statements report cash receipts, cash payments, and net changes in cash resulting from operations, investing and financing activities for the reporting period.

Notes to the financial statements – The notes are an integral part of the financial statements. They provide additional disclosures that are essential to a full understanding of the data provided in the financial statements, such as for certain estimates and financing details. The notes to the financial statements begin on page 18 of this report.

Financial Analysis

Increases or decreases in net position may serve over time as a useful indicator of whether the Fund's financial position is improving or deteriorating. At December 31, 2021 and 2020, the Fund's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources, resulting in surpluses in total net position of $714.0 million and $641.8 million, respectively. In 2021, the Fund's change in net position was an increase of $72.3 million (11.3%) as compared to 2020, which increased $55.9 million (9.5%). The following summary statement of net position presents the assets and deferred outflows of resources of the Fund and shows the mix of liabilities, deferred inflows of resources, and net position used to acquire these assets:

Summary Statement of Net Position

	2021	2020	2019
ASSETS			
Current assets	$ 154,864,335	$ 186,462,740	$ 173,480,929
Capital assets, net	1,341,563,530	1,338,082,729	1,319,864,509
Other	152,086,836	130,344,057	160,646,632
Total assets	1,648,514,701	1,654,889,526	1,653,992,070
DEFERRED OUTFLOWS OF RESOURCES	28,252,378	31,706,364	42,606,814
Total assets and deferred outflows of resources	$ 1,676,767,079	$ 1,686,595,890	$ 1,696,598,884
LIABILITIES			
Current liabilities	$ 86,565,262	$ 81,303,808	$ 86,054,632
Revenue bonds	703,243,284	767,000,352	817,813,647
Other	106,059,564	122,317,203	139,523,671
Total liabilities	895,868,110	970,621,363	1,043,391,950
DEFERRED INFLOWS OF RESOURCES			
Revenue stabilization fund	41,720,888	59,880,197	58,869,864
Deferred inflows - other	25,146,855	14,320,203	8,476,141
Total deferred inflows of resources	66,867,743	74,200,400	67,346,005
NET POSITION			
Net investment in capital assets	662,512,834	563,868,163	526,544,348
Restricted	16,440,207	13,230,176	12,976,412
Unrestricted	35,078,185	64,675,788	46,340,169
TOTAL NET POSITION	714,031,226	641,774,127	585,860,929
Total liabilities, deferred inflows of resources and net position	$ 1,676,767,079	$ 1,686,595,890	$ 1,696,598,884

Financial Analysis (continued)

2021 Compared to 2020

Assets – Current assets decreased $31.6 million (-16.9%) from 2020. This is primarily due to decreases in operating cash of $32.7 million and fair value of investments of $5.0 million offset by increases in accounts receivable of $4.6 million, unbilled revenue of $0.3 million and due from other governments of $0.9 million. The change in operating cash is primarily due to bond refunding and increased spending for capital assets, of which a certain portion of those costs are reimbursed to operating cash from the bond proceeds. The increase in accounts receivable is mostly due to slower than expected payments from customers due to the COVID-19 pandemic.

Capital assets increased $3.5 million (0.3%) from 2020 mainly due to closed projects transferred from construction in progress (Note 3).

Other assets increased $21.7 million (16.7%) from 2020. The largest portion of the change was due to an increase in restricted cash and equity in pooled investments of $20.1 million from proceeds of bonds.

Deferred outflows of resources – Deferred outflows of resources decreased by $3.5 million (-10.9%) from 2020. This change resulted mainly from assumptions related to pension accounting and differences in expected and actual experience in other post-employment benefits.

Liabilities – Current liabilities increased $5.3 million (6.5%) from 2020. This change mostly resulted from increases of $3.0 million in due to other funds, other liabilities of $2.9 million and revenue bonds due in one year of $1.1 million offset by decrease in $0.7 million of accounts payable, $0.6 million of interest payable and $0.5 million in salaries and benefits payable.

Noncurrent liabilities decreased $80 million (-9.0%) over 2020. This is mainly to decrease of $65.0 million in revenue bonds due to refunding and defeasance, $14.8 of net pension liability and $2.0 of loans due to scheduled payments.

Deferred inflows of resources – Deferred inflows of resources decreased by $7.3 million (-9.9%) from 2020. This decrease is mainly due to a decrease of $18.2 million in the revenue stabilization account as a result of withdrawal from the account offset by increase of deferred inflows of $6.9 in pension and OPEB and of $3.9 of unamortized gain on advanced refunding on bond issuance.

Net position – Net investment in capital assets was the largest portion of the Fund's net position ($662.5 million or 92.8%). This amount reflects the Fund's investment in capital assets such as land, buildings, and equipment, less accumulated depreciation and any related outstanding debt used to acquire those assets. The Fund uses these assets to provide services to customers; consequently, these assets are not available for future spending. Although the Fund's investment in its capital assets is reported net of related debt, the resources needed to repay the debt are provided by fees paid by customers for services provided by these assets. In 2021, net investment in capital assets increased $98.6 million from 2020 primarily from an increase in utility plant and construction in progress. Other contributing factors are decreases in debt and debt related accounts, offset by an increase in construction cash of $38.2 million as a result of bond issuance.

Financial Analysis (continued)

The Fund's restricted net position ($16.4 million or 2.3%) represents resources that are subject to restrictions on how they may be used. Restricted net position increased slightly by $3.2 million.

The Fund's unrestricted net position ($35.1 million or 4.9%) represents resources that are not subject to external restrictions and may be used to meet the Fund's obligations to creditors. This portion decreased $29.6 million in 2021 as compared to 2020 primarily as a result of a decrease in operating cash due to the defeasance of 2012 Bonds.

2020 Compared to 2019

Assets – Current assets increased $13.0 million (7.5%) from 2019. This is primarily due to increases in operating cash of $10.7 million and accounts receivable of $4.9 million offset by decreases in due from other funds of $1.9 million, unbilled revenue of $0.6 million and due from other governments of $0.3 million. The change in operating cash is primarily due to increased spending for capital assets, of which a certain portion of those costs are reimbursed to operating cash from the bond proceeds. The increase in accounts receivable is mostly due to slower than expected payments from customers due to the COVID-19 pandemic.

Capital assets increased $18.2 million (1.4%) from 2019 mainly due to closed projects transferred from construction in progress (Note 3).

Other assets decreased $30.3 million (-18.9%) from 2019. The largest portion of the change was due to a decrease in restricted cash and equity in pooled investments of $29.4 million for spending on capital projects.

Deferred outflows of resources – Deferred outflows of resources decreased by $10.9 million (-25.6%) from 2019. This change resulted mainly from assumptions related to pension accounting and differences in expected and actual experience in other post-employment benefits (OPEB).

Liabilities – Current liabilities decreased $4.8 million (-5.5%) from 2019. This change mostly resulted from decreases of $1.1 million in accounts payable and $3.8 million in salaries and benefits payable.

Noncurrent liabilities decreased $68.0 million (-7.1%) over 2019. This decrease is mainly due to principal payments of $46.2 million in revenue bonds and loans of $2.0 million and decrease in net pension liability of $16.4 million and bond premiums of $4.6 million. These decreases were partially offset by an increase of $1.1 million in compensated absences payable.

Deferred inflows of resources – Deferred inflows of resources increased by $6.9 million (10.2%) from 2019. This increase is mainly due to an increase of $1.0 million in the revenue stabilization account and $5.8 million in deferred inflows-pension and OPEB.

Financial Analysis (continued)

Net position – Net investment in capital assets was the largest portion of the Fund's net position ($563.9 million or 87.9%). This amount reflects the Fund's investment in capital assets such as land, buildings, and equipment, less accumulated depreciation and any related outstanding debt used to acquire those assets. The Fund uses these assets to provide services to customers; consequently, these assets are not available for future spending. Although the Fund's investment in its capital assets is reported net of related debt, the resources needed to repay the debt are provided by fees paid by customers for services provided by these assets. In 2020, net investment in capital assets increased $37.3 million from 2019 primarily from an increase in utility plant and construction in progress. Other contributing factors are decreases in debt and debt related accounts, offset by a decrease in construction cash of $29.4 million.

The Fund's restricted net position ($13.2 million or 2.0%) represents resources that are subject to restrictions on how they may be used. Restricted net position increased slightly by $0.3 million.

The Fund's unrestricted net position ($64.7 million or 10.1%) represents resources that are not subject to external restrictions and may be used to meet the Fund's obligations to creditors. This portion increased $18.3 million in 2020 as compared to 2019 primarily as a result of an increase in operating cash.

Summary Statements of Revenues, Expenses, and Changes in Net Position

	2021	2020	2019
Operating revenues	$ 303,499,096	$ 278,577,869	$ 281,008,043
Operating expenses	(222,123,802)	(213,442,003)	(220,594,542)
Net operating income	81,375,294	65,135,866	60,413,501
Other expenses, net of other revenues	(18,648,118)	(19,433,866)	(18,930,740)
Fees, contributions, and grants	9,529,923	10,211,198	7,998,790
Change in net position	$ 72,257,099	$ 55,913,198	$ 49,481,551

2021 Compared to 2020

Operating revenues increased approximately $24.9 million (8.9%) over 2020. The change was mainly driven by a transfer in from the revenue stabilization account of $19.0 million and an increase in retail water utility service of $5.6 million.

Financial Analysis (continued)

Operating expenses increased $8.7 million (4.1%) from 2020. Notable factors affecting this change include increases of $5.5 million in write offs of capital projects and other expenses, $3.2 million in services, $1.6 million of intergovernmental payments, $1.2 million in depreciation and amortization. These increases are offset by decreases of $3.1 million in salaries, wages and benefits.

Other expenses, net of other revenues decreased by $0.8 million (4.0%) over 2020. The change was primarily due to a decrease in interest and debt service expenses of $2.3 million, offset by $5 million increase in recoveries and $2.6 million increase in investment losses realized and unrealized.

Capital fees, contributions and grants decreased by $0.7 million (6.7%) over 2020. The main factors for the decrease are $1.7 million decrease in donations offset by $1.2 increase in capital contributions.

2020 Compared to 2019

Operating revenues decreased approximately $2.4 million (-0.9%) over 2019. The change was mainly driven by a decrease in unbilled revenue of $1.8 million, utility discount of $1.0 million, retail water sales of $0.9 million, tap revenue of $1.2 million and $0.3 million of miscellaneous fines and penalties. The decreases were offset by increases of $0.3 million in municipal utility services and $2.5 million in rate stabilization account.

Operating expenses decreased $7.2 million (-3.2%) from 2019. Notable factors affecting this change include decreases of $1.4 million in salaries, wages and benefits, $2.7 million in services, $1.9 million in other operating expenses, $0.6 million in intergovernmental payments and $0.4 million in depreciation and amortization.

Other expenses, net of other revenues increased by $0.5 million (2.7%) over 2019. The change was primarily due to a decrease in interest and debt service expenses of $2.8 million.

Capital fees, contributions and grants increased by $2.2 million (27.7%) over 2019. The main factors for the decrease are $3.1 million increase in donations.

Financial Analysis (continued)

Capital Assets

The following table summarizes capital assets, net of accumulated depreciation, by major asset category as of December 31, 2021, 2020, and 2019:

Summary of Capital Assets, Net of Accumulated Depreciation

	December 31,		
	2021	2020	2019
Land and land rights	$ 54,361,920	$ 54,016,672	$ 48,319,324
Buildings	131,209,658	136,701,527	138,081,286
Structures	825,180,582	809,255,051	790,865,802
Machinery and equipment	254,893,874	270,111,490	285,317,611
Computer systems	19,794,129	22,261,534	22,096,338
Construction in progress	53,698,154	43,894,329	33,428,453
Artwork	2,150,701	1,567,614	1,481,184
Property held for future use	274,512	274,512	274,512
Capital assets, net of accumulated depreciation	$ 1,341,563,530	$ 1,338,082,729	$ 1,319,864,510

Additional information about the Fund's capital assets can be found in Note 3 of this report.

2021 Compared to 2020

The Fund's investment in capital assets for the year ended December 31, 2021, was $1.34 billion, net of accumulated depreciation. This represents an increase of $3.5 million (0.3%) compared to 2020. Addition of capital assets was offset by increased depreciation and disposals. Highlights of the Fund's major capital assets placed in service during 2021 include the following:

- $19.7 million for Water infrastructure improvements and rehabilitation
- $10.6 million reservoir coverings
- $5.8 million for Cedar and Tolt infrastructure and Facilities
- $1.8 million for Technology
- $ 0.5 million in City facility improvements.

As of December 31, 2021, the Fund had $53.7 million in construction in progress. Major projects under construction are the following:

- $7.2 million for Water system improvements and rehabilitation
- $4.7 million for Technology
- $3.2 million for Cedar and Tolt infrastructure and facility
- $1.6 million in City facility
- $0.4 million in reservoir covering

Financial Analysis (continued)

2020 Compared to 2019

The Fund's investment in capital assets for the year ended December 31, 2020, was $1.3 billion, net of accumulated depreciation. This represents an increase of $18.2 million (1.4%) compared to 2019. Addition of capital assets was offset by increased depreciation and disposals. Highlights of the Fund's major capital assets placed in service during 2020 include the following:

$21.9 million for Water infrastructure improvements and rehabilitation
$4.9 million for Cedar Falls and Lake Young's Facilities
$5.0 million for Infrastructure work for Cedar and Tolt
$4.3 million for Technology

As of December 31, 2020, the Fund had $33.4 million in construction in progress. Major projects under construction are the following:

$27.5 million for Water system improvements and rehabilitation
$12.7 million for Regional Facility and infrastructure
$4.9 million for Technology

Debt Administration

The Fund's debt primarily consists of bonded debt and loans. Bonded debt is secured solely by water system revenues and provides financing for capital improvements. Loans issued by the Washington State Agencies for certain capital improvements are unsecured. The Fund's credit ratings on its bonds were Aaa and Aa1 by Moody's Investors Service Inc. and Standard & Poor's Rating Services, respectively. Additional details about the Fund's revenue bonds and loans are in Notes 4 and 10 of this report.

2021 Compared to 2020

At December 31, 2021, the Fund had $664.5 million in bonded debt and $22.7 million in loans, as compared to $728.5 million and $24.8 million, respectively, at December 31, 2020. Bonded debt decreased a net $64.0 million, attributed to scheduled payments of debt principal on existing bonds, issuance of a new revenue and refunding bonds and defeasance of old bonds. Loans also decreased $2.0 million due to scheduled principal payments on existing loans.

2020 Compared to 2019

At December 31, 2020, the Fund had $728.5 million in bonded debt and $24.8 million in loans, as compared to $774.1 million and $26.8 million, respectively, at December 31, 2019. Bonded debt decreased a net $45.6 million, attributed to scheduled payments of debt principal on existing bonds. Loans also decreased $2.0 million due to scheduled principal payments on existing loans.

Requests for Information

The Fund's financial statements are designed to provide a general overview of the Fund's finances, as well as to demonstrate the Fund's accountability to its customers, investors, creditors, and other interested parties. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to Seattle Public Utilities, Finance and Administration Branch, Accounting Division, PO Box 34018, Seattle, WA 98124-4018, telephone (206) 684-3000.

Seattle Public Utilities – Water Fund
(An Enterprise Fund of the City of Seattle)
Statements of Net Position

	December 31, 2021	December 31, 2020
ASSETS		
CURRENT ASSETS		
Operating cash and equity in pooled investments	$ 103,019,565	$ 140,762,314
Receivables		
Accounts, net of allowance	24,300,001	19,768,400
Interest and dividends	780,121	835,958
Unbilled revenues	16,776,780	16,516,809
Due from other funds	222,700	561,079
Due from other governments	1,860,149	884,847
Materials and supplies inventory	7,833,426	7,022,028
Prepayments and other current assets	71,593	111,305
Total current assets	154,864,335	186,462,740
NONCURRENT ASSETS		
Restricted cash and equity in pooled investments	113,183,254	93,098,242
Prepayments long-term	732,224	803,816
Conservation costs	24,838,794	26,171,056
Regulatory assets	8,482,608	6,017,105
Other charges	4,849,956	4,253,838
Capital assets		
Land and land rights	54,361,920	54,016,672
Plant in service, excluding land	2,183,917,307	2,146,526,408
Less accumulated depreciation	(952,839,064)	(908,196,806)
Construction in progress	53,698,154	43,894,329
Other property, net	2,425,213	1,842,126
Total noncurrent assets	1,493,650,366	1,468,426,786
Total assets	1,648,514,701	1,654,889,526
DEFERRED OUTFLOWS OF RESOURCES		
Unamortized loss on advanced refunding	15,589,025	18,337,668
Pension and OPEB contributions and changes in assumptions	12,663,353	13,368,696
Total deferred outflow of resources	28,252,378	31,706,364
Total assets and deferred outflows of resources	$ 1,676,767,079	$ 1,686,595,890

See accompanying notes.

Statements of Net Position

	December 31, 2021	December 31, 2020
LIABILITIES		
CURRENT LIABILITIES		
Accounts payable	$ 9,266,873	$ 9,924,189
Salaries, benefits, and payroll taxes payable	3,077,310	3,587,341
Compensated absences payable	290,827	296,233
Due to other funds	3,198,888	4,525
Due to other governments	-	109,515
Interest payable	10,072,475	10,704,947
Taxes payable	887,812	811,140
Revenue bonds due within one year	47,345,000	46,235,000
Claims payable	1,404,703	1,324,184
Habitat conservation program liability	573,279	733,539
Loans payable, due within one year	2,049,935	2,049,935
Other	8,398,160	5,523,260
Total current liabilities	86,565,262	81,303,808
NONCURRENT LIABILITIES		
Compensated absences payable	5,525,719	5,628,415
Claims payable	4,034,671	3,907,560
Habitat conservation program liability	6,369,442	6,328,713
Loans payable	20,676,819	22,726,754
Unfunded other post employment benefits	3,384,866	3,014,776
Net pension liability	65,444,915	80,221,489
Other noncurrent liabilities	623,132	489,496
Revenue bonds	617,110,000	682,255,000
Bond premiums	86,133,284	84,745,352
Total noncurrent liabilities	809,302,848	889,317,555
Total liabilities	895,868,110	970,621,363
DEFERRED INFLOWS OF RESOURCES		
Unamortized gain on advanced refunding	3,905,643	-
Rate stabilization account	41,720,888	59,880,197
Deferred inflows-pension and OPEB	21,241,212	14,320,203
Total deferred inflows of resources	66,867,743	74,200,400
NET POSITION		
Net investment in capital assets	662,512,834	563,868,163
Restricted for		
Other charges	7,450,181	5,122,759
Conservation costs	3,640,400	3,535,719
Habitat conservation program	5,349,626	4,571,698
Unrestricted	35,078,185	64,675,788
Total net position	714,031,226	641,774,127
Total liabilities, deferred inflows of resources and net position	$ 1,676,767,079	$ 1,686,595,890

See accompanying notes.

Seattle Public Utilities – Water Fund
(An Enterprise Fund of the City of Seattle)
Statements of Revenues, Expenses, and Changes in Net Position

	Years Ended December 31, 2021	2020
OPERATING REVENUES		
Charges for services and other revenues	$ 303,499,096	$ 278,577,869
OPERATING EXPENSES		
Salaries, wages and personnel benefits	57,800,983	60,886,762
Supplies	5,961,728	5,670,627
Services	47,020,613	43,864,447
Intergovernmental payments	47,726,666	46,100,555
Depreciation	51,836,095	50,393,358
Amortization	3,885,933	4,092,999
Other operating expenses	7,891,784	2,433,255
Total operating expenses	222,123,802	213,442,003
OPERATING INCOME	81,375,294	65,135,866
NONOPERATING REVENUES		
Other nonoperating revenue	10,091,196	2,561,005
Investment income (loss)	(885,236)	8,898,503
Total nonoperating revenues	9,205,960	11,459,508
NONOPERATING EXPENSES		
Interest/debt service expenses	27,852,908	30,893,374
Other nonoperating expenses	1,170	-
Total nonoperating expenses	27,854,078	30,893,374
Income before capital contributions and grants	62,727,176	45,702,000
Capital contributions and grants	9,529,923	10,211,198
CHANGE IN NET POSITION	72,257,099	55,913,198
NET POSITION		
Beginning of year	641,774,127	585,860,929
End of year	$ 714,031,226	$ 641,774,127

See accompanying notes.

	Years Ended December 31, 2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers	$ 288,505,955	$ 280,463,985
Cash paid to suppliers	(62,609,932)	(53,970,448)
Cash paid to employees	(65,307,700)	(65,777,972)
Cash paid for taxes	(45,659,283)	(44,316,495)
Net cash provided by operating activities	114,929,040	116,399,070
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Noncapital grants received	3,355,420	5,072,354
Payment for environmental liabilities	(1,170)	-
Net cash flows from noncapital financing activities	3,354,250	5,072,354
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Proceeds from the sales of bonds and other long-term debt	107,723,718	-
Principal payments on long-term debt	(155,969,260)	(42,532,929)
Capital expenditures and other charges paid	(59,084,306)	(75,331,822)
Interest paid on long-term debt	(34,147,913)	(36,478,733)
Build America Bonds Federal Interest Subsidy	1,884,728	1,937,152
Capital fees and grants received	6,174,503	5,138,843
Proceeds from sale of capital assets	191,629	119,624
Net cash used in capital and related financing activities	(133,226,901)	(147,147,865)
CASH FLOWS FROM INVESTING ACTIVITIES		
Net change on investment	(2,714,126)	6,959,734
NET DECREASE IN CASH AND EQUITY IN POOLED INVESTMENTS	(17,657,737)	(18,716,707)
CASH AND EQUITY IN POOLED INVESTMENTS		
Beginning of year	233,860,556	252,577,263
End of year	$ 216,202,819	$ 233,860,556
CASH AT THE END OF THE YEAR CONSISTS OF		
Operating cash and equity in pooled investments	$ 103,019,565	$ 140,762,314
Noncurrent restricted cash and equity in pooled investments	113,183,254	93,098,242
Total cash at the end of the year	$ 216,202,819	$ 233,860,556

Seattle Public Utilities – Water Fund
(An Enterprise Fund of the City of Seattle)
Statements of Cash Flows (continued)

	Years Ended December 31,	
	2021	2020
RECONCILIATION OF NET OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Net operating income	$ 81,375,294	$ 65,135,866
Adjustments to reconcile net operating income to net cash provided by operating activities		
Adjustment for net pension liability	(7,150,223)	(1,012,927)
Depreciation and amortization	55,722,028	54,486,357
Other cash receipts	3,797,511	2,441,379
Changes in operating assets and liabilities		
Accounts receivable	(4,256,847)	(4,941,054)
Unbilled revenues	(259,971)	614,368
Due from other funds	63,624	1,905,355
Due from other governments	(975,302)	315,626
Materials and supplies inventory	(811,398)	(108,275)
Other assets	111,305	31,882
Accounts payable	(657,316)	(1,145,783)
Salaries, benefits, and payroll taxes payable	(510,030)	(3,762,359)
Compensated absences payable	(108,102)	1,113,325
Due to other funds	3,194,363	(341,299)
Due to other governments	(109,515)	109,515
Claims payable	207,630	36,290
Taxes payable	76,672	(51,674)
Regulatory liability - revenue stabilization fund	(18,159,309)	1,010,333
Credits and other	3,378,626	562,145
Total adjustments	33,553,746	51,263,204
NET CASH PROVIDED BY OPERATING ACTIVITIES	$ 114,929,040	$ 116,399,070
NONCASH TRANSACTIONS		
Contributed infrastructure	$ 3,251,810	$ 4,932,415

See accompanying notes.

Note 1 – Operations and Summary of Significant Accounting Policies

Operations – The City of Seattle, Seattle Public Utilities – Water Fund (the Fund) is a public utility enterprise fund of the City of Seattle (the City). The Fund was established to account for activities of the water system operated by Seattle Public Utilities (SPU). The water system, established in 1890, provides water to the greater Seattle area through direct service to customers and through purveyors, such as suburban water districts and municipalities. The activities of the water system include protection of available water supply, transmission of water to customers, development of water conservation programs, evaluation of new water sources, and management of the City's water system assets, which include the Tolt and Cedar River Watersheds, water pipes, pumping stations, and treatment plants.

On January 1, 1997, the City created SPU, which brought together under one administrative umbrella the water, solid waste, and drainage and wastewater functions of the City. The Fund (as well as SPU's other funds) remains separate for accounting purposes.

SPU receives certain services from other departments and agencies of the City, including information technology and some that are normally considered to be general and administrative. The Fund is charged a share of these costs and during 2021 and 2020, paid $22,719,184 and $20,707,277, respectively, to the City for its share of these services. Additionally, the Fund pays a business and occupation utility tax to the City's General Fund. The Fund paid $35,036,125 and $34,019,832 for these taxes in 2021 and 2020, respectively.

The utility billing function is co-managed by SPU, Seattle City Light (SCL), and the Seattle Information Technology Department (ITD). SPU provides customer service through the call center and walk-in center. ITD maintains the Customer Information System (CIS). SPU and SCL bill and reimburse each other for these services. SPU reimburses ITD for the information technologies services mentioned above. Within SPU, the costs and reimbursements were shared among its three utility funds (Water, Drainage and Wastewater, and Solid Waste). The Fund received reimbursements related to the call center and walk-in center of $2,265,351 and $2,327,309 in 2021 and 2020, respectively. The Fund paid $113,764 and $31,132 for the utility billing services in 2021 and 2020, respectively.

Water services provided to other City departments and agencies are billed at rates prescribed by City ordinances. The Fund collected $4,260,281 and $3,461,381 in 2021 and 2020, respectively, from the City for water services provided.

The Fund is subject to regulation by the City and the State of Washington. Service rates are authorized by ordinances passed by the Seattle City Council (City Council). Financial reporting is reviewed by the Washington State Auditor's Office and conforms to accounting principles generally accepted in the United States of America (U.S. GAAP) as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

Note 1 – Operations and Summary of Significant Accounting Policies (continued)

Basis of accounting – The Fund is accounted for on a flow of economic resources measurement focus. Its financial statements are prepared in accordance with accounting principles generally accepted in the United States of America as applied to governmental units using the accrual basis of accounting. With the flow of economic resources measurement focus, all assets, deferred outflows of resources, liabilities, and deferred inflows of resources associated with the Fund's operations are included on the statements of net position. the statements of revenues, expenses, and changes in net position present increases (revenues) and decreases (expenses) in total net position.

Cash and equity in pooled investments – Cash resources of the Fund are combined with cash resources of the City in a pooled investment portfolio that is managed by the City's Finance and Administration Services Department. The City's investment portfolio consists of fixed income securities authorized by the Revised Code of Washington and other applicable law. The pool operates like a demand deposit account in that all City departments may deposit cash at any time and withdraw cash out of the pool without prior notice or penalty. Interest earned on the pooled investments is prorated to individual funds at the end of each month on the basis of their average daily cash balances during the month when interest was earned. Cash and equity in pooled investments are reported at fair market value in accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*, and GASB Statement No. 72, *Fair Value Measurement and Application*. The Fund's share of the pool is included in the accompanying Statement of Net Position under the caption "cash and equity in pooled investments." Accordingly, the Statements of Cash Flows reconcile to cash and equity in pooled investments. The restricted cash and equity in pooled investments are comprised of unexpended bond proceeds, bond reserve account and a revenue stabilization account.

Receivables and unbilled revenues – Customer accounts receivable consist of amounts owed by private individuals, organizations and other city departments for goods delivered or services rendered in the regular course of business operations. Accounts receivable is shown net of allowances for doubtful accounts. The Fund also accrues an estimated amount for services that have been provided but not billed. Notes and contracts receivable arise from written agreements or contracts with public organizations and private individuals.

Due from/to other funds and governments – Activity between other funds and governments that is outstanding at the end of the year, not related to the provision of utility services, is reported as due from or due to other funds and governments.

Allowance for doubtful accounts – A reserve has been established for uncollectible accounts receivable 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, 2021 and 2020, the Fund's allowance for doubtful accounts was $974,384 and $728,885, respectively.

Materials and supplies inventory – The Fund values its inventory based on a moving average method. The most recent total cost of an inventory item is divided by the total units of the item that remain in inventory to determine the moving average cost of the item. The moving average cost is then applied to all the units of the inventory item.

Note 1 – Operations and Summary of Significant Accounting Policies (continued)

Regulatory assets – GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, allows for certain costs to be capitalized as a regulatory asset instead of charged to expense. A regulatory asset is recorded when it is probable that future revenue in an amount at least equal to the capitalized costs will be recovered through customer rates over some future period. The Fund uses regulatory accounting for debt issuance costs because these costs are included in the rate structure and, as such, will continue to be amortized over the life of the associated bond and loan issues. GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*, would have required these costs to be expensed in the period incurred if the Fund had not utilized regulatory accounting for these costs. The Fund uses regulatory accounting for interest costs incurred during the construction of capital assets because these costs are included in the rate structure and, as such, will continue to be amortized over the life of the associated capital assets. GASB Statement No. 89*, Accounting for Interest Cost Incurred before the End of a Construction Period*, would have required these costs to be recognized as an expense in the period incurred if the Fund had not utilized regulatory accounting for these costs.

Revenue Stabilization Account – The Revenue Stabilization Account (RSA) was established by City Ordinance 122841 to reduce year-to-year variation in rates. Amounts deposited into the RSA are excluded from the statements of revenues, expenses, and changes in net position and treated as a credit in accordance with GASB Statement No. 62. The RSA is included in the “Revenue Stabilization Account” identified in the Fund’s bond covenants. These covenants provide that withdrawals and deposits from the “Revenue Stabilization Account” shall augment or reduce adjusted net revenue available for the payment of debt service. In 2021, there was a withdrawal of $19 million from the RSA.

BPA account – In 2003, the Bonneville Power Administration (BPA) purchased an easement in the amount of $6.0 million from the Fund to construct a power transmission line through the Cedar River Watershed. This $6.0 million, together with $657,149 in timber sales related to the easement, were deposited into the BPA account and classified as restricted assets. At December 31, 2021 and 2020, the cash balance in the BPA account was $503,366 and $496,152, respectively. Monies in the BPA account are considered a portion of the “Revenue Stabilization Account” described in bond covenants, and therefore shall augment or reduce adjusted net revenue available for the payment of debt service. The Fund will recognize the revenues deposited in the BPA account in the calculation of adjusted net revenues available for the payment of debt service as they are withdrawn to fund certain activities in the Cedar River Watershed.

Conservation costs – Conservation program costs that result in long-term benefits and reduce or postpone other capital expenditures or have a legal requirement are included in noncurrent assets and amortized over their expected useful lives, commencing when each program is in place. The conservation program costs are amortized over their expected useful lives of ten years. Certain costs related to the Habitat Conservation Plan (HCP) are included in the noncurrent assets and amortized through 2050, the year in which the plan expires. An incidental take permit was issued to the City by the federal government approving the HCP for 50 years. Costs of administering the conservation and HCP programs are expensed as incurred.

Note 1 – Operations and Summary of Significant Accounting Policies (continued)

Other charges – Other charges include costs such as the Water System Plan, leasehold improvements, and the Tolt Levee modification. The Fund amortizes these charges over a 2- to 33-year period.

Capital assets – Capital assets are stated at cost or, if contributed, at fair value at the date of contribution. Costs include direct material, labor, and indirect costs such as engineering, supervision, payroll taxes, pension benefits, and interest relating to the financing of projects under construction. The cost of current repairs and maintenance is charged to expense, while the cost of additions and improvements is capitalized. SPU's policy is to capitalize assets with a cost of $5,000 or more. The Fund receives donated assets such as water mains from developers and other governmental agencies. These donated assets are treated as a special item under capital contributions and grants in the statements of revenues, expenses, and changes in net position.

Construction in progress – Capitalizable costs incurred on projects which are not in service or ready for use are held in construction in progress. When the asset is ready for service, related costs are transferred to capital assets. Upon determining that a project will be abandoned, the related costs are charged to expense.

Other property – Other property is stated at cost, or if contributed, the fair value at the date of contribution. Other property includes artwork and property held for future use. The artwork is acquired through the City's "One Percent for Art" program, which supports the City ordinance established to direct the inclusion of works of art in public spaces within the City.

Depreciation – Capital assets in service are depreciated on the straight-line method over estimated useful lives as follows:

Buildings and fixtures	10 to 50 years
Earthen source of supply developments	100 years
Transmission and distribution pipelines, reservoirs, and tanks	15 to 100 years
Water mains	33 to 57 years
Pumps, wells, and treatment equipment	10 to 50 years
Machinery and equipment	3 to 20 years
Computer systems	3 to 11 years

Asset depreciation begins in the month the asset is placed in service.

Note 1 – Operations and Summary of Significant Accounting Policies (continued)

Deferred outflows/inflows of resources – In addition to assets, the statements of net position, when applicable, will report a separate section for deferred outflows of resources. It represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then. The fund has deferred loss on refunding debt which qualifies for reporting in this category. A deferred loss on refunding bonds results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The Fund has also recorded deferred outflows of resources for certain pension and OPEB activities including, the difference between projected and actual experience, the difference between projected and actual earnings on investments, and contributions made subsequent to the measurement date (Notes 6 and 9).

In addition to liabilities, the statements of net position, when applicable, will report a separate section for deferred inflows of resources. It represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until then. The Fund has also recorded deferred inflows of resources for changes in proportion and differences between employer contributions and proportionate share of contributions. The Fund has a revenue stabilization account which qualifies for reporting in this category.

Compensated absences – Employees earn vacation based upon their date of hire and years of service and may accumulate earned vacation up to a maximum of 480 hours. Unused vacation at retirement or normal termination is considered vested and payable to the employee. Earned but unused vacation is accrued as a liability of the Fund. Employees also earn up to 12 days of sick leave per year and may accumulate sick leave balances without limit.

Employees who submit the required documentation when represented by the Coalition of City Unions are paid 35% of the value of unused sick leave upon retirement as part of the Health Reimbursement Arrangement – Voluntary Employees' Beneficiary Association (HRA-VEBA) program. If the employee fails to submit the required documentation by their last working day of employment, their sick leave balance is forfeited.

Retiring employees who are not eligible to participate in the HRA-VEBA program may elect to receive 25% of the value of unused sick leave upon retirement or defer receipt of 35% of the value of their sick leave balance to the City's 457 Plan and Trust, subject to the year-to-date or life-to-date limitations on deferrals and contributions. If the 35% value of the sick leave balance exceeds the maximum amount deferred to the City's 457 Plan and Trust, the employee shall receive a taxable cash payment equal to the amount by which the 25% value of the sick leave balance exceeds the 35% that was allowed to be deferred. The Fund records a liability for estimated sick leave payments.

Pensions – For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Seattle City Employees' Retirement System (SCERS) are reported on the same basis as reported by SCERS. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Note 1 – Operations and Summary of Significant Accounting Policies (continued)

Postemployment Benefits Other Than Pensions (OPEB) – For purposes of measuring the OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the benefit have been determined on the same basis as they are reported by the City. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms.

Operating revenues – The Fund provides water service to wholesale and retail customers and recognizes revenue when such service is provided. Wholesale customers (Purveyors) are under contract with the Fund, and rates are set based on cost allocation criteria stipulated in the contracts.

Service rates for all customers are authorized by ordinances passed by the City Council. Service revenues are recorded through cycle billings rendered to customers monthly or bimonthly. The Fund accrues and records unbilled water service revenues in the financial statements for services provided from the date of the last billing to year end.

Operating expenses – The Fund's operating expenses include the cost of sales and services, administrative expenses, depreciation on capital assets and amortization of deferred assets.

Taxes – The Fund is charged a public utility tax by the City at a rate of 15.54% of Fund revenues, net of certain credits and certain revenues. In addition, the Fund paid a 5.029% public utility tax to the State on a certain portion of revenues identified as utility revenues. The Fund also paid business and occupation tax to the City at the rate of 0.222% and to the State at the rate of 1.75% for certain other non-utility revenues.

Other revenues and expenses – The Fund's non-operating revenues and expenses arise from transactions not related directly to the major income-earning operations of the utility and are of a recurring nature. Major items are investment and interest income, interest expense, gains or losses on the sale of assets, and amortization of debt expenses.

Net position – The statements of net position report all financial and capital resources. Assets and deferred outflows of resources minus liabilities and deferred inflows of resources is net position. There are three components of net position: net investment in capital assets, restricted, and unrestricted.

Net investment in capital assets, consists of capital assets, less accumulated depreciation, reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.

Net position is restricted when constraints placed on net position use are either (1) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments, or (2) imposed by law through constitutional provisions or enabling legislation. The Fund's restricted net position as of December 31, 2021 and 2020, are mainly related to conservation costs, HCP and certain other charges.

Unrestricted net positions are those that are not "net investment in capital assets" or "restricted."

Note 1 – Operations and Summary of Significant Accounting Policies (continued)

Arbitrage rebate requirement – The Fund is subject to the Internal Revenue Code (IRC), Section 148(f), related to its tax-exempt revenue bond. The IRC requires that earnings on gross proceeds of any revenue bonds that are more than the amount prescribed will be surrendered to the Internal Revenue Service. As such, the Fund would record such a rebate as a liability. The Fund had no arbitrage liability as of December 31, 2021 and 2020.

Accounting standard changes – GASB has issued Statement No. 87, *Leases*. The new standard was issued in June 2017 and was originally scheduled for implementation for reporting periods beginning after December 15, 2019. Due to the COVID-19 pandemic, GASB issued Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*, which delayed the implementation dates of certain statements. As a result, GASB 87 will be effective for the Fund for reporting periods beginning after June 15, 2021. Under this rule, leases are all assumed to be capital financings of the underlying asset with only a narrow range of short-term equipment and motor vehicle leases treated as an ‘operating lease. GASB now assumes that all leases are ‘capital leases’ except for the specific exceptions noted. The Fund is evaluating the impact of this standard on the financial statements.

GASB has also issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. Such interest cost includes all interest that previously was accounted for in accordance with the requirements of paragraphs 5–22 of Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, which are superseded by this Statement. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. The Statement was issued in June 2018 to be implemented effective for reporting periods beginning after December 15, 2019. Due to the COVID-19 pandemic, GASB issued Statement No. 95 which delayed the implementation dates of certain statements. GASB 89 is effective for the Fund for the year ended December 31, 2021. The Fund invoked regulatory accounting under GASB 62 effective January 1, 2021, and continues to capitalize interest as a charge to projects.

Use of estimates – The preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements. Estimates and assumptions are used to record unbilled revenues, allowance for doubtful accounts, fair market value of cash and equity in pooled investments, accrued sick leave, capitalized interest, depreciation, risk liabilities, post-retirement benefits, pension liability, and other contingencies. Changes in these estimates and assumptions may have a material impact on the financial statements.

Note 1 – Operations and Summary of Significant Accounting Policies (continued)

Significant risks and uncertainties – The Fund is subject to certain business risks that could have a material impact on future operations and financial performance. These risks include, but are not limited to, water conditions, weather and natural disaster-related disruptions, collective bargaining labor disputes, fish and other endangered species act issues, Environmental Protection Agency regulations, federal government regulations or orders concerning the operation, maintenance, and licensing of facilities.

Reclassifications – Certain reclassifications have been made to the prior year footnote presentations to correspond to the current year presentation. These reclassifications had no effect on the operating results of the Fund.

Note 2 – Cash and Equity in Pooled Investments

Per Seattle Municipal Code, SMC 5.06.010 Investment Authority, the City's Director of Finance and Administrative Services (FAS) is authorized to invest all moneys in the City Treasury. Cash resources of the Department are combined with cash resources of the City to form a pool of cash that is managed by the City's Department of Finance and Administrative Services (FAS). Under the City's investment policy, all temporary cash surpluses in the pool are invested. The Fund's share of the pool is included on the balance sheets as Cash and Equity in Pooled Investments or as restricted assets. The pool operates like a demand deposit account in that all departments, including the Fund may deposit cash at any time and can also withdraw cash, out of the pool, up to the amount of the Fund's balance, without prior notice or penalty. Accordingly, the statements of cash flows reconcile to cash and equity in pooled investments.

Custodial credit risk – deposits – Custodial credit risk of deposits is the risk that in the event of bank failure for one of the City's depository institutions, the City's deposits or related collateral securities may not be returned in a timely manner.

As of December 31, 2021 and 2020, the City did not have custodial credit risk. The City's deposits are covered by insurance provided by the Federal Deposit Insurance Corporation (FDIC) and the National Credit Union Association (NCUA) as well as protection provided by the Washington State Public Deposit Protection Commission (PDPC) as established in RCW 39.58. The PDPC makes and enforces regulations and administers a program to ensure public funds deposited in banks and thrifts are protected if a financial institution becomes insolvent. The PDPC approves which banks, credit unions, and thrifts can hold state and local government deposits and monitors collateral pledged to secure uninsured public deposits. This secures public treasurers' deposits when they exceed the amount insured by the FDIC or NCUA by requiring banks, credit unions, and thrifts to pledge securities as collateral.

As of December 31, 2021 and 2020, the City held sufficient cash in its vault for operations. Additional small amounts of cash were held in departmental revolving fund accounts with the City's various custodial banks, all of which fell within the NCUA/FDIC's $250,000 standard maximum deposit insurance amount. Any of the City's cash not held in its vault, or a local depository, was held in the City's operating fund (investment pool), and at the close of every business day, any cash remaining in the operating fund is swept into an overnight repurchase agreement that matures the next day.

Note 2 – Cash and Equity in Pooled Investments (continued)

Custodial credit risk – investments – Custodial credit risk for investments is the risk that, in the event of failure of the counterparty, the City will not have access to, or be able to recover, its investments or collateral securities that are in the possession of an outside party. The City mitigates custodial credit risk for its investments by having its investment securities held by the City's contractual custodial agent. The City maintains a custody relationship with Wells Fargo under the State of Washington's statewide custody provider program arranged by the State Treasurer's Office. The City mitigates counterparty risk by settling trades through its custodian on a delivery-versus-payment method.

By investment policy, the City maintains a list of approved securities dealers for transacting business. The City also conducts its own due diligence as to the financial wherewithal of its counterparties.

Credit risk – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Some of the City's pooled investments have credit risk from holdings in commercial paper, corporate notes, and taxable municipal bonds. The City may not hold more than 50% of the Pool's total assets in these credit sensitive sectors.

State statute defines the investments in commercial paper and corporate notes as a "credit portfolio". The credit portfolio may not exceed 25 percent of the Pool's market value. Credit investments must be diversified by sector and industry. No single issuer shall exceed 3 percent of the Pool's market value.

Commercial Paper investments may not have maturities exceeding 270 days and must hold the highest short-term credit rating by all the major credit rating agencies that rate the issuer at the time of purchase.

Corporate notes must mature within 5.5 years from the time of purchase and must be rated at least weak single-A or better by all the major rating agencies that rate the note at the time of purchase. No single issuer rated AA or better may exceed 3 percent of the Pool's market value. No single issuer rated in the single-A category may exceed 2 percent of the Pool's market value.

Municipal bonds must have a credit rating of weak single-A or better by all the major rating agencies that rate the issuer at the time of purchase. No single issuer may exceed 5 percent of the Pool's market value.

Interest rate risk – Interest rate risk is the risk that changes in interest rates over time will adversely affect the fair value of an investment. To mitigate interest rate risk, the City intentionally immunizes its known and expected cash flow needs. To best accomplish meeting its investment objectives, the City has divided the Pool into two separate portfolios: Operating and Strategic.

The Operating Portfolio is invested to meet reasonably expected liquidity needs over a period of twelve to eighteen months. This portfolio has low duration and high liquidity. Consistent with this profile, and for the purpose of comparing earnings yield, its benchmark is the net earnings rate of the State of Washington's Local Government Investment Pool (LGIP).

The Strategic Portfolio consists of cash that is in excess of known and expected liquidity needs. Accordingly, this portfolio is invested in debt securities with longer maturities than the Operating Portfolio, which over a market cycle, is expected to provide a higher return and greater investment income.

Note 2 – Cash and Equity in Pooled Investments (continued)

Consistent with this profile, and for the purpose of comparing duration, yield and total return, the benchmark for the Strategic portfolio is the Barclays U.S. Government 1–7 year index. The duration of the Strategic Portfolio is targeted between 75% and 125% of the benchmark.

To further mitigate interest rate risk a minimum of 60% of the Operating Portfolio and 30% of the Strategic Portfolio must be invested in asset types with high liquidity, specifically U.S. Government obligations, U.S. Government Agency obligations, LGIP, Demand Accounts, Repo, Sweep, and Commercial Paper.

Investments – The Fund's cash resources may be invested by FAS separate from the cash and investments pool. Investments are managed in accordance with the City's Statement of Investment Policy, with limits and restrictions applied at the City-wide level rather than to specific investments of the Fund. As of December 31, 2021 and 2020, the Fund did not have any dedicated investments. The City's Statement of Investment Policy was modified on January 1, 2018, with an effective date of March 8, 2018. There have been no subsequent changes to the policy.

The City of Seattle has three objectives in managing its investments that define its risk profile and guide implementation of its investment strategy. In order of importance, they are Safety of Principal, Maintenance of Liquidity, and Return on Investment.

The City follows a set of Standards of Care when it comes to its investments that include the following:

- Social Policies: A City social policy shall take precedence over furthering the City's financial objectives when expressly authorized by City Council resolution, except where otherwise provided by law or trust principles.

- Ethics and Conflict of Interest: Investment officers shall comply with the City's Ethics Code (SMC 4.16.080) and annually submit a Financial Interest Statement to the City's Ethics & Elections Commission that identifies any potential financial interest that could be related to the performance of the City's investment portfolio.

Delegation of authority – The Director of Finance and Administrative Services has delegated management responsibility for the City's investment program to the Director of Finance who has designated day to day management responsibility to investment officers under the supervision of the City's Treasury Services Director. No persons may engage in an investment transaction except as provided under the terms of the City Statement of Investment Policy and the procedures established therein.

Fair value of pooled investments – The City reports investments at fair value and categorizes its fair value measurements within the fair value hierarchy established by GASB Statement No. 72, *Fair Value Measurement and Application*. Fair value of the City's pooled investments fluctuates with changes in interest rates and the underlying size of the pooled investment portfolio. To mitigate interest rate risk in the City's pooled investment portfolio, the City typically holds its investments to maturity and manages its maturities to ensure sufficient monthly cash flow to meet its liquidity requirements.

Note 2 – Cash and Equity in Pooled Investments (continued)

As of December 31, 2021, the City held $555.1 million on deposit in the Washington State Local Government Investment Pool (LGIP) managed by the Office of the Washington State Treasurer. The City's investments in the LGIP are reported at amortized cost which approximates fair value. It is overseen by the Office of the State Treasurer, the State Finance Committee, the Local Government Investment Pool Advisory Committee, and the Washington State Auditor's Office.

The City reports its investments at fair value and categorizes its fair value measurements within the fair value hierarchy established by U.S. GAAP. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction amongst market participants at the measurement date (an exit price). Fair value is a market-based measurement for a particular asset or liability based on assumptions that market participants would use in pricing the asset or liability. Such assumptions include observable and unobservable inputs of market data, as well as assumptions about risk and the risk inherent in the inputs to the valuation technique.

Valuation techniques to determine fair value should be consistent with one or more of three approaches: the market approach, cost approach, and income approach. The City uses a combination of the market and cost approach for the valuation of pooled investments.

The City's overnight repurchase agreement with Wells Fargo Bank, N.A. and investment in the State of Washington Local Government Investment Pool (LGIP) are accounted for at cost. The LGIP is an external investment pool and is measured at a net asset value (NAV) per share of $1. The remainder of the City's investments are purchased in the over-the-counter U.S. bond market and accounted for at market.

The City uses market pricing for its over-the-counter investments as provided by its contractual custodial agent, Wells Fargo Institutional Retirement & Trust, and its third-party investment accounting vendor FIS AvantGard LLC. Both Wells Fargo and FIS contract with Interactive Data Pricing and Reference Data, Inc., for securities pricing.

As a basis for considering market participant assumptions in fair value measurements, GASB Statement No. 72 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as follows:

Level 1 – Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Fund can access at the measurement date.

Level 2 – Inputs are inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 – Inputs are unobservable inputs for the asset or liability. Valuation adjustments such as for nonperformance risk or inactive markets could cause an instrument to be classified as Level 3 that would otherwise be classified as Level 1 or Level 2.

Note 2 – Cash and Equity in Pooled Investments (continued)

The City’s investments in US Treasuries are valued as Level 1. The City’s remaining investments are valued as Level 2 or measured at amortized cost. The City does not invest in securities that require Level 3 inputs.

As of December 31, 2021, the City’s pooled investments were categorized within the fair value hierarchy as follows:

Investments	Fair Value as of December 31, 2021	Fair Value Measurements Using: Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Weighted Average Maturity (Days)
U.S. Treasury and U.S. Government-					
Backed Securities	$ 745,736,783	$ 745,736,783	$ -	$ -	651
U.S. Government Agency Securities	719,408,575	-	719,408,575	-	950
Local Government Investment Pool	555,140,850	-	555,140,850		3
U.S. Government Agency Mortgage-				-	
Backed Securities	358,218,426	-	358,218,426	-	2,375
Municipal Bonds	203,186,845	-	203,186,845		603
Repurchase Agreements	125,430,820	-	125,430,820	-	3
Corporate Bonds	88,971,783	-	88,971,783	-	632
International Bank for Reconstruction					
and Development	25,364,250	-	25,364,250	-	971
	$ 2,821,458,332	$ 745,736,783	$ 2,075,721,549	$ -	
Weighted Average Maturity of the City’s Pooled Investments					788

As of December 31, 2020, the City’s pooled investments were categorized within the fair value hierarchy as follows:

Investments	Fair Value as of December 31, 2020	Fair Value Measurements Using: Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Weighted Average Maturity (Days)
U.S. Government Agency Securities	$ 760,599,687	-	$ 760,599,687	$ -	1,111
Local Government Investment Pool	519,690,038	-	519,690,038	-	1
U.S. Treasury and U.S. Government-					
Backed Securities	470,004,815	470,004,815	-	-	732
Municipal Bonds	319,681,755	-	319,681,755	-	2,597
U.S. Government Agency Mortgage-					
Backed Securities	268,695,014	-	268,695,014	-	1,616
Corporate Bonds	92,745,580		92,745,580	-	509
Repurchase Agreements	72,592,802	-	72,592,802	-	4
International Bank for Reconstruction					
and Development	41,064,600		41,064,600	-	1,654
	$ 2,545,074,291	$ 470,004,815	$ 2,075,069,476	$ -	
Weighted Average Maturity of the City’s Pooled Investments					1,010

Note 2 – Cash and Equity in Pooled Investments (continued)

The Fund's share of the City pool was as follows as of December 31:

	2021	2020
Cash and equity in pooled investments	$ 103,019,565	$ 140,762,314
Restricted cash and equity in pooled investments	113,183,254	93,098,242
Total	$ 216,202,819	$ 233,860,556
Balance as a percentage of City Pool cash and investments	7.7%	9.2%

Concentration of credit risk – Concentration risk is the risk of loss attributed to the magnitude of investments in a single issuer. The City manages concentration risk by limiting its investments in any one issuer in accordance with the City's investment policy and state statutes. The policy limits vary for each investment category. State statute and the City's Statement of Investment Policy do not stipulate concentration limits for holdings of U.S. Government or U.S. Government Agency Obligations. However, as noted under credit risk, the City's Statement of Investment Policy outlines maximum percentage allocations for municipal securities, commercial paper as well as bank notes and corporate notes.

The City's investments in which five percent or more is invested in any single issuer, as of December 31 are as follows:

	2021		2020	
Issuer	Fair Value	Percent of Total Investments	Fair Value	Percent of Total Investments
Local Government Investment Pool	$ 745,736,783	26%	$ 519,690,038	20%
United States Government	555,140,850	20%	470,004,815	18%
Federal National Mortgage Association	412,991,031	15%	292,500,837	11%
Federal Home Loan Bank	159,613,722	6%	200,784,989	8%
Federal Home Loan Mortgage Corp	196,090,506	7%	193,228,369	8%
Federal Farm Credit Bank	129,090,979	5%	152,404,144	6%

Note 3 – Capital Assets

Capital asset activity consisted of the following for the year ended December 31, 2021:

	Beginning Balance	Additions and Transfers In	Retirements and Transfers Out	Ending Balance
Buildings	$ 214,518,016	$ 535,848	$ (1,504,597)	$ 213,549,267
Structures	1,237,561,394	36,470,896	(805,669)	1,273,226,621
Machinery and equipment	594,087,854	2,951,576	(1,883,602)	595,155,828
Computer systems	100,359,144	1,626,447	-	101,985,591
Total capital assets - excluding land	2,146,526,408	41,584,767	(4,193,868)	2,183,917,307
Less accumulated depreciation	(908,196,806)	(47,811,209)	3,168,951	(952,839,064)
	1,238,329,602	(6,226,442)	(1,024,917)	1,231,078,243
Construction in progress	43,894,329	61,504,581	(51,700,756)	53,698,154
Land and land rights	54,016,672	345,248	-	54,361,920
Artwork	1,567,614	583,087	-	2,150,701
Property held for future use	274,512	-	-	274,512
Capital assets, net	$ 1,338,082,729	$ 56,206,474	$ (52,725,673)	$ 1,341,563,530

Capital asset activity consisted of the following for the year ended December 31, 2020:

	Beginning Balance	Additions and Transfers In	Retirements and Transfers Out	Ending Balance
Buildings	$ 210,759,070	$ 3,758,946	$ -	$ 214,518,016
Structures	1,197,172,414	41,088,818	(699,838)	1,237,561,394
Machinery and equipment	591,560,925	3,454,484	(927,555)	594,087,854
Computer systems	96,082,846	4,276,298	-	100,359,144
Total capital assets - excluding land	2,095,575,255	52,578,546	(1,627,393)	2,146,526,408
Less accumulated depreciation	(859,214,220)	(50,393,358)	1,410,772	(908,196,806)
	1,236,361,035	2,185,188	(216,621)	1,238,329,602
Construction in progress	33,428,453	67,420,370	(56,954,494)	43,894,329
Land and land rights	48,319,324	5,697,348	-	54,016,672
Artwork	1,481,184	86,430	-	1,567,614
Property held for future use	274,512	-	-	274,512
Capital assets, net	$ 1,319,864,508	$ 75,389,336	$ (57,171,115)	$ 1,338,082,729

During 2021 and 2020, the Fund capitalized interest costs as a regulatory asset relating to construction of $1,967,414 and $1,753,540, respectively.

Note 4 – Revenue Bonds

The Fund issues bonds to provide financing for capital improvements. Payment of debt service on the bonds is derived solely from the revenues generated by the Fund. The Fund has set aside $20,884,236 in a debt service reserve account and has obtained reserve insurance policies to meet the remainder of its reserve requirements. The total bonds outstanding as of December 31, 2021 and 2020, were $664,455,000 and $728,490,000, respectively.

Revenue bonds outstanding as of December 31, 2021 and 2020, consisted of the following Municipal Water bonds:

Name of Issue	Issuance Date	Maturity Years	Interest Rates	Original Issue Amount	Bonds Outstanding 2021	Bonds Outstanding 2020
2010 Improvement, Series A [a] (Taxable)	1/21/10	2019-2040	4.67-5.89%	$ 109,080,000	$ 98,680,000	$ 102,255,000
2010 Improvement and Refunding, Series B	1/21/10	2010-2027	3.0-5.0%	81,760,000	-	28,215,000
2012 Refunding	5/30/12	2012-2034	2.0-5.0%	238,770,000	62,660,000	153,475,000
2015 Improvement and Refunding	6/10/15	2015-2045	2.0-5.0%	340,840,000	247,250,000	265,245,000
2017 Improvement and Refunding	1/25/17	2017-2046	4.0-5.0%	194,685,000	173,645,000	179,300,000
2021 Improvement and Refunding	6/14/21	2022-2034	4.0-5.0%	82,220,000	82,220,000	-
				$ 1,047,355,000	$ 664,455,000	$ 728,490,000

Minimum debt service requirements to maturity on revenue bonds are as follows:

Years Ending December 31,	Principal	Interest	Total
2022	$ 47,345,000	$ 31,002,714	$ 78,347,714
2023	50,465,000	28,614,295	79,079,295
2024	43,715,000	26,062,249	69,777,249
2025	45,850,000	23,837,609	69,687,609
2026	43,400,000	21,577,327	64,977,327
2027 - 2031	189,810,000	77,932,736	267,742,736
2032 - 2036	129,180,000	40,915,714	170,095,714
2037 - 2041	77,500,000	16,012,499	93,512,499
2042 - 2046	37,190,000	4,141,900	41,331,900
	$ 664,455,000	$ 270,097,043	$ 934,552,043

Note 4 – Revenue Bonds (continued)

The following table shows the revenue bond activity during the year ended December 31, 2021:

	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
Bonds payable					
Revenue bonds	$ 728,490,000	$ 82,220,000	$ (146,255,000)	$ 664,455,000	$ 47,345,000
Add (deduct) deferred amounts					
Issuance premiums	84,745,352	21,854,978	(20,467,047)	86,133,283	-
Total bonds payable	$ 813,235,352	$ 104,074,978	$ (166,722,047)	$ 750,588,283	$ 47,345,000

The following table shows the revenue bond activity during the year ended December 31, 2020:

	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
Bonds payable					
Revenue bonds	$ 774,115,000	$ -	$ (45,625,000)	$ 728,490,000	$ 46,235,000
Add (deduct) deferred amounts					
Issuance premiums	89,323,647	-	(4,578,295)	84,745,352	-
Total bonds payable	$ 863,438,647	$ -	$ (50,203,295)	$ 813,235,352	$ 46,235,000

Defeasance of debt – The Fund defeased certain obligations by placing the proceeds of new bonds and a certain amount of operating cash in an irrevocable trust to provide for all future debt service payments on the old bonds. As a result, the old bonds are considered defeased, and the corresponding liabilities and trust account assets are not included in the statements of net position. In 2021, $75,265,000 bonds were defeased and $24,755,000 were redeemed as shown below:

Name of Issue	Amount Outstanding at December 31, 2020	Additions	Redemptions	Amount Outstanding at December 31, 2021
2010 Improvement and Refunding, Series B	$ -	$ 24,755,000	$ (24,755,000)	$ -
2012 Improvement and Refunding	-	75,265,000	-	75,265,000
	$ -	$ 100,020,000	$ -	$ 75,265,000

Note 4 – Revenue Bonds (continued)

In June 2021, the Fund issued $82,220,000 of Water System Improvement and Refunding Revenue Bonds with varying annual principal payments due beginning 2022 and ending in 2034, at interest rates ranging from 4.0 percent and 5.0 percent. A portion of the proceeds were used to fully refund the remaining 2010B Water System Improvement and Refunding bonds. As a result of the refunding, the Fund reduced total debt service requirements by $3.9 million resulting in an economic gain (difference between the present value of the debt service payments on the old and new debts) of $3.9 million.

In July 2021, the Fund used operating cash to partially defease the 2012 bonds, reducing the principal amount owed by $75.3 million.

Financial covenants – The revenue bonds contain certain financial covenants, the most significant of which requires the Fund to maintain net revenue available for debt service at least equal to 125% of average annual debt service. For 2021, net revenue available for debt service, as defined by the bond covenants, was 2.28% of annual debt service. As of December 31, 2021, management believes the Fund complied with all debt covenants. For more information, see Other Information (page 50).

Note 5 – Leases

The Fund has noncancelable operating lease commitments for real and personal property with minimum payments of $155,008 in 2021 and $152,345 in 2020. Rents are paid as they become due and payable.

Minimum payments under the leases for the years ending December 31 are shown below:

	Minimum Payments
2022	$ 155,308
2023	155,614
2024	155,206
2025	46,218
2026	12,625
2027 - 2031	37,875
	$ 562,846

Note 6 – Postemployment Benefit Plans

Deferred compensation – The City offers all of its employees a deferred compensation plan (the Plan) created in accordance with Internal Revenue Code (IRC) Section 457. The Plan permits employees to defer a portion of their salaries until future years. The deferred compensation is paid to employees upon termination, retirement, death, or unforeseen emergency.

The Plan is an eligible deferred compensation plan under Section 457 of the IRC of 1986, as amended, and a trust exempt from tax under IRC Sections 457(g) and 501(a). The Plan is operated for the exclusive benefit of participants and their beneficiaries. No part of the corpus or income of the Plan shall revert to the City or be used for, or diverted to, purposes other than the exclusive benefit of participants and their beneficiaries. The Plan is not reported in the financial statements of the City or the Fund.

It is the opinion of the City's legal counsel that the City has no liability for investment losses under the Plan. Under the Plan, participants select investments from alternatives offered by the Plan Administrator, who is under contract with the City to manage the Plan. Investment selection by a participant may be changed from time to time. The City does not manage any of the investment selections. By making the selection, participants accept and assume all risks inherent in the Plan and its administration.

Other postemployment benefits plan description – Health care plans for active and retired employees are administered by the City of Seattle as single-employer defined benefit public employee health care plans.

Employees retiring under the City may continue their health insurance coverage under the City's health insurance plans for active employees. When a retired participant dies, the spouse remains fully covered until age 65 and covered by the Medicare supplement plan thereafter. Employees that retire with disability retirement under the City may continue their health coverage through the City with same coverage provisions as other retirees. Eligible retirees self-pay 100 percent of the premium based on blended rates which were established by including the experience of retirees with the experience of active employees for underwriting purposes. The postemployment benefit provisions are established and may be amended by ordinance of the Seattle City Council and as provided in Seattle Municipal Code 4.50.020. The City provides an implicit subsidy of the post-retirement health insurance costs and funds the subsidy on a pay-as-you-go basis.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. Calculations are based on the types of benefits provided under the terms of the substantive plan at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future. Actuarial calculations reflect a long-term perspective. Consistent with that perspective, actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Note 6 – Postemployment Benefit Plans (continued)

Based on the latest biennial actuarial valuation date, the significant methods and assumptions are as follows:

Actuarial data and assumptions – The demographic assumptions of mortality, termination, retirement, and disability are set equal to the assumptions used for City pension actuarial valuations based on a Seattle City Employees' Retirement System Experience Report for the period 2014–2017.

Valuation date	January 1, 2020
Actuarial cost method	Entry age normal
Amortization method	Level dollar
Discount rate	2.74%
Health care cost trend rates – medical	6.55% in 2020, decreasing to 6.32% in 2021, and decreasing by varying amounts until 2030 thereafter
Health care cost trend rates – Rx	9.00% in 2020, decreasing to 8.50% in 2021, and decreasing by varying amounts until 2030 thereafter
Participation	25% of active employees who retire participate

Mortality

General Service (Actives)

Males: RP-2014 Employees Table for Males, adjusted by 60%
Females: RP-2014 Employees Table for Females, adjusted by 95%
Rates are projected generationally using Scale MP-2014 ultimate rates

General Service (Retirees)

Males: RP-2014 Healthy Annuitant Males, adjusted by 95%
Females: RP-2014 Healthy Annuitant Females, adjusted by 95%
Rates are projected generationally using Scale MP-2014 ultimate rates

Marital status – 25% of members electing coverage: married or have a registered domestic partner. Male spouses two years older than their female spouses.

Note 6 – Postemployment Benefit Plans (continued)

Health care claims development – The sample per capita claim cost assumptions shown below by age, benefit, and plan represent the true underlying baseline experience estimated for the City of Seattle's sponsored postretirement benefits and costs.

	Aetna Preventive Plan			Aetna Traditional Plan		
Age	Medical	Rx	Admin	Medical	Rx	Admin
50	$ 11,520	$ 2,677	$ 358	$ 11,243	$ 2,659	$ 358
52	12,533	2,912	358	12,230	2,893	358
55	14,220	3,305	358	13,877	3,282	358
57	15,499	3,601	358	15,125	3,576	358
60	17,638	4,097	358	17,210	4,069	358
62	19,003	4,415	358	18,543	4,384	358

	Group Health Deductible			Group Health Standard		
Age	Medical	Rx	Admin	Medical	Rx	Admin
50	$ 4,961	$ 1,145	$ 689	$ 5,291	$ 1,171	$ 689
52	5,397	1,246	689	5,755	1,273	689
55	6,123	1,413	689	6,531	1,445	689
57	6,674	1,540	689	7,118	1,574	689
60	7,595	1,752	689	8,100	1,792	689
62	8,182	1,888	689	8,727	1,930	689

The average medical and prescription drug per capita claims costs were developed from 2021 calendar year self-funded premium rates. Premium-equivalent rates were provided by City of Seattle's health pricing actuary. The average medical and prescription drug per capita "adult-equivalent" claims costs were based on the respective pre-65 enrollment weighted average of the 2021 four-tier rate structure including the add-on cost of dependent children and trended back from 2021 to 2020 to be centered at the mid-point of the annual period following the valuation date. Average medical/Rx per capita claims costs were then age-adjusted based on the demographics of the rating population, and the assumed health care aging factors shown in the table below.

The average medical and prescription drug per capita claims costs were blended with the 2019 medical/Rx per capita developed claims cost trended forward to the valuation date.

Models are used to estimate underlying per capita medical and drug claims costs, subsequently utilized as assumption inputs for valuation models used to develop the liabilities for the 2021 and future valuations. The Aon consulting team leveraged expertise of Health experts within Aon as it relates to reviewing the models used for development of the per capita claims costs and future trend rates.

Note 6 – Postemployment Benefit Plans (continued)

Morbidity factors – The claim costs for medical and prescription drugs were assumed to increase with age according to the table below.

Age	Medical	Rx	Composite
40–44	3.0%	4.8%	3.3%
45–49	3.7%	4.7%	3.8%
50–54	4.2%	4.7%	4.3%
55–59	4.4%	4.6%	4.4%
60–64	3.7%	4.6%	3.8%

Other considerations – Active employees with current spouse and/or dependent coverage elect same plan and coverage. After retirement, it is assumed that children will have aged off coverage and will have $0 liability.

OPEB liability – The Fund reported an OPEB liability of approximately $3.4 million in 2021 and $3.0 million in 2020. The Fund's proportionate share of the change in the OPEB liability was 4.62% and 4.52% for the years ended December 31, 2021 and 2020, respectively. Based on the actuarial valuation date of January 1, 2020, details regarding the Fund's Total OPEB Liability as of December 31, 2021, are shown below.

($ in thousands)	**Total OPEB Liability**
Changes recognized for the fiscal year:	
Service cost	$ 185.5
Interest on the total OPEB liability	83.8
Differences between expected and actual experience	0.0
Changes of assumptions	172.7
Benefit payments	(135.5)
Contributions from the employer	0.0
Other changes	63.6
Net changes	370.1
Balance recognized at 12/31/2020	3,014.8
Balance recognized at 12/31/2021	$ 3,384.9

The Fund recorded an expense for OPEB of $220,456 in 2021 and $203,851 in 2020. The Health Care Subfund of the General Fund is reported in The City of Seattle's Annual Comprehensive Financial Report.

Note 6 – Postemployment Benefit Plans (continued)

Discount rate and healthcare cost trend rates – The discount rate used to measure the total OPEB liability is 2.12% for 2021 and 2.74% for 2020. The following tables present the sensitivity of OPEB liability calculation to a 1% increase and a 1% decrease in the discount rate used to measure the total OPEB liability:

Discount Rate Sensitivity
(in millions)

	OPEB Liability at December 31, 2021	OPEB Liability at December 31, 2020
Discount rate		
1% decrease	$ 3.7	$ 3.3
Current discount rate	3.4	3.0
1% increase	3.1	2.8

The following table presents the sensitivity of net Health Plan OPEB liability calculation to a 1% increase and a 1% decrease in the healthcare cost trend rates used to measure the total Health Plan OPEB liability:

Healthcare Cost Trend Rate Sensitivity
(in millions)

	OPEB Liability at December 31, 2021	OPEB Liability at December 31, 2020
Discount rate		
1% decrease	$ 3.0	$ 2.7
Trend rate	3.4	3.0
1% increase	3.9	3.4

Deferred outflows of resources and deferred inflows of resources related to OPEB – The following table presents information about the OPEB-related deferred outflows of resources and deferred inflows of resources for the Fund at December 31, 2021.

(in thousands)	Deferred Outflows	Deferred Inflows
Difference between actual and expected experience	$ 625.5	$ -
Assumption changes	154.3	1,022.7
Contributions made in 2021 after measurement date	140.4	N/A
Total	$ 920.2	$ 1,022.7

Note 6 – Postemployment Benefit Plans (continued)

The Fund's contributions made in 2021 in the amount of $140,439 are reported as deferred outflows of resources and will be recognized as a reduction of the net OPEB liability in the year ended December 31, 2022. These contributions will be recognized in the future as shown in the following table. Note that additional future deferred outflows and inflows of resources may impact these amounts.

Year Ending December 31, *(in thousands)*	Amortization
2022	$ (54.0)
2023	(54.0)
2024	(54.0)
2025	(54.0)
2026	(54.1)
Thereafter	27.2
Total	$ (242.9)

The Health Care Sub Fund of the General Fund is reported in the City's Comprehensive Annual Financial Report, which can be obtained by writing the Department of Finance, City of Seattle, PO Box 94747, Seattle, Washington 98124-4747 or www.seattle.gov/financial-services/comprehensive-annual-financial-report.

Note 7 – Claims Payable

The City and the Fund are self-insured for certain losses arising from personal and property damage claims by third parties and for casualty losses to the Fund's property. Liabilities for identified claims and claims incurred but not reported have been recorded by the Fund.

For 2021 and 2020, liabilities for workers' compensation claims, as well as other claims, are discounted over a 15-year period at the City's rate of return on investments of 1.378% and 1.816%, respectively. Claims expected to be paid within one year are $1,404,703 and $1,324,184 at December 31, 2021 and 2020, respectively. The table below presents the changes in the liability for workers' compensation claims and other claims (risk-financing liabilities) as of December 31:

	2021	2020
Beginning liability, discounted	$ 5,231,744	$ 5,195,454
Payments	(829,841)	(489,679)
Incurred claims and changes in estimate	1,037,471	525,969
Ending liability, discounted	$ 5,439,374	$ 5,231,744

The Fund is involved in litigation from time to time as a result of operations.

Note 8 – Compensated Absences

The Fund has recorded a liability for earned but unused compensatory and vacation leave, as well as estimated sick leave payments calculated based on the termination payment method. The schedule below presents the compensated absences activity during the years ended December 31:

	2021	2020
Beginning liability	$ 5,924,648	$ 4,811,323
Additions	6,157,247	5,414,964
Reductions	(6,265,349)	(4,301,639)
Ending liability	$ 5,816,546	$ 5,924,648

Note 9 – Pension Benefit Plan

Plan description – The Seattle City Employees' Retirement System (the System) is a cost-sharing multiple employer pension plan covering employee of the City of Seattle and is administered in accordance with Chapter 4.36 of the Seattle Municipal Code.

The System is governed by the Retirement System Board of Administration (the Board). The Board consists of seven members including the Chair of the Finance Committee of the Seattle City Council, the City of Seattle Finance Director, the City of Seattle Personnel Director, two active members and one retired member of the System who are elected by other System members, and one outside board member who is appointed by the other six board members. Elected and appointed board members serve for three-year terms.

Beginning with employees with hire dates of January 1, 2017, or later, all new members are enrolled in SCERS Plan II, which has contribution and benefit calculation rates different than the original SCERS I Plan.

All permanent Fund employees are eligible to participate in the system.

System benefits –Service retirement benefits are calculated on the basis of age, salary, and service credit.

Note 9 – Pension Benefit Plan (continued)

SCERS I – The System provides retirement, death, and disability benefits. Retirement benefits vest after five years of credited service, while death and disability benefits vest after ten years of service. Members are eligible for retirement benefits after 30 years of service; at age 52 after 20 years of service; at age 57 after ten years of service; and at age 62 after five years of service. Annual retirement benefits are calculated as 2% multiplied by years of creditable service, multiplied by average salary, based on the highest 24 consecutive months, excluding overtime. Members who retire before meeting the age and/or years of service requirement receive a 0.1% reduction for each year that retirement precedes the date of eligibility. Retirement benefits vest after 5 years of credited service.

SCERS II – Members are eligible for retirement benefits at age 55 after 20 years of service, at age 57 after 10 years of service, and at age 60 after 5 years of service. Annual retirement benefits are calculated as 1.75% multiplied by years of creditable service, multiplied by average salary, based on the highest 60 consecutive months, excluding overtime. Members who retire before meeting the age and/or years of service requirement receive a 0.1% reduction for each year that retirement precedes the date of eligibility. Retirement benefits vest after 5 years of credited service.

Member and employer contributions – Member and employer contributions are:

	YEAR	SCERS I	SCERS II
Member Contribution	2021	10.03%	7.00%
	2020	10.03%	7.00%
Employer Contribution	2021	16.20%	15.72%
	2020	16.20%	15.76%

Member and employer rates are established by the Seattle Municipal Code Chapter 4.36. The Fund's contributions to the System for the years ended December 31, 2021 and 2020, were $8,226,382 and $8,253,575, respectively.

The System issues stand-alone financial statements, which may be obtained by writing to the Seattle City Employees' Retirement System, 720 Third Avenue, Suite 900, Seattle, Washington, 98104, and telephone: (206) 386-1293, or www.seattle.gov/retirement/annual_report.htm.

Pension liabilities, pension expense, and deferred outflows of resources and deferred inflows of resources related to pensions – At December 31, 2021 and 2020, the Fund reported a liability of $65,444,915 and $80,221,489, respectively, its proportionate share of the Systems' net pension liability. The net pension liability was measured as of December 31, 2020 and 2019, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of these dates. The Fund's proportion of the net pension liability was based on a projection of the City's long-term share of contributions to the pension plan relative to the projected contributions of all participating parties, actuarially determined. At December 31, 2021 and 2020, the Fund's proportion was 5.85% and 5.73%, respectively.

Note 9 – Pension Benefit Plan (continued)

For the years ended December 31, 2021 and 2020, the Fund recognized pension expense of approximately $3,000,000 and $8,757,000, respectively.

The Fund's deferred outflows and inflows of resources are as follows at December 31, 2021:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 229,177	$ 1,739,940
Change of assumptions	2,956,687	-
Net difference between projected and actual earnings	-	17,284,684
Contributions made subsequent to measurement date	8,557,308	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	-	1,193,936
Total	$ 11,743,172	$ 20,218,560

The Fund's deferred outflows and inflows of resources are as follows at December 31, 2020:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 11,907	$ 2,436,135
Change of assumptions	3,926,421	-
Net difference between projected and actual earnings	-	6,249,661
Contributions made subsequent to measurement date	8,584,501	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	-	4,466,236
Total	$ 12,522,829	$ 13,152,032

Note 9 – Pension Benefit Plan (continued)

Amounts currently reported as deferred outflows of resources relate to actual experience and difference in actual earnings on pension investments from projected earnings and will be recognized in pension expense as follows for years ending December 31:

2022	$	(5,633,626)
2023		(2,343,252)
2024		(6,075,839)
2025		(3,178,608)
2026		198,629
Total	$	(17,032,696)

Actuarial assumptions – The total pension liability as of December 31, 2021, was determined using the following actuarial assumptions:

Valuation date	January 1, 2020
Measurement date	December 31, 2020
Actuarial cost method	Individual Entry Age Normal
Amortization method	Level Percent, Closed
Remaining amortization period	30 years as of January 1, 2013 valuation
Asset valuation method	5-Year Non-asymptotic
Inflation	2.75%
Investment rate of return	7.25% compounded annually, net of expenses
Discount rate	7.25%
Projected general wage inflation	3.5%
Postretirement benefit increases	1.5%
Mortality	Various rates based on RP-2014 mortality tables and using generational projection of improvement using MP-2014 Ultimate projection scale. See 2018 Investigation of Experience report for details.

The actuarial assumptions that determined the total pension liability as of the measurement date were based on the results of an actuarial experience study for the period January 1, 2014, through December 31, 2017.

The discount rate used to measure the pension liability is based on a projection of cash flows assuming that plan member contributions will be made at the current contribution rate and that participating employers' contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the System's 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 on pension plan investments was applied to all periods on projected benefit payment to determine total pension liability.

Note 9 – Pension Benefit Plan (continued)

The long-term expected rate of return assumption was based on the System's investments using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the System's target asset allocation as of December 31, 2020, are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Equity: Public	4.25%
Equity: Private	7.32%
Fixed Income: Broad	-0.10%
Fixed Income: Credit	3.26%
Real Assets: Real Estate	3.41%
Real Assets: Infrastructure	3.85%

Sensitivity analysis – The following presents the Fund's proportionate share of the net pension liability calculated using the discounted rate of 7.25%, as well as what the employer's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.25%) or 1 percentage point higher (8.25%) than the current rate.

1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
$ 103,311,934	$ 65,444,915	$ 33,785,794

Note 10 – Loans

The Fund has various construction projects that are financed by low interest loans issued by the State. The loan agreements require that the Fund finance a portion of these projects from other sources. These loans have been used to enhance and protect the water system.

Loans outstanding as of December 31, 2021 and 2020, are as follows:

Description	Maturity Years	Interest Rate	Loan Amount	Loans Outstanding 2021	Loans Outstanding 2020
Myrtle Reservoir	2008-2025	1.5%	$ 4,040,000	$ 897,778	$ 1,122,222
Beacon Reservoir	2008-2026	1.5%	4,040,000	1,063,158	1,275,789
West Seattle Reservoir	2009-2027	1.5%	3,030,000	956,842	1,116,316
Maple Leaf	2011-2029	1.5%	3,030,000	1,290,799	1,452,149
Maple Leaf ARRA	2013-2031	1.0%	7,341,758	4,037,967	4,405,055
Morse Lake Pump Plant #1	2014-2037	1.5%	12,120,000	9,696,000	10,302,000
Morse Lake Pump Plant #2	2017-2036	1.5%	6,060,000	4,784,210	5,103,158
			$ 39,661,758	$ 22,726,754	$ 24,776,689

Minimum debt service requirements to maturity on the loans are as follows:

Years Ending December 31,	Principal	Interest	Total
2022	$ 2,049,935	$ 320,711	$ 2,370,646
2023	2,049,935	291,798	2,341,733
2024	2,049,935	262,884	2,312,819
2025	2,049,935	233,971	2,283,906
2026	1,825,490	205,057	2,030,547
2027 - 2031	7,103,699	690,750	7,794,449
2032 - 2036	4,991,825	257,234	5,249,059
2037	606,000	9,090	615,090
	$ 22,726,754	$ 2,271,495	$ 24,998,249

The table below summarizes the activity for the loans for the years ended December 31:

	2021	2020
Net loans, beginning of year	$ 24,776,689	$ 26,826,623
Loan proceeds	-	-
Principal payments	(2,049,935)	(2,049,934)
Net loans, end of year	$ 22,726,754	$ 24,776,689
Loans due within one year	$ 2,049,935	$ 2,049,935
Loans, noncurrent	$ 20,676,819	$ 22,726,754

Note 11 – Commitments

The Fund is required by the Washington State Department of Health (DOH) to complete a program to cover its open, above-ground distribution system reservoirs. The total cost of burying six reservoirs is expected to be approximately $221.6 million through the year 2025; costs beyond 2025 are not estimable as of the date of this report. As of December 31, 2021 and 2020, total cumulative costs incurred were $177.7 million and $168.9 million, respectively.

The City has wholesale contracts with Cascade Water Alliance (CWA) and nineteen individual water districts and municipalities. Sixteen wholesale customers have full and partial requirements contracts which obligate the City to meet the wholesale customers' demand that is not already met by their independent sources of supply. The full and partial requirements contracts include amendment periods where the parties may opt to review and change certain contract terms and conditions in 2022 and 2042. The City and the full and partial requirements Wholesale Customers began the review of certain contract terms in 2021 to determine if any amendments are desired in 2022 under the first amendment period. This review period has been extended one year by mutual agreement, with potential amendments becoming effective in 2023.

Two wholesale customers (including CWA) have block contracts which obligate the City to provide water up to a combined maximum of 41.85 MGD per year. Two other wholesale customers have emergency intertie agreements and do not purchase water from Seattle on a regular basis. The CWA contract expires in 2063 while other wholesale contracts expire in 2062. In 2020, Cascade requested that the City consider selling it additional increments of surplus water that would extend the date at which Cascade's block would begin to decline to sometime past 2039. The City's declining block contract does not obligate the City to sell any additional surplus water to Cascade or any further extensions, unless by mutual agreement. The City began discussions with Cascade in 2022.

The City also has a contract with the City of North Bend to provide untreated water supply up to an average annual amount of 1.1 MGD through 2066 for use in supplementing stream flows.

Note 12 – Habitat Conservation Program Liability

SPU has prepared a comprehensive environmental management plan for its Cedar River Watershed. The purpose of the Habitat Conservation Plan (HCP) is to protect all species of concern that may be affected by the operations of SPU and SCL in the Cedar River Watershed, while allowing the City to continue to provide high quality drinking water to the region. The federal government has accepted the HCP. The total cost of implementing the HCP is expected to be $116.2 million (in 2021 dollars) over a period of 50 years (from the year 2000 through the year 2050).

Expenditures are being funded from a combination of the Fund's operating revenues and issuance of revenue bonds. The total amount expended for the HCP through 2021 is $100.2 million. The remaining $16.0 million to complete the HCP is comprised of an $7.8 million liability and an estimate of $8.2 million for construction and operating commitments. The construction activities will add to the Fund's capital assets and the operating activities are mainly research, monitoring, and maintenance of the HCP Program that will be expensed as incurred.

Required Supplementary Information

Schedule of Seattle Public Utilities' Proportionate Share of the Net Pension Liability

	2021	2020	2019	2018	2017	2016
Employer's proportion of the net pension liability	14.62%	14.33%	14.55%	14.73%	15.13%	16.37%
Employer's proportionate share of the net pension liability	$ 143,163,797	$ 180,105,232	$ 221,049,893	$ 163,086,154	$ 197,454,529	$ 212,671,200
Employer's covered payroll	$ 127,584,358	$ 112,528,955	$ 111,973,027	$ 107,715,383	$ 106,696,535	$ 105,031,141
Employer's proportionate share of the net pension liability as a percentage of its covered payroll	112.21%	160.05%	197.41%	151.40%	185.06%	202.48%
Plan fiduciary net position as a percentage of the total pension liability	78.81%	71.48%	64.14%	72.04%	65.60%	64.03%

Schedule of Seattle Public Utilities' Pension Contributions

	2021	2020	2019	2018	2017	2016
Contractually required employer contribution	$ 20,654,175	$ 17,041,133	$ 17,103,559	$ 16,466,270	$ 16,354,089	$ 16,487,154
Contributions in relation to the contractually required employer contribution	(20,654,175)	(17,041,133)	(17,103,559)	(16,466,270)	(16,354,089)	(16,487,154)
Employer contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -	$ -
Employer's covered payroll	$ 127,584,358	$ 112,528,955	$ 111,973,027	$ 107,715,383	$ 106,696,535	$ 105,031,141
Employer contributions as a percentile of covered payroll	16.19%	15.14%	15.27%	15.29%	15.33%	15.70%

Schedule of City of Seattle's OPEB Liability and Related Ratios

	December 31, 2021	December 31, 2020	December 31, 2019
Total OPEB Liability			
Normal cost	$ 4,015,249	$ 3,378,925	$ 3,842,152
Interest	1,813,401	2,586,942	2,195,238
Differences between expected and actual experience	-	6,956,579	-
Changes in assumptions	3,738,597	(7,760,776)	(3,886,702)
Benefit payment	(2,933,774)	(2,484,320)	(2,333,610)
Total OPEB liability – beginning of year	63,624,261	60,946,911	61,129,833
Total OPEB liability – end of year	$ 70,257,734	$ 63,624,261	$ 60,946,911
Covered-employee payroll	$ 1,124,692,046	$ 1,124,692,046	$ 1,015,097,334
Net OPEB liability as percentage of covered-employee payroll	6.25%	5.66%	6.00%

Other Information (Unaudited)

Water Fund Debt Service Coverage Calculation 2021

Operating Revenues	
Utility Service	$ 232,552,010
Wholesale/Commercial	57,361,589
Other	13,585,497
Total Operating Revenue	303,499,096
Operating Expense	
Salaries and Wages	41,261,728
Personnel Benefits	16,539,255
Supplies	5,961,728
Services	47,020,613
Intergovernmental Payments	47,726,666
Other Operating Expense	7,891,784
Total Operating Expenses	166,401,774
Net Operating Income	137,097,322
Adjustments	
Add: Capital Contributions Connection Charge	4,613,416
Add: City Taxes	35,036,125
Add: Investment Interest	2,261,079
Less: DSRF Earnings	(302,533)
Add: BAB's Subsidy	1,884,728
Add (Less): Net Other Nonoperating Revenues/(Expenses)	5,875,550
Add: Proceeds from Sale of Assets	423,212
Total Adjustments	49,791,577
Net Revenue Available for Debt Service	$ 186,888,899
w/o Credit for City Taxes	$ 151,852,774
Annual Debt Service	
Annual Debt Service	$ 82,409,059
Less: DSRF Earnings	(302,533)
Adjusted Annual Debt Service	$ 82,106,526
Coverage	2.28
Coverage without taxes	1.85

Water System Operating Statistics

	2017	2018	2019	2020	2021
Population Served					
Retail	770,800	788,000	788,500	820,000	**
Wholesale[1]	707,200	718,000	722,500	741,000	**
Total Population Served	1,478,000	1,506,000	1,511,000	1,561,000	**
Water Sales Revenues ($000)[2][3]					
Retail	$ 195,291	$ 198,516	$ 200,304	$ 207,590	$ 213,552
Wholesale	56,210	57,941	57,805	56,782	57,362
Total Water Sales Revenues	$ 251,501	$ 256,457	$ 258,109	$ 264,372	$ 270,914
Billed Water Consumption (MG)[3]					
Retail	20,312	20,233	19,889	18,882	19,522
Wholesale	22,905	22,987	22,128	21,712	23,328
Total Billed Water Use	43,217	43,220	42,017	40,594	42,850
Operating Costs ($ per MG)	$ 4,675	$ 4,924	$ 5,065	$ 5,246	$ 5,184
Gallons Used per Day per Capita	80	79	76	71	75
Retail Meters in Use	195,331	196,634	197,747	198,726	200,152
Number of New Retail Meters	751	1,303	1,113	979	1,426
Total Water Diversions (MGD)	124.0	125.0	124.2	118.2	124.9
Non-Revenue	5.6	6.5	9.1	7.0	7.5
% Non-Revenue	4.5	5.2	7.3	5.9	6.0

** 2021 population served estimates are unchanged from 2020 estimates. Data used to estimate population is currently not available and is not expected to be available until late 2022 or early 2023.

(1) This is the estimated total population served by SPU's water supply

(2) Revenues represent payments from customers for service provided at published rates in each year. Revenues shown do not include the impacts of transfers to/from the Revenue Stabilization Account.

(3) Per capita billed water consumption has been generally decreasing for the past 25 years. Variations in billed water use are primarily associated with year-to-year variations in temperature and precipitation in the summer irrigation period. There has been no change in the geographic area service nor any appreciable change in the number or composition of retail customers.

(5) Gallons used per Day per Capita in 2021 uses the population from 2020.

Major Retail Water Customers – 2021 Annual Revenues and Volumes

City of Seattle, Port of Seattle, University of Washington, Seattle Housing Authority, King County, Equity Residential, Nucor Steel, Marriott International Inc., Seattle Public Schools, Certainteed Gypsum. In aggregate, charges to these customers represented roughly 10% of total billed direct service revenue for the year.

Seattle Public Utilities – Water Fund
(An Enterprise Fund of the City of Seattle)
Other Information (Unaudited)

Water Rates – Effective January 1, 2021

Effective January 1, 2021

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
		Direct Service												
	RATE SCHEDULES	Inside City				Outside City				City of Shoreline / City of Lake Forest Park				
		Residential	MMRD*	Gen Svc	Fire Service	Residential	MMRD*	Gen Svc	Fire Service	Residential	MMRD*	Gen Svc	Fire Service	MMRD* w/PUT
1	**Commodity Charge ($/100 Cubic Feet)**													
2														
3	Offpeak Usage (Sept 16-May 15)	$5.40	$5.40	$5.40		$6.16	$6.16	$6.16		$6.55	$6.55	$6.55		$6.13
4	Peak Usage (May 16-Sept 15)													
5	Up to 5 ccf**	$5.55	$5.55	$6.86		$6.33	$6.33	$7.82		$6.73	$6.73	$8.32		$6.30
6	Next 13 ccf**	$6.86	$6.86	$6.86		$7.82	$7.82	$7.82		$8.32	$8.32	$8.32		$7.79
7	Over 18 ccf**	$11.80	$11.80	$6.86		$13.45	$13.45	$7.82		$14.31	$14.31	$8.32		$13.39
8														
9	Usage over base allowance				$20.00				$22.80				$24.30	
10														
11	Utility Credit ($/month)	$22.85		$12.50		$22.85		$12.50		$22.85		$12.50		
12														
13														
14	**Base Service Charge ($/month/meter)**													
15														
16	3/4 inch and less	$18.45		$18.45		$21.05		$21.05		$22.40		$22.40		
17	1 inch	$19.00		$19.00		$21.65		$21.65		$23.05		$23.05		
18	1-1/2 inch	$29.35	$29.35	$29.35		$33.45	$33.45	$33.45		$35.60	$35.60	$35.60		$33.30
19	2 inch	$32.50	$32.50	$32.50	$17.75	$37.05	$37.05	$37.05	$20.00	$39.40	$39.40	$39.40	$22.00	$36.85
20	3 inch	$120.30	$120.30	$120.30	$23.00	$137.15	$137.15	$137.15	$26.00	$145.90	$145.90	$145.90	$28.00	$136.55
21	4 inch	$172.35	$172.35	$172.35	$43.00	$196.50	$196.50	$196.50	$49.00	$209.00	$209.00	$209.00	$52.00	$195.60
22	6 inch		$212.00	$212.00	$73.00		$242.00	$242.00	$83.00		$257.00	$257.00	$89.00	$241.00
23	8 inch		$250.00	$250.00	$115.00		$285.00	$285.00	$131.00		$303.00	$303.00	$139.00	$284.00
24	10 inch		$305.00	$305.00	$166.00		$348.00	$348.00	$189.00		$370.00	$370.00	$201.00	$346.00
25	12 inch		$412.00	$412.00	$242.00		$470.00	$470.00	$276.00		$500.00	$500.00	$293.00	$468.00
26	16 inch		$477.00	$477.00			$544.00	$544.00			$579.00	$579.00		$542.00
27	20 inch		$614.00	$614.00			$700.00	$700.00			$745.00	$745.00		$697.00
28	24 inch		$771.00	$771.00			$879.00	$879.00			$935.00	$935.00		$875.00

* Master Metered Residential Development

** per residence

MOSSADAMS

APPENDIX D

DEMOGRAPHIC AND ECONOMIC INFORMATION

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DEMOGRAPHIC AND ECONOMIC INFORMATION

Seattle is the largest city in the Pacific Northwest, serves as the County seat and is the center of the County's economic activity. King County is the largest county in the State in population, number of cities and employment, and the twelfth most populous county in the United States. Of the State's population, nearly 30% reside in the County, and of the County's population, 32% live in the City of Seattle.

Population

The most recently released historical and current population counts and estimates for the State of Washington, the County, and the City are given below.

POPULATION

Year	Washington	King County	Seattle
2012 [(1)]	6,835,396	1,945,686	614,283
2013 [(1)]	6,909,666	1,983,550	624,045
2014 [(1)]	7,005,504	2,021,027	638,784
2015 [(1)]	7,106,989	2,061,981	660,908
2016 [(1)]	7,237,661	2,118,958	684,136
2017 [(1)]	7,344,589	2,149,910	694,513
2018 [(1)]	7,464,069	2,187,460	707,555
2019 [(1)]	7,582,481	2,227,755	724,144
2020 [(2)]	7,705,281	2,269,675	737,015
2021 [(3)]	7,766,975	2,287,050	742,400

(1) Source: State of Washington, Office of Financial Management ("OFM"). Intercensal population estimates are bracketed by the two most recent decennial censuses and are provided by OFM to yield a more consistent series than the original postcensal estimates—see following note.

(2) Source: U.S. Department of Commerce, Bureau of Census.

(3) State of Washington, OFM, April 1 Postcensal Estimates of Population (2021 Revised, released November 30, 2021). City postcensal population estimates reference the most recent decennial census count and are updated each year based on changes in housing stock and counts of persons in group quarters facilities.

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

	2016	2017	2018	2019	2020
Seattle MD	$ 71,903	$ 75,973	$ 81,201	$ 85,284	$ 87,452
King County	79,742	84,542	90,438	94,974	96,647
State of Washington	55,884	58,550	62,026	64,758	67,126
United States	49,870	51,885	54,446	56,490	59,510

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 within the City. The value of public construction is not included in this table.

CITY OF SEATTLE
RESIDENTIAL BUILDING PERMIT VALUES

	New Single Family Units		New Multi-Family Units		
Year	**Number**	**Value($)**	**Number**	**Value($)**	**Total Value($)**
2016	797	216,693,139	9,202	1,242,951,877	1,459,645,016
2017	593	162,452,219	9,294	1,562,063,391	1,724,515,610
2018	523	141,737,845	7,395	892,514,843	1,034,252,688
2019	507	139,195,045	10,277	1,554,462,494	1,693,657,539
2020	247	111,343,923	5,479	637,037,156	748,381,079
2021	264	78,231,798	11,716	1,849,751,186	1,927,982,984
2021(1)	88	29,972,334	3,350	483,009,405	512,981,739
2022(1)	140	38,733,905	3,029	612,050,662	650,784,567

(1) Through April.

Source: U.S. Bureau of the Census

Retail Activity

The following table presents information on taxable retail sales in King County and the City.

THE CITY OF SEATTLE AND KING COUNTY
TAXABLE RETAIL SALES

Year	King County	City of Seattle
2017	$ 62,910,608,935	$ 26,005,147,210
2018	69,018,354,390	28,292,069,881
2019	72,785,180,223	29,953,200,188
2020	66,955,895,952	25,904,879,115
2021	78,440,949,141	30,047,705,303

Source: Quarterly Business Review, Washington State Department of Revenue

Employment

The following table presents total employment in Washington State as of December 31, 2020 (unless otherwise noted) for certain major employers in the Puget Sound area.

PUGET SOUND
MAJOR EMPLOYERS

Employer	Employees
Amazon.com	80,000
Microsoft Corp.	57,700
The Boeing Co.	56,900(1)
Joint Base Lewis-McChord	54,000(2)
University of Washington Seattle	49,500
Providence	43,500
Walmart Inc.	22,100
Costco Wholesale Corp.	20,200
Albertsons Cos. dba Safeway, Haggen, Albertsons	20,000
MultiCare Health System	18,300
Virginia Mason Franciscan Health(3)	17,800
King County Government	16,400
Fred Meyer Stores	16,100
City of Seattle(4)	15,200
Starbucks Coffee Co.	14,000
Swedish Health Services	12,700
Seattle Public Schools	11,700
Alaska Air Group Inc.	9,200
Kaiser Permanente	8,200
Seattle Children's Foundation	8,000
T-Mobile USA Inc.	8,000

(1) Since the date of this table, Boeing has faced financial stress and has significantly reduced its company-wide workforce through a combination of buyouts and layoffs and the shift of 787 production out of the State. The State's quarterly economic and revenue forecast released in September 2021 assumed that Boeing was about three quarters of the way through its announced 31,000 company-wide layoffs, which were assumed to be concentrated in the State. The forecast estimated a loss of about 22,300 aerospace jobs (including Boeing and non-Boeing jobs) as of August 2021 and anticipated a further decline in this sector by the end of calendar year 2021

(2) 40,000 are service members and 14,000 are civilian employees.

(3) Virginia Mason and CHI Franciscan Health merged in January 2021.

(4) Source: City of Seattle

Source: Puget Sound Business Journal, Publication Date October 8, 2021

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

	Annual Average				
	2017	**2018**	**2019**	**2020**	**2021**
Civilian Labor Force	1,231,166	1,260,655	1,285,974	1,278,594	1,278,003
Total Employment	1,187,422	1,218,696	1,250,766	1,178,362	1,223,432
Total Unemployment	43,744	41,959	35,208	100,232	54,571
Percent of Labor Force	3.6%	3.3%	2.7%	7.8%	4.3%

NAICS INDUSTRY	**2017**	**2018**	**2019**	**2020**	**2021**
Total Nonfarm	1,397,875	1,432,817	1,467,850	1,383,033	1,407,858
Total Private	1,216,542	1,254,283	1,292,300	1,211,158	1,237,183
Goods Producing	177,733	181,550	186,058	172,467	168,533
Mining and Logging	533	500	500	475	408
Construction	74,342	78,108	79,533	76,675	79,258
Manufacturing	102,867	102,925	106,000	95,267	88,850
Service Providing	1,220,142	1,251,267	1,281,792	1,210,567	1,239,325
Trade, Transportation, and Utilities	268,325	274,642	280,933	276,558	282,650
Information	102,883	111,017	121,633	127,908	134,450
Financial Activities	71,450	73,708	75,267	72,533	73,567
Professional and Business Services	227,792	233,092	238,875	234,558	245,675
Educational and Health Services	179,142	185,842	189,592	179,767	182,683
Leisure and Hospitality	140,775	145,050	146,833	100,675	104,417
Other Services	48,442	49,383	53,108	46,692	45,208
Government	181,333	178,533	175,550	171,875	170,675
Workers in Labor/Management Disputes	0	0	0	0	0

	Apr. 2022
Civilian Labor Force	1,328,152
Total Employment	1,302,585
Total Unemployment	25,567
Percent of Labor Force	1.9%

(1) Columns may not add to totals due to rounding.

Source: Washington State Employment Security Department.

APPENDIX E

BOOK-ENTRY TRANSFER SYSTEM

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BOOK-ENTRY TRANSFER SYSTEM

The following information has been provided by the Depository Trust Company ("DTC"). The City makes no representation as to the accuracy or completeness thereof. Purchasers of the Bonds (the "Beneficial Owners") should confirm the following with DTC or its participants (the "Participants").

The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the Bonds. The Bonds 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 Bond certificate will be issued for each maturity of the Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

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 an S&P 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*.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("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 Bonds 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 Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds 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 Bonds 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 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds 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.

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 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. For example, Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds 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.

Redemption notices shall be sent to DTC. If less than all of the Bonds within a maturity 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.

Neither DTC nor Cede & Co. will consent or vote with respect to Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City 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 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments on the Bonds 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 the City or Bond Registrar, 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, the Bond Registrar, or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) are the responsibility of the City or the Bond Registrar, 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.

DTC may discontinue providing its services as depository with respect to the Bonds at any time by giving reasonable notice to the City or the Bond Registrar. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The following information has been provided by the City.

The City may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered to DTC.

The information in this appendix concerning DTC and DTC's book-entry system has been obtained from sources the City believes to be reliable, but the City takes no responsibility for the accuracy thereof.

The Bond Registrar is not be obligated to exchange or transfer any Bond during the 15 days preceding any principal or interest payment or redemption date.

The City and the Bond Registrar may treat DTC (or its nominee) as the sole and exclusive Registered Owner of the Bonds registered in such name for the purposes of payment of the principal of, premium, if any, or interest with respect to those Bonds, selecting Bonds or portions thereof to be redeemed, giving any notice permitted or required to be given to Registered Owners of Bonds under the Bond Documents, registering the transfer of Bonds, obtaining any consent or other action to be taken by Registered Owners of Bonds, and for all other purposes whatsoever; and the City and the Bond Registrar shall not be affected by any notice to the contrary. The City and the Bond Registrar shall not have any responsibility or obligation to any direct or indirect DTC participant, any person claiming a beneficial ownership interest in the Bonds under or through DTC or any such participant, or any other person which is not shown on the Bond Register as being a Registered Owner of Bonds, with respect to: (i) the Bonds; (ii) any records maintained by DTC or any such participant; (iii) the payment by DTC or such participant of any amount in respect of the principal of, premium, if any, or interest with respect to the Bonds; (iv) any notice which is permitted or required to be given to Registered Owners of Bonds under the Bond Documents; (v) the selection by DTC or any such participant of any person to receive payment in the event of a partial redemption of the Bonds; or (vi) any consent given or other action taken by DTC as Registered Owner of the Bonds.

APPENDIX F

KESTREL VERIFIERS SECOND PARTY OPINION

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Second Party Opinion
EXECUTIVE SUMMARY

ISSUER
The City of Seattle, Washington

OPINION ON
Water System Improvement and Refunding Revenue Bonds, 2022 (Green Bonds)

GREEN STANDARD AND CATEGORY

The Green Bond Principles

- Sustainable Water Management

KEYWORDS
Drinking water, watershed protection, responsible management of natural resources, fish and wildlife habitat restoration, endangered species, Cedar River Watershed, South Fork Tolt Watershed, Pacific Northwest, Washington

EVALUATION DATE
July 13, 2022

SUMMARY
Kestrel Verifiers is of the opinion that the Water System Improvement and Refunding Revenue Bonds, 2022 (Green Bonds) conform with the four core components of the Green Bond Principles 2021 as follows:

- **Use of Proceeds**
  Proceeds of the Bonds will finance and refund capital improvement projects for Seattle's drinking water system that include watershed stewardship, conservation, and water quality improvements. The Bonds align with the *Sustainable Water Management* project category under the Green Bond Principles.
- **Process for Project Evaluation and Selection**
  Seattle Public Utilities has a transparent and consistent process for evaluating priorities for funding and ensuring that environmental considerations are incorporated into planning processes. Capital investments in the water system are identified in the multi-year Capital Improvement Plan and are shaped by the framework established in the *2019 Water System Plan*.
- **Management of Proceeds**
  Proceeds of the Bonds will only be used to finance and refund capital improvement projects that support sustainable operation of the water system and to pay costs of issuance. Proceeds will be deposited into a dedicated Construction Account and proceeds for refunding will be allocated directly to refunding the 2012 Bonds.
- **Reporting**
  The City of Seattle will post continuing disclosures to the Municipal Securities Rulemaking Board ("MSRB") annually through the Electronic Municipal Market Access ("EMMA") system. Additionally, Seattle Public Utilities produces annual water quality reports and Annual Report Cards which provide highlights of capital project delivery and updates on compliance with drinking water standards.

KESTREL VERIFIERS™

Second Party Opinion

Issuer:	**The City of Seattle, Washington**
Issue Description:	Water System Improvement and Refunding Revenue Bonds, 2022 (Green Bonds)
Project:	Capital Improvement Projects
Green Standard:	Green Bond Principles
Green Category:	Sustainable Water Management
Keywords:	Drinking water, watershed protection, responsible management of natural resources, fish and wildlife habitat restoration, endangered species, Cedar River Watershed, South Fork Tolt Watershed, Pacific Northwest, Washington
Par:	$93,260,000
Evaluation Date:	July 13, 2022

GREEN BONDS DESIGNATION

Kestrel Verifiers, an Approved Verifier accredited by the Climate Bonds Initiative, conducted an independent external review of the Water System Improvement and Refunding Revenue Bonds, 2022 (the "Bonds") to evaluate conformance with the Green Bond Principles (June 2021) established by the International Capital Market Association.

This Second Party Opinion reflects our review of the uses and allocation of proceeds, oversight and conformance of the Bonds with the Green Bond Principles. In our opinion, the Bonds are aligned with the four core components of the Green Bond Principles and qualify for Green Bonds designation.

ABOUT THE ISSUER

The City of Seattle ("City" or "Seattle"), located in the State of Washington, is the largest city in the Pacific Northwest. Seattle Public Utilities ("SPU") owns and operates various utilities, including the municipal water system (the "Water System"). SPU provides retail service to approximately 1.5 million people and businesses in Seattle and maintains wholesale contracts with 17 suburban water districts and municipalities, plus the Cascade Water Alliance. Water System infrastructure includes:[1]

- The Cedar and South Fork Tolt supply sources;
- Three groundwater wells;
- Two primary water treatment plants;
- 11 booster chlorination facilities;
- 325 million gallons of treated water storage;
- 30 pump stations;
- Approximately 1,800 miles of transmission and distribution system pipelines;
- Almost 200,000 meters and service connections;
- More than 17,000 distribution system valves;
- About 19,000 hydrants;
- Monitoring and control systems;
- Various buildings and other related facilities; and
- 320 million gallons of storage capacity.

[1] "2022-2027 Proposed Capital Improvement Plan: Seattle Public Utilities - Water," City of Seattle, accessed July 12, 2022, https://www.seattle.gov/documents/Departments/FinanceDepartment/2227adoptedcip/SPUCIP.pdf.

SPU's *2019 Water System Plan* highlights the organization's sustainability efforts for the Water System. SPU has comprehensive conservation practices and goals, and the Bond-financed activities and projects directly contribute to SPU's sustainable agenda for the Water System.

SPU has taken a uniquely bold approach to addressing anticipated risks associated with climate change and has produced climate impact assessments since 2002. In the most recent iteration of the study completed in 2018, 40 climate change scenarios were evaluated to identify critical improvements to avoid future negative impacts on supply, storage, and treatment systems. As a founding member of the national Water Utility Climate Alliance, SPU collaborates with 11 other large water utilities to integrate climate research and adaptation into operations and share key recommendations with broader stakeholders. SPU recognizes the potential effects of climate change and catastrophic wildfires on Seattle's water system and regularly evaluates plans to increase resilience and mitigate impacts. SPU will remain engaged in future research on climate change by conducting periodic assessments and continuing to research effective climate adaptation strategies.

ALIGNMENT TO GREEN STANDARDS[2]

Use of Proceeds

The Bonds will finance and refund water system improvements. Financed projects are eligible green projects as defined by the Green Bond Principles in the project category of *Sustainable Water Management*. The projects serve approximately 1.5 million people and businesses and more than 17 suburban water districts and municipalities.

A portion of Bond proceeds will finance capital improvement projects in the adopted 2022-2027 Capital Improvement Program ("CIP"), as described in Table 1. The remaining proceeds will refund the City of Seattle, Washington, Water System Refunding Revenue Bonds, 2012 ("2012 Bonds") which refunded multiple outstanding bonds as described in the Official Statement (collectively, the "Refunded Bonds").

Green Standard

The Green Bond Principles

Eligible Project Category:

- Sustainable Water Management

Table 1: Overview of Water System program areas receiving Bond proceeds

Program	Examples
Distribution	Rehabilitation and improvements to water mains, storage, and facilities that distribute water; may include projects such as safety upgrades, pump station improvements
Transmission	Rehabilitation and improvements to transmission infrastructure for delivering untreated water to treatment facilities and other water customers; may include seismic upgrades
Watershed Stewardship	Protection and conservation of water resources in Cedar River and South Fork Tolt River watersheds, including restoration activities, habitat improvements, and responsible management of natural resources
Water Quality & Treatment	Construction and rehabilitation of water treatment facilities and reservoirs, including covering open reservoirs and responding to changing state and federal regulatory standards

[2] Green Bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or refinance eligible Green Projects which are aligned with the four core components of ICMA's Green Bond Principles.

Program	Examples
Water Resources	Planning and activities to meet anticipated demand for water to support ecosystem health and community needs; includes education and actions to reduce residential and commercial water use and management of water flow requirements for aquatic habitat, riparian vegetation, and wetlands
Habitat Conservation Program	Projects identified in the Cedar River Watershed Habitat Conservation Plan, including activities related to the Endangered Species Act, land acquisition, and investment in in-stream flows, forest and land conservation, and salmon and steelhead fish spawning habitat restoration
Shared Cost Projects	Partnership with other entities to support interdepartmental programs
Technology	Technology improvements to manage billing, project management, system performance metrics, and other technology investments

SPU's long history of watershed stewardship is infused in projects financed by the Refunded Bonds. In 1996, ownership of Cedar River and South Fork Tolt Watersheds was consolidated through the US Forest Service for long-term conservation and management by the City of Seattle. Activities are guided by comprehensive management policies that support sustainable forest management, protection of fish and wildlife habitat, watershed research, and education. In 2000, commercial timber harvest was halted in the Cedar River Watershed and forests may only be cut now for purposes of environmental restoration. The City continues to invest in aquatic resources research to guide decision-making for watershed planning and salmon recovery in regional watersheds.

SPU has also demonstrated major success in achieving its water conservation goals. Proceeds of the Refunded Bonds have enabled these achievements. The *One Percent Regional Conservation Program* was initiated in 1999 and outlined a goal to maintain stable water demand for ten years while simultaneously experiencing significant population growth. Continuing this commitment to conservation, SPU's 2007 Water System Plan included programs to provide 15 million gallons per day (MGD) water use savings between 2011 and 2030. This program was identified in response to the Municipal Water Law passed by the Washington State Legislature in 2003 that established water use efficiency standards. Projects financed by the Refunded Bonds support these programs.

The projects and activities in CIPs financed by the Refunded Bonds fall into similar program areas as the 2022 Bonds. Program areas include: Water Infrastructure, Water Quality, Water Supply, Technology, Habitat Conservation Plan, Environmental Stewardship, and Other Agency Projects. Projects in the CIPs included, but were not limited to, replacing system components; construction of a new Cedar River Ozonation Facility; new supervisory control and data acquisition system to monitor and control water supplies; and an agreement with the Bonneville Power Administration to construct an electric power transmission line through the Cedar River Watershed. Projects prioritized in CIPs also included seismic improvements; conservation projects to reduce per capita water use; and stream and forest restoration and fish passage improvements associated with the Cedar River Watershed Habitat Conservation Plan.

Climate Risk and Transition Alignment[3]

Mitigation of transition risk requires planning for the necessary structural changes to address climate change and the transition to a low-carbon economy, with recognition of the risks associated with inaction. The Bonds are addressing climate transition risks by incorporating climate resilience into long-term planning and

[3] Climate change poses significant systemic risks to US financial systems and municipal issuers. These risks may broadly be divided into physical risk, transition risk and societal risk. Physical risk includes effects of climate change on physical assets, such as extreme weather events and sea level rise. Transition risk includes market and technology risks, reputational risks, policy risks and legal risks. Societal risk includes risk to stable democracies, risk to civil liberties and human rights, risk to labor supply, and risk to public health. Mitigation of transition risk requires planning for the necessary structural changes to address climate change and societal inequity with recognition of the risks associated with inaction. We refer to this as the just transition to a decarbonized economy, or the just transition.

decision-making. SPU is committed to understanding and adapting to anticipated changes through ongoing research, monitoring, and prioritization of capital improvement projects.

The Bonds also finance activities which align with the *just transition,* characterized by the equitable inclusion and accommodation of all individuals, with a special focus on disadvantaged groups who may be directly or indirectly affected by the structural changes necessary for the transition to a low-carbon economy. The Bonds support the just transition by financing activities and projects that ensure long-term, reliable access to drinking water for all residents.

Process for Project Evaluation and Selection

SPU has a transparent and consistent process for evaluating priorities for funding and ensuring that environmental considerations are incorporated into planning processes. Capital investments in the water system are identified in the multi-year Capital Improvement Plan (the "Water CIP") and are shaped by the framework established in the *Water System Plan*. The Water System capital projects are included in the City-wide capital improvement program, and reviewed and adopted annually by the City's Mayor and City Council. The *Water System Plan* was last updated in 2019. It includes water demand forecasts, shortage contingency plans, treatment chemicals, design standards, water rates, and land use and zoning maps. The *Water System Plan* also addresses system resilience in response to climate change.

The Water CIP is guided by the following thematic priorities:

- Asset preservation
- Health and human safety
- Environmental sustainability
- Race and social justice

The Water CIP development process follows multiple steps. Initially, SPU identifies projects through planning, emergencies, or other activities. Projects are justified through an analysis that identifies need and a triple bottom line review that accounts for economic, environmental, and social factors. Projects are prioritized based on an established set of criteria approved by the SPU CEO/General Manager and Asset Management Committee.

The City has multi-decadal watershed management plans that ensure responsible management of water sources and the surrounding ecosystems. Capital improvement projects financed and refunded by the Bonds align with or directly support these planning documents, including the most recent 2022-2027 Adopted CIP. The *Cedar River Watershed Habitat Conservation Plan* includes fish and wildlife management, forest road abandonment, restoration thinning and tree planting, and riparian, wetland, and stream habitat restoration. The *South Fork Tolt Watershed Management Plan* was developed in 2008 to guide similar activities in the South Fork Watershed.

Management of Proceeds

Proceeds of the Bonds will finance and refund capital improvement projects that support the sustainable operation of the water system and to pay costs of issuance. Proceeds will be deposited into a dedicated Construction Account, and proceeds for refunding will be allocated directly to refunding the 2012 Bonds. Any proceeds that are not allocated immediately may temporarily be invested according to the City's investment policy that prioritizes safety and liquidity.

Reporting

The City of Seattle will submit continuing disclosures to the Municipal Securities Rulemaking Board ("MSRB") as long as the Bonds are outstanding. The City will also provide reports in the event of material developments. This reporting will be done annually on the Electronic Municipal Market Access ("EMMA") system operated by the MSRB. Additionally, Seattle Public Utilities produces annual water quality reports and Annual Report Cards which provide highlights of capital project delivery and updates on compliance with drinking water standards. These are typically available at seattle.gov/utilities/about/reports.

CONCLUSION

Based on our independent external review, the Water System Improvement and Refunding Revenue Bonds, 2022 (Green Bonds) conform, in all material respects, with the Green Bond Principles (2021) and are in complete alignment with the *Sustainable Water Management* eligible project category. The Bonds directly contribute to advancing Seattle Public Utility's watershed stewardship, conservation, and water quality improvement goals.

ABOUT KESTREL VERIFIERS

For over 20 years Kestrel has been a trusted consultant in sustainable finance. Kestrel Verifiers, a division of Kestrel 360, Inc. is a Climate Bonds Initiative Approved Verifier qualified to verify transactions in all asset classes worldwide. Kestrel is a US-based certified Women's Business Enterprise. For more information, visit kestrelverifiers.com.

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DISCLAIMER

This Opinion aims to explain how and why the discussed financing meets the ICMA Green Bond Principles based on the information which was available to us during the time of this engagement (July 2022) only. By providing this Opinion, Kestrel Verifiers is not certifying the materiality of the projects financed by the Green Bonds. It was beyond Kestrel Verifiers' scope of work to review for regulatory compliance and no surveys or site visits were conducted. Furthermore, we are not responsible for surveillance on the project or use of proceeds. Kestrel Verifiers relied on information made publicly available by the City. The Opinion delivered by Kestrel Verifiers does not address financial performance of the Green Bonds or the effectiveness of allocation of its proceeds. This Opinion does not make any assessment of the creditworthiness of the City, or its ability to pay principal and interest when due. This is not a recommendation to buy, sell or hold the Bonds. Kestrel Verifiers is not liable for consequences when third parties use this Opinion either to make investment decisions or to undertake any other business transactions. This Opinion may not be altered without the written consent of Kestrel Verifiers. Kestrel Verifiers reserves the right to revoke or withdraw this Opinion at any time. Kestrel Verifiers certifies that there is no affiliation, involvement, financial or non-financial interest in the City or the projects discussed. We are 100% independent. Language in the offering disclosure supersedes any language included in this Second Party Opinion.