



San Francisco  
Water Power Sewer

Services of the San Francisco Public Utilities Commission

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August 30, 2024

Ms. Angela Calvillo  
Clerk of the Board  
City and County of San Francisco  
1 Dr. Carlton B. Goodlett Place City Hall, Room 244  
San Francisco, CA 94102

Dear Ms. Calvillo,

Please see the attached Memorandum for the 2024 Wastewater Revenue Bonds New Money and Refunding Sale Report of \$1,142,975,000 SFPUC Wastewater Revenue Bonds, 2024 Series ABCD from the San Francisco Public Utilities Commission and the Municipal Advisor for the transaction, Montague DeRose and Associates, LLC. The 2024 Wastewater Revenue Bonds, 2024 Series ABCD were issued pursuant to authorization from the Board of Supervisors of the City and County of San Francisco to retire commercial paper and finance or re-finance capital projects benefiting the Wastewater Enterprise.

The Report to the Clerk of the Board of Supervisors showing the results of the bonds, together with a copy of the final Official Statement, are being provided in accordance with Board of Supervisors Ordinance 181-23.

Sincerely,

/s/ Nikolai J. Sklaroff

Nikolai J. Sklaroff  
*Capital Finance Director*  
San Francisco Public Utilities Commission

**London N. Breed**  
Mayor

**Tim Paulson**  
President

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General Manager



**OUR MISSION:** To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.



## Memorandum

**To:** Board of Supervisors of the City and County of San Francisco

**From:** Montague DeRose and Associates, LLC, Municipal Advisor to and on behalf of the Public Utilities Commission of the City and County of San Francisco Finance Staff

**Date:** August 30, 2024

**Subject:** 2024 Wastewater Enterprise Revenue Bond New Money and Refunding Sale Report  
\$431,110,000 Revenue Bonds, 2024 Series A (SSIP) (Green Bonds) (Federally Taxable)  
\$87,250,000 Revenue Bonds, 2024 Series B (Non-SSIP) (Federally Taxable)  
\$539,720,000 Revenue Bonds, 2024 Series C (SSIP) (Green Bonds)  
\$84,895,000 Revenue Bonds, 2024 Series D (Non-SSIP)

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### Background:

The Board of Supervisors of the City and County of San Francisco (the “Board of Supervisors”) has adopted various ordinances which have authorized the issuance of new money Wastewater Revenue Bonds and Wastewater Revenue Refunding Bonds in order to finance, and refinance, the costs of capital projects benefiting the Wastewater Enterprise (together, the “Authorizing Legislation”). The most recent of this Authorizing Legislation in effect was Ordinance No. 181-23, passed on July 25, 2023.

Pursuant to the Authorizing Legislation, on July 31, 2024, the San Francisco Public Utilities Commission (the “SFPUC”) issued \$431.110 million of the Wastewater Revenue Bonds, 2024 Series A (SSIP) (Green Bonds) (Federally Taxable), \$87.250 million of the Wastewater Revenue Bonds, 2024 Series B (Non-SSIP) (Federally Taxable), \$539.720 million of the Wastewater Revenue Bonds, 2024 Series C (SSIP) (Green Bonds), and \$84.895 million of the Wastewater Revenue Bonds, 2024 Series D (Non-SSIP) for the following primary purposes:

- 2024 Series A Bonds (SSIP) (Green Bonds) (Federally Taxable): issued to fund certain costs related to the Biosolids Digester Facilities Project, a project of the SSIP, and to fund capitalized interest. The 2024 Series A Bonds were issued on a taxable basis to provide time for the Biosolids Digesters Facilities Project team to finalize project construction/operation plans and for the financing team to evaluate options for long-term financing of the remaining project costs to maximize potential Investment Tax Credits from the Inflation Reduction Act.
- 2024 Series B Bonds (Non-SSIP) (Federally Taxable): issued to re-finance certain costs related to the Southeast Community Center by defeasing or refunding portions of the Wastewater Revenue Bonds, Series 2018B and the Wastewater Revenue Bonds, Series 2023B that were attributable to the Southeast Community Center. The 2024 Series B Bonds were issued on a taxable basis to allow for flexible use of the facility by the community without need for tax compliance monitoring regarding private use. Pursuant to Ordinance No. 181-23, the Commission approved this refinancing despite it not satisfying the 3% net present value debt service savings test by finding that significant non-economic factors exist that justify the waiver of the savings test (i.e. desire to have the flexibility to change and optimize space and events use of the facility without violating tax laws).
- 2024 Series C Bonds (SSIP) (Green Bonds): issued to retire commercial paper and finance capital projects benefitting the Wastewater Enterprise from the SSIP, and to fund capitalized interest.

- 2024 Series D Bonds (Non-SSIP): issued to retire commercial paper and finance capital projects benefitting the Wastewater Enterprise, and to fund capitalized interest.

Per the Authorizing Legislation, within 30 days of a new money or refunding bond issuance, the SFPUC must file with the Clerk of the BOS the following:

- a. New Money Bond Sale Report showing the results of the sale of the bonds, including (a) principal amount sold and method of sale, (b) true interest cost, (c) final maturity, (d) the facilities constructed and/or improved, and (e) a statement about the remaining bonding authorization under the applicable financing budget ordinance.
- b. Refunding Bonds Savings Report that reflects at least a 3% net present value debt service savings, unless the Commission found that significant non-economic factors exist to justify waiving the 3% NPV debt service savings test, together with a copy of the final Official Statement for the refunding bonds.

The SFPUC has requested that Montague DeRose and Associates, LLC, who served as co-municipal advisor to the 2024 Wastewater Revenue Bonds, prepare this combined New Money Bond Sale and Refunding Bond Savings report for purposes of complying with the requirements set forth in Ordinance No. 181-23.

**New Money Bond Sale Report:**

As noted, the SFPUC issued 2024 Series A Bonds, 2024 Series C Bonds and 2024 Series D Bonds on July 31, 2024. The SFPUC priced the 2024 Series A Bonds on July 17, 2024, and the 2024 Series C and 2024 Series D Bonds on July 18, 2024, all via negotiated sale. The 2024 Series A Bonds, 2024 Series C Bonds and 2024 Series D Bonds were issued for new money purposes (together, these series represent the 2024 New Money Bonds). Details of the 2024 New Money Bonds are noted in Table 1.

<b>Table 1   Summary Statistics: 2024 New Money Bonds</b>			
	<b>2024 Series A Bonds (SSIP) (Green Bonds) (Federally Taxable)</b>	<b>2024 Series C Bonds (SSIP) (Green Bonds)</b>	<b>2024 Series D Bonds (Non-SSIP)</b>
<b>Pricing Date</b>	July 17, 2024	July 18, 2024	July 18, 2024
<b>Closing Date</b>	July 31, 2024	July 31, 2024	July 31, 2024
<b>Method of Sale</b>	Negotiated	Negotiated	Negotiated
<b>Final Maturity</b>	10/01/2027	10/01/2054	10/01/2054
<b>Principal Amount Sold</b>	\$431.110 million	\$539.720 million	\$84.895 million
<b>True Interest Cost</b>	4.706%	4.163%	4.165%

Table 2 includes a list of projects which are expected to be fully or partially funded with the proceeds of the 2024 Series A Bonds, 2024 Series C Bonds, and 2024 Series D Bonds.

**Table 2 | Projects Financed with 2024 New Money Bonds**

Project
<b>2024 Series A Bonds</b>
Sewer System Improvement Program (SSIP) Biosolids-Digester Project
<b>2024 Series C Bonds</b>
Collection System Improvement
Central Bayside System Improvement
SSIP Biosolids-Digester Project
Stormwater Management
Flood Resilience-hydraulic
SSIP Program-wide Management
Treatment Plant Improvement
Urban Watershed Assessment
<b>2024 Series D Bonds</b>
Treasure Island Capital Improvement
Ocean Beach Project
Islais Creek Outfall
Wastewater Enterprise Repair and Replacement Collection System
Wastewater Enterprise Repair and Replacement Treatment Facilities
Southeast Outfall Assessment & Rehabilitation
Sewer Improvement – Small Diameter
Sewer Lateral Improvements
Interim Sidestream Nutrient Removal
Customer Service System
Information Technology Services Capital Projects

**Remaining Authorization under Ordinance No. 181-23:**

As of July 1, 2024, pursuant to Proposition E, the SFPUC had authorized but unissued wastewater revenue bonds or other forms of indebtedness in the amount of \$1,854,755,439.00 under Proposition E. Following the issuance of the 2024 Bonds, and the subsequent retirement of commercial paper notes with proceeds of the bonds, the SFPUC has \$711,780,439.00 of authorized but unissued bonds remaining under Proposition E.

**Refunding Bonds Savings Report:**

As stated, the 2024 Series B Bonds were issued to refinance costs for the Southeast Community Center funded from previously issued bonds (Series 2018B and Series 2023B), given that there is a desire to change and optimize space and event uses of the facility, which necessitated the execution of this refinancing with taxable debt. Ordinance No. 181-23 specifies refunding bonds must meet a 3% NPV debt service savings test, unless the Commission makes a finding, by resolution, that significant non-economic factors exist that justify the waiver of this savings test. The Commission adopted Resolution No. 24-0160 on June 25, 2024 that authorized the issuance of the 2024 Wastewater Revenue Bonds and included the finding that significant non-economic factors exist that justify the waiver of the savings test for the 2024 Series B Bonds, including a desire to provide optimal flexibility for the use of the Southeast Community Center by the community.

The 2024 Series B Bonds were priced on July 17, 2024 and closed on July 31, 2024 as part of the same negotiated sale. Details of the refinancing results of the 2024 Series B Bonds are included in Table 3 (note, as stated, this refinancing was not required to satisfy the 3% NPV debt service savings test typically required for refunding bonds due to the significant non-economic factors discussed above).

<b>Table 3   Summary Statistics: 2024 Series B Bonds</b>	
	<b>2024 Series B Bonds (Non-SSIP) (Federally Taxable)</b>
<b>Pricing Date</b>	July 17, 2024
<b>Closing Date</b>	July 31, 2024
<b>Method of Sale</b>	Negotiated
<b>Principal Amount Sold</b>	\$87.250 million
<b>Par Amount of Refunded Bonds</b>	\$81.405 million
<b>NPV Savings (%)</b>	-2.675%
<b>NPV Savings (\$)</b>	-\$2.178 million

A copy of the final Official Statement for the 2024 Wastewater Revenue Bonds is included with this report.

In the opinion of Norton Rose Fulbright US LLP, San Francisco, California, Bond Counsel, under existing statutes, regulations, rulings and judicial decisions, and assuming compliance with certain covenants in the documents pertaining to the Tax-Exempt Bonds and requirements of the Internal Revenue Code of 1986, as described herein, interest on the Tax-Exempt Bonds is not included in the gross income of the owners thereof for federal income tax purposes. In the further opinion of Bond Counsel, interest on the Tax-Exempt Bonds is not treated as an item of tax preference for purposes of the federal alternative minimum tax on individuals. Bond Counsel is also of the opinion that, under existing law, interest on the 2024ABCD Bonds is exempt from personal income taxes of the State of California. Bond Counsel expresses no opinion with respect to the exclusion from gross income for federal income tax purposes of the interest on the Taxable Bonds. Such interest is not intended to be excluded from gross income for federal income tax purposes. See “TAX MATTERS” herein.



**\$1,142,975,000**  
**PUBLIC UTILITIES COMMISSION OF THE**  
**CITY AND COUNTY OF SAN FRANCISCO**  
**Wastewater Revenue Bonds**

**\$431,110,000**  
**2024 Series A**  
**(SSIP) (Green Bonds)**  
**(Federally Taxable)**



**\$87,250,000**  
**2024 Series B**  
**(Non-SSIP)**  
**(Federally Taxable)**

**\$539,720,000**  
**2024 Series C**  
**(SSIP) (Green Bonds)**



**\$84,895,000**  
**2024 Series D**  
**(Non-SSIP)**

**Dated:** Date of Delivery

**Due:** As shown on inside cover pages

**This cover page contains certain information for quick reference only. It is not intended to be a summary of the security or terms of this issue. Investors are instructed to read the entire Official Statement, including the appendices hereto, to obtain information essential to making an informed investment decision.**

**General.** This Official Statement provides information regarding the above-captioned bonds (collectively, the “2024ABCD Bonds”) of the Public Utilities Commission of the City and County of San Francisco (the “SFPUC”). Capitalized terms not otherwise defined on this cover shall have the meanings ascribed to such terms herein.

**Authority for Issuance.** The SFPUC is issuing the 2024ABCD Bonds pursuant to authority granted by the Charter of the City and County of San Francisco (the “City”), under Proposition E, approved by San Francisco voters on November 5, 2002. The 2024ABCD Bonds will be issued under supplemental indentures that supplement the Indenture, dated as of January 1, 2003 (as amended and supplemented, the “Indenture”), by and between the SFPUC and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, as trustee (the “Trustee”). See “SECURITY FOR THE BONDS.” All bonds, notes and other obligations of the SFPUC issued and outstanding at any given time under the Indenture, including the 2024ABCD Bonds, and Parity Loans as the context requires, are referred to collectively in this Official Statement as the “Bonds.”

**Purpose.** The 2024ABCD Bonds are being issued to finance certain capital projects benefiting the Wastewater Enterprise, including from the Sewer System Improvement Program (the “SSIP”), to retire tax-exempt Commercial Paper Notes issued to finance certain capital projects benefiting the Wastewater Enterprise, including from the SSIP, to defease a portion of certain of the SFPUC’s outstanding Bonds, to fund capitalized interest with respect to a portion of the 2024ABCD Bonds through April 1, 2026, and to pay the costs of issuance of the 2024ABCD Bonds. See “PLAN OF FINANCE,” “ESTIMATED SOURCES AND USES OF FUNDS,” “GREEN BONDS DESIGNATION AND CLIMATE CERTIFICATION” and “WASTEWATER ENTERPRISE CAPITAL PROGRAM.”

**Denominations and Interest.** The 2024ABCD Bonds will be available in denominations of \$5,000 or any integral multiple thereof and will mature in the years and amounts and accrue interest from their date of delivery at the rates set forth on the inside cover pages of this Official Statement. Interest on the 2024ABCD Bonds is payable semiannually on April 1 and October 1 of each year, commencing on October 1, 2024. See “THE 2024ABCD BONDS.”

**Book-Entry Only.** The 2024ABCD Bonds will be issued as fully registered bonds, registered in the name of Cede & Co., as nominee of The Depository Trust Company (“DTC”), New York, New York, and will be available to ultimate purchasers (the “Beneficial Owners”) under the book-entry only system maintained by DTC. Beneficial Owners will not receive physical certificates representing their interests in the 2024ABCD Bonds. The principal of, premium, if any, and interest on the 2024ABCD Bonds are payable to DTC by the Trustee, and, so long as DTC is acting as securities depository for the 2024ABCD Bonds, disbursements of such payments to DTC Participants is the responsibility of DTC and disbursements of such payments to the Beneficial Owners is the responsibility of DTC Participants. See “THE 2024ABCD BONDS.”

**Redemption.** The 2024ABCD Bonds are subject to redemption prior to their stated maturities as described herein. See “THE 2024ABCD BONDS – Redemption.”

**Security.** Under the Indenture, the SFPUC has irrevocably pledged the Net Revenues of the Wastewater Enterprise to the punctual payment of principal of, premium, if any, and interest on the Bonds, which consist of any parity revenue bonds, notes and other obligations issued under the Indenture, including the 2024ABCD Bonds, and Parity Loans, subject to the allocation of funds provided in the Indenture. The 2024ABCD Bonds are payable on a parity with certain Outstanding Bonds previously issued by the SFPUC under the Indenture and certain Parity Loans. No Reserve Account will be established for the 2024ABCD Bonds. See “SECURITY FOR THE BONDS.”

**Limited Obligation.** The SFPUC is not obligated to pay the principal of, premium, if any, or interest on the Bonds from any source of funds other than Net Revenues of the Wastewater Enterprise. The SFPUC has no taxing power. The General Fund of the City is not liable for the payment of the principal of, premium, if any, or interest on the Bonds, and neither the credit nor the taxing power of the City is pledged to the payment of the principal of, premium, if any, or interest on the Bonds. The Bonds are not secured by a legal or equitable pledge of, or charge, lien, or encumbrance upon, any of the property of the City or of the SFPUC or any of its income or receipts, except Net Revenues of the Wastewater Enterprise. See “SECURITY FOR THE BONDS.”

The 2024ABCD Bonds are offered when, as and if issued by the SFPUC and received by the Underwriters, subject to the approval of validity by Norton Rose Fulbright US LLP, San Francisco, California, Bond Counsel to the SFPUC, and to certain other conditions. Certain matters will be passed upon for the SFPUC and the City by Orrick, Herrington & Sutcliffe LLP, San Francisco, California, Disclosure Counsel, and by the City Attorney of the City and County of San Francisco. Montague DeRose and Associates, LLC, Walnut Creek, California, and Backstrom McCauley Berry & Co., LLC, San Francisco, California, Co-Municipal Advisors to the SFPUC, assisted in the structuring of this financing. Certain matters will be passed upon for the Underwriters by Hawkins Delafield & Wood LLP, San Francisco, California. It is expected that the 2024ABCD Bonds in fully registered form will be available for delivery in book-entry form through the facilities of DTC on or about July 31, 2024.

<b>BofA Securities</b>	<b>Morgan Stanley</b>	<b>Morgan Stanley</b>	<b>BofA Securities</b>
<b>J.P. Morgan</b>	<b>Jefferies</b>	<b>J.P. Morgan</b>	<b>Jefferies</b>
<b>Ramirez &amp; Co., Inc.</b>	<b>Siebert Williams Shank &amp; Co., LLC</b>	<b>Ramirez &amp; Co., Inc.</b>	<b>Siebert Williams Shank &amp; Co., LLC</b>
<i>(Underwriters for the 2024AB Bonds)</i>		<i>(Underwriters for the 2024CD Bonds)</i>	

## MATURITY SCHEDULES

### Wastewater Revenue Bonds 2024 Series A (SSIP) (Green Bonds) (Federally Taxable)

Maturity (October 1)	Principal Amount	Interest Rate	Price*	CUSIP† Base Number 79768H
2027	\$431,110,000	4.655%	100.00	JN9

### Wastewater Revenue Bonds 2024 Series B (Non-SSIP) (Federally Taxable)

\$87,250,000 Serial Bonds

Maturity (October 1)	Principal Amount	Interest Rate	Price*	CUSIP† Base Number 79768H
2027	\$ 8,210,000	4.655%	100.00	JP4
2028	4,055,000	4.581	100.00	JQ2
2032	10,050,000	4.806	100.00	JR0
2033	10,550,000	4.836	100.00	JS8
2034	11,075,000	4.886	100.00	JT6
2035	11,635,000	4.966	100.00	JU3
2036	10,545,000	5.036	100.00	JV1
2037	21,130,000	5.086	100.00	JW9

\* Reoffering prices have been provided by the 2024AB Underwriters. See “UNDERWRITING – 2024AB Bonds.”

† CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Global Services data base. Neither the SFPUC nor the 2024AB Underwriters assume any responsibility for the accuracy of the CUSIP data.

## MATURITY SCHEDULES (CONTINUED)

### Wastewater Revenue Bonds 2024 Series C (SSIP) (Green Bonds)

\$219,860,000 Serial Bonds

Maturity (October 1)	Principal Amount	Interest Rate	Yield*	CUSIP† Base Number 79768H
2027	\$10,510,000	5.00%	2.69%	JX7
2028	3,280,000	5.00	2.70	JY5
2029	7,135,000	5.00	2.70	JZ2
2030	7,500,000	5.00	2.71	KA5
2031	8,060,000	5.00	2.71	KB3
2037	1,735,000	5.00	2.95‡	KC1
2038	23,450,000	5.00	3.00‡	KD9
2039	25,755,000	5.00	3.10‡	KE7
2040	19,640,000	5.00	3.16‡	KF4
2041	20,105,000	5.00	3.25‡	KG2
2042	21,120,000	5.00	3.32‡	KH0
2043	19,175,000	5.00	3.39‡	KJ6
2044	19,155,000	5.00	3.44‡	KK3
2045	17,550,000	5.00	3.50‡	KL1
2046	15,690,000	5.00	3.54‡	KM9

\$72,575,000 5.00% Term Bonds due October 1, 2049 Yield\* 3.66%‡ CUSIP† 79768H KN7  
\$247,285,000 5.00% Term Bonds due October 1, 2054 Yield\* 3.77%‡ CUSIP† 79768H KP2

### Wastewater Revenue Bonds 2024 Series D (Non-SSIP)

\$34,255,000 Serial Bonds

Maturity (October 1)	Principal Amount	Interest Rate	Yield*	CUSIP† Base Number 79768H
2027	\$1,630,000	5.00%	2.69%	KQ0
2028	510,000	5.00	2.70	KR8
2029	1,110,000	5.00	2.70	KS6
2030	1,165,000	5.00	2.71	KT4
2031	1,250,000	5.00	2.71	KU1
2037	265,000	5.00	2.95‡	KV9
2038	3,725,000	5.00	3.00‡	KW7
2039	4,005,000	5.00	3.10‡	KX5
2040	3,055,000	5.00	3.16‡	KY3
2041	3,130,000	5.00	3.25‡	KZ0
2042	3,280,000	5.00	3.32‡	LA4
2043	2,985,000	5.00	3.39‡	LB2
2044	2,980,000	5.00	3.44‡	LC0
2045	2,730,000	5.00	3.50‡	LD8
2046	2,435,000	5.00	3.54‡	LE6

\$11,290,000 5.00% Term Bonds due October 1, 2049 Yield\* 3.66%‡ CUSIP† 79768H LF3  
\$39,350,000 5.00% Term Bonds due October 1, 2054 Yield\* 3.77%‡ CUSIP† 79768H LG1

\* Reoffering yields have been provided by the 2024CD Underwriters. See “UNDERWRITING – 2024CD Bonds.”

† CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Global Services data base. Neither the SFPUC nor the 2024CD Underwriters assume any responsibility for the accuracy of the CUSIP data.

‡ Priced to the par call date of October 1, 2034.

## SFPUC WASTEWATER ENTERPRISE AND MAJOR FACILITIES



Figure 1-1 – SFPUC Wastewater Enterprise and Major Facilities (Not to Scale)

The SFPUC Wastewater Enterprise operates and maintains the City’s combined sewer system, which collects and treats both sewage and stormwater. The map in Figure 1-1 shows the location of key facilities (as described below) owned by the City and under the jurisdiction of the SFPUC and the urban watershed boundaries which encompass the major drainage areas of San Francisco.

The system consists of approximately 1,000 miles of main sewer lines that collect sanitary sewage from homes and businesses and stormwater runoff; large transport/storage box facilities; 28 pump stations that transport sewage and stormwater; and two all-weather treatment plants and one wet-weather treatment facility that discharge treated water into the San Francisco Bay and Pacific Ocean. San Francisco has eight distinct urban watersheds: five on the Bayside (North Shore; Channel; Islais; Sunnydale; and Yosemite) and three on the Westside (Richmond; Sunset; and Lake Merced). The all-weather treatment plants and wet-weather facility treat sewage and stormwater based on whether the collection point is located on the Bayside or the Westside. The Oceanside Water Pollution Control Plant is not connected to the Bayside treatment systems, and the Southeast Water Pollution Control Plant and North Point Wet Weather Facility are not connected to the Westside treatment system. See “THE WASTEWATER ENTERPRISE.”

The Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any of the property of the City or of the SFPUC or any of its income or receipts, except the Net Revenues of the Wastewater Enterprise. See “SECURITY FOR THE BONDS.”

## GENERAL INFORMATION

No dealer, broker, salesperson or other person has been authorized by the SFPUC to give any information or to make any representation other than those contained herein and, if given or made, such other information or representation must not be relied upon as having been authorized by the SFPUC.

This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 2024ABCD Bonds, by any person in any jurisdiction in which it is unlawful for such person to make such an offer, solicitation or sale. This Official Statement is not to be construed as a contract with the initial purchasers of the 2024ABCD Bonds. Any statement made in this Official Statement involving any forecast or matter of estimates or opinion, whether or not expressly so stated, is intended solely as such and not as a representation of fact.

The information set forth herein other than that provided by the SFPUC, although obtained from sources which are believed to be reliable, is not guaranteed as to accuracy or completeness. The information and expressions of opinion herein are subject to change without notice and neither delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the SFPUC or the City since the date hereof.

The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The City maintains a website at <https://www.sf.gov/> and the SFPUC maintains a website at <https://www.sfpuc.gov/>. The City and the SFPUC also maintain social media accounts. In addition, certain information and reports found on other websites and other information and reports are referred to in this Official Statement. *The information and reports available on such websites, social media accounts and the other referenced information and reports, are not incorporated by reference into this Official Statement and should not be relied upon in making an investment in the 2024ABCD Bonds.*

The issuance and sale of the 2024ABCD Bonds have not been registered under the Securities Act of 1933 in reliance upon the exemption provided thereunder by Section 3(a)(2) for the issuance and sale of municipal securities.

This Official Statement is delivered for use in connection with the issuance, sale and delivery of the 2024ABCD Bonds and may not be reproduced or used, in whole or in part, for any other purpose.

## FORWARD-LOOKING STATEMENTS

CERTAIN STATEMENTS CONTAINED IN THIS OFFICIAL STATEMENT REFLECT NOT HISTORICAL FACTS BUT FORECASTS AND “FORWARD-LOOKING STATEMENTS.” ALL FORWARD-LOOKING STATEMENTS ARE PREDICTIONS AND ARE SUBJECT TO KNOWN AND UNKNOWN RISKS AND UNCERTAINTIES. NO ASSURANCE CAN BE GIVEN THAT THE FUTURE RESULTS DISCUSSED HEREIN WILL BE ACHIEVED, AND ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THE FORECASTS DESCRIBED HEREIN. IN THIS RESPECT, THE WORDS “ESTIMATE,” “PROJECT,” “ANTICIPATE,” “EXPECT,” “INTEND,” “BELIEVE” AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. ALL PROJECTIONS, FORECASTS, ASSUMPTIONS, EXPRESSIONS OF OPINIONS, ESTIMATES AND OTHER FORWARD-LOOKING STATEMENTS ARE EXPRESSLY QUALIFIED IN THEIR ENTIRETY BY THE CAUTIONARY STATEMENTS SET FORTH IN THIS OFFICIAL STATEMENT. GIVEN THEIR UNCERTAINTY, INVESTORS ARE CAUTIONED NOT TO PLACE UNDUE RELIANCE ON SUCH STATEMENTS.

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

Tim Paulson, President  
Anthony Rivera, Vice President  
Newsha Ajami, Commissioner  
Kate H. Stacy, Commissioner

**PUBLIC UTILITIES COMMISSION OFFICIALS**

Dennis J. Herrera, General Manager  
Ronald P. Flynn, Deputy General Manager and Chief Operating Officer  
Nancy L. Hom, Assistant General Manager, Business Services and Chief Financial Officer  
Joel Prather, Assistant General Manager, Wastewater Enterprise  
Masood Ordikhani, Assistant General Manager, External Affairs  
Barbara Hale, Assistant General Manager, Power Enterprise  
Stephen Robinson, Assistant General Manager, Infrastructure Division  
Steven R. Ritchie, Assistant General Manager, Water Enterprise

**CITY AND COUNTY OF SAN FRANCISCO**

**MAYOR**

London Breed

**BOARD OF SUPERVISORS**

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Connie Chan, District 1  
Matt Dorsey, District 6  
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Rafael Mandelman, District 8  
Myrna Melgar, District 7  
Dean Preston, District 5  
Hillary Ronen, District 9  
Ahsha Safaí, District 11  
Catherine Stefani, District 2  
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**CITY ATTORNEY**

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## OFFICIAL STATEMENT

**\$1,142,975,000**

**Public Utilities Commission of the  
City and County of San Francisco  
Wastewater Revenue Bonds**

<b>\$431,110,000</b> <b>2024 Series A</b> <b>(SSIP) (Green Bonds)</b> <b>(Federally Taxable)</b>	<b>\$87,250,000</b> <b>2024 Series B</b> <b>(Non-SSIP)</b> <b>(Federally Taxable)</b>	<b>\$539,720,000</b> <b>2024 Series C</b> <b>(SSIP) (Green Bonds)</b>	<b>\$84,895,000</b> <b>2024 Series D</b> <b>(Non-SSIP)</b>
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## INTRODUCTION

*This Introduction is qualified in its entirety by reference to the more detailed information included and referred to elsewhere in this Official Statement. The offering of the hereinafter defined 2024ABCD Bonds to potential investors is made only by means of the entire Official Statement. Capitalized terms used in this Introduction and not otherwise defined have the respective meanings assigned to them elsewhere in this Official Statement, including “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”*

### General

This Official Statement, including the cover pages and Appendices hereto, is provided to furnish certain information in connection with the offering by the Public Utilities Commission of the City and County of San Francisco (the “**SFPUC**”) of its Wastewater Revenue Bonds, 2024 Series A (SSIP) (Green Bonds) (Federally Taxable) (the “**2024A Bonds**”), 2024 Series B (Non-SSIP) (Federally Taxable) (the “**2024B Bonds**” and, together with the 2024A Bonds, the “**2024AB Bonds**” or the “**Taxable Bonds**”), 2024 Series C (SSIP) (Green Bonds) (the “**2024C Bonds**”), and 2024 Series D (Non-SSIP) (the “**2024D Bonds**” and, together with the 2024C Bonds, the “**2024CD Bonds**” or the “**Tax-Exempt Bonds**” and, together with the 2024AB Bonds, the “**2024ABCD Bonds**”). All bonds, notes and other obligations of the SFPUC issued and outstanding at any given time under the Indenture (as defined herein), including the 2024ABCD Bonds and the Parity Loans (as defined herein) as the context requires, are referred to collectively in this Official Statement as the “**Bonds**.”

### Authority for Issuance

The SFPUC is issuing the 2024ABCD Bonds pursuant to authority granted by the Charter (the “**Charter**”) of the City and County of San Francisco (the “**City**”), under Proposition E, approved by San Francisco voters on November 5, 2002 (“**Proposition E**”).

The 2024A Bonds will be issued under a Seventeenth Supplemental Indenture, dated as of July 1, 2024 (the “**Seventeenth Supplemental Indenture**”), by and between the SFPUC and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, as trustee (the “**Trustee**”). The 2024B Bonds, 2024C Bonds and 2024D Bonds will be issued under an Eighteenth Supplemental Indenture, dated as of July 1, 2024 (the “**Eighteenth Supplemental Indenture**”), by and between the SFPUC and the Trustee. The Seventeenth Supplemental Indenture and Eighteenth Supplemental Indenture supplement the Indenture, dated as of January 1, 2003 (the “**Original Indenture**” and, as amended and supplemented, including as supplemented by the Seventeenth Supplemental Indenture and Eighteenth Supplemental Indenture, the “**Indenture**”), by and between the SFPUC and the Trustee.

The 2024ABCD Bonds are being issued pursuant to Ordinance No. 173-20, adopted by the Board of Supervisors of the City (the “**Board of Supervisors**”) on September 29, 2020, Ordinance No. 128-21, adopted by the Board of Supervisors on July 27, 2021, Ordinance No. 110-22, adopted by the Board of Supervisors on June 14, 2022, and Ordinance No. 181-23, adopted by the Board of Supervisors on July 25, 2023, and under a resolution adopted by the SFPUC governing body (the “**Commission**”) on June 25, 2024.

See “OBLIGATIONS PAYABLE FROM NET REVENUES – Authority for Issuance of Revenue Bonds and Other Obligations Payable from Net Revenues.”

### **Purpose**

The 2024ABCD Bonds are being issued to finance certain capital projects benefiting the Wastewater Enterprise, including from the Sewer System Improvement Program (the “SSIP”), to retire tax-exempt Commercial Paper Notes (as defined herein) issued to finance certain capital projects benefiting the Wastewater Enterprise, including from the SSIP, to defease a portion of the SFPUC’s outstanding 2018B Bonds (as defined herein) and a portion of the outstanding 2023B Bonds (as defined herein), to fund capitalized interest with respect to the 2024A Bonds, 2024C Bonds and 2024D Bonds through April 1, 2026, and to pay the costs of issuance of the 2024ABCD Bonds. The Commercial Paper Notes to be retired with the proceeds of the 2024C Bonds and 2024D Bonds will be paid within 90 days of the issuance of the 2024C Bonds and 2024D Bonds, respectively. See “PLAN OF FINANCE,” “ESTIMATED SOURCES AND USES OF FUNDS,” “GREEN BONDS DESIGNATION AND CLIMATE CERTIFICATION” and “WASTEWATER ENTERPRISE CAPITAL PROGRAM.”

### **The SFPUC and the Wastewater Enterprise**

The SFPUC is a department of the City responsible for the maintenance, operation and development of three utility enterprises. See “THE PUBLIC UTILITIES COMMISSION.”

The Wastewater Enterprise provides sewage and stormwater collection, treatment and disposal services to residential, commercial and industrial customers in San Francisco, as well as three municipal sewer service providers that serve residents and businesses in northern San Mateo County. The Wastewater Enterprise’s services are provided through (i) a combined sewer system that collects sewage and stormwater, (ii) two all-weather treatment plants and one wet-weather treatment facility and (iii) effluent outfalls to the San Francisco Bay and Pacific Ocean. See “THE WASTEWATER ENTERPRISE.”

The SFPUC’s Water Enterprise (as defined herein) delivers retail water services to San Francisco and wholesale water to users in three other Bay Area counties, and the SFPUC’s Power Enterprise (as defined herein) delivers power, mainly hydroelectric, for City government operations and to other users. See “THE PUBLIC UTILITIES COMMISSION.” **The revenues of the Water Enterprise and the Power Enterprise are not available for, and do not secure, payment of the principal of, premium, if any, or interest on the Bonds, including the 2024ABCD Bonds.**

### **Security for the 2024ABCD Bonds**

Under the Indenture, the SFPUC has irrevocably pledged the Net Revenues (as defined herein) of the Wastewater Enterprise to the punctual payment of principal of, premium, if any, and interest on the Bonds, which consist of any parity revenue bonds, notes and obligations issued under the Indenture, including the 2024ABCD Bonds, and Parity Loans, subject to the flow of funds contained in the Indenture. The 2024ABCD Bonds and all other Bonds are secured by a parity lien on Net Revenues. Under the Indenture, Parity Loans are treated as “Bonds” for certain purposes and are therefore secured by a pledge of Net Revenues on a parity with the 2024ABCD Bonds. See “SECURITY FOR THE BONDS” and “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

The Indenture defines “Net Revenues” as all “Revenues” less all “Operation and Maintenance Costs of the Enterprise” (each as defined herein). Revenues are generated principally from the sewer service charges to customers for the sanitary wastewater and stormwater collection, treatment and disposal services of the Wastewater Enterprise. Wastewater rates are set by the SFPUC, subject to rejection by resolution of the Board of Supervisors. See “FINANCIAL OPERATIONS – Wastewater Enterprise Rate Setting” and “– Wastewater Enterprise Rates and Charges.”

**The SFPUC is not obligated to pay the principal of, premium, if any, or interest on the Bonds from any source of funds other than Net Revenues of the Wastewater Enterprise. The SFPUC has no taxing power.**

**The General Fund of the City is not liable for the payment of the principal of, premium, if any, or interest on the Bonds, and neither the credit nor the taxing power of the City is pledged to the payment of the principal of, premium, if any, or interest on the Bonds. The Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any of the property of the City or of the SFPUC or any of its income or receipts, except Net Revenues of the Wastewater Enterprise. See “SECURITY FOR THE BONDS.”**

#### **Sources of Repayment for the 2024A Bonds**

Although the 2024A Bonds are secured by a pledge of Net Revenues of the Wastewater Enterprise, the SFPUC does not expect that Net Revenues will be sufficient to pay the principal of the 2024A Bonds at maturity. The SFPUC has determined that principal of the 2024A Bonds will qualify as “Excluded Principal” under the Indenture. See “SECURITY FOR THE BONDS – Rate Covenants.” As such, the SFPUC intends to pay interest on the 2024A Bonds from Net Revenues of the Wastewater Enterprise and to pay principal of the 2024A Bonds from the proceeds of additional notes, revenue bonds or other revenue secured obligations (referred to herein as the “**Take-Out Obligations**”) to be issued by the SFPUC on or prior to the maturity of the 2024A Bonds. If the SFPUC is unable to issue Take-Out Obligations, no assurance can be given that the SFPUC will have sufficient funds on hand to pay the principal of the 2024A Bonds on their maturity date. See “PLAN OF FINANCE” and “RISK FACTORS – Access to Capital Markets.”

#### **No Reserve Account for 2024ABCD Bonds**

No Reserve Account will be established for the 2024ABCD Bonds.

#### **Outstanding and Future Parity Bonds and Other Indebtedness**

**Parity Bonds.** The SFPUC has 14 series of outstanding parity revenue bonds, issued under the Indenture, in the aggregate principal amount of approximately \$3.285 billion as of July 1, 2024. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Outstanding Parity Revenue Bonds.”

The Indenture permits, upon the satisfaction of certain conditions, the issuance of additional bonds secured by a pledge of Net Revenues (the “**Additional Bonds**”) on a parity with the Outstanding Bonds and the 2024ABCD Bonds. See “SECURITY FOR THE BONDS – Additional Series of Bonds.”

**Parity Loans.** Under the Indenture, the SFPUC may enter into loan agreements with the State of California (the “**State**”) and any board, department or agency thereof, or the federal government and any board, department and agency thereof, to finance certain categories of projects relating to the facilities of the Wastewater Enterprise. These loans (referred to herein as the “**Parity Loans**”) are payable from Net Revenues on a parity with the Bonds. In accordance with the Fifth Supplemental Indenture, dated as of September 14, 2017, Parity Loans are treated as “Bonds” for certain purposes under the Indenture. See “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

As of the date of this Official Statement, the SFPUC has entered into seven State Revolving Fund (“**SRF**”) loans with the State for the Wastewater Enterprise. These SRF loans constitute “Parity Loans” under the Indenture. The maximum aggregate amount that may be disbursed under such existing SRF loans is approximately \$400.5 million. The SFPUC has also applied for three additional SRF loans for the Wastewater Enterprise. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Parity Loans” and “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

**WIFIA Bonds.** The SFPUC has issued three parity Bonds under the Indenture to evidence its repayment obligation to the United States Environmental Protection Agency (the “**EPA**”), acting by and through the Administrator of the EPA (the “**WIFIA Lender**”), under the WIFIA Loan Agreements (as defined and further described herein). The WIFIA Lender has agreed to make (i) the BDFP WIFIA Loan (as defined and further described herein) to the SFPUC in an amount not to exceed \$699,242,023 to finance eligible costs of the Biosolids Digester Facilities Project (as defined herein) plus certain eligible expenses, (ii) the STPI WIFIA Loan (as defined and further described herein) to the SFPUC in an amount not to exceed \$513,861,981 to finance eligible costs of the

Southeast Treatment Plant Improvements Project (as defined herein) plus certain eligible expenses, and (iii) up to five loans to the SFPUC in an aggregate amount not to exceed \$791,337,456 to finance certain Wastewater Enterprise capital improvement projects, including the Project 1 WIFIA Loan (as defined and further described herein), in an amount not to exceed \$369,335,021. The WIFIA Bonds (as defined and further described herein) are payable from and secured by a pledge of Net Revenues on a parity with the Bonds. As of the date of this Official Statement, the SFPUC has made two draws on the BDFP WIFIA Loan and the principal amount of the BDFP WIFIA Bond (as defined herein) is approximately \$562,277,529 and one draw on the STPI WIFIA Loan and the principal amount of the STPI WIFIA Bond (as defined herein) is approximately \$352,573,021. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Water Infrastructure Finance and Innovation Act Loans” and “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

### **Risk Factors**

Investment in the 2024ABCD Bonds is subject to certain risks that should be considered, in addition to other matters set forth in this Official Statement, in evaluating an investment in the 2024ABCD Bonds. For a general overview of certain risk factors, see “RISK FACTORS.”

### **Continuing Disclosure**

The SFPUC will covenant for the benefit of the Owners and Beneficial Owners of the 2024ABCD Bonds to provide certain financial information and operating data regarding the Wastewater Enterprise not later than March 31 following the end of its Fiscal Year (presently June 30), beginning on March 31, 2025, with respect to the report for Fiscal Year 2023-24, and to provide notices of the occurrence of certain enumerated events. These covenants will be made to assist the Underwriters in complying with Rule 15c2-12(b)(5) of the Securities and Exchange Commission (the “**Rule**”). See “CONTINUING DISCLOSURE” and “APPENDIX D – FORM OF CONTINUING DISCLOSURE CERTIFICATE.”

### **Other Matters**

Brief descriptions of the 2024ABCD Bonds, the security and sources of payment for the 2024ABCD Bonds, the SFPUC and the Wastewater Enterprise are provided herein. Such descriptions do not purport to be comprehensive or definitive. Definitions of certain capitalized terms used herein may be found in “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.” All references made to various documents herein are qualified in their entirety by reference to the forms thereof, all of which are available for inspection at the office of the SFPUC at:

San Francisco Public Utilities Commission  
525 Golden Gate Avenue, 13<sup>th</sup> Floor  
San Francisco, CA 94102  
Attention: Chief Financial Officer and Assistant General Manager, Business Services  
(415) 554-3155

## **THE 2024ABCD BONDS**

### **General**

The 2024ABCD Bonds will be dated as of their date of delivery and will accrue interest from their date of delivery at the rates per annum set forth on the inside cover pages of this Official Statement. Interest on the 2024ABCD Bonds will be calculated based on a 360-day year composed of twelve 30-day months. Interest on the 2024ABCD Bonds is payable on April 1 and October 1 each year, commencing October 1, 2024. The 2024ABCD Bonds will mature on the dates and in the principal amounts set forth on the inside cover pages of this Official Statement. The 2024ABCD Bonds will be issued in fully registered form in denominations of \$5,000 or any integral multiple of \$5,000. Under the Indenture, the record date with respect to the payment of principal of and interest on the 2024ABCD Bonds is the 15<sup>th</sup> day of the month immediately preceding an interest payment date, whether such day is a Business Day.

## Securities Depository and Book-Entry System

The 2024ABCD Bonds will be issued in fully registered form, registered in the name of Cede & Co., as nominee for The Depository Trust Company (“DTC”), New York, New York, as the Owner of the 2024ABCD Bonds. So long as DTC, or its nominee, Cede & Co., is the Owner of the 2024ABCD Bonds, all payments on the 2024ABCD Bonds will be made directly to DTC. Disbursement of such payments to the DTC Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners of the 2024ABCD Bonds will be the responsibility of the DTC Participants. See “APPENDIX E – SECURITIES DEPOSITORY AND THE BOOK-ENTRY SYSTEM.”

## Redemption

### Redemption of 2024A Bonds

**Optional Redemption of 2024A Bonds.** The 2024A Bonds are subject to redemption prior to its stated maturity, at the option of the SFPUC, from and to the extent of any source of available funds, as a whole or in part, on any date on or after September 1, 2027, at a redemption price equal to 100% of the principal amount of the 2024A Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium.

**Make-Whole Optional Redemption of 2024A Bonds.** Prior to September 1, 2027, the 2024A Bonds are subject to redemption prior to its stated maturity date either in whole or in part, at the option of the SFPUC, at any time, at a redemption price equal to the greater of (i) 100% of the principal amount thereof or (ii) the Discounted Value thereof, plus in either case, accrued interest thereon to the date of redemption. See “– Definitions for Make-Whole Optional Redemption of 2024A Bonds and 2024B Bonds” below.

**Partial Redemption.** If the 2024A Bonds are redeemed in part, the 2024A Bonds shall be redeemed pro-rata.

### Redemption of 2024B Bonds

**Optional Redemption of 2024B Bonds.** The 2024B Bonds are subject to redemption prior to their stated maturity, at the option of the SFPUC, from and to the extent of any source of available funds, as a whole or in part, on any date on or after October 1, 2034, at a redemption price equal to 100% of the principal amount of the 2024B Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium.

**Make-Whole Optional Redemption of 2024B Bonds.** Prior to October 1, 2034, the 2024B Bonds are subject to redemption prior to their respective stated maturity dates either in whole or in part, at the option of the SFPUC, at any time, at a redemption price equal to the greater of (i) 100% of the principal amount thereof or (ii) the Discounted Value thereof, plus in either case, accrued interest thereon to the date of redemption. See “– Definitions for Make-Whole Optional Redemption of 2024A Bonds and 2024B Bonds” below.

**Partial Redemption.** If the 2024B Bonds are redeemed in part, the SFPUC shall direct the maturities, or portions thereof, to be redeemed, and if less than all of the 2024B Bonds of a particular maturity are to be redeemed, the 2024B Bonds shall be redeemed pro-rata within any maturity.

### Definitions for Make-Whole Optional Redemption of 2024A Bonds and 2024B Bonds

“**Blended Treasury Yield**” means, with respect to a maturity of the 2024A Bonds or a maturity of the 2024B Bonds, as applicable, the yield computed by the SFPUC or the Calculation Agent as the linear interpolation of two Market Treasury Yields such that the theoretical maturity that corresponds to the interpolated Market Treasury Yield equals the date that corresponds to the remaining average life date of the maturity to be redeemed from the redemption date. The first Market Treasury Yield shall be the yield on an actively traded U.S. Treasury security, or a U.S. Treasury constant maturity with the maturity closest to but no later than the date corresponding to the remaining average life of the 2024A Bonds maturity or the 2024B Bonds maturity, as applicable, to be redeemed. The second Market Treasury Yield shall be the yield on an actively traded U.S. Treasury security or a U.S. Treasury

constant maturity with the maturity closest to but no earlier than the date corresponding to the remaining average life of the 2024A Bonds maturity or the 2024B Bonds maturity, as applicable, to be redeemed.

“**Calculation Agent**” means a municipal advisor or other agent selected by the SFPUC to perform the calculations required in connection with the redemption of any 2024A Bonds or 2024B Bonds, as applicable, pursuant to the Indenture. The SFPUC may conclusively rely upon the calculations made by the Calculation Agent in connection with such redemption.

“**Discount Yield**” with respect to the 2024A Bonds means, the Blended Treasury Yield, as determined by the SFPUC or the Calculation Agent with respect to the 2024A Bonds to be redeemed plus 10 basis points (0.10%). “**Discount Yield**” with respect to the 2024B Bonds means, the Blended Treasury Yield, as determined by the SFPUC or the Calculation Agent with respect to the 2024B Bonds maturity to be redeemed: (i) plus 10 basis points (0.10%) with respect to the 2024B Bonds maturing on and prior to October 1, 2028, and (ii) plus 15 basis points (0.15%) with respect to the 2024B Bonds maturing on and after October 1, 2032. The Discount Yield will be calculated assuming semi-annual compounding based upon a 360-day year consisting of twelve 30-day months.

“**Discounted Value**” means, with respect to each outstanding maturity of the 2024A Bonds or the 2024B Bonds, as applicable, to be redeemed, the sum as determined by the SFPUC or the Calculation Agent of the amounts obtained by discounting all remaining scheduled payments of principal and interest (exclusive of interest accrued to the date of redemption) on such maturity from their respective scheduled payment dates to the applicable redemption date, at a yield (computed on a semi-annual basis, assuming a 360-day year consisting of twelve 30-day months) equal to the applicable Discount Yield.

“**Market Treasury Yield**” means that yield, as determined by the SFPUC or the Calculation Agent, assuming semi-annual compounding based upon a 360-day year consisting of twelve 30-day months, which is equal to:

(i) the yield determined using the average of the bid and ask prices for the applicable maturity of an actively traded U.S. Treasury security, reported, as of 11:00 a.m., New York City time, on the Valuation Date on the Bloomberg’s Fixed Income Trading (“FIT”) screen (or, if not available, any other nationally recognized trading screen reporting on-line intraday trading in U.S. Treasury securities); or

(ii) if the yield described in (i) above is not reported as of such time or the yield reported as of such time is not ascertainable, the most recent yield published for the applicable U.S. Treasury constant maturity from the federal Reserve Statistical Release H.15 Daily Update (or any comparable or successor publication) reported, as of 11:00 a.m., New York City time, on the Valuation Date; or

(iii) if the yields described in (i) and (ii) above are not reported as of such time or the yields reported as of such time are not ascertainable, the yield for the applicable maturity of any actively traded U.S. Treasury security shall be based upon the average of yields determined using bid and ask price quotations for such security (after excluding the highest and lowest quotations) as of 3:30 p.m., New York City time, on the Valuation Date received from no less than five primary dealers in U.S. Government securities selected by the SFPUC.

“**Valuation Date**” means no less than the third Business Day nor more than the twentieth Business Day preceding the redemption date.

Redemption of 2024C Bonds

**Optional Redemption of 2024C Bonds.** The 2024C Bonds maturing on and after October 1, 2037, are subject to redemption prior to their stated maturity, at the option of the SFPUC, from and to extent of any source of available funds, as a whole or in part, on any date on or after October 1, 2034, at a redemption price equal to 100% of the principal amount of the 2024C Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium. If 2024C Bonds are to be optionally redeemed in part, the SFPUC shall direct the maturities, or portions thereof, to be redeemed, and, if less than all of the 2024C Bonds of a particular maturity are to be redeemed, the 2024C Bonds shall be redeemed by lot within any such maturity.

**Mandatory Sinking Fund Redemption of 2024C Bonds.** The 2024C Bonds maturing on October 1, 2049, are further subject to mandatory sinking fund redemption, by lot, prior to their stated maturity, on October 1 in the years and in the following principal amounts as shown below:

<u>Redemption Date (October 1)</u>	<u>Principal Amount</u>
2047	\$16,055,000
2048	17,965,000
2049*	38,555,000

\* Maturity

The 2024C Bonds maturing on October 1, 2054, are further subject to mandatory sinking fund redemption, by lot, prior to their stated maturity, on October 1 in the years and in the following principal amounts as shown below:

<u>Redemption Date (October 1)</u>	<u>Principal Amount</u>
2050	\$40,995,000
2051	42,265,000
2052	51,045,000
2053	52,760,000
2054*	60,220,000

\* Maturity

Redemption of 2024D Bonds

**Optional Redemption of 2024D Bonds.** The 2024D Bonds maturing on and after October 1, 2037, are subject to redemption prior to their stated maturity, at the option of the SFPUC, from and to extent of any source of available funds, as a whole or in part, on any date on or after October 1, 2034, at a redemption price equal to 100% of the principal amount of the 2024D Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium. If 2024D Bonds are to be optionally redeemed in part, the SFPUC shall direct the maturities, or portions thereof, to be redeemed, and, if less than all of the 2024D Bonds of a particular maturity are to be redeemed, the 2024D Bonds shall be redeemed by lot within any such maturity.

**Mandatory Sinking Fund Redemption of 2024D Bonds.** The 2024D Bonds maturing on October 1, 2049, are further subject to mandatory sinking fund redemption, by lot, prior to their stated maturity, on October 1 in the years and in the following principal amounts as shown below:

Redemption Date (October 1)	Principal Amount
2047	\$2,500,000
2048	2,795,000
2049*	5,995,000

\* Maturity

The 2024D Bonds maturing on October 1, 2054, are further subject to mandatory sinking fund redemption, by lot, prior to their stated maturity, on October 1 in the years and in the following principal amounts as shown below:

Redemption Date (October 1)	Principal Amount
2050	\$6,525,000
2051	6,725,000
2052	8,125,000
2053	8,395,000
2054*	9,580,000

\* Maturity

#### General Redemption Provisions

***Selection of 2024C and 2024D Bonds for Redemption.*** Whenever less than all of the 2024C Bonds or 2024D Bonds of any one maturity and tenor of any Series are called for redemption and such 2024C Bonds or 2024D Bonds are redeemable by lot, the Trustee will select the 2024C Bonds or 2024D Bonds of such maturity and tenor to be redeemed from the Outstanding 2024C Bonds or 2024D Bonds of such maturity and tenor, by lot or by any other manner which the Trustee deems fair and equitable. For purposes of such selection, 2024C Bonds or 2024D Bonds will be deemed to be made up of \$5,000 portions of principal and any such portion may be redeemed separately.

***Notice of Redemption for 2024ABCD Bonds.*** Notice of redemption will be mailed by the Trustee at least 30 days but not more than 60 days prior to the redemption date to DTC (so long as the DTC Book-Entry System is used). The actual receipt by the owner of any 2024ABCD Bonds of notice of such redemption is not a condition precedent to redemption, and failure to receive a redemption notice or any defect in a redemption notice will not affect the validity of the proceedings for the redemption of such 2024ABCD Bonds or the cessation of the accrual of interest on the date fixed for such redemption. See “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – GENERAL REDEMPTION PROVISIONS – Notice of Redemption” and “APPENDIX E – SECURITIES DEPOSITORY AND THE BOOK-ENTRY SYSTEM.”

***Rescission of Notice of Redemption for 2024ABCD Bonds.*** The SFPUC may, at its option, prior to the date fixed for redemption in any notice of redemption of 2024ABCD Bonds, rescind and cancel such notice of redemption by written request to the Trustee and the Trustee will mail notice of such cancellation to the recipients of the notice of redemption being cancelled.

***Effect of Redemption for 2024ABCD Bonds.*** When notice of redemption has been duly given as described above, and moneys for payment of the redemption price are held by the Trustee, the 2024ABCD Bonds so called for redemption will, on the redemption date designated in such notice, become due and payable at the redemption price specified in such notice; and from and after the date so designated, interest on the 2024ABCD Bonds so called for redemption will cease to accrue, those 2024ABCD Bonds will cease to be entitled to any benefit or security under the Indenture, and the Owners of those 2024ABCD Bonds will have no rights in respect thereof except to receive payment of the redemption price thereof. The Trustee will, upon surrender for payment of any of said 2024ABCD Bonds, pay such 2024ABCD Bonds at the redemption price, together with accrued interest thereon. All 2024ABCD Bonds redeemed will be cancelled upon surrender and no 2024ABCD Bonds will be issued in place thereof.

## **Defeasance**

The obligations of the SFPUC and the pledge, lien, covenants and agreements of the SFPUC made or provided for in the Indenture as to any 2024ABCD Bonds will be fully discharged and satisfied and will no longer be deemed outstanding thereunder if certain conditions set forth in the Indenture are satisfied. See “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – DEFEASANCE.”

## **PLAN OF FINANCE**

### **General**

The 2024A Bonds are being issued to (i) finance certain capital projects benefiting the Wastewater Enterprise from the SSIP, (ii) fund capitalized interest with respect to the 2024A Bonds through April 1, 2026, and (iii) pay the costs of issuance of the 2024A Bonds.

Although the 2024A Bonds are secured by a pledge of Net Revenues of the Wastewater Enterprise, the SFPUC does not expect that Net Revenues will be sufficient to pay the principal of the 2024A Bonds at maturity. The SFPUC has determined that principal of the 2024A Bonds will qualify as “Excluded Principal” under the Indenture. See “SECURITY FOR THE BONDS – Rate Covenants.” As such, the SFPUC intends to pay interest on the 2024A Bonds from Net Revenues of the Wastewater Enterprise and to pay principal of the 2024 Bonds from the proceeds of Take-Out Obligations to be issued by the SFPUC on or prior to the maturity of the 2024A Bonds. If the SFPUC is unable to issue Take-Out Obligations, no assurance can be given that the SFPUC will have sufficient funds on hand to pay the principal of the 2024A Bonds on their maturity date. See “RISK FACTORS – Access to Capital Markets.”

The 2024B Bonds are being issued to (i) defease a portion of the outstanding 2018B Bonds and a portion of the outstanding 2023B Bonds and (ii) pay the costs of issuance of the 2024B Bonds.

The 2024C Bonds are being issued to (i) retire approximately \$272.0 million principal amount of and interest on tax-exempt Commercial Paper Notes issued to finance certain capital projects benefiting the Wastewater Enterprise from the SSIP, (ii) finance certain capital projects benefiting the Wastewater Enterprise from the SSIP, (iii) fund capitalized interest with respect to the 2024C Bonds through April 1, 2026, and (iv) pay the costs of issuance of the 2024C Bonds. The Commercial Paper Notes to be retired with the proceeds of the 2024C Bonds will be paid within 90 days of the issuance of the 2024C Bonds.

The 2024D Bonds are being issued to (i) retire approximately \$72.3 million principal amount of and interest on tax-exempt Commercial Paper Notes issued to finance certain capital projects benefiting the Wastewater Enterprise, (ii) finance certain capital projects benefiting the Wastewater Enterprise, (iii) fund capitalized interest with respect to the 2024D Bonds through April 1, 2026, and (iv) pay the costs of issuance of the 2024D Bonds. The Commercial Paper Notes to be retired with the proceeds of the 2024D Bonds will be paid within 90 days of the issuance of the 2024D Bonds.

See “ESTIMATED SOURCES AND USES OF FUNDS,” “GREEN BONDS DESIGNATION AND CLIMATE CERTIFICATION” and “WASTEWATER ENTERPRISE CAPITAL PROGRAM.”

## Refunded Bonds

The following tables detail the 2018B Bonds to be refunded (the “**Refunded 2018B Bonds**”) and the 2023B Bonds to be refunded (the “**Refunded 2023B Bonds**”) and, together with the Refunded 2018B Bonds, the “**Refunded Bonds**”) with proceeds of the 2024B Bonds, as described under “– General.”

*Public Utilities Commission of the City and County of San Francisco  
Wastewater Revenue Bonds, 2018 Series B*

Maturity	Outstanding Principal Amount	Interest Rate	CUSIP (Base No. 79768H)	Principal Amount to be Refunded	Payment or Redemption Date
10/01/2026	\$ 5,900,000	5.00%	EY0	\$ 2,400,000	10/01/2026
10/01/2043	57,585,000	5.00	FM5	3,955,000	04/01/2028
Total:	\$63,485,000			\$6,355,000	

*Public Utilities Commission of the City and County of San Francisco  
Wastewater Revenue Bonds, 2023 Series B*

Maturity	Outstanding Principal Amount	Interest Rate	CUSIP (Base No. 79768H)	Principal Amount to be Refunded	Payment or Redemption Date
10/01/2026	\$ 8,000,000	5.00%	HP6	\$ 8,000,000	10/01/2026
10/01/2037	14,430,000	5.00	JD1	12,105,000	10/01/2032
10/01/2038	15,575,000	5.00	JF6	15,575,000	10/01/2032
10/01/2039	16,790,000	5.00	JH2	16,790,000	10/01/2032
10/01/2040	9,065,000	5.00	JJ8	9,065,000	10/01/2032
10/01/2041	6,490,000	5.00	JK5	6,490,000	10/01/2032
10/01/2042	7,025,000	5.00	JL3	7,025,000	10/01/2032
Total:	\$77,375,000			\$75,050,000	

## Escrow Fund

The Refunded 2018B Bonds were issued pursuant to, and will be defeased in accordance with, the terms of the Original Indenture, as supplemented by the Seventh Supplemental Indenture, dated as of August 1, 2018 (the “**Seventh Supplemental Indenture**”), by and between the SFPUC and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, as trustee. The Refunded 2023B Bonds were issued pursuant to, and will be defeased in accordance with, the terms of the Original Indenture, as supplemented by the Fifteenth Supplemental Indenture, dated as of April 1, 2023 (the “**Fifteenth Supplemental Indenture**”), by and between the SFPUC and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, as trustee.

A portion of the proceeds of the 2024B Bonds (the “**Escrow Proceeds**”) will be delivered to U.S. Bank Trust Company, National Association, as escrow agent (the “**Escrow Agent**”), under that certain Escrow Agreement, dated as of July 1, 2024 (the “**Escrow Agreement**”), by and between the SFPUC and the Escrow Agent. The Escrow Agent will deposit the Escrow Proceeds in accordance with the Escrow Agreement in an irrevocable escrow fund (the “**Escrow Fund**”) for the benefit of the owners of the Refunded 2018B Bonds and Refunded 2023B Bonds, to be invested in the Initial Government Securities (as defined in the Escrow Agreement and referred to herein as the “**Initial Government Securities**”), with any remaining amounts (if any) held in cash. The Initial Government Securities, together with earnings thereon, plus the amounts held in cash (if any), will be used (i) to provide for the payment of interest on the Refunded 2018B Bonds as such interest becomes due and payable, the payment of principal of the Refunded 2018B Bonds maturing on October 1, 2026, on such date, and the redemption of the Refunded 2018B Bonds maturing on October 1, 2043, on April 1, 2028 (the “**Refunded 2018B Bonds Redemption**”).

**Date**”), at the redemption price of 100% of the principal amount of such Refunded 2018B Bonds, together with interest accrued thereon to the Refunded 2018B Bonds Redemption Date, and (ii) to provide for the payment of interest on the Refunded 2023B Bonds as such interest becomes due and payable, the payment of principal of the Refunded 2023B Bonds maturing on October 1, 2026, on such date, and the redemption of the Refunded 2023B Bonds maturing on and after October 1, 2037, on October 1, 2032 (the “**Refunded 2023B Bonds Redemption Date**”), at the redemption price of 100% of the principal amount of such Refunded 2023B Bonds, together with interest accrued thereon to the Refunded 2023B Bonds Redemption Date.

As a result of the deposit and application of funds as provided in the Escrow Agreement, the Refunded 2018B Bonds will be defeased pursuant to the Original Indenture and the Seventh Supplemental Indenture, and the Refunded 2023B Bonds will be defeased pursuant to the Original Indenture and the Fifteenth Supplemental Indenture, as of the date of issuance of the 2024B Bonds.

Sufficiency of the deposits in the irrevocable Escrow Fund for the purposes described in the previous paragraph will be verified by AW Smith LLC, Rockford, Minnesota (the “**Verification Agent**”). See “**VERIFICATION OF MATHEMATICAL ACCURACY.**”

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**ESTIMATED SOURCES AND USES OF FUNDS**

The proceeds of the 2024ABCD Bonds are expected to be applied as follows:

	2024A Bonds	2024B Bonds	2024C Bonds	2024D Bonds	Total 2024ABCD Bonds
<b>Sources of Funds</b>					
Par Amount	\$431,110,000.00	\$87,250,000.00	\$539,720,000.00	\$84,895,000.00	\$1,142,975,000.00
Original Issue Premium	--	--	64,812,627.15	10,183,513.55	74,996,140.70
Total Sources	<u>\$431,110,000.00</u>	<u>\$87,250,000.00</u>	<u>\$604,532,627.15</u>	<u>\$95,078,513.55</u>	<u>\$1,217,971,140.70</u>
<b>Uses of Funds</b>					
Retirement of Commercial Paper Notes	--	--	\$270,686,663.28	\$71,964,016.88	\$342,650,680.16
Deposit to Capital Project Fund	\$396,143,732.08	--	286,812,645.00	15,711,370.42	698,667,747.50
Deposit to Escrow Fund <sup>(1)</sup>	--	\$86,982,395.22	--	--	86,982,395.22
Capitalized Interest <sup>(2)</sup>	33,502,695.75	--	45,051,627.78	7,086,374.31	85,640,697.84
Underwriters' Discount	610,392.59	123,534.03	779,403.13	122,595.85	1,635,925.60
Costs of Issuance <sup>(3)</sup>	853,179.58	144,070.75	1,202,287.96	194,156.09	2,393,694.38
Total Uses	<u>\$431,110,000.00</u>	<u>\$87,250,000.00</u>	<u>\$604,532,627.15</u>	<u>\$95,078,513.55</u>	<u>\$1,217,971,140.70</u>

<sup>(1)</sup> Represents deposit to the Escrow Fund established under the Escrow Agreement. See "PLAN OF FINANCE" and "OBLIGATIONS PAYABLE FROM NET REVENUES – Outstanding Parity Revenue Bonds."

<sup>(2)</sup> Represents capitalized interest on the 2024A Bonds, 2024C Bonds and 2024D Bonds through April 1, 2026.

<sup>(3)</sup> The costs of issuance include amounts for legal fees, Trustee and Escrow Agent fees, municipal advisor fees, Verification Agent fees, rating agency fees, printing costs, and other costs relating to the issuance of the 2024ABCD Bonds.

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## GREEN BONDS DESIGNATION AND CLIMATE CERTIFICATION

### Designation as Green Bonds

The SFPUC is committed to providing sewage and stormwater collection, treatment and disposal services in a manner that values environmental and community interests. San Francisco issued its first climate action plan in 2004. Environmental stewardship is a key element of the SFPUC's mission statement and the SFPUC remains prominent in the City's most recent climate action plan, released in 2021 and supplemented in 2023 (see "THE WASTEWATER ENTERPRISE– Climate Action Plan"). The 2024A Bonds and the 2024C Bonds are being designated by the SFPUC as "Green Bonds" (the "**2024 Green Bonds**"). The purpose of designating such Bonds as "Green Bonds" is to allow investors to invest directly in notes and bonds that finance the cost of environmentally beneficial projects ("**Green Projects**"). For purposes of such determination, the SFPUC considers the projects included in the SSIP to be Green Projects ("**SSIP Green Projects**"). See "PLAN OF FINANCE," "ESTIMATED SOURCES AND USES OF FUNDS" and "WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program."

The Indenture does not restrict the use of proceeds of future issuances of Bonds to the financing of Green Projects and in the future the SFPUC may issue Additional Bonds which are not designated as green bonds or certified by the Climate Bonds Initiative (the "**CBI**"). The repayment obligations of the SFPUC with respect to the 2024 Green Bonds are not conditioned on the completion of any particular project or the satisfaction of any condition relating to the status of the 2024 Green Bonds or the certification of such bonds by the CBI. The SFPUC assumes no obligation to ensure compliance with any legal or other principles of green bonds, as such principles may evolve over time. See "SECURITY FOR THE BONDS." The terms "Climate Bond" and "green bonds" are neither defined in, nor related to the Indenture, and their use herein is for identification purposes only and is not intended to provide or imply that a holder of the 2024 Green Bonds is entitled to any additional security other than as provided in the Indenture. The SFPUC has no continuing legal obligation to maintain the Climate Bond certification of the 2024 Green Bonds.

The designation of the 2024 Green Bonds as "Green Bonds" does not imply that such obligations are entitled to any particular advantageous treatment under the Internal Revenue Code of 1986 (the "**Code**").

### Certification by the Climate Bonds Initiative

The CBI is an international, investor-focused non-profit organization working to focus the global bond market on climate change solutions through the development and promotion of an efficient green bond market. The CBI establishes and manages the Climate Bonds Standard (the "**Climate Bonds Standard**").

The 2024 Green Bonds have been certified by the CBI as "Climate Bonds Standard Certified" based on a pre-issuance verification report from Morningstar Sustainalytics ("**Sustainalytics**"), a verifier approved by the Climate Bonds Standard Board and retained by the SFPUC. Sustainalytics has verified that the SFPUC's bonds issued to finance and refinance SSIP Green Projects meet the requirements of the Water Climate Bond Standard. The CBI also requires post-issuance verification of compliance as part of the certification process. As such, the SFPUC has provided information concerning prior and anticipated capital project expenditures related to the SSIP (some of which does not appear in this Official Statement) to Sustainalytics. Certification of the 2024 Green Bonds by the CBI essentially reflects the alignment of the issuance with Climate Bonds Standard v2.1 and the explanation of the significance of this certification may be obtained from the CBI.

The certification of the 2024 Green Bonds as Climate Bonds by the CBI is based solely on the Climate Bonds Standard and does not, and is not intended to, make any representation, warranty, undertaking, express or implied, or give any assurance with respect to any other matter relating to the 2024 Green Bonds or any SSIP Green Project, including but not limited to this Official Statement, the transaction documents, the SFPUC or the management of the SFPUC.

The certification of the 2024 Green Bonds as Climate Bonds by the CBI was addressed solely to the SFPUC and is not a recommendation to any person to purchase, hold or sell the 2024 Green Bonds and such

certification does not address the market price or suitability of the 2024 Green Bonds for a particular investor. Each potential purchaser of the 2024 Green Bonds should determine for itself the relevance of this certification. Any purchase of the 2024 Green Bonds should be based upon such investigation that each potential purchaser deems necessary. The certification also does not address the merits of the decision by the SFPUC or any third party to participate in any SSIP Green Project and does not express and should not be deemed to be an expression of an opinion as to the SFPUC or any aspect of any SSIP Green Project (including but not limited to the financial viability of any SSIP Green Project) other than with respect to conformance with the Climate Bonds Standard.

In issuing or monitoring, as applicable, the certification, the CBI has assumed and relied upon and will assume and rely upon the fairness, accuracy, reasonableness and completeness in all material respects of the information supplied or otherwise made available to the CBI. The CBI does not assume or accept any responsibility or liability to any person for independently verifying (and it has not verified) such information or to undertake (and it has not undertaken) any independent evaluation of any SSIP Green Project or the SFPUC. In addition, the CBI does not assume any obligation to conduct (and it has not conducted) any physical inspection of any SSIP Green Project. The certification may only be used with the 2024 Green Bonds and may not be used for any other purpose without the CBI's prior written consent.

The certification does not, and is not in any way intended to, address the likelihood of timely payment of interest when due on the 2024 Green Bonds and/or the payment of principal at maturity or any other date.

The certification may be withdrawn at any time in the CBI's sole and absolute discretion and there can be no assurance that such certification will not be withdrawn. The SFPUC has not undertaken to contest any such withdrawal or to provide notice thereof.

The CBI is not a licensed broker-dealer or a nationally recognized statistical ratings organization. Certification by the CBI is not a recommendation to buy, sell or hold securities, and such certification may be subject to revision or withdrawal, including, without limitation, if the SFPUC's future capital expenditures from the proceeds of the 2024 Green Bonds vary from the anticipated expenditures reviewed by the CBI. The SFPUC will undertake reasonable efforts to ensure that any adjustment of capital expenditures or other actions taken with respect to the 2024 Green Bonds will not result in revision or withdrawal of the CBI's certification; however, there can be no guarantee that such adjustment or other action or a future revision to the CBI's criteria for certifying bonds will not result in a withdrawal or revision of the CBI's certification. The SFPUC expects to post information reflecting the expenditure of the proceeds of the 2024 Green Bonds on its website. See “ – Green Bond Reporting” below.

### **United Nations Sustainable Development Goals**

Impacts from SSIP projects financed and refinanced by the SFPUC's Green Bonds are also aligned with several United Nations Sustainable Development Goals (“**UN SDGs**”). By reference to the International Capital Market Association (“**ICMA**”) “Green, Social and Sustainability Bonds: A High-Level Mapping to the Sustainable Development Goals” (June 2023), the projects financed and refinanced by the 2024 Green Bonds primarily aim to address the following goals: 3 (Good Health and Well-being), 6 (Clean Water and Sanitation), 7 (Affordable and Clean Energy), 9 (Industry, Innovation and Infrastructure), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), 13 (Climate Action), 14 (Life Below Water) and 15 (Life on Land). The determination of whether the impacts of a particular SSIP project align with one or more UN SDGs is based on criteria that the SFPUC has deemed to be appropriate and may differ from criteria applied by investors. See also “ – Process for Project Evaluation and Selection” below.

As promulgated by the ICMA and most recently updated in June 2023, the “Green Bond Principles” have four core components (Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting), each of which are further described below.

### **Use of Proceeds**

A portion of the proceeds of the 2024 Green Bonds will (i) finance certain capital projects benefiting the Wastewater Enterprise from the SSIP and (ii) retire a portion of the tax-exempt Commercial Paper Notes that were

used to finance certain capital projects benefiting the Wastewater Enterprise from the SSIP. Such proceeds of the 2024 Green Bonds will be, and proceeds of such tax-exempt Commercial Paper Notes have been, expended on projects the SFPUC considers to be “Green Projects.” Program goals for the SSIP include the following:

- Providing a compliant, reliable, resilient and flexible system responsive to catastrophic events;
- Integrating grey and green infrastructure to manage stormwater and minimize flooding;
- Providing benefits to impacted communities;
- Modifying the system to adapt to climate change;
- Achieving economic and environmental sustainability; and
- Maintaining ratepayer affordability.

### Process for Project Evaluation and Selection

The SSIP was initiated as a citywide investment to upgrade the SFPUC’s existing infrastructure to ensure a reliable, sustainable, and seismically safe sewer system. As further described under “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program,” the highest priority and best-defined projects, which focused on maintaining regulatory compliance, enhancing process reliability and redundancy, implementing pilot green infrastructure projects, improving plant odor control, and replacing existing biosolids and headworks facilities with state-of-the-art technology, were included in the first phase of the SSIP. Other SSIP projects are initiated based on priority, schedule, and affordability, as part of its rolling 10-year capital plan.

General SSIP projects, which align with various UN SDGs, include, but are not limited to, the following:

- ***Biosolids-Digester Facilities Project.*** Replace existing solids handling facilities with new state-of-the-art biosolids digester facilities (see “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program – *Program Scope* – Treatment Facilities – *Biosolids Digester Facilities Project*”). (UN SDGs 3, 6, 7, 9, 11, 12, 13)
- ***Central Bayside System Improvements.*** Enhance collection system. (UN SDGs 3, 6, 9, 11, 13)
- ***Urban Watershed Assessment.*** Alternatives that balance the use of grey versus green infrastructure for improvements to watershed surface drainage and collection system management at each of San Francisco’s eight drainage basins. (UN SDGs 3, 6, 9, 11)
- ***Flood Resilience-Hydraulic.*** Mitigate flooding during large storms; implement small stormwater capture and conveyance improvements at critical flood-prone neighborhoods; improvements to stormwater conveyance. (UN SDGs 3, 6, 9, 11, 13)
- ***SSIP Program-Wide Management.*** Programmatic planning work for systemwide infrastructure that identifies and prioritizes the capital improvement needs of the wastewater system; evaluate the feasibility and cost-effectiveness for the SFPUC to generate bioenergy. (UN SDGs 3, 6, 7, 9, 11, 12, 13)
- ***Stormwater Management.*** Enhancing conveyance in the Islais and Mission Channel watersheds to provide reliability and redundancy, and increase capacity to manage storm events. (UN SDGs 3, 6, 9, 11, 13)
- ***Treatment Plant Improvement.*** Improving the level of screening and grit removal in existing facilities; condition assessment and rehabilitation of building structures; replacing and integrating a facility-wide distributed control system; seismic retrofitting; replacing mechanical and electrical equipment. (UN SDGs 3, 6, 7, 9, 11, 12, 13)
- ***Collection System Improvements.*** Rehabilitating and replacing interceptors, tunnels, pump stations, force mains and transport/storage boxes; rehabilitating combined sewer discharge structures and preventing backflow of bay water through combined sewer discharges due to sea level rise. (UN SDGs 3, 6, 9, 11, 12, 13)

Additional information about the SSIP may be found under “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program.”

## **Management of Proceeds**

The proceeds of the tax-exempt Commercial Paper Notes to be retired with the proceeds of the 2024 Green Bonds were, and the proceeds of the 2024 Green Bonds to finance certain capital projects benefiting the Wastewater Enterprise from the SSIP are expected to be, expended on projects the SFPUC considers to be “Green Projects.” Such projects are generally described above under “– Process for Project Evaluation and Selection.” The SFPUC records proceeds of its green bonds in separate capital project funds available only to eligible projects. Non-eligible projects cannot access proceeds generated from green bonds.

## **Green Bond Reporting**

The SFPUC will provide post-issuance verification reports by Sustainalytics to the CBI as part of the certification process for the 2024 Green Bonds. In addition, the SFPUC publishes annually a project spending and management of proceeds report (the “**Green Bond Report**”) for all outstanding green bonds issued by the SFPUC, including those issued to finance and refinance capital projects of the Wastewater Enterprise. The next Green Bond Report will include projects financed and refinanced by proceeds of the 2024 Green Bonds. The post-issuance verification reports and Green Bond Reports will be made available at <https://sfpuc.gov/about-us/reports/debt-management-and-disclosure-reports>. *The information available on such website is not incorporated by reference into this Official Statement and should not be relied upon in making an investment in the 2024 Green Bonds.*

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## SECURITY FOR THE BONDS

### Pledge of Net Revenues

**General.** Under the Indenture, the SFPUC has irrevocably pledged the Net Revenues of the Wastewater Enterprise to the punctual payment of principal of, premium, if any, and interest on the Bonds, which consist of any parity revenue bonds, notes and obligations issued under the Indenture, including the 2024ABCD Bonds, and Parity Loans. This pledge is subject to the flow of funds contained in the Indenture, as described below. See “– Flow of Funds.”

The facilities comprising the Wastewater Enterprise have not been pledged or mortgaged and do not otherwise secure payment of the Bonds.

Pursuant to Section 5451 of the California Government Code, the pledge of, lien on and security interest in Net Revenues and certain other funds granted by the Indenture is valid and binding in accordance with the terms thereof from the time of issuance of the 2024ABCD Bonds; the Net Revenues and such other funds will be immediately subject to such pledge; and such pledge will constitute a lien and security interest which will immediately attach to such Net Revenues and other funds and will be effective, binding and enforceable against the SFPUC, its successors, purchasers of the Net Revenues, creditors, and all others asserting rights therein to the extent set forth and in accordance with the terms of the Indenture irrespective of whether those parties have notice of such pledge and without the need for any physical delivery, recordation, filing or other further act. Such pledge, lien and security interest are not subject to the provisions of Article 9 of the California Uniform Commercial Code.

For definitions of capitalized terms used herein and not otherwise defined, see “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – THE INDENTURE – DEFINITIONS; EQUAL SECURITY: CERTIFICATES AND OPINIONS.”

**Limited Obligation.** THE SFPUC IS NOT OBLIGATED TO PAY THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS EXCEPT FROM NET REVENUES OF THE WASTEWATER ENTERPRISE. THE SFPUC HAS NO TAXING POWER. THE GENERAL FUND OF THE CITY IS NOT LIABLE FOR THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS, AND NEITHER THE CREDIT NOR THE TAXING POWER OF THE CITY IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE BONDS. THE BONDS ARE NOT SECURED BY A LEGAL OR EQUITABLE PLEDGE OF, OR CHARGE, LIEN, OR ENCUMBRANCE UPON, ANY OF THE PROPERTY OF THE CITY OR OF THE SFPUC OR ANY OF ITS INCOME OR RECEIPTS, EXCEPT NET REVENUES OF THE WASTEWATER ENTERPRISE.

**Wastewater Enterprise.** The Indenture defines “**Enterprise**” (referred to in this Official Statement as the “**Wastewater Enterprise**”) as the whole and each and every part of the municipal sanitary waste and stormwater collection, treatment and disposal system and auxiliary or related facilities of the SFPUC, including all of the presently existing system of the SFPUC for the collection, treatment and disposal of sanitary waste and stormwater and all future additions, betterments, and extensions to the system or any part thereof.

**Net Revenues.** The Indenture defines “**Net Revenues**” as all Revenues, less all Operation and Maintenance Costs of the Wastewater Enterprise.

The Indenture defines “**Revenues**” as all gross revenues of the Wastewater Enterprise, including all charges received for and all other income and receipts derived by the SFPUC from the operation of the Wastewater Enterprise, or arising from the Wastewater Enterprise, including connection and installation charges, but excluding:

- (a) any money received by or for the account of the SFPUC from the levy or collection of taxes;
- (b) moneys received from the State of California and the United States of America and required to be deposited in restricted funds;

- (c) refundable deposits made to establish credit;
- (d) advances and contributions made to the SFPUC to be applied to construction;
- (e) moneys received constituting casualty insurance proceeds with respect to all or any part of the Wastewater Enterprise (which shall be received and disposed of pursuant to the Indenture) and moneys received constituting other insurance proceeds;
- (f) moneys received from the sale or disposition of all or any part of the Wastewater Enterprise (which shall be received and disposed of pursuant to the Indenture);
- (g) moneys received upon the taking by or under the threat of eminent domain of all or any part of the Wastewater Enterprise (which moneys shall be received and disposed of pursuant to the Indenture);
- (h) proceeds from Bonds issued by the SFPUC or proceeds from loans or other indebtedness obtained by the SFPUC; and
- (i) moneys or securities received by the SFPUC as gifts or grants the use of which is restricted by the donor or grantor.

The term “**Revenues**” also includes (i) all interest or other income (excluding profits or losses from the sale or disposition of Permitted Investments or other securities owned by or on behalf of the SFPUC) derived from the deposit or investment of any moneys in any fund or account established under the Indenture (excluding any Rebate Fund and any escrow fund pledged for the payment of defeased bonds) or in any fund or account of the Wastewater Enterprise and legally available to pay Debt Service, and (ii) any other moneys, proceeds and other amounts that the SFPUC determines should be “Revenues” under the Indenture.

The Indenture defines “**Operation and Maintenance Costs of the Enterprise**” (referred to in this Official Statement as the “**Operation and Maintenance Costs of the Wastewater Enterprise**”) as the reasonable and necessary costs of operating and maintaining the Wastewater Enterprise, calculated on the basis of generally accepted accounting principles, including (among other things) salaries and wages, fees for services, costs of materials, supplies and fuel, reasonable expenses of management, legal fees, accounting fees, repairs and other expenses necessary to maintain and preserve the Wastewater Enterprise in good repair and working order, and reasonable amounts for administration, overhead, insurance, taxes (if any), and the payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the SFPUC may establish or the Board of Supervisors may require with respect to employees of the SFPUC, as provided in the Charter.

However, the term “Operation and Maintenance Costs of the Wastewater Enterprise” excludes in all cases (a) depreciation and obsolescence charges or reserves therefor, (b) amortization of intangibles or other bookkeeping entries of a similar nature, (c) costs of capital additions, replacements, betterments, extensions or improvements to the Wastewater Enterprise, which under generally accepted accounting principles are chargeable to a capital account or to a reserve for depreciation, (d) charges for the payment of principal of and interest on any revenue bonds or other indebtedness issued before or after the date of the Indenture for Wastewater Enterprise purposes and (e) such costs as are scheduled to be paid by the SFPUC from moneys other than Revenues, such moneys to be clearly available for such purpose.

### **Flow of Funds**

The Indenture provides that all Revenues must be paid into the Revenue Fund, which must be maintained in the City treasury. Moneys in the Revenue Fund, including earnings thereon, are required by the Indenture to be applied for the following purposes and only in the following order of priority:

- (a) payment of Operation and Maintenance Costs of the Wastewater Enterprise;
- (b) payment of Bonds, Parity Loans, Policy Costs and amounts due as reimbursement under any Letter of Credit Agreement, as provided in the Indenture; and
- (c) any other lawful purpose of the SFPUC.

Net Revenues deposited in the Revenue Fund, as described in (b) above, will be applied to pay interest and principal on the Bonds (which include Parity Loans) and to make deposits to the Bond Reserve Fund if the amounts therein are less than the Required Reserve. See “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

The Indenture defines “**Refundable Credits**” as (a) with respect to a Series of Bonds issued as Build America Bonds under Section 54AA of the Code, the amounts which are payable by the federal government under Section 6431 of the Code, which the SFPUC has elected to receive under Section 54AA(g)(1) of the Code, and (b) with respect to a Series of Bonds issued as Build America Bonds under any other provision of the Code that creates a substantially similar direct-pay subsidy program, the amounts which are payable by the federal government under the applicable provisions of the Code, which the SFPUC has elected to receive under the applicable provisions of the Code.

The Indenture defines “**Build America Bonds**” as any bonds or other obligations issued as Build America Bonds under Section 54AA of the Code, or under any other provision of the Code that creates a substantially similar direct-pay subsidy program.

The Indenture provides that all of the Refundable Credits received by the SFPUC shall be deposited immediately upon receipt in the Interest Fund, and such Refundable Credits are irrevocably pledged to the punctual payment of the interest on the Bonds issued as Build America Bonds, and the Refundable Credits shall not be used for any other purpose while any of the Bonds issued as Build America Bonds remain Outstanding.

## Rate Covenants

***Sufficiency of Revenues.*** The SFPUC has covenanted in the Indenture that it will, to the fullest extent permitted by law, establish, fix and prescribe prior to the commencement of each Fiscal Year, rates, fees and charges in connection with the sanitary waste and stormwater collection, treatment and disposal services and facilities furnished by the Wastewater Enterprise so as to yield Revenues at least sufficient, after making reasonable allowances for contingencies and error in the estimates, to pay the following amounts:

- (a) the interest on and principal of the Bonds (which include Parity Loans) as they become due and payable (but not including any interest for which moneys have been deposited in the Interest Fund from the proceeds of any Series of Bonds or from any other source);
- (b) all other payments required for compliance with the terms of the Indenture and of any Supplemental Indenture providing for the issuance of Additional Bonds pursuant to the Indenture;
- (c) all other payments to meet any other obligations of the SFPUC which are charges, liens or encumbrances upon, or payable from, Revenues; and
- (d) all current Operation and Maintenance Costs of the Wastewater Enterprise (but not including such Operation and Maintenance Costs of the Wastewater Enterprise as are scheduled to be paid by the SFPUC from moneys other than Revenues, such moneys to be clearly available for such purpose).

***Debt Service Coverage.*** In addition to the requirements set forth under “– *Sufficiency of Revenues*” above, the Indenture provides that the SFPUC will, to the fullest extent permitted by law, establish, fix, and prescribe, prior to the commencement of each Fiscal Year, rates, fees and charges in connection with the sanitary waste and stormwater collection, treatment and disposal services and facilities furnished by the Wastewater Enterprise, which

are reasonably expected to be at least sufficient to yield during such Fiscal Year Net Revenues (together with any fund balances of the SFPUC which are available for payment of Debt Service, but excluding the Bond Reserve Fund), equal to 1.25 times the Annual Debt Service payable in such Fiscal Year.

The SFPUC may make adjustments from time to time in such rates, fees and charges and may make such classification thereof as it deems necessary, but is obligated not to reduce such rates, fees and charges below those in effect unless the Revenues resulting after such reduced rates are put into effect will at all times be sufficient to meet the requirements described in this section, "Rate Covenants."

So long as the SFPUC has complied with its obligations described under "*Sufficiency of Revenues*" above and the first paragraph under this "*Debt Service Coverage*" subsection, the failure to yield the amount of Revenues as described under "*Sufficiency of Revenues*" above, or the failure of Net Revenues to equal 1.25 times Annual Debt Service as set forth in the first paragraph under this "*Debt Service Coverage*" subsection at the end of a Fiscal Year, will not constitute a default or an Event of Default under the Indenture so long as the SFPUC has complied with its obligations described under "*Sufficiency of Revenues*" above and the first paragraph under this "*Debt Service Coverage*" subsection at the commencement of the succeeding Fiscal Year.

"**Annual Debt Service**" is defined in the Indenture as the sum of principal and interest on all Outstanding Bonds (including Parity Loans) as computed for the twelve-month period ending June 30 to which reference is made, and calculated by the SFPUC using the following assumptions:

- (a) in determining the principal amount due for such twelve-month period ending June 30, payment will (unless a different subsection of this definition applies for purposes of determining principal maturities or amortization) be assumed to be made in accordance with the amortization schedule established for such debt, including any Minimum Sinking Fund Account Payments or any scheduled redemption or payment of Bonds on the basis of Accreted Value, and for such purpose, the redemption payment or payment of Accreted Value will be deemed a principal payment and interest that is compounded and paid as Accreted Value will be deemed due on the scheduled redemption or Payment Date of such Capital Appreciation Bond, but excluding Excluded Principal.
- (b) if any Outstanding Bonds constitute Variable Rate Indebtedness, the interest rate will, as of the date of calculation, be: (i) the greater of (a) the average SIFMA rate over the past 3 years times 150% or (b) 4 percent or (ii) if, designated in writing by the SFPUC in the Supplemental Indenture authorizing such Bonds (which the SFPUC must certify, in the case of obligations interest on which is not excluded from gross income for federal income tax purposes under the Code), a fixed rate of interest reasonably determined by the SFPUC for obligations with similar duration, which interest rate has been certified by a Qualified Financial Advisor as reasonable concurrent with the execution and delivery of such Supplemental Indenture.
- (c) if Defeasance Obligations have been deposited with and are held by the Trustee or another fiduciary to be used to pay principal and/or interest on specified Bonds, or any amounts have been deposited in the Interest Fund from the proceeds of any Series of Bonds or from any other source to pay interest on such Bonds, then the principal and/or interest to be paid from such Defeasance Obligations or from the earnings thereon, or from such amounts in the Interest Fund, shall be disregarded and not included in calculating Annual Debt Service.
- (d) in determining the amount of interest coming due during any twelve-month period ending June 30 on any Series of Bonds that are issued as Build America Bonds or obligations issued under any future program similar to Build America Bonds, amounts equal to the Refundable Credits the SFPUC is scheduled to receive during each twelve-month period ending June 30 will be deducted from such interest.

"**Excluded Principal**" means each payment of principal of Bonds with a remaining term, on the date of calculation, of not greater than 60 months that the SFPUC intends to pay from the proceeds of Bonds or Parity Loans, other bonds, notes or other obligations of the SFPUC or moneys other than Net Revenues.

The SFPUC has determined that the principal of the 2024A Bonds will qualify as “Excluded Principal” under the Indenture. As a result of this determination, the principal of the 2024A Bonds will be excluded from the calculation of Annual Debt Service for purposes of the rate covenant described above and the requirements for issuing Additional Bonds under the Indenture. See “– *Debt Service Coverage*,” “– *Additional Series of Bonds – Indenture Requirements*,” and “APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

Pursuant to federal sequestration legislation passed by Congress in 2011 and 2013, federal subsidy payments for direct pay bonds, including Build America Bonds, have been reduced (by formula) from the original funding subsidy level of 35% of interest costs on direct pay bonds, including Build America Bonds. The current sequestration reduction rate of the federal subsidy payment for Build America Bonds is 5.7% (or a net subsidy level of 33.005% of interest costs on Build America Bonds), which rate will remain in effect through September 30, 2030, unless changed by legislation. Refundable credits sought by the SFPUC for its Build America Bonds have been and are expected to be reduced by this percentage until September 30, 2031. This reduction has and will increase the SFPUC’s net interest cost. The SFPUC can give no assurance regarding the level of subsidy payments or changes in the sequestration rate, if any, in the future. In Fiscal Years 2021-22 and 2022-23, the SFPUC received approximately \$3.5 million and \$3.5 million, respectively, in Refundable Credits for the Wastewater Enterprise.

#### **No Reserve Account for 2024ABCD Bonds**

The Indenture requires that the Bond Reserve Fund be established with the Trustee and funded in an amount equal to the “**Required Reserve**,” if any, applicable to each series of Bonds. If the Required Reserve for a Series of Bonds is greater than zero, the Indenture requires the establishment of a bond reserve account (each, a “**Reserve Account**”) within the Bond Reserve Fund for such Series of Bonds, and requires the deposit in that bond reserve account of an amount equal to the Required Reserve for the related Series of Bonds.

**The Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture do not require the establishment of a Reserve Account for the respective 2024ABCD Bonds. The Reserve Account established for the 2010B Bonds (as defined herein) does not secure the 2024ABCD Bonds. No Reserve Account has been established for any other series of Outstanding Bonds. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Outstanding Parity Revenue Bonds.”**

#### **Additional Series of Bonds**

The Charter and the Indenture authorize the issuance of Additional Bonds payable from Net Revenues on a parity with Outstanding Bonds and the 2024ABCD Bonds, upon satisfaction of the conditions set forth therein.

The SFPUC expects to issue Additional Bonds, which may include Bonds evidencing obligations to repay the WIFIA Lender in connection with additional WIFIA loans, to finance the costs of additional improvements included in the SSIP and other portions of the Wastewater Enterprise’s capital program. See “FINANCING PLAN FOR WASTEWATER ENTERPRISE CAPITAL PROGRAM” and “RISK FACTORS – Costs of Capital Program Projects; Timely Completion of Capital Program Projects.”

**Charter Requirements.** Under the Charter, the SFPUC may issue revenue bonds (including Additional Bonds) relating to the Wastewater Enterprise without voter approval in the following circumstances, among others:

- (a) to issue revenue bonds (including Additional Bonds) approved by an affirmative vote of two-thirds of the members of the Board of Supervisors for the purpose of reconstructing, replacing, expanding, repairing or improving the Wastewater Enterprise or for any other lawful purpose of the Wastewater Enterprise, including the refunding of existing obligations;
- (b) to issue bonds (including Additional Bonds) approved by an affirmative vote of three-fourths of the members of the Board of Supervisors if the bonds are to finance buildings, fixtures or equipment which are deemed necessary by the Board of Supervisors to comply with an order of a duly constituted state or federal authority having jurisdiction over the Wastewater Enterprise; and

- (c) to issue refunding bonds which are expected to result in net debt service savings to the City on a present value basis, calculated as described in the SFPUC's Debt Management Policies and Procedures.

The Charter also generally authorizes the SFPUC to issue revenue bonds upon the approval of a majority of the voters voting on the proposition at a general or special election.

Notwithstanding any other provision of the Charter or of any ordinance of the City, the Board of Supervisors may, in connection with the issuance of additional bonds as described under paragraph (a) above, take any and all actions necessary to authorize, issue and repay such bonds, including, but not limited to, modifying schedules of rates and charges to provide for the payment and retirement of such bonds, subject to the following conditions:

- (a) Certification by an independent engineer retained by the SFPUC that:
  - (1) the projects to be financed by the additional bonds, including the prioritization, cost estimates and scheduling, meet utility standards; and
  - (2) that estimated net revenue after payment of operating and maintenance expenses will be sufficient to meet debt service coverage and other indenture or resolution requirements, including debt service on the bonds to be issued, and estimated repair and replacement costs.
- (b) Certification by the City Planning Department that facilities under the jurisdiction of the SFPUC funded with such bonds will comply with applicable requirements of the California Environmental Quality Act ("CEQA").

***Indenture Requirements.*** The Indenture provides that Additional Bonds secured on a parity with the Bonds may be issued for any lawful purpose if no Event of Default has occurred and is continuing under the Indenture or any Supplemental Indenture and no event has occurred which, but for the passage of time or the giving of notice, would constitute an Event of Default under the Indenture or any Supplemental Indenture. Prior to the issuance of such Additional Bonds, the SFPUC is required to file with the Trustee, among other documents, the following:

- (a) a Certificate of the SFPUC setting forth for each of the next three Fiscal Years estimates of (A) Revenues, (B) Operation and Maintenance Costs of the Enterprise and (3) Net Revenues; and
- (b) a Certificate of the SFPUC demonstrating that (1) the ratio of (A) Net Revenues for the most recent Fiscal Year for which audited financial statements are available, or any consecutive twelve calendar month period during the eighteen calendar month period prior to the issuance of such additional Series of Bonds, to (B) Annual Debt Service for the current Fiscal Year, calculated as of the date of sale of, and including such additional Series of Bonds, will not be less than 1.25:1; or (2) the ratio of (A) Net Revenues projected by the SFPUC for each of the next three Fiscal Years as determined in the Indenture, and including in such projections amounts projected to be received from any adopted rate increases and fund balances of the SFPUC which are projected to be available for the payment of Debt Service (but excluding the Bond Reserve Fund), to (B) Annual Debt Service in each of such three Fiscal Years, calculated as of the date of sale of and including such additional Series of Bonds, will not be less than 1.25:1 in each of such Fiscal Years.

See "APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – THE INDENTURE – DEFINITIONS; EQUAL SECURITY: CERTIFICATES AND OPINIONS" and "– ISSUANCE OF ADDITIONAL SERIES OF BONDS."

The Indenture provides the SFPUC with flexibility as to the nature and terms of any Additional Bonds issued with a lien and charge on Net Revenues on a parity with the Outstanding Bonds. Such Additional Bonds may: mature over any period of time; bear interest at a fixed, variable or zero rate; be in any denominations; be in any

form (including registered, coupon or book-entry); include or exclude redemption provisions; be subject to optional or mandatory tender for purchase; be sold at such price or prices; be further secured by any separate and additional security; and otherwise include such additional terms and provisions as the SFPUC may determine, consistent with the Indenture and applicable provisions of the Charter.

### **Additional Parity Loans**

Pursuant to the Charter, the SFPUC can incur indebtedness, including additional State and federal loans, without voter approval, but subject to Board of Supervisors' approval. In addition, the Indenture permits the SFPUC to enter into Parity Loans or loans on a subordinated lien basis relative to the Bonds, as determined by the SFPUC.

Under the Indenture, the SFPUC may only enter into additional Parity Loans if no Event of Default has occurred and is continuing under the Indenture or any Supplemental Indenture (and no event has occurred which, but for the passage of time or the giving of notice, would constitute an Event of Default under the Indenture or any Supplemental Indenture).

In addition, in connection with the execution and delivery of such Parity Loans, the SFPUC is required to deliver a Certificate to the Trustee setting forth, for each of the next three Fiscal Years after the delivery of the Parity Loans:

- (a) the Revenues and Operation and Maintenance Costs of the Wastewater Enterprise and Net Revenues; and
- (b) the Annual Debt Service assuming delivery of the Parity Loans;

demonstrating that the estimated Net Revenues (together with any fund balances of the SFPUC which are available for Debt Service, but excluding the Bond Reserve Fund), in each of such three Fiscal Years is at least equal to 1.25 times the Annual Debt Service.

Pursuant to the SRF loan program (the "**SRF Loan Program**"), the SFPUC has entered into seven SRF loans that fund certain capital projects of the Wastewater Enterprise with a maximum principal amount authorized to be disbursed thereunder of approximately \$400.5 million. The SFPUC has applied for three additional SRF loans and plans to apply for additional SRF loans over the next several years to obtain long-term financing for a portion of the SSIP. However, the SFPUC can give no assurance that it will receive additional SRF loans. The seven SRF loans constitute "Parity Loans" under the Indenture. The SFPUC may also enter into additional WIFIA loans constituting "Parity Loans." See "OBLIGATIONS PAYABLE FROM NET REVENUES – Parity Loans" and "APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

### **Refunding Bonds**

**City Charter Requirements.** The Charter allows refunding bonds to be issued without voter approval if such refunding results in net debt service savings on a present value basis, calculated as provided by ordinance. The Charter also allows refunding bonds to be issued without voter approval and without satisfying such net debt service savings requirement when approved by a vote of two-thirds of the members of the Board of Supervisors.

**Indenture Requirements.** The Indenture provides that Additional Bonds may be issued to refund any Bonds without meeting the test for the issuance of Additional Bonds described above, if the SFPUC delivers to the Trustee (among other documents) a certificate of a Qualified Financial Advisor to the effect that after giving effect to the application of the proceeds of the additional Series of Bonds, either (i) Annual Debt Service will not be increased in any Fiscal Year (excluding Debt Service on the Outstanding Bonds to be refunded) in an amount in excess of 5% or (ii) the Average Annual Debt Service for the Bonds of such additional Series will be equal to or less than the Average Annual Debt Service on the Bonds to be refunded (during the period from the issuance of the additional Series to the last maturity date of the Outstanding Bonds to be refunded).

### **Subordinate Obligations; Obligations Not Payable from Revenues**

The Indenture permits the SFPUC to authorize and issue bonds, notes, warrants, certificates or other obligations or evidences of indebtedness, the principal of or interest on which would be payable either (i) from Net Revenues after and subordinate to the payment from Net Revenues of the principal of and interest on the Bonds, or (ii) from moneys which are not Revenues. The SFPUC may issue bonds or incur other indebtedness secured by a pledge of Net Revenues on a basis subordinate to the pledge thereof securing the Bonds without limitation.

### **Investments**

The Indenture provides that moneys in all funds and accounts held by the Trustee under the Indenture shall be invested upon receipt in Permitted Investments as directed by the SFPUC and all accounts funds and accounts held by the City Treasurer (the “**City Treasurer**”) shall be invested in Legal Investments. “**Legal Investments**” means any bonds, notes, certificates of indebtedness, bills, acceptances or other securities in which the City Treasurer may legally invest the SFPUC’s funds. For information regarding the investment of moneys held in the various funds and accounts of the SFPUC, see “FINANCIAL OPERATIONS – Investment of SFPUC Funds.”

## **OBLIGATIONS PAYABLE FROM NET REVENUES**

### **Authority for Issuance of Revenue Bonds and Other Obligations Payable from Net Revenues**

The Charter authorizes the SFPUC to issue revenue bonds and commercial paper notes and to incur other obligations payable from or secured by a pledge of revenues. The 2024ABCD Bonds are being issued pursuant to Ordinance No. 173-20, adopted by the Board of Supervisors on September 29, 2020, Ordinance No. 128-21, adopted by the Board of Supervisors on July 27, 2021, Ordinance No. 110-22, adopted by the Board of Supervisors on June 14, 2022, and Ordinance No. 181-23, adopted by the Board of Supervisors on July 25, 2023, and under a resolution adopted by the Commission on June 25, 2024. See “SECURITY FOR THE BONDS – Additional Series of Bonds,” “– Additional Parity Loans” and “– Refunding Bonds.”

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## Outstanding Parity Revenue Bonds

The following outstanding parity revenue bonds have been issued pursuant to the Indenture and are secured by a parity pledge of Net Revenues on a parity with the 2024ABCD Bonds and the Parity Loans.

Series of Bonds	Purpose	Original Principal Amount	Principal Amount Outstanding as of July 1, 2024
Wastewater Revenue Bonds, 2010 Series B (“ <b>2010B Bonds</b> ”) <sup>(1)</sup>	Finance and refinance SSIP and other capital program costs	\$192,515,000	\$177,730,000
Wastewater Revenue Bonds, 2013 Series B (“ <b>2013B Bonds</b> ”)	Finance and refinance SSIP and other capital program costs	331,585,000	93,095,000
Wastewater Revenue Bonds, 2016 Series A (“ <b>2016A Bonds</b> ”)	Finance and refinance SSIP and other capital program costs	240,580,000	235,105,000
Wastewater Revenue Bonds, 2016 Series B (“ <b>2016B Bonds</b> ”)	Finance and refinance capital program costs	67,820,000	66,275,000
Wastewater Revenue Bonds, 2018 Series A (“ <b>2018A Bonds</b> ”)	Finance and refinance SSIP and other capital program costs	229,050,000	214,175,000
Wastewater Revenue Bonds, 2018 Series B (“ <b>2018B Bonds</b> ”) <sup>(2)</sup>	Finance capital program costs	185,950,000	173,880,000
Wastewater Revenue Bonds, 2021 Series A (“ <b>2021A Bonds</b> ”)	Finance SSIP costs	260,835,000	260,835,000
Wastewater Revenue Bonds, 2021 Series B (“ <b>2021B Bonds</b> ”)	Finance capital program costs	37,045,000	37,045,000
Wastewater Revenue Bonds, 2022 Series B (“ <b>2022B Bonds</b> ”)	Refinance SSIP and other capital program costs	137,080,000	137,080,000
Wastewater Revenue Bonds (WIFIA Biosolids Loan) (“ <b>BDFP WIFIA Bond</b> ”) <sup>(3)</sup>	Finance Biosolids Digester Facilities Project	562,277,529	562,277,529
Wastewater Revenue Bonds (Southeast Treatment Plant Improvements Project WIFIA Loan) (“ <b>STPI WIFIA Bond</b> ”) <sup>(4)</sup>	Finance Southeast Treatment Plant Improvement Project	352,573,021	352,573,021
Wastewater Revenue Bonds, 2023 Series A (“ <b>2023A Bonds</b> ”)	Finance SSIP costs	530,565,000	530,565,000
Wastewater Revenue Bonds, 2023 Series B (“ <b>2023B Bonds</b> ”) <sup>(2)</sup>	Finance capital program costs	278,155,000	278,155,000
Wastewater Revenue Bonds, 2023 Series C (“ <b>2023C Bonds</b> ”)	Refinance SSIP and other capital program costs	165,660,000	165,660,000
<b>Total:</b>		<b>\$3,571,690,550</b>	<b>\$3,284,450,550</b>

<sup>(1)</sup> Issued as Build America Bonds. See “SECURITY FOR THE BONDS – Flow of Funds” and “– Rate Covenants.”

<sup>(2)</sup> A portion of such amount will be refunded by the 2024B Bonds. See “PLAN OF FINANCE.”

<sup>(3)</sup> Issued under the Eleventh Supplemental Indenture in connection with the BDFP WIFIA Loan. See “– Water Infrastructure Finance and Innovation Act Loans.” Original Principal Amount and Principal Amount Outstanding are rounded. On March 27, 2024, a portion of the proceeds of the BDFP WIFIA Bond was used to defease the SFPUC’s Wastewater Revenue Notes, 2021 Series A (Green Notes), maturing on October 1, 2025.

<sup>(4)</sup> Issued under the Tenth Supplemental Indenture in connection with the STPI WIFIA Loan. See “– Water Infrastructure Finance and Innovation Act Loans.” Original Principal Amount and Principal Amount Outstanding are rounded. On March 27, 2024, a portion of the proceeds of the STPI WIFIA Bond was used to defease the SFPUC’s Wastewater Revenue Notes, 2021 Series B (Green Notes), maturing on October 1, 2026.

## **Additional Bonds**

*General.* The SFPUC intends to issue Additional Bonds under the Indenture to finance select capital program projects, including SSIP projects. See “WASTEWATER ENTERPRISE CAPITAL PROGRAM,” “FINANCING PLAN FOR WASTEWATER ENTERPRISE CAPITAL PROGRAM” and “PROJECTED OPERATING RESULTS.”

## **Parity Loans**

The SFPUC has entered into seven SRF loans with the State. These SRF loans constitute “Parity Loans” under the Indenture. The SFPUC has also applied for three additional SRF loans and plans to apply for additional SRF loans with the State over the next several years to obtain long-term financing for a portion of the SSIP. Such SRF loans are low-cost loans provided and administered by the State Water Resources Control Board on a project-by-project basis. The State’s SRF Loan Program provides favorable terms to the SFPUC, including up to 30-year amortizing loan terms which generally commence one year following project completion, an interest rate on each SRF loan that is equal to one-half of the true interest cost for the State’s most recent general obligation bond issue at the time such loan is entered into, and repayment of the SRF loans on a parity with the Bonds rather than on a basis senior to the Bonds. The SRF Loan Program offers loans to applicant entities based on available moneys and placement in a statewide intended use plan. SRF Loan Program moneys are disbursed on a cost-incurred basis pursuant to disbursement requests submitted by the SFPUC under the SRF loan documents. Although placement in the intended use plan is a necessary condition to receiving SRF Loan Program moneys, such placement does not create an obligation on the part of the applicant to accept SRF Loan Program moneys.

In connection with the SFPUC’s Wastewater Enterprise, the following table sets forth the SRF loans that the SFPUC has entered into pursuant to the State’s SRF Loan Program, the SRF loan commitment amount, the disbursement amount requested and received as of March 4, 2024, the interest rate, the estimated/actual project completion date, the estimated/actual loan repayment commencement date and the final maturity of each SRF loan.

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**State Revolving Fund Loans**

Project	SRF Loan Commitment Amount	Disbursement Amount Requested as of March 4, 2024 <sup>(1)</sup>	Disbursement Amount Received as of March 4, 2024	Interest Rate	Actual/Estimated Project Completion Date	Actual/Estimated Loan Repayment Commencement Date <sup>(2)</sup>	Final Maturity
Lake Merced Green Infrastructure Project	\$ 7,435,000	\$6,261,946	\$6,115,588	1.6%	April 24, 2018 <sup>(3)</sup>	July 31, 2021	July 31, 2050
Southeast Treatment Plant Primary/Secondary Clarifier Upgrade Project	34,445,778	30,494,680	29,197,239	1.8	January 21, 2019 <sup>(3)</sup>	March 30, 2019	March 30, 2048
Southeast Treatment Plant 521/522 and Disinfection Upgrade Project	40,006,740	39,777,650	39,740,686	1.8	June 30, 2021 <sup>(3)</sup>	July 18, 2020	July 18, 2049
North Point Facility Outfall Rehabilitation Project	20,199,435	17,713,411	17,705,698	1.8	October 31, 2018 <sup>(3)</sup>	February 28, 2019	February 28, 2048
Southeast Water Pollution Control Plant Biosolids Digester Facilities Project	132,000,000	132,000,000	132,000,000	1.4	May 11, 2029 <sup>(4)</sup>	May 1, 2027	May 1, 2056
OSP Digester Gas Utilization Upgrade Project	54,387,969	33,349,280	33,230,029	1.4	June 2, 2025 <sup>(4)</sup>	March 31, 2025	March 31, 2054
Southeast Plant New Headworks (Grit) Replacement Project	112,036,181	78,620,278	78,620,278	1.1	August 31, 2027 <sup>(4)</sup>	March 1, 2025	March 1, 2054
<b>Total:</b>	<b>\$400,511,103</b>	<b>\$338,217,245</b>	<b>\$336,609,518</b>				

- <sup>(1)</sup> SRF Loan Program moneys are disbursed on a cost-incurred basis pursuant to disbursement requests submitted by the SFPUC.
- <sup>(2)</sup> SRF loans generally amortize over a 30-year term commencing one year following the estimated project completion date as set forth in the applicable loan agreement.
- <sup>(3)</sup> Actual project completion dates; repayment schedules have been established and repayments have commenced for these projects.
- <sup>(4)</sup> Estimated project completion dates; loan repayment expected to commence one year following estimated project completion date as set forth in the applicable loan agreement (originally May 1, 2026, for Southeast Water Pollution Control Plant Biosolids Digester Facilities Project; originally March 31, 2024, for OSP Digester Gas Utilization Upgrade Project; and originally March 1, 2024, for Southeast Plant New Headworks (Grit) Replacement Project).

In addition to the SRF loans described above, the SFPUC has applied for three additional SRF loans to finance: (i) the Wawona Area Stormwater Improvement Project (the “**Wawona Project**”), (ii) the Treasure Island Water Resource Recovery Facility (the “**Treasure Island Water Resource Recovery Facility**”) and (iii) the Folsom Stormwater Improvement Project (Phase 2) (the “**Folsom Project**”). For more information about these projects, see “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program – *Program Scope* – Stormwater Management/Flood Resilience.”

In September 2023, the State Water Resources Control Board approved the Clean Water State Revolving Fund Intended Use Plan for State Fiscal Year 2023-24, which includes a list of projects that the Division of Financial Assistance anticipates funding (the “**2023-24 Fundable List**”). The 2023-24 Fundable List includes, among others, full funding for the Wawona Project (\$40 million loan and \$5 million grant), partial funding in the amount of \$65 million for the Treasure Island Water Resource Recovery Facility (\$50 million loan and \$15 million grant), and partial funding in the amount of \$55 million for the Folsom Project (\$50 million loan and \$5 million grant). Inclusion on the 2023-24 Fundable List does not, however, constitute a financing commitment, a guarantee that sufficient funds from the anticipated sources of funds will be available, or a determination of eligibility. Any such funding would take the form of a loan from the State Water Resources Control Board to the SFPUC, constituting a Parity Loan. After the 2023-24 Fundable List was released, the SFPUC submitted a request to the State Water Resources Control Board to reallocate the full funding for the Wawona Project to the Treasure Island Water Resource Recovery Facility. If such request is approved, the SFPUC anticipates withdrawing the SRF loan application for the Wawona Project. The SFPUC is working with the State Water Resources Control Board to obtain approval of the SRF loan applications and negotiate SRF loan terms for the remaining two projects. If approved by the State Water Resources Control Board, the SFPUC anticipates that an SRF loan for each of the Folsom Project and the Treasure Island Water Resource Recovery Facility will close in Fiscal Year 2024-25.

The SFPUC has also entered into a WIFIA loan to provide partial funding to the Wawona Project and the Treasure Island Water Resource Recovery Facility. For more information, see “– Water Infrastructure Finance and Innovation Act Loans – *Master Agreement and Project Loans*” below.

The SFPUC has covenanted in the Seventeenth Supplemental Indenture and Eighteenth Supplemental Indenture not to enter into state loans payable on a basis senior to the Bonds.

### **Water Infrastructure Finance and Innovation Act Loans**

***Biosolids Digester Facilities Project.*** In July 2018, the SFPUC entered into the WIFIA Loan Agreement, dated as of July 27, 2018 (the “**Original BDFP WIFIA Loan Agreement**”), with the EPA, acting by and through the WIFIA Lender, pursuant to which the WIFIA Lender agreed to make a loan to the SFPUC in an amount not to exceed \$699,242,023 to finance eligible costs of the Biosolids Digester Facilities Project to be located at the Southeast Treatment Plant (the “**BDFP WIFIA Loan**”). The BDFP WIFIA Loan does not constitute a “Parity Loan” under the Indenture. Instead, to evidence its repayment obligation pursuant to the BDFP WIFIA Loan to the EPA, the SFPUC issued a parity Bond under the Ninth Supplemental Indenture, dated as of July 27, 2018 (the “**Ninth Supplemental Indenture**”), between the SFPUC and the Trustee. In June 2020, the SFPUC and the WIFIA Lender agreed to make administrative revisions to the Original BDFP WIFIA Loan Agreement and to enter into a new loan agreement (the “**Revised BDFP WIFIA Loan Agreement**”). The Original BDFP WIFIA Loan Agreement has been terminated and is no longer in full force and effect, and the Ninth Supplemental Indenture has been surrendered and cancelled by the SFPUC and the WIFIA Lender. Pursuant to the Revised BDFP WIFIA Loan Agreement, the BDFP WIFIA Loan bears interest at a fixed rate of 1.45% and will mature no later than April 1, 2059. To evidence its repayment obligation pursuant to the BDFP WIFIA Loan to the EPA, the SFPUC issued the BDFP WIFIA Bond, a parity Bond under the Eleventh Supplemental Indenture, dated as of June 12, 2020, between the SFPUC and the Trustee. As of the date of this Official Statement, the SFPUC has made two draws on the BDFP WIFIA Loan and the principal amount of the BDFP WIFIA Bond is approximately \$562,277,529. On March 27, 2024, a portion of the proceeds of the BDFP WIFIA Bond was used to defease the SFPUC’s Wastewater Revenue Notes, 2021 Series A Notes (Green Notes), maturing on October 1, 2025.

No payment of principal or interest on the BDFP WIFIA Loan is anticipated to be made prior to April 1, 2026. Prior to April 1, 2026, interest on the BDFP WIFIA Loan is expected to accrete and will be added to the outstanding principal balance of the BDFP WIFIA Bond. From April 1, 2026, through April 1, 2043, only interest is

expected to be payable on the BDFP WIFIA Loan. Principal of the BDFP WIFIA Loan is expected to be amortized commencing on April 1, 2043, and to continue through the final maturity date of the BDFP WIFIA Loan.

***Southeast Treatment Plant Improvements Project.*** In June 2020, the SFPUC entered into the WIFIA Loan Agreement, dated as of June 12, 2020 (the “**STPI WIFIA Loan Agreement**”), with the EPA, pursuant to which the WIFIA Lender agreed to make a loan to the SFPUC in an amount not to exceed \$513,861,981 to finance eligible costs of certain improvements at the Southeast Treatment Plant (the “**Southeast Treatment Plant Improvements Project**”) (the “**STPI WIFIA Loan**”), which includes the Biosolids Digester Facilities Project and the SEP New Headworks (Grit) Replacement Project (as defined herein). Pursuant to the STPI WIFIA Loan Agreement, the STPI WIFIA Loan bears interest at a fixed rate of 1.45% and will mature no later than April 1, 2062. The STPI WIFIA Loan does not constitute a “Parity Loan” under the Indenture. Instead, to evidence its repayment obligation pursuant to the STPI WIFIA Loan to the EPA, the SFPUC issued the STPI WIFIA Bond, a parity Bond under the Tenth Supplemental Indenture, dated as of June 12, 2020, between the SFPUC and the Trustee. As of the date of this Official Statement, the SFPUC has made one draw on the STPI WIFIA Loan Agreement and the principal amount of the STPI WIFIA Bond is approximately \$352,573,021. On March 27, 2024, a portion of the proceeds of the STPI WIFIA Bond was used to defease the SFPUC’s Wastewater Revenue Notes, 2021 Series B Notes (Green Notes), maturing on October 1, 2026.

No payment of principal or interest on the STPI WIFIA Loan is anticipated to be made prior to April 1, 2032. Prior to April 1, 2032, interest on the STPI WIFIA Loan is expected to accrete and will be added to the outstanding principal balance of the STPI WIFIA Bond. From April 1, 2032, through April 1, 2043, only interest is expected to be payable on the STPI WIFIA Loan. Principal of the STPI WIFIA Loan is expected to be amortized commencing on April 1, 2043, and to continue through the final maturity date of the STPI WIFIA Loan.

***Master Agreement and Project Loans.*** In April 2023, the SFPUC entered into the WIFIA Master Agreement, dated April 26, 2023 (the “**WIFIA Master Agreement**”), with the EPA, pursuant to which the WIFIA Lender agreed to make up to five loans to the SFPUC in an aggregate amount not to exceed \$791,337,456 to finance certain Wastewater Enterprise capital improvement projects. In April 2023, the SFPUC also entered into the first WIFIA Loan Agreement (the “**Project 1 Loan Agreement**” and, together with the Revised BDFP WIFIA Loan Agreement and the STPI WIFIA Loan Agreement, the “**WIFIA Loan Agreements**”), with the EPA, pursuant to which the WIFIA Lender agreed to make a loan to the SFPUC in an amount not to exceed \$369,335,021 to finance a portion of eligible project costs for a project that includes the following components: (1) Yosemite Slough Daylighting, (2) Wawona Area Stormwater Improvements and Vicente Street Water Main Replacement, (3) Folsom Area Stormwater Improvements, (4) Westside Pump Station Reliability Improvements, (5) North Shore Pump Station, and (6) Treasure Island Water Resource Recovery Facility (collectively, the “**Project 1 Projects**”) (“**Project 1 WIFIA Loan**” and, together with the BDFP WIFIA Loan and the STPI WIFIA Loan, the “**WIFIA Loans**”).

Pursuant to the Project 1 Loan Agreement, the Project 1 WIFIA Loan bears interest at a fixed rate of 3.65% and will mature no later than October 1, 2061. The Project 1 Loan does not constitute a “Parity Loan” under the Indenture. Instead, to evidence its repayment obligation pursuant to the Project 1 Loan to the EPA, the SFPUC issued a parity Bond (the “**Project 1 WIFIA Bond**” and, together with the BDFP WIFIA Bond and the STPI WIFIA Bond, the “**WIFIA Bonds**”) under the Sixteenth Supplemental Indenture, dated as of April 26, 2023, between the SFPUC and the Trustee. As of the date of this Official Statement, the SFPUC has not yet drawn on the Project 1 Loan Agreement and no principal amount of the Project 1 WIFIA Bond is currently outstanding.

No payment of principal or interest on the Project 1 Loan is anticipated to be made prior to April 1, 2032. Prior to April 1, 2032, interest on the Project 1 Loan is expected to accrete and will be added to the outstanding principal balance of the Project 1 WIFIA Bond. From April 1, 2032, through April 1, 2041, only interest is expected to be payable on the Project 1 Loan. Principal of the Project 1 Loan is expected to be amortized commencing on October 1, 2041, and to continue through the final maturity date of the Project 1 Loan.

The SFPUC is in the process of securing a second loan under the WIFIA Master Agreement for approximately \$145.2 million to finance (1) Ocean Beach Climate Change Adaptation, (2) Combined Sewer Discharge Structure Rehabilitation and Upgrades – Part 1, (3) Geary Bus Rapid Transit Sewer Improvements, (4) Seacliff No. 1 Pump Station and Force Main Upgrade, and (5) Seacliff No. Pump Station and Force Main Upgrade

(the “**Project 2 WIFIA Loan**”). The SFPUC anticipates it will enter into a second WIFIA Loan Agreement with the EPA for the Project 2 WIFIA Loan in the second quarter of Fiscal Year 2024-25.

**WIFIA Bonds.** The BDFP WIFIA Bond and the STPI WIFIA Bond are, and the Project 1 WIFIA Bond will be, payable from and secured by a pledge of Net Revenues on a parity with the Bonds.

The WIFIA Loan Agreements permit the SFPUC to draw under the respective WIFIA Loans from time to time, provided that such loans must be disbursed no later than one year following the substantial completion date of each project as set forth in the respective WIFIA Loan Agreements (May 1, 2024, for the Biosolids Digester Facilities Project; July 26, 2027, for the Southeast Treatment Plant Improvements Project; and May 8, 2028 for the Project 1 Projects). Each draw is subject to the satisfaction of conditions, including without limitation, the delivery to the EPA of financial projections evidencing that the SFPUC will be able to satisfy its rate covenant for the current fiscal year and each of the next 10 fiscal years.

If an event of default occurs under a WIFIA Loan Agreement, the EPA may elect to suspend future disbursements of such WIFIA Loan, to terminate the capitalized interest period (thus causing interest to be payable on a current basis), to require the payment of a default interest rate (equal to such WIFIA Loan rate plus 200 basis points) and to institute legal action to enforce the provisions of such WIFIA Loan Agreement. However, the EPA cannot take any action, in law or in equity, which would affect the application of the Net Revenues of the Wastewater Enterprise or to accelerate the payment obligations under such WIFIA Bond except pursuant to the EPA’s rights as a parity Bondholder under the Indenture.

No reserve account was established to secure the WIFIA Loans.

**Conditions to Disbursements under WIFIA Loan Agreements.** The ability of the SFPUC to obtain disbursements from the EPA under the WIFIA Loan Agreements is subject to several conditions, including the payment of certain fees, if applicable, and the delivery of certain documentation, including an updated financial plan, copies of financing and project documents, proof of insurance required under the respective WIFIA Loan Agreements and a requisition that contains certain representations of the SFPUC as of the disbursement date.

The EPA is permitted to refuse disbursement upon the occurrence and continuance of certain events of default under the WIFIA Loan Agreements or the occurrence and continuance of events that would be an event of default with the passage of time and/or giving of notice. Such events include, among others, and as applicable (i) failure of the SFPUC to diligently pursue work on the applicable project or to achieve substantial completion of the applicable project by July 26, 2029, with respect to the STPI WIFIA Loan Agreement, by May 1, 2026, with respect to the BDFP WIFIA Loan Agreement, and by May 8, 2030, with respect to the Project 1 Loan Agreement; (ii) a default by the SFPUC under any of the principal contracts relating to the applicable project and the SFPUC fails to cure such default or replace the contract; (iii) the occurrence of a Bankruptcy Related Event (as defined in the WIFIA Loan Agreements) with respect to the counterparty to any of the principal contracts relating to the applicable project, unless such contract is replaced; (iv) abandonment of the applicable project by the SFPUC; (v) failure of the SFPUC to operate the applicable project for a continuous period of at least 180 days unless the cessation in operations is excused pursuant to the respective WIFIA Loan Agreements; (vi) a covenant default under the respective WIFIA Loan Agreements; (vii) misrepresentations made by the SFPUC under the respective WIFIA Loan Agreements or a document delivered in connection with the respective WIFIA Loan Agreements, (viii) acceleration of parity debt or a default under documents relating to the SFPUC’s parity debt; (ix) one or more judgments for the payment of money that in the aggregate exceed \$50 million or would cause a Material Adverse Effect (as defined under the WIFIA Loan Agreements) are rendered against the SFPUC, and such judgment(s) are unpaid for a period of 30 consecutive days or for which an action has been legally taken by a judgment creditor to attach or levy upon the SFPUC’s assets for the enforcement of such judgment(s); (x) the SFPUC fails to maintain its existence; (xi) a Bankruptcy Related Event (as defined under the WIFIA Loan Agreements) with respect to the SFPUC occurs; (xii) the respective WIFIA Loans or documents related to the respective WIFIA Loans are no longer valid; (xiii) failure to comply with the rate covenant set forth in the Indenture; (xiv) failure by the SFPUC to construct the respective projects consistent with government approvals or good engineering practices or failure to comply with applicable federal or local law; (xv) occurrence of a Material Adverse Effect (as defined in the WIFIA Loan Agreement), or an event or condition that could reasonably be expected to result in a Material Adverse Effect; or (xvi) failure to

comply with certain other provisions of the WIFIA Loan Agreement (such as the maintenance of insurance). See also “RISK FACTORS – WIFIA Loan Agreements.”

### Contingent Payment Obligations

The Wastewater Enterprise has no interest rate swaps, caps or hedges or other contingent payment obligations payable from Net Revenues. The Wastewater Enterprise may in the future, however, incur contingent payment obligations payable from Net Revenues. Such contingent payment obligations may be payable on a parity with the Bonds if the conditions for the issuance of parity debt under the Indenture are met. See “SECURITY FOR THE BONDS – Additional Series of Bonds” and “– Additional Parity Loans.”

### Subordinate Debt and Interim Funding Program

**No Limits on Subordinate Debt.** The SFPUC may issue bonds or incur other indebtedness secured by a pledge of Net Revenues on a basis subordinate to the pledge thereof securing the Bonds, without limitation.

**Interim Funding Program.** Pursuant to the Charter, the SFPUC has established an Interim Funding Program (the “**Interim Funding Program**”) (formerly known as the “Commercial Paper Program”) to fund construction costs relating to Wastewater Enterprise capital projects.

The Interim Funding Program is authorized for the Wastewater Enterprise in the amount of \$750 million. Of this amount, \$675 million is authorized for the SFPUC to issue tax-exempt and taxable commercial paper notes (the “**Commercial Paper Notes**”) secured by five bank credit facilities, as set forth below:

#### Commercial Paper Notes Bank Credit Facilities

Credit Facility	Bank	Amount	Stated Expiration Date
Letter of Credit	Sumitomo Mitsui Banking Corporation, acting through its New York Branch	\$150 million	March 2, 2029
Letter of Credit	Bank of America, N.A.	\$150 million	April 24, 2026
Revolving Credit and Term Loan Agreement	TD Bank, N.A.	\$75 million	July 6, 2027
Revolving Credit and Term Loan Agreement	State Street Bank and Trust Company	\$200 million	October 10, 2024 <sup>(1)</sup>
Letter of Credit	Sumitomo Mitsui Banking Corporation, acting through its New York Branch	\$100 million	May 31, 2027

<sup>(1)</sup> The SFPUC expects to replace this facility in August 2024.

The remaining \$75 million of the Interim Funding Program is in the form of a bank revolving credit agreement with U.S. Bank National Association (the “**U.S. Bank Credit Facility**”), with a current stated expiration date of July 18, 2024. The U.S. Bank Credit Facility permits the SFPUC to make draws directly on the bank, with the SFPUC’s payment obligation evidenced by a tax-exempt revolving note (the “**Revolving Notes**”). The SFPUC expects to replace this facility before it expires with a similar bank revolving credit agreement with U.S. Bank National Association for a line of credit of up to \$75 million with a three-year term.

The Commercial Paper Notes and the Revolving Notes are payable from Net Revenues, and are secured on a parity lien basis with each other. The Commercial Paper Notes and the Revolving Notes, collectively, are secured on a basis subordinate to the payment of debt service on the Bonds (including the Parity Loans and the WIFIA Bonds).

The SFPUC has approximately \$342.0 million principal amount of Commercial Paper Notes outstanding and no outstanding principal balance on any of the Revolving Notes. Approximately \$344.3 million principal amount of and interest on tax-exempt Commercial Paper Notes will be retired with proceeds of the 2024C Bonds and 2024D Bonds. See “PLAN OF FINANCE.”

### **Other Subordinate Obligations Payable from Net Revenues**

The SFPUC completed the construction of a 13-story office building at 525 Golden Gate Avenue in San Francisco to house the administrative offices of the SFPUC’s three utility enterprises and moved into the building in 2012. Total project costs were approximately \$202 million and were financed with land and property sale proceeds, fund balances, grants and the proceeds of certificates of participation (the “**2009 Golden Gate COPs**”), representing interests in a City General Fund lease, executed and delivered in two series (one of which constitutes Build America Bonds) on October 7, 2009, in the aggregate principal amount of \$167,670,000. Pursuant to a memorandum of understanding between the City and the SFPUC, the SFPUC will reimburse the City General Fund for all debt service in connection with this City financing (net of Refundable Credits received). The final maturity date on the 2009 Golden Gate COPs is November 1, 2041. As of July 1, 2024, the principal amount outstanding of the 2009 Golden Gate COPs was \$125 million. The SFPUC allocates such payment obligations internally among its three utility enterprises based on percentage usage. The Wastewater Enterprise is responsible for 18.88% of such obligations, payable from Net Revenues on a basis subordinate to the payment of principal of and interest on the Bonds.

### **Revenue Bond Oversight Committee**

On November 5, 2002, the voters of San Francisco adopted Proposition P, an ordinance that established the Public Utilities Revenue Bond Oversight Committee (“**RBOC**”) to report publicly to the Mayor, the SFPUC and the Board of Supervisors regarding the expenditure of revenue bond proceeds on the repair, replacement, upgrading and expansion of the Wastewater Enterprise, the Water Enterprise and the Power Enterprise.

The RBOC has seven members appointed as follows: two by the Mayor, two by the Board of Supervisors, one by the City Controller, one by the Bay Area Water Users Association under the auspices of the Bay Area Water Supply and Conservation Agency. The seventh member is the City’s Budget Analyst or their representative. Pursuant to Proposition P, the RBOC receives 1/20th of 1% of the gross new money revenue bond proceeds to fund the cost of retaining the services of outside auditors, inspectors, and necessary experts to perform independent reviews.

The provisions of the ordinance establishing the RBOC are set to expire on January 1, 2025.

The RBOC may, by majority vote of all its members, prohibit the issuance or sale of authorized SFPUC revenue bonds which have yet to be issued or sold if, after reviewing materials provided by the SFPUC and conducting its own independent audit, and after consultation with the City Attorney, the RBOC determines that revenue bond proceeds have been or are being spent on purposes not authorized by the authorizing bond resolution or otherwise in a manner amounting to an illegal expenditure or illegal waste of such revenue bond proceeds. The SFPUC may appeal such a decision to the Board of Supervisors within 30 days. The Board of Supervisors may overturn such a decision by the RBOC by a two-thirds vote of all members of the Board of Supervisors with evidence from the SFPUC of corrective measures satisfactory to the Board of Supervisors or may remand the decision to the RBOC for further consideration. To date, the RBOC has not prohibited the issuance or sale of any authorized SFPUC revenue bonds of the Wastewater Enterprise, the Water Enterprise or the Power Enterprise.

### **Debt Service Requirements**

Set forth in the following table are debt service requirements for the Outstanding Bonds and the 2024ABCD Bonds assuming no early redemptions.

**DEBT SERVICE REQUIREMENTS ON  
OUTSTANDING BONDS AND 2024ABCD BONDS**

Fiscal Year (ending June 30)	Outstanding Parity Revenue Bonds <sup>(1)(2)(3)</sup>	Parity Loans <sup>(4)</sup>	2024A Bonds Interest <sup>(3)(5)</sup>	2024B Bonds Interest <sup>(3)</sup>	2024B Bonds Principal	2024C Bonds Interest <sup>(3)</sup>	2024C Bonds Principal	2024D Bonds Interest <sup>(3)</sup>	2024D Bonds Principal	Total Bond Debt Service	Total Debt Service including Parity Loans <sup>(6)</sup>
2025	\$104,773,352	\$4,004,851	--	\$2,869,087	--	--	--	--	--	\$107,642,439	\$111,647,290
2026	130,194,202	4,004,851	--	4,285,773	--	--	--	--	--	134,479,975	138,484,826
2027	171,633,046	4,004,851	\$20,068,171	4,285,773	--	\$26,986,000	--	\$4,244,750	--	227,217,739	231,222,590
2028	185,513,936	4,004,851	10,034,085	4,094,685	\$8,210,000	26,723,250	\$10,510,000	4,204,000	\$1,630,000	250,919,956	254,924,807
2029	208,580,876	4,004,851	--	3,810,717	4,055,000	26,378,500	3,280,000	4,150,500	510,000	250,765,593	254,770,444
2030	208,415,206	4,004,851	--	3,717,838	--	26,118,125	7,135,000	4,110,000	1,110,000	250,606,168	254,611,020
2031	208,244,321	4,004,851	--	3,717,838	--	25,752,250	7,500,000	4,053,125	1,165,000	250,432,533	254,437,385
2032	198,262,782	4,004,851	--	3,717,838	--	25,363,250	8,060,000	3,992,750	1,250,000	240,646,619	244,651,470
2033	188,273,990	4,004,851	--	3,476,336	10,050,000	25,161,750	--	3,961,500	--	230,923,576	234,928,427
2034	188,072,153	4,004,851	--	2,979,736	10,550,000	25,161,750	--	3,961,500	--	230,725,138	234,729,989
2035	187,868,334	4,004,851	--	2,454,074	11,075,000	25,161,750	--	3,961,500	--	230,520,658	234,525,509
2036	187,655,528	4,004,851	--	1,894,615	11,635,000	25,161,750	--	3,961,500	--	230,308,393	234,313,244
2037	156,852,434	4,004,851	--	1,340,195	10,545,000	25,161,750	--	3,961,500	--	197,860,879	201,865,730
2038	144,815,757	4,004,851	--	537,336	21,130,000	25,118,375	1,735,000	3,954,875	265,000	197,556,343	201,561,194
2039	141,795,971	4,004,851	--	--	--	24,488,750	23,450,000	3,855,125	3,725,000	197,314,846	201,319,697
2040	140,384,687	4,004,851	--	--	--	23,258,625	25,755,000	3,661,875	4,005,000	197,065,187	201,070,038
2041	148,501,025	4,004,851	--	--	--	22,123,750	19,640,000	3,485,375	3,055,000	196,805,150	200,810,001
2042	140,910,732	4,004,851	--	--	--	21,130,125	20,105,000	3,330,750	3,130,000	188,606,607	192,611,458
2043	140,947,938	4,004,851	--	--	--	20,099,500	21,120,000	3,170,500	3,280,000	188,617,938	192,622,790
2044	136,817,130	4,004,851	--	--	--	19,092,125	19,175,000	3,013,875	2,985,000	181,083,130	185,087,981
2045	137,803,374	4,004,851	--	--	--	18,133,875	19,155,000	2,864,750	2,980,000	180,936,999	184,941,851
2046	138,081,166	4,004,851	--	--	--	17,216,250	17,550,000	2,722,000	2,730,000	178,299,416	182,304,267
2047	138,446,046	4,004,851	--	--	--	16,385,250	15,690,000	2,592,875	2,435,000	175,549,171	179,554,022
2048	134,883,633	4,004,851	--	--	--	15,591,625	16,055,000	2,469,500	2,500,000	171,499,758	175,504,609
2049	135,560,411	1,979,553	--	--	--	14,741,125	17,965,000	2,337,125	2,795,000	173,398,661	175,378,213
2050	110,601,006	1,979,553	--	--	--	13,328,125	38,555,000	2,117,375	5,995,000	170,596,506	172,576,059
2051	111,377,387	265,078	--	--	--	11,339,375	40,995,000	1,804,375	6,525,000	172,041,137	172,306,215
2052	112,373,768	--	--	--	--	9,257,875	42,265,000	1,473,125	6,725,000	172,094,768	172,094,768
2053	73,226,073	--	--	--	--	6,925,125	51,045,000	1,101,875	8,125,000	140,423,073	140,423,073
2054	74,055,906	--	--	--	--	4,330,000	52,760,000	688,875	8,395,000	140,229,781	140,229,781
2055	74,938,451	--	--	--	--	1,505,500	60,220,000	239,500	9,580,000	146,483,451	146,483,451
2056	75,715,493	--	--	--	--	--	--	--	--	75,715,493	75,715,493
2057	76,660,399	--	--	--	--	--	--	--	--	76,660,399	76,660,399
2058	77,555,911	--	--	--	--	--	--	--	--	77,555,911	77,555,911
2059	78,501,621	--	--	--	--	--	--	--	--	78,501,621	78,501,621
2060	26,619,268	--	--	--	--	--	--	--	--	26,619,268	26,619,268
2061	26,719,609	--	--	--	--	--	--	--	--	26,719,609	26,719,609
2062	26,852,502	--	--	--	--	--	--	--	--	26,852,502	26,852,502
<b>TOTAL<sup>(6)</sup></b>	<b>\$4,948,485,421</b>	<b>\$100,340,613</b>	<b>\$30,102,256</b>	<b>\$43,181,839</b>	<b>\$87,250,000</b>	<b>\$567,195,500</b>	<b>\$539,720,000</b>	<b>\$89,446,375</b>	<b>\$84,895,000</b>	<b>\$6,390,276,391</b>	<b>\$6,490,617,004</b>

<sup>(1)</sup> Comprised of debt service relating to the outstanding 2010B Bonds, 2013B Bonds, 2016A Bonds, 2016B Bonds, 2018A Bonds, 2018B Bonds, 2021A Bonds, 2021B Bonds, 2022B Bonds, BDFP WIFIA Bond (relating to two draws on the BDFP WIFIA Loan as of the date of this Official Statement), STPI WIFIA Bond (relating to one draw on the STPI WIFIA Loan as of the date of this Official Statement), 2023A Bonds, 2023B Bonds and 2023C Bonds. Does not include debt service relating to the Refunded 2018B Bonds or the Refunded 2023B Bonds. See "PLAN OF FINANCE – Refunded Bonds." Assumes 2023C Bonds bear interest at a rate of 4% per annum after the Initial Term Rate Period (as defined in the Fifteenth Supplemental Indenture). Does not include debt service relating to the Project 1 WIFIA Bond (relating to the Project 1 WIFIA Loan), any Parity Loans, subordinate Commercial Paper Notes or Revolving Notes. See "– Outstanding Parity Revenue Bonds," "– Parity Loans," "– Water Infrastructure Finance and Innovation Act Loans" and "– Subordinate Debt and Interim Funding Program."

<sup>(2)</sup> Calculation of interest due on outstanding parity revenue bonds shown without an offset for Refundable Credits.

<sup>(3)</sup> Net of capitalized interest payments.

<sup>(4)</sup> Includes SRF loans for Lake Merced Green Infrastructure Project, Southeast Treatment Plant Primary/Secondary Clarifier Upgrade Project, Southeast Treatment Plant 521/522 and Disinfection Upgrade Project and North Point Facility Outfall Rehabilitation Project for which payment schedules have been established. See "– Parity Loans." Does not include debt service relating to Parity Loans for which a payment schedule has not been established.

<sup>(5)</sup> Does not include principal on 2024A Bonds. See "PLAN OF FINANCE."

<sup>(6)</sup> Totals may not add due to independent rounding.

## THE CITY AND COUNTY OF SAN FRANCISCO

THE FOLLOWING INFORMATION IS PROVIDED FOR CONVENIENCE ONLY. THE GENERAL FUND OF THE CITY IS NOT LIABLE FOR THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE 2024ABCD BONDS, AND NEITHER THE CREDIT NOR THE TAXING POWER OF THE CITY IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE 2024ABCD BONDS. THE 2024ABCD BONDS ARE NOT SECURED BY A LEGAL OR EQUITABLE PLEDGE OF, OR CHARGE, LIEN, OR ENCUMBRANCE UPON, ANY OF THE PROPERTY OF THE CITY.

**General.** San Francisco is the economic and cultural center of the San Francisco Bay Area and northern California. The limits of San Francisco encompass over 93 square miles, of which 49 square miles are land, with the balance consisting of tidelands and a portion of the San Francisco Bay. San Francisco is located at the northern tip of the San Francisco Peninsula, bounded by the Pacific Ocean to the west, the San Francisco Bay and the San Francisco-Oakland Bay Bridge to the east, the entrance to the San Francisco Bay and the Golden Gate Bridge to the north, and San Mateo County to the south. Silicon Valley is about a 40-minute drive to the south, and the Napa-Sonoma wine country is about an hour's drive to the north. The California Department of Finance estimates San Francisco's population decreased from 873,965 as of April 1, 2020 to 843,071 as of January 1, 2024.

The San Francisco Bay Area consists of the nine counties contiguous to the Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma Counties (collectively, the "**Bay Area**"). The economy of the Bay Area includes a wide range of industries, supplying local needs as well as the needs of national and international markets. Major business sectors in the Bay Area include technology, retail, entertainment and the arts, conventions and tourism, service businesses, banking, professional and financial services, corporate headquarters, international and wholesale trade, multimedia and advertising, healthcare and higher education. The California State Supreme Court is also based in San Francisco.

San Francisco benefits from a highly skilled, educated and professional labor force. The City estimates the per-capita personal income of San Francisco for fiscal year 2022-23 was \$175,597. The San Francisco Unified School District ("**SFUSD**"), which is a separate legal entity from the City, operates 73 elementary schools, 13 middle schools, 17 high schools, 47 early education schools, and three County and Court schools. Higher education institutions located in San Francisco include the University of San Francisco, California State University – San Francisco, University of California – San Francisco (a medical school and health science campus), the UC College of the Law, San Francisco (formerly University of California Hastings College of the Law), the University of the Pacific's School of Dentistry, Golden Gate University, City College of San Francisco (a public community college), the San Francisco Conservatory of Music, and the Academy of Art University.

San Francisco International Airport ("**SFO**"), located 14 miles south of downtown San Francisco in an unincorporated area of San Mateo County, is owned by the City and is operated by the San Francisco Airport Commission (the "**Airport Commission**"), and is a principal commercial service airport for the Bay Area and one of the nation's principal gateways for Pacific Rim traffic. San Francisco is also served by the Bay Area Rapid Transit District ("**BART**") (an electric rail commuter service linking San Francisco with the East Bay and the San Francisco Peninsula, including SFO), Caltrain (a conventional commuter rail line linking the City with the San Francisco Peninsula), and bus and ferry services between San Francisco and residential areas to the north, east and south of San Francisco. San Francisco Municipal Railway ("**Muni**"), operated by the San Francisco Municipal Transportation Agency ("**SFMTA**"), provides bus and streetcar service within San Francisco (although since fiscal year 2019-20, telecommuting has caused ridership into and within San Francisco to decline significantly compared to pre-pandemic levels). The Port of San Francisco (the "**Port**"), which administers 7.5 miles of Bay waterfront held in "public trust" by the Port on behalf of the people of California, promotes a balance of maritime-related commerce, fishing, recreational, industrial and commercial activities, and natural resource protection.

**Government.** San Francisco is a city and county chartered pursuant to Article XI, Sections 3, 4, 5 and 6 of the Constitution of the State of California and is the only consolidated city and county in California. Voters approved the City's current Charter at the November 1995 election. The City is governed by a Board of Supervisors elected from 11 districts to serve four-year terms, and a Mayor who serves as chief executive officer, elected citywide to a four-year term. The City's original budget for fiscal years 2023-24 and 2024-25 totals \$14.6 billion and \$14.5 billion, respectively. The General Fund portion of each year's proposed budget is \$6.8 billion in fiscal year 2023-24

and \$7.0 billion in fiscal year 2024-25, with the balance allocated to all other funds, including enterprise fund departments, such as the Airport Commission, SFMTA, the Port Commission and the SFPUC. According to the Controller of the City (the “**Controller**”), at the start of fiscal year 2023-24, total net assessed valuation of taxable property in San Francisco was approximately \$343.9 billion.

**City Financial Challenges.** The City continues to face financial challenges resulting from a variety of factors, including continuing remote work by a significant portion of the regional workforce (which has led to vacancies and declining property taxes for certain office buildings, lower real estate property transfer taxes, and reductions in taxes based on employees physically located in the City), slower than anticipated recovery in the local hospitality and convention industries (resulting in declines in hotel and sales taxes from pre-pandemic levels), and general economic conditions. These conditions have resulted in projected budget deficits (absent corrective actions) in the hundreds of millions of dollars in future fiscal years, rising to approximately \$1.36 billion in fiscal year 2027-28. On June 3, 2024, the Controller issued its most recent report on the status of the San Francisco economy for May 2024. The Controller’s report noted that the job market in the San Francisco Metropolitan Statistical Area has been improving in 2024, with an addition of 1,900 jobs in San Francisco and San Mateo counties between February and April. Unemployment has dropped to 3.4%, down from 4.0% in January, with the leisure and hospitality sector leading the area’s job growth, followed by the education, health and government sectors, while technology job losses continue. The report also notes that office vacancies in the first quarter of 2024 are 32.4% (as compared to 5.6% in the fourth quarter of 2019). Furthermore, San Francisco domestic air travel through March 2024 is at 84% of 2019 levels, while San Francisco international travel now exceeds 2019 levels. Muni and BART ridership and bridge crossings into and out of San Francisco continue to remain lower than pre-pandemic levels.

The City’s financial challenges described above have not significantly impacted the Wastewater Enterprise’s operations or financial condition, although reduced demand for service resulting from some of the factors has required increased rate increases by the Wastewater Enterprise. See “THE WASTEWATER ENTERPRISE – Service Area – *Recent Economic Developments*” and “– Recent Factors Impacting Wastewater Revenues.”

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## THE PUBLIC UTILITIES COMMISSION

### General

The SFPUC is a department of the City responsible for the maintenance, operation and development of three utility enterprises: the Wastewater Enterprise, the Water Enterprise and the Power Enterprise (which is a component of Hetch Hetchy Water and Power). The SFPUC's enterprises are operated and managed as separate financial entities with separate enterprise funds.

- The Wastewater Enterprise provides wastewater and stormwater collection, treatment and disposal services for San Francisco.
- The Water Enterprise provides drinking water to retail customers in San Francisco, to certain retail customers outside San Francisco and to wholesale customers in three other Bay Area counties (the "**Water Enterprise**").
- Hetch Hetchy Water and Power operates dams (including O'Shaughnessy Dam), reservoirs (including Hetch Hetchy Reservoir), hydroelectric generation and transmission facilities and water transmission facilities from Hetch Hetchy Valley to the connection with the Water Enterprise (collectively, the "**Hetch Hetchy Project**"). In addition, Hetch Hetchy Water and Power provides hydroelectric, solar and other power for municipal and public infrastructure, services and facilities (the "**Power Enterprise**"). CleanPowerSF ("**CleanPowerSF**"), managed by the Power Enterprise, is a Community Choice Aggregation program.

*The revenues of the Water Enterprise, the Power Enterprise and CleanPowerSF are not available for payment of the principal of, premium, if any, or interest on the Bonds. See "SECURITY FOR THE BONDS – Pledge of Net Revenues."*

### Organization, Purposes and Powers

**Wastewater Enterprise.** The Wastewater Enterprise's collection and treatment system consists of a combined sewer collection system conveying sewage and stormwater flows within San Francisco to two water pollution control plants and one wet weather treatment facility located within San Francisco. Treated effluent flows are then discharged through mostly deep-water outfalls into the San Francisco Bay and the Pacific Ocean. The Wastewater Enterprise also currently provides sewage treatment service on Treasure Island pursuant to contract, and operates an onsite sewage and stormwater reclamation and treatment facility at the SFPUC headquarters at 525 Golden Gate Avenue, San Francisco, California. See "THE WASTEWATER ENTERPRISE."

**Water Enterprise.** Nearly 2.7 million people rely on water supplied by the SFPUC to meet their daily water needs through its Water Enterprise. The SFPUC serves as the retail water supplier for San Francisco and is responsible for water deliveries to residents and institutions within San Francisco city limits, as well as to a number of retail accounts outside of San Francisco city limits. In addition, the SFPUC sells water to 27 wholesale customer entities in San Mateo, Alameda and Santa Clara Counties under contractual agreements.

*The revenues of the Water Enterprise are not "Revenues" under the Indenture and do not secure the payment of the principal of, premium, if any, or interest on the Bonds. See "SECURITY FOR THE BONDS - Pledge of Net Revenues."*

**Hetch Hetchy – Water and Power Operations.** Hetch Hetchy Water and Power operates the dams (among them O'Shaughnessy Dam being the largest), reservoirs (among them Hetch Hetchy Reservoir being the largest), hydroelectric generation and transmission facilities and water transmission facilities from Hetch Hetchy Valley to the connection with the Water Enterprise, which provides water for distribution through the Water Enterprise and hydroelectric, solar and other power for municipal and public infrastructure, services and facilities of San Francisco. The Power Enterprise, which is a component of the Hetch Hetchy Project, was created in 2005 as a separate system within Hetch Hetchy Water and Power. The Power Enterprise provides electric power to meet the municipal

requirements of the City, including power to operate municipal streetcars and electric buses, street and traffic lights, municipal buildings and other City facilities, including SFO. Additionally, the Power Enterprise provides power to the Modesto Irrigation District and Turlock Irrigation District, located in the central valley of California, to certain commercial customers consistent with prescribed contractual obligations and federal law and to certain retail customers in San Francisco. CleanPowerSF, managed by the Power Enterprise, is a Community Choice Aggregation program, pursuant to which the SFPUC pools the electricity demands of CleanPowerSF customers, including certain of the San Francisco's residents and businesses, for the purpose of buying electricity on behalf of such customers. CleanPowerSF provides San Francisco with new clean energy alternatives at competitive rates.

In September 2019, in connection with the bankruptcy of Pacific Gas & Electric Company (“PG&E”) and PG&E Corporation, the City submitted a non-binding indication of interest to purchase substantially all of PG&E’s electric distribution and transmission assets needed to provide retail electric service to all electricity customers within the geographic boundaries of San Francisco. The City subsequently submitted an additional non-binding indication of interest to PG&E in September 2020. PG&E has not indicated a willingness to sell any such assets. The City remains interested in acquiring these assets from PG&E, and in July 2021, submitted a petition to the California Public Utilities Commission (“CPUC”) for a formal determination of the fair market value of PG&E’s assets the City is interested in acquiring. In April 2023, the City filed direct testimony of four expert witnesses with the CPUC regarding the specific assets under consideration for acquisition and the value of such assets. In December 2019, the City’s Planning Department initiated review of the acquisition project under CEQA and is currently preparing an environmental impact report in compliance with CEQA. A transaction has not been consummated with PG&E, and neither the SFPUC nor the City are able to predict whether a transaction will be consummated or what the terms of any such transaction would be, if consummated.

***The revenues of the Power Enterprise and the revenues of CleanPowerSF are not “Revenues” under the Indenture and do not secure the payment of the principal of, premium, if any, or interest on the Bonds. See “SECURITY FOR THE BONDS – Pledge of Net Revenues.”***

### **Commission Members**

Under the Charter, the SFPUC is given exclusive charge of the operation and management of all water, wastewater and energy supplies and utilities owned or maintained by the City, as well as the real, personal and financial assets under the SFPUC’s jurisdiction. The SFPUC is governed by the Commission.

The Commission consists of five members appointed by the Mayor, subject to confirmation by a majority of the Board of Supervisors. Seat 1 is designated for a member with experience in environmental policy and an understanding of environmental justice issues. Seat 2 is designated for a member with experience in ratepayer or consumer advocacy. Seat 3 is designated for a member with experience in project finance. Seat 4 is designated for a member with expertise in water systems, power systems, or public utility management. Seat 5 is designated for an at-large member. Members are appointed for four-year terms and are eligible for reappointment. Members may be suspended by the Mayor and may be removed by a three-fourths vote of the Board of Supervisors for official misconduct.

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The current members of the Commission and their appointment dates and expiration dates of their current terms are set forth below:

Name and Title	Seat	Appointment Date	Term Expires
Tim Paulson, President	3	April 29, 2019 <sup>(1)</sup>	August 1, 2024 <sup>(2)</sup>
Anthony Rivera, Vice President	5	October 11, 2022 <sup>(1)</sup>	August 1, 2024 <sup>(2)</sup>
Newsha Ajami	1	February 4, 2021 <sup>(1)</sup>	August 1, 2024 <sup>(2)</sup>
Kate H. Stacy	4	October 18, 2022	August 1, 2026

<sup>(1)</sup> Currently serving out the remainder of the seat’s four-year term, which expires August 1, 2024.

<sup>(2)</sup> Pursuant to Section 4.101.5 of the Charter, the tenure of a member of the Commission will terminate no later than 60 days after the expiration of the member’s term, unless the member is reappointed. Mayor London Breed is expected to appoint or reappoint members of the Commission in the near future.

Seat 2 is currently vacant. The term of Seat 2 expires August 1, 2025.

## Management

Management of the SFPUC is led by the General Manager. The General Manager is appointed by the Mayor from candidates submitted by the Commission. Once appointed by the Mayor, the General Manager serves at the pleasure of the Commission; however, the Commission also has Charter authority to employ and does employ the General Manager under an individual contract.

Brief biographies of the General Manager and principal members of the senior management of the SFPUC are set forth below.

***Dennis J. Herrera.*** Dennis J. Herrera commenced serving as the General Manager of the SFPUC on November 1, 2021. Prior to his appointment, Mr. Herrera had been re-elected in November 2019 to a four-year term as City Attorney for the City and County of San Francisco. Mr. Herrera was first elected City Attorney in December 2001. Before becoming City Attorney, Mr. Herrera had been a partner in a private law firm and had served in the Clinton Administration as Chief of Staff of the United States Maritime Administration. He also served as president of the San Francisco Police Commission and was a member of the San Francisco Public Transportation Commission. Mr. Herrera earned a B.A. from Villanova University and a J.D. from George Washington School of Law.

***Ronald P. Flynn.*** Ronald P. Flynn is the Deputy General Manager and Chief Operating Officer of the SFPUC. Appointed to this role in 2022, Mr. Flynn works with the General Manager on all policy and strategic initiatives, oversees the SFPUC’s daily operations, including business services (finance, accounting, audits, customer services, information technology), external affairs (communications, legislative, community benefits, equity), and human resources. Prior to this position, Mr. Flynn served for almost 16 years in the San Francisco City Attorney’s Office under Dennis Herrera. For the last seven years he was the Chief Deputy City Attorney, where he oversaw the City’s litigation teams, as well as worked closely with departments and agencies, including the SFPUC, on procurement, financial, and litigation matters. He worked on Hetch Hetchy litigation, PG&E’s bankruptcy, and other SFPUC-related issues. Mr. Flynn previously served as Team Leader of the Construction and Public Contracting Team in the City Attorney’s Office, working on many SFPUC projects, including the Water System Improvement Program. Mr. Flynn earned a B.Sc. from California Polytechnic State University, San Luis Obispo, an Ed.M. from Harvard University, and a J.D. from University of California, Berkeley School of Law.

***Nancy L. Hom.*** Nancy L. Hom is the Chief Financial Officer and Assistant General Manager for Business Services, providing direction and oversight for the Financial Services, Audit, Loans and Grants, Information Technology Services, Customer Services, and Strategy Innovation and Change bureaus. She has led several important bureaus of Business Services, including serving as the Assurance and Internal Control Director for 10 years; and more recently as the SFPUC’s Co-Deputy Chief Financial Officer. Ms. Hom has nearly 20 years of experience leading financial and governance teams in public agencies and has extensive knowledge of the City’s financial and accounting guidelines and systems, capital improvement projects and regulatory affairs. Prior to

joining the SFPUC, she served as the Chief Financial Officer for the Department of Child Support Services and as a leader in the Office of the Controller's Budget and Analysis division. Ms. Hom earned a B.S. in Business Administration from San Francisco State University, concentrating in Finance, Internal Audit, and Project Management. She also maintains two professional certifications from the Institute of Internal Auditors as a Certified Internal Auditor and Certified Risk Management Assurance professional.

**Joel Prather.** Joel Prather is the Assistant General Manager of the Wastewater Enterprise. His professional background includes more than a decade at the SFPUC Wastewater Enterprise, and over 20 years with the City. He started with San Francisco Public Works in the Bureau of Street and Sewer Repair and came to the SFPUC in 2011 as a Maintenance Planner. Prior to his appointment in his current role, he held the position of Maintenance Manager, where he managed the day to day maintenance systems and practices for the wastewater treatment facilities. He earned a B.A. in urban studies from San Francisco State University.

**Masood Ordikhani.** Masood Ordikhani serves as the Assistant General Manager, External Affairs for the SFPUC. Previously, he served as the SFPUC's first Chief Equity and Innovation Officer, leading the agency's racial equity work. Prior to that role, he was the Director of Workforce and Economic Program Services within the SFPUC's Infrastructure Division. During his tenure in that role, Mr. Ordikhani and his team have developed and delivered several nationally recognized programs. Prior to joining the SFPUC, Mr. Ordikhani was the Deputy Director of the City's Human Rights Commission. In addition, prior to his more than 14 years of public service, he was an attorney in private practice. He is a graduate of the University of California, Berkeley and UC College of the Law, San Francisco (formerly University of California Hastings College of the Law).

**Barbara Hale.** Barbara Hale is Assistant General Manager of the Power Enterprise. Ms. Hale oversees the Power Enterprise, where she is responsible for all commercial arrangements associated with the purchase and sale of power, whether wholesale or retail, and operations of retail electric service programs. Prior to this role, Ms. Hale served as Analyst, Advisor to the President, Administrative Law Judge, and Division Director at the California Public Utilities Commission. Ms. Hale graduated cum laude from San Francisco State University with a B.A. in Economics, receiving special recognition for high achievement with the Department Honors Award, and pursued extensive graduate coursework in Applied Economics.

**Stephen Robinson.** Stephen Robinson is the Assistant General Manager for Infrastructure, where he is responsible for capital programs and project implementation for SFPUC facilities, including the Water Capital Improvement Plan, the Wastewater Capital Improvement Plan (which includes the Sewer System Improvement Program), and the Hetchy Capital Improvement Program. Previously, he was the Director of the Wastewater Enterprise Capital Program for SFPUC's Infrastructure Division. He is a Professional Civil Engineer and a UK Chartered Civil Engineer with over two decades of planning, design, construction, and management experience in the water/wastewater sector. Prior to joining SFPUC, Mr. Robinson worked with MWH/Stantec as a consultant and served in the British Army as a Royal Engineer Captain. Mr. Robinson has a master's degree in Civil Engineering and Management from the Queens University of Belfast, Northern Ireland.

**Steven R. Ritchie.** Steven Ritchie is the Assistant General Manager of the Water Enterprise, responsible for overseeing water system operations and planning from the Hetch Hetchy Project through the Regional Water System to the City Distribution Division. He is also responsible for the management of the SFPUC's lands and natural resources. Mr. Ritchie was the Manager of Planning at the SFPUC from 1995 to 1998. Prior to his current assignment, he managed the South Bay Salt Pond Restoration Project, a multi-agency effort to restore 15,100 acres of valuable habitat in South San Francisco Bay, while providing for flood risk management and public access. In addition, Mr. Ritchie has worked at management positions at the San Francisco Bay Regional Water Quality Control Board (1987-1995), the CalFed Bay Delta Program (1998-2000), and URS consultants (2000-2004). He has a B.S. and M.S. in Civil Engineering from Stanford University.

### **Ongoing Investigations**

In January 2020, the City's former Director of Public Works, Mohammad Nuru, was criminally charged with honest services wire fraud, conspiracy to commit money laundering and making false statements to the Federal Bureau of Investigation ("FBI"). Mr. Nuru later pled guilty to honest services wire fraud and was sentenced to seven years in prison in August 2022. The FBI investigation into Mr. Nuru has led to the discovery of further corruption

involving various former City officials and contractors, including the SFPUC's then General Manager, Harlan L. Kelly, Jr. In November 2020, Mr. Kelly was charged in connection with an alleged bribery scheme involving Walter Wong, a San Francisco construction executive and permit expediting consultant, and an alleged bank fraud scheme involving Victor Makras, a San Francisco real estate broker and property developer. In July 2023, Mr. Kelly was convicted of one count of conspiracy to commit honest services wire fraud, one count of honest services wire fraud and four counts related to charges stemming from a bank fraud scheme. In March 2024, Mr. Kelly was sentenced to four years in prison, beginning June 2024.

The FBI investigation may be ongoing, and the City can give no assurance when the FBI will complete any investigation. The San Francisco District Attorney's Office may also be independently investigating certain matters related to alleged corruption involving various former City officials and contractors, and the City can give no assurance when the District Attorney's Office will complete any investigation.

## **Employee Relations**

**San Francisco.** The City's original budget for fiscal years 2023-24 and 2024-25 included approximately 40,455 full-time and part-time budgeted City positions. City workers are represented by 36 different labor unions. The largest unions in the City include the International Federation of Professional and Technical Engineers ("IFPTE"), Local 21, which represent Wastewater Enterprise employees.

Wages, hours and working conditions of City employees, including employees of the SFPUC, are determined by collective bargaining pursuant to State law (the Meyers-Milias-Brown Act, California Government Code Sections 3500-3511) and the City Charter. San Francisco is unusual among California's cities and counties in that nearly all of its employees, including managerial and executive-level employees, are represented by labor organizations.

Further, the City Charter requires binding arbitration to resolve negotiations in the event of an impasse. If an impasse occurs, the parties are required to convene a tripartite arbitration panel, chaired by an impartial third-party arbitrator, which sets the disputed terms of the new agreement. The award of the arbitration panel is final and binding. This process applies to almost all City employees. Since 1976, no City employees have participated in a union-authorized strike, which is prohibited by the City Charter. On July 24, 2023, the California Public Employment Relations Board ("PERB") ruled in favor of the Service Employees International Union ("SEIU"), Local 1021 and IFPTE, Local 21, concluding that City Charter sections A8.346 and A8.409 prohibiting strikes by City employees are invalid, affirming an earlier ruling of an administrative law judge that such City Charter provisions violate the Meyers-Milias-Brown Act. The City has filed a notice of appeal to the California Court of Appeal with respect to the PERB decision. The City can give no assurance whether the appeal will be successful. See "RISK FACTORS – Risks Related to Wastewater Enterprise Facilities and Operation – *Labor Actions.*"

The City's employee selection procedures are established and maintained through a civil service system. In general, selection procedures and other merit system issues, with the exception of discipline, are not subject to arbitration. Disciplinary actions are generally subject to grievance arbitration, with the exception of sworn police officers and fire fighters.

In 2024, the City negotiated three-year agreements (for fiscal years 2024-25 through 2026-27) with 27 labor unions, including IFPTE, Local 21, Laborers International, Local 261, SEIU, Local 1021, and Stationary Engineers, Local 39, which represent most of the Wastewater Enterprise represented employees. The parties agreed to the following: a 1.5% wage increase effective July 1, 2024; a 1.5% wage increase effective January 4, 2025; a 1% wage increase effective June 30, 2025, at close of business, and a 1% wage increase effective July 1, 2025, for a total compounded increase of 2.01% effective July 1, 2025; a 1.5% wage increase effective January 3, 2026; a 2% wage increase effective June 30, 2026, at close of business; a 2% wage increase effective January 2, 2027; and a 2.5% wage increase effective June 30, 2027, at close of business. These increases have no off ramps (potential deferrals triggered by the budget). The total compounded increase over three years is 13.753%. All City employees shall earn no less than \$25 per hour as of July 1, 2024 (which affects SEIU 1021, Local 1021, Laborers, Local 261).

**SFPUC.** The SFPUC currently employs approximately 2,300 of the City’s workers, of which approximately 17.6% work for the Wastewater Enterprise. The Charter governs the SFPUC’s employment policies and authorizes the San Francisco Civil Service Commission to establish rules and procedures to implement those policies. Of the 36 labor unions representing City workers more broadly, 14 presently represent SFPUC employees, as set forth in “Table 1 – Wastewater Enterprise Memoranda of Understanding.”

Over the next five years, approximately 38.9% of the SFPUC workforce agency-wide, including approximately 48.6% of the Wastewater Enterprise workforce, will be eligible for retirement. A new generation of jobs will require workers with specialized training, skills and experience. The SFPUC’s 2020 Strategic Sustainability Plan includes an “effective workforce” goal, which focuses on a number of workforce development and sustainability initiatives. The SFPUC provides career opportunities and training to San Francisco residents and partners with unions, the City and other stakeholders to support apprenticeships and pre-apprentice training programs in the skilled trades to help maintain a skilled and reliable workforce for the SFPUC’s operations and infrastructure development. In addition, the SFPUC provides high school, college and graduate student internship programs that span a variety of fields including engineering, water and wastewater management, finance, communications, human resources and information technology. The SFPUC also provides ethics training, diversity training, management training, environmental management system training, as well as fraud prevention and awareness training.

The following table summarizes the number of SFPUC and Wastewater Enterprise employees covered by a memorandum of understanding (similar to a collective bargaining agreement), each of which will expire on June 30, 2027.

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**TABLE 1  
WASTEWATER ENTERPRISE  
MEMORANDA OF UNDERSTANDING**

<b>Employee Bargaining Unit</b>	<b>SFPUC Full-Time Equivalent Employment<sup>(1)</sup></b>	<b>Wastewater Enterprise Full-Time Equivalent Employment<sup>(1)</sup></b>
International Association of Machinists, Lodge 1414	56	6
Carpenters, Local 22	21	3
Hod Carriers, Local 36	2	2
International Brotherhood of Electrical Workers, Local 6	141	24
Laborers, Local 261	168	44
Municipal Executives Association	206	24
Operating Engineers, Local 3	26	2
Plumbers, Local 38	239	36
International Federation of Professional and Technical Engineers, Local 21	1,111	191
Service Employees International Union, Local 1021	342	43
San Francisco City Workers United	14	5
Stationary Engineers, Local 39	299	183
Teamsters, Local 853	36	12
Transport Workers Union Local 250-A, Automotive Service Workers	11	1
Unrepresented Employees <sup>(2)</sup>	1	0
<b>Total</b>	<b>2,673</b>	<b>576</b>

<sup>(1)</sup> Represents budgeted numbers as of July 2023. Actual full-time equivalent employment totals will differ from the number of positions budgeted by the SFPUC for a variety of reasons, including certain requirements in the respective memoranda of understanding (similar to collective bargaining agreements). See “FINANCIAL OPERATIONS – General – *City Budget Process*.”

<sup>(2)</sup> Not covered by a memorandum of understanding (similar to a collective bargaining agreement).

*Source: SFPUC, Human Resources Services.*

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## Employee Benefit Plans

**Retirement System Plan Description.** The San Francisco City and County Employees' Retirement System (the "**Retirement System**" or "**SFERS**") is charged with administering a defined-benefit pension plan (the "**Plan**") that covers substantially all City employees, including SFPUC employees, and certain other employees. The Retirement System was initially established by approval of San Francisco voters on November 2, 1920, and the State Legislature on January 12, 1921, and is currently codified in the Charter. The Charter provisions governing the Retirement System may be revised only by a Charter amendment, which requires an affirmative public vote at a duly called election. The Retirement System is administered by the Retirement Board (the "**Retirement Board**"). The Plan provides basic service retirement, disability and death benefits based on specified percentages of final average salary and provides cost-of-living adjustments after retirement. The Plan also provides pension continuation benefits to qualified survivors.

**Funding Practices.** Employer and employee (member) contributions are mandated by the Charter. Sponsoring employers, including the SFPUC, are required to contribute 100% of the actuarially determined contribution approved by the Retirement Board. The Charter specifies that employer contributions consist of the normal cost (the present value of the benefits that SFERS expects to become payable in the future attributable to a current year's employment) plus an amortization of the unfunded liability over a period not to exceed 20 years. The Retirement Board sets the funding policy subject to the Charter requirements.

The Retirement Board adopts the economic and demographic assumptions used in the annual valuations. Demographic assumptions such as retirement, termination and disability rates are based upon periodic demographic studies performed by a consulting actuarial firm approximately every five years. Economic assumptions are reviewed each year by the Retirement Board after receiving an economic experience analysis from the consulting actuarial firm. The Retirement Board adopted the current demographic assumptions at its December 9, 2020 Retirement Board meeting based on the experience study dated August 12, 2020. The current discount rate of 7.20% was adopted at the November 10, 2021 Retirement Board meeting, effective for the July 1, 2021 actuarial valuation. The Retirement Board voted to maintain these assumptions for the 2022 and 2023 actuarial valuations at its November 17, 2022 and November 8, 2023 meetings, respectively. In the long term, the true cost of a pension plan is determined by actual results and not by assumptions.

While employee contribution rates are mandated by the Charter, sources of payment of employee contributions may be the subject of collective bargaining agreements with each union or bargaining unit. Since July 1, 2011, substantially all employee groups have agreed through collective bargaining for employees to contribute all employee contributions through pre-tax payroll deductions.

The following table shows total Retirement System liabilities, assets and percent funded for the last five actuarial valuations, as well as total contributions for fiscal years 2018-19 through 2022-23.

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**TABLE 2**  
**CITY AND COUNTY OF SAN FRANCISCO**  
**EMPLOYEES' RETIREMENT SYSTEM**  
**FISCAL YEARS 2018-19 THROUGH 2022-23**  
**(IN THOUSANDS)**

As of July 1st	Actuarial Liability	Market Value of Assets	Actuarial Value of Assets	Market Percent Funded	Actuarial Percent Funded	Employee and Employer Contribution in Prior Fiscal Year	Employer Contribution Rates in Prior Fiscal Year <sup>(1)</sup>
2019	\$28,798,581	\$26,078,649	\$25,247,549	90.6%	87.7%	\$1,026,036	23.31%
2020	29,499,918	26,620,218	26,695,844	90.2	90.5	1,143,634	25.19
2021	31,905,275	35,673,834	30,043,222	111.8	94.2	1,245,957	26.90
2022	33,591,565	32,798,524	32,275,474	97.6	96.1	1,191,934	24.41
2023	35,351,967	33,688,428	34,137,005	95.3	96.6	1,086,567	21.35

<sup>(1)</sup> Employer contribution rates are shown before required employer/employee cost-sharing provisions. Employer contribution rates for fiscal years 2022-23 and 2023-24 are 21.35% and 18.24%, respectively.

Source: SFERS' audited year-end financial statements and required supplemental information. SFERS' annual Actuarial Valuation Report dated July 1<sup>st</sup>.

Note: Information above reflects entire Retirement System, which covers substantially all City employees, including SFPUC employees, and certain other employees.

The City's net pension liabilities were approximately \$2.6 billion for Fiscal Year 2022-23. The amount allocable to the Wastewater Enterprise, as of June 30, 2023, was approximately \$49.5 million.

The SFPUC is required to contribute at an actuarially determined rate and allocates the applicable portions of such contribution to the separate enterprises, including the Wastewater Enterprise. For Fiscal Years 2018-19 through 2022-23, the SFPUC's employee contribution rates varied from 7.5% to 12.0% as a percentage of gross covered salary. For Fiscal Years 2018-19 through 2022-23, the Wastewater Enterprise has paid 100% of its required contributions. The contributions by the Wastewater Enterprise required for Fiscal Years 2018-19 through 2022-23 are summarized in the following table:

**TABLE 3**  
**WASTEWATER ENTERPRISE RETIREMENT SYSTEM CONTRIBUTION**  
**FISCAL YEARS 2018-19 THROUGH 2022-23**  
**(IN THOUSANDS)**

Fiscal Year (Measurement Period)	Employer Contribution Rates	Wastewater Enterprise Contribution
2018-19	23.3%	\$12,816
2019-20	25.2	14,352
2020-21	26.9	16,083
2021-22	24.4	14,543
2022-23	21.4	12,383

Source: SFERS Actuarial Valuation reports as of July 1, 2019, July 1, 2020, July 1, 2021 and July 1, 2022, and SFPUC audited financial statements.

**Plan Financial Reports and Funded Status.** The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the Plan. That report may be obtained by writing to the San Francisco City and County Employees' Retirement System, 1145 Market Street, 5th Floor, San Francisco, CA 94103, or by calling (415) 487-7000.

**Health Care Benefits.** The SFPUC participates in the City’s agent multiple employer defined benefit plan, which operates as a cost-sharing multiple employer defined benefit plan for the SFPUC (the “**OPEB Plan**”). The OPEB Plan is maintained by the City and is administered through the City’s Health Service System and provides postemployment medical, dental and vision insurance benefits to eligible employees, retired employees, and surviving spouses. Health benefit provisions are established and may be amended through negotiations between the City and the respective bargaining units. The City does not issue a separate report on its other post-employment benefit plan.

As prescribed under Governmental Accounting Standards Board (“**GASB**”) Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions, net OPEB liability, deferred outflows/inflows of resources related to OPEB, and OPEB expense are actuarially determined on a citywide basis. Net OPEB liability is measured as the portion of the present value of projected benefit payments to be provided to current active and inactive employees attributed to those employees’ past service, less the amount of the Retiree Healthcare Trust Fund investments measured at fair value.

The following table shows the components of the City’s annual OPEB allocations for the Wastewater Enterprise for Fiscal Years 2020-21 through 2022-23, for the amount contributed to the plan, and changes in the City’s net OPEB obligation:

**TABLE 4  
ANNUAL OPEB OBLIGATION  
FOR FISCAL YEARS 2020-21 TO 2022-23  
(IN THOUSANDS)**

	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>
City’s reported net OPEB liabilities	\$3,823,336	\$3,691,122	\$3,746,270
Wastewater Enterprise’s proportionate share of City’s contribution	3,263	3,365	3,412
Wastewater Enterprise’s proportionate share of City’s OPEB liability	50,711	49,123	49,035

*Source: SFPUC, Financial Services.*

The City issues a publicly available financial report on a City-wide level that includes the complete note disclosures and required supplementary information related to the City’s post-retirement health care obligations. The report may be obtained by writing to the City and County of San Francisco, Office of the Controller, 1 Dr. Carlton B. Goodlett Place, Room 316, San Francisco, CA 94102, or by calling (415) 554-7500.

**Pension and Health Care Cost Reforms.** Voters implemented City employee pension and health care cost reforms to help mitigate future cost increases. These include the following propositions:

**Proposition B.** Proposition B was a Charter amendment approved by voters in June 2008 that increased the years of service required to qualify for employer-funded retiree health benefits for City employees who retire under SFERS and were hired on or after January 10, 2009. Previously, employees became eligible to participate in the retirement health care system after five years of service and the employer paid 100% of the contribution. Beginning with employees hired on or after January 10, 2009, employees remain eligible to participate in the retirement health care system after five years of service, however, no employer contributions are required until 10 years of service. From 10 to 15 years of service, employers pay 50% of the contribution, from 15 to 20 years of service 75%, and for employees with 20 years or more of service, 100%.

Proposition B also established a health care trust fund to pay for future costs related to retiree health care. Employees hired on or after January 10, 2009, contribute up to 2% of their pre-tax pay, with employers contributing an additional 1%, to the health care trust fund. Proposition B also increased maximum pension benefits for employees retiring at and after age 60 and enhances cost of living increases for pensions.

Proposition C. Proposition C was a Charter amendment approved by voters in November 2011 that changed the way the City and current and future employees share in funding SFERS pension and health benefits.

With regard to pension benefits, the base employee contribution rate remains at 7.5% for most employees when the City contribution rate is between 11% and 12% of City payroll. Employees making at least \$50,000 will pay an additional amount up to 6% of compensation when the City contribution rate is over 12% of City payroll. When the City contribution rate falls below 11%, employee contributions will be decreased proportionately.

Proposition C creates new retirement plans for employees hired on or after January 7, 2012 that: (1) for miscellaneous employees, increased the minimum retirement age to 53 with 20 years of service or 60 with 10 years; (2) for safety employees, kept the minimum retirement age at 50 with five years of service, but increased the age for maximum benefits to 58; (3) for all employees, limited covered compensation, calculated final compensation from a three year average, and changed the multipliers used to calculate pension benefits; and (4) for miscellaneous employees, raised the age of eligibility to receive vesting allowance to 53 and reduced by half the City's contribution to vesting allowances.

With regard to health benefits, elected officials and employees hired on or before January 9, 2009, contribute up to 1% of compensation toward their retiree health care, with matching contribution by the City. For employees or elected officials who left the City workforce before June 30, 2001, and retire after January 6, 2012, Proposition C requires that the City contributions toward retiree health benefits remain at the same levels they were when the employee left the City workforce.

Proposition C also limits cost of living adjustments for SFERS retirees; however, in 2015, the Court of Appeals held in a suit against the City brought by a retiree organization, *Protect Our Benefits v. City and County of San Francisco*, 235 Cal. App. 4th 619 (2015) that certain changes to payment of supplemental cost of living allowances imposed by Proposition C could not be applied to current City employees and those who retired after November 1996 when the supplemental cost of living allowance provisions were originally adopted, but could be applied to SFERS members who retired before November 1996. This decision is now final and its implementation increased the July 1, 2016 unfunded actuarial liability by \$429.3 million for Supplemental COLAs granted retroactive to July 1, 2013 and July 1, 2014.

On July 13, 2016, the Retirement Board adopted a resolution to exempt members who retired before November 6, 1996, from the "fully funded" provision related to payment of Supplemental COLAs under Proposition C. The resolution directed that retroactive payments for Supplemental COLAs be made to these retirees. After the Retirement Board adopted said resolution, the Retirement System published an actuarial study on the cost to the fund of payments to the pre-1996 retirees. The study reports that the two retroactive supplemental payments will trigger immediate payments of \$34 million, create additional liability for continuing payments of \$114 million, and cause a new unfunded liability of \$148 million. This liability does not include the Supplemental COLA payments that may be triggered in the future. Under the cost sharing formulas in Proposition C, the City and its employees will pay for these costs in the form of higher yearly contribution rates. The City Controller has projected the future cost to the City and its employees to be \$260 million, with over \$200 million to be paid in the next five fiscal years. The City obtained a permanent injunction to prevent SFERS from making Supplemental COLA payments to these members who retired before November 6, 1996. The Superior Court's injunction was affirmed by the Court of Appeal.

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## THE WASTEWATER ENTERPRISE

### Background and History

Initial development of the City's combined system dates back to the second half of the 19th century. In accordance with common engineering practice of that period, the combined system collected both sewage and stormwater runoff and transported them to a large number of discharge points on the shoreline of San Francisco Bay.

The Wastewater Enterprise provides sewage and stormwater collection, treatment and disposal services through the operation of combined sewage and stormwater system. The Wastewater Enterprise provides such sanitary wastewater and stormwater services across eight distinct urban watersheds, with the Southeast Treatment Plant (as defined herein) providing all-weather wastewater treatment and the North Point Facility (as defined herein) providing wet-weather treatment, serving the North Shore, Channel, Islais, Sunnyside, and Yosemite urban watersheds with effluent outfalls to the San Francisco Bay (the "**Bayside Watersheds**"), and the Oceanside Treatment Plant (as defined herein) providing all-weather wastewater treatment serving the Richmond, Sunset, and Lake Merced urban watersheds with an effluent outfall to the Pacific Ocean (the "**Westside Watersheds**").

The combined sewage and stormwater system handles an average of approximately 40 billion gallons per year of combined wastewater and stormwater. Approximately 34 billion gallons per year receive full secondary treatment, 4.5 billion gallons per year receive primary or decant treatment and are discharged to deep-water outfalls, and 1.5 billion gallons per year receive the equivalent to wet-weather primary treatment and are discharged through nearshore outfalls.

In several small areas of San Francisco representing less than 3% of the City's total sewer mileage, wastewater and stormwater are collected and conveyed in separate storm and sanitary sewers. These separate storm and sanitary sewers are generally located in redevelopment areas within San Francisco that are subject to the City's stormwater management ordinance. These redevelopment projects are also required to include green infrastructure to manage and treat stormwater. Green infrastructure includes tools such as rain gardens, green roofs and permeable pavement that slow and clean stormwater prior to discharge into the receiving waters or sewers in adjacent areas.

The operations of the Wastewater Enterprise are highly regulated. For more information, see "REGULATORY MATTERS."

### Service Area

**General.** The service area of the Wastewater Enterprise encompasses approximately 29,773 acres and includes residents of San Francisco and of northern San Mateo County through arrangements with three municipal sewer service providers: North San Mateo County Sanitation District, the Bayshore Sanitary District and the City of Brisbane (collectively, the "**Municipal Customers**"). The SFPUC also currently provides wastewater treatment service on Treasure Island and Yerba Buena Island pursuant to contract, and expects eventually to expand its service area to include Treasure Island and Yerba Buena Island. See "- Wastewater Treatment - *Contract Services*," "WASTEWATER ENTERPRISE CAPITAL PROGRAM - Treasure Island Capital Improvements" and "FINANCING PLAN FOR WASTEWATER ENTERPRISE CAPITAL PROGRAM."

The Wastewater Enterprise serves residential, commercial and industrial users, making up a daytime "population equivalent" of approximately 942,433 in 2022. The United States Census Bureau estimates of the total daytime and nighttime populations of the City from calendar years 2018 to 2022 (most recent data available) are reflected in the table below.

**TABLE 5  
CITY AND COUNTY OF SAN FRANCISCO POPULATION  
CALENDAR YEARS 2018 TO 2022**

	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Daytime <sup>(1)</sup>	1,132,295	1,150,041	1,109,742	940,211	942,433
Nighttime	883,305	881,549	874,784	815,201	804,437

<sup>(1)</sup> Includes the estimated number of people who work, but do not live, within San Francisco.

Source: United States Census Bureau, American Community Survey 1-Year Survey for calendar years 2018, 2019, 2021 and 2022; 5-year Survey for calendar year 2020.

**Recent Economic Developments.** As shown in “Table 5 – City and County of San Francisco Population – Calendar Years 2018 to 2022,” San Francisco has experienced an overall decline in both daytime and nighttime (resident) population since calendar year 2019. This is due to, among other factors, widespread business closures, worker migration out of San Francisco as a result of remote work policies, a general decline in tourism, and unemployment concentrated recently in the technology-heavy information, professional and business services sectors, which can be attributed in some part to the COVID-19 pandemic. As of March 2024, remote work in San Francisco has persisted, with weekly office attendance at approximately 46% of pre-pandemic levels. Despite the general decline in population since calendar year 2019, the number of active sewer accounts has generally remained steady, as described under “– Customer Base” and shown in “Table 6 – Summary of Active Sewer Accounts by User Type – Fiscal Years 2018-19 to 2022-23.” See also “– Recent Factors Impacting Wastewater Revenues” and “THE CITY AND COUNTY OF SAN FRANCISCO.”

**Customer Base**

As of June 30, 2023, the SFPUC has 175,680 active retail wastewater accounts. Of these, approximately 85% are residential accounts, with the remainder being commercial, industrial, or municipal. Major non-residential customer categories include retail, offices, restaurants, and services, which together account for approximately 15% of all customers. The remaining accounts are primarily accounts associated with fire suppression water accounts. As shown in “Table 6 – Summary of Active Sewer Accounts by User Type – Fiscal Years 2018-19 to 2022-23” below, the total number of customer accounts has increased by a total of 1% since Fiscal Year 2018-19, despite general declines in San Francisco’s population since calendar year 2019. See “– Service Area” and “Table 5 – City and County of San Francisco Population – Calendar Years 2018 to 2022.”

In addition to its retail customers, the SFPUC provides wholesale sewage treatment services to the Municipal Customers located in northern San Mateo County, and operates wastewater treatment facilities on Treasure Island and Yerba Buena Island. See “– Wastewater Treatment – Contract Services.”

The following table sets forth a five-year history of the number of customer accounts served by the Wastewater Enterprise, grouped by user type.

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**TABLE 6**  
**SUMMARY OF ACTIVE SEWER ACCOUNTS BY USER TYPE**  
**FISCAL YEARS 2018-19 TO 2022-23**

User Type	2018-19	2019-20	2020-21	2021-22	2022-23
Multi-Family Residential <sup>(1)</sup>	36,387	36,467	36,528	36,595	36,603
Single-Family Residential	111,681	111,869	111,398	111,786	111,995
<i>Subtotal Residential</i>	148,068	148,336	147,926	148,381	148,598
Commercial <sup>(1)</sup>	24,802	24,721	24,941	25,278	25,564
Municipal Customers	772	1,150	1,182	1,208	1,218
Unmetered Properties	306	302	300	297	294
Suburban <sup>(2)</sup>	8	7	7	7	6
<b>Total</b>	<b>173,956</b>	<b>174,516</b>	<b>174,356</b>	<b>175,171</b>	<b>175,680</b>

<sup>(1)</sup> Includes Presidio Trust Wastewater Accounts, which consist of one multi-family residential, one mixed-use (residential and commercial), and three commercial customer accounts.

<sup>(2)</sup> In addition to suburban customers, service is provided to North San Mateo County Sanitation District, Bayshore Sanitary District and the City of Brisbane.

Source: SFPUC.

Separate rate schedules apply to single-family residential, multi-family residential, and non-residential customers. See “FINANCIAL OPERATIONS – Wastewater Enterprise Rates and Charges.”

### Combined Sewage and Stormwater System

On average, over three quarters of San Francisco’s annual rainfall occurs between November and March. Depending on the duration, intensity and storm pattern, combined flows of sewage and stormwater can exceed the collection and treatment system hydraulic capacity, resulting in combined sewer discharges. The SFPUC’s permits explicitly authorize combined sewer discharges from the system’s 35 combined sewer discharge outfalls when a storm exceeds the system’s capacity. To reduce the number and volume of combined sewer discharges during wet-weather events, the system relies on a series of large underground transport/storage structures (box sewers and tunnels) around the perimeter of San Francisco to intercept, temporarily store and transport the mixture of storm runoff and sewage to treatment facilities. When the storage capacity of the sewers, the transport/storage structures and the wet weather capacity of their associated treatment facilities are exceeded during large storms, combined sewage is discharged through one or more combined sewer discharge outfalls. The Westside treatment system has seven combined sewer discharge outfalls to the Pacific Ocean, and the Bayside treatment system has 29 combined sewer discharge outfalls to San Francisco Bay. The primary purpose of this system is to maximize treatment and discharge at the wastewater treatment plants and minimize the incidence and volume of discharge from the combined sewer outfalls.

**Sewer Lines.** The Wastewater Enterprise’s collection and transport system includes approximately 1,000 miles of main sewer lines, of which approximately 800 miles is made up of collecting sewers of 36 inches or less in diameter. See “Table 7 – Sewer System by Pipe Length in Miles and Age,” which summarizes these assets by age. The SFPUC’s capital program includes replacing specific sewer sections that have been prioritized for replacement using an asset management approach that considers the current condition of the section in question and applicable risks of failure. Sewers are inspected through closed-circuit television and the likelihood of failure is calculated on a condition scoring algorithm that takes into account the severity and quantity of defects identified in each inspection. Since 2011, the SFPUC has replaced an average of 11.9 miles of small diameter gravity sewers per year. The number of targeted replacement pipe miles may vary in the future based on the affordability and deliverability of such projects and of the Wastewater Enterprise’s entire capital program.

**TABLE 7  
SEWER SYSTEM BY PIPE LENGTH IN MILES AND AGE**

<b>Year Built</b>	<b>Gravity Pipe ≤ 36" Diameter</b>	<b>All Other Pipe<sup>(1)</sup></b>	<b>Total Pipe</b>	<b>Percent of Total</b>
1860 – 1900	56	35	92	9%
1901 – 1940	305	65	370	37%
1941 – 1980	161	57	217	21%
1981 – present	259	52	310	31%
Unknown	21	1	22	2%
Total <sup>(2)</sup>	802	210	1,011	100%

<sup>(1)</sup> Includes gravity pipe greater than 36" in diameter, tunnels, force mains, transport/storage, effluent outfall and overflow discharge.

<sup>(2)</sup> Totals may not add due to independent rounding.

Source: SFPUC, *Wastewater Enterprise*.

**Transport/Storage Structures.** In addition to sewer lines, the Wastewater Enterprise maintains 24 miles of underground transport/storage structures that are located around the perimeter of San Francisco to intercept, temporarily store and transport the mix of stormwater runoff and sewage to treatment facilities. These structures, which operate in both dry and wet weather, were built between 1979 and 1997. The largest of these structures, the Westside transport structure, is approximately two miles long, 45 feet deep and 25 feet wide. The transport/storage structures were designed with sufficient storage to reduce combined sewer discharges and protect beneficial uses of receiving waters for the San Francisco Bay and Pacific Ocean. The transport/storage and collection system provides approximately 200 million gallons worth of storage, or approximately 1.5 to three days of dry weather storage depending on the specific storage box sections and related upstream service area.

The SFPUC believes that the performance of the transport/storage structures and treatment facilities complies with the requirements of the national Combined Sewer Overflow Control Policy, as implemented by discharge permits issued by the EPA and the San Francisco Bay Regional Water Quality Control Board (the "**Regional Water Quality Control Board**"). See "REGULATORY MATTERS – Combined Sewer Overflow Control Policy." By providing both storage volume and detention time, the transport/storage structures allow for delayed treatment of combined sewage and stormwater flows at the treatment plants at the conclusion of a wet weather event. They also provide a "buffer" for dry weather flows in the event of an unplanned outage.

**Pump Stations.** The Wastewater Enterprise has 28 pump stations, which include nine major all-weather pump stations, seven major wet-weather pump stations and 12 minor pump stations.

**Outfalls and Nearshore Discharge Structures.** The Wastewater Enterprise has three offshore outfalls that discharge to deep waters – Southeast Outfall, Northpoint Outfall, and Southwest Ocean Outfall. In addition to these outfalls, 35 combined sewer discharge structures, or near-shore outfalls, serve as relief points of the combined sewer system. These structures operate infrequently, and only during large storm events. Discharges through these permitted facilities receive the equivalent of wet weather primary treatment.

**Urban Watershed Management.** The SFPUC, through its combined sewer operations, manages stormwater drainage and is working to improve system performance. The SFPUC's stormwater program is designed to maximize stormwater management before flows enter the combined system, engage community members, improve watershed function, enhance the environmental quality of San Francisco's neighborhoods, and protect the water quality of the San Francisco Bay and Pacific Ocean. To achieve these goals, the SFPUC has adopted regulations that require new and redevelopment projects in San Francisco to install and operate green infrastructure for managing stormwater runoff.

## Wastewater Treatment

**Wastewater Treatment Plants.** The Wastewater Enterprise operates three major wastewater treatment facilities (in addition to the transport/storage structures that provide the equivalent of wet weather primary treatment), two serving the Bayside Watersheds and one serving the Westside Watersheds:

- Southeast Water Pollution Control Plant (the “**Southeast Treatment Plant**”), which treats dry and wet weather flows collected from the Bayside Watersheds (18,597 acres, or 63% of the total city service area) as well as the Municipal Customers;
- North Point Wet Weather Facility (the “**North Point Facility**”), which treats a portion of wet-weather flows collected from the north Bayside Watersheds; and
- Oceanside Water Pollution Control Plant (the “**Oceanside Treatment Plant**”), which treats dry and wet weather flows collected from the Westside Watersheds (11,176 acres, or 37% of the total city service area) and minor flows from northern San Mateo County.

The Oceanside Treatment Plant and related collection facilities in the Westside Watersheds are not interconnected with the Southeast Treatment Plant or the North Point Facility and related collection facilities in the Bayside Watersheds.

**Southeast Treatment Plant.** The Southeast Treatment Plant is an all-weather secondary wastewater treatment plant serving the sewage and stormwater treatment needs for nearly two-thirds of San Francisco in the Bayside Watersheds, which consists of 18,597 acres including the Marina, Downtown, South of Market Area, Mission, Hunters Point, and Visitacion Valley neighborhoods, plus 1.65 million gallons per day (“**mgd**”) from the Municipal Customers. Land uses in the Bayside Watersheds are a mixture of residential, commercial, light industrial and heavy industrial. The Southeast Treatment Plant, as the only Bayside dry-weather facility, is a critical component of the system that must meet high availability requirements. The Bayside Watersheds wastewater flow is collected by the combined sewer system and conveyed to the Southeast Treatment Plant via gravity sewers, tunnels, transport/storage structures, pump stations and force mains.

The Southeast Treatment Plant provides preliminary, primary and secondary treatment using a high-purity-oxygen activated sludge process prior to effluent disinfection. Sludge treatment consists of gravity-belt thickening, anaerobic digestion, chemical conditioning and dewatering. The Southeast Treatment Plant’s treated effluent is discharged during dry weather into the San Francisco Bay through a deep-water outfall near Pier 80. During wet weather, treated effluent is discharged through the Pier 80 outfall and through an additional outfall at the shoreline of Islais Channel.

The Southeast Treatment Plant was planned and designed in the 1940s and commenced operations in 1951 as a primary treatment facility. To meet the mandates of the federal Clean Water Act, the Southeast Treatment Plant was expanded in the early 1980s to provide secondary treatment of all Bayside Watersheds’ dry-weather flows with a daily average design capacity of approximately 85 mgd and peak-hour design flow of 142 mgd. In 1996, the Southeast Treatment Plant’s wet weather capacity was increased to 250 mgd, with 150 mgd receiving secondary treatment prior to disinfection and discharge. During wet weather, additional wet-weather facilities are operated at the Southeast Treatment Plant to provide primary treatment and disinfection to the remaining 100 mgd of combined sewage flow.

The Southeast Treatment Plant operates every day of the year in both wet weather and dry weather conditions. Many of its critical systems have operated past their expected useful life and replacement facilities are needed to ensure reliability requirements are met, including seismic upgrades. At the start of SSIP, the program management consultant conducted a full condition assessment of the Southeast Treatment Plant and the highest priority needs were identified for both the liquid treatment and solids treatment facilities. The assessment considered current maintenance records, remaining life and compliance with levels of service. Projects have been identified for all of the major treatment processes, and for various support, monitoring and control systems. Maintenance and repair projects, including repairs to digester roofs and existing biosolids treatment and storage equipment, have been

undertaken to bolster some of the facilities considered to be the most vulnerable so that they function until the new facilities are completed. See “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program.” Because the Southeast Treatment Plant is not interconnected with the other treatment plants, it cannot be shut down during construction of such projects as there would be no substitute wastewater treatment option. Instead, the Southeast Treatment Plant will remain in service during construction. See “RISK FACTORS – Risks Related to Wastewater Enterprise Facilities and Operation – *Aging Facilities*” and “– *Limited Redundancy*.”

***North Point Wet-Weather Facility.*** The North Point Facility is a wet-weather primary wastewater treatment plant serving the northeast quadrant of the Bayside Watersheds, an area comprising of predominantly commercial and residential land uses. The North Point Facility was originally constructed in 1951 as an all-weather primary treatment facility, but did not incorporate digesters, so sludge was pumped to the digesters at the newly constructed Southeast Treatment Plant for treatment. In response to the mandates of the federal Clean Water Act, the North Point Facility was converted into a strictly wet-weather treatment facility in 1983, providing up to 150 mgd of primary treatment.

The North Point Facility provides preliminary, primary and disinfection treatment. Effluent from the North Point Facility is discharged into the San Francisco Bay through a deep water outfall system at Piers 33 and 35. At the conclusion of each wet-weather event, grit and solids are flushed out of the sedimentation tanks and directed to the Channel Pump Station, which pumps them to the Southeast Treatment Plant for treatment.

***Oceanside Treatment Plant.*** Constructed in 1993, the Oceanside Treatment Plant is an all-weather secondary wastewater treatment plant that provides the wastewater treatment and stormwater treatment needs for the Westside Watersheds and San Mateo County flows that drain to the Westside Watersheds. Land uses in the Westside Watersheds are primarily residential.

The Oceanside Treatment Plant’s dry weather capacity is up to 43 mgd of secondary treatment. The Oceanside Treatment Plant’s wet-weather capacity is up to 65 mgd of primary and 43 mgd of secondary treatment using the high-purity-oxygen activated sludge process. Sludge treatment consists of thickening, anaerobic digestion, chemical conditioning and dewatering. The Oceanside Treatment Plant began operations in 1993 and complies with all dry- and wet-weather discharge requirements. Up to 195 mgd of plant effluent and decanted wet weather flow from the westside transport storage boxes is discharged approximately four miles offshore into the Pacific Ocean through a deep ocean outfall.

***Emergency Operations.*** The SFPUC believes that it maintains up-to-date contingency plans in the event of an unplanned outage or failure of a treatment facility, process unit, pump station, sewer pipeline or other infrastructure element. The wastewater collection and treatment system is designed with some redundancy and flexibility in order to facilitate responses to emergency events, though the Westside Watersheds and Bayside Watersheds are not interconnected.

If an unplanned shutdown of critical treatment facilities were to occur, the transport/storage structures and collection system pipes provide approximately 200 million gallons of storage (providing approximately 1.5 to three days of storage in some portions of the system, depending on the inflow). The wastewater treatment facilities and major pump stations are also built with some redundancy, and in some instances may continue operation with select equipment outages. Critical infrastructure elements with higher failure risk or for which adequate redundancy is not available have been identified as projects in the SSIP to increase system flexibility and the ability to respond to unplanned events. See “RISK FACTORS – Risks Related to Wastewater Enterprise Facilities and Operations.”

***Biosolids Management.*** The Southeast Treatment Plant and the Oceanside Treatment Plant produce approximately 55,000 wet tons of biosolids per year. Biosolids are highly treated, anaerobically digested wastewater solids that are rich in plant nutrients and utilized as fertilizer. The SFPUC’s biosolids are transported to Sacramento County and used as a fertilizer, transported to Lystek, a facility which processes biosolids into a liquid fertilizer, and transported to a facility in Merced where they are processed into biosolids compost.

The Wastewater Enterprise coordinates the transportation, use, testing, and reporting for biosolids in accordance with applicable regulations. The SFPUC plans to implement technology at the Southeast Treatment Plant which will produce “Class A” biosolids as part of a major capital upgrade of the plant. The Biosolids Digester

Facilities Project (the “**Biosolids Digester Facilities Project**”) will replace existing infrastructure, produce a high quality biosolids product, ensure system reliability and reduce negative impacts to the neighborhood with respect to aesthetics and odors. For more information about the Biosolids Digester Facilities Project, see “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program – *Program Scope – Treatment Facilities – Biosolids Digester Facilities Project.*” See also “REGULATORY MATTERS.”

**Contract Services.** The Wastewater Enterprise operates wastewater treatment facilities on Treasure Island and Yerba Buena Island, both located in the San Francisco Bay between San Francisco and Oakland, pursuant to an agreement with the Treasure Island Development Authority (“**TIDA**”). TIDA is a non-profit public benefit agency created by the Board of Supervisors in 1997 vested with the rights to administer municipal services to Treasure Island and Yerba Buena Island during interim reuse of the property. Such contractual wastewater treatment service is provided at a wastewater treatment plant currently owned by TIDA and operated by the SFPUC on Treasure Island. The wastewater system serving Treasure Island and Yerba Buena Island currently relies on pumping to convey sewage to the treatment plant on Treasure Island for treatment and discharge. The treatment plant is designed to provide secondary treatment of an average of 2.0 mgd and can provide secondary treatment of up to 4.4 mgd during wet weather. The wastewater collection system consists of 10 miles of sewers and several wastewater pump stations, while the stormwater collection system includes several stormwater pump stations and several shallow water outfalls. The SFPUC currently operates and maintains 16 pump stations. These existing facilities are not owned by the SFPUC and are not interconnected with the Wastewater Enterprise’s combined sewer system in San Francisco. The SFPUC is not currently the wastewater utility provider on Treasure Island and Yerba Buena Island, but rather an independent contractor of TIDA.

It is not anticipated that the SFPUC will acquire existing facilities; rather, the SFPUC expects to replace the wastewater facilities on Treasure Island and Yerba Buena Island with new, SFPUC-owned facilities and that the existing facilities currently owned by TIDA will be decommissioned and demolished as part of the area’s redevelopment plans. The Treasure Island Water Resource Recovery Facility is being constructed as part of ongoing redevelopment activities on Treasure Island and is anticipated to be completed in August 2026. See “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Treasure Island Capital Improvements – *Treasure Island Water Resource Recovery Facility.*” The SFPUC anticipates that certain new facilities being built by developers as part of the project, including the new collection and treatment facilities, will eventually be transferred to the SFPUC and integrated into the Wastewater Enterprise’s overall system assets, beginning with four pump stations by late 2024 or early 2025.

Following completion of the Treasure Island Water Resource Recovery Facility and related asset transfers, the SFPUC plans to provide wastewater treatment service and impose rates and charges directly on customers on Treasure Island and Yerba Buena Island. Payments the SFPUC receives from such customers would constitute Revenues, as and to the extent provided under the Indenture. The SFPUC is expected to become responsible for operation and maintenance of the new collection and treatment facilities, and such costs would constitute Operation and Maintenance Costs of the Wastewater Enterprise, as and to the extent provided under the Indenture. Finally, the SFPUC would be responsible for the future repair and replacement of all facilities transferred to it, including the new collection and treatment facilities. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Parity Loans,” “– Projected Future Demand,” “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Treasure Island Capital Improvements” and “FINANCING PLAN FOR WASTEWATER ENTERPRISE CAPITAL PROGRAM.”

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## System Capacity

When the three treatment facilities and other elements of the collection system are fully operational, the Wastewater Enterprise can provide up to 575 mgd of combined wastewater and stormwater treatment, including 193 mgd of secondary treatment, 272 mgd of primary treatment and 110 mgd of equivalent-to-primary treatment.

**TABLE 8**  
**TREATMENT PLANT MAXIMUM CAPACITY**  
**(MILLION GALLONS PER DAY)**

<u>Plant</u>	<u>Permitted Dry Weather</u>	<u>Peak Wet Weather</u>
Southeast Treatment Plant	85.4	250.0
Oceanside Treatment Plant	43.0	65.0
North Point Facility	--	150.0
Total	128.4	465.0

*Source: SFPUC, Wastewater Enterprise.*

As shown in the table above, the Southeast Treatment Plant is permitted to discharge an average dry weather flow of 85.4 mgd and an average peak wet weather flow of 250.0 mgd. The Oceanside Treatment Plant is permitted to discharge an average dry weather flow of 43.0 mgd and an average peak wet weather flow of 65.0 mgd. The North Point Facility is permitted to discharge an average peak-wet weather flow of 150.0 mgd.

The three treatment plants each discharge through separate deep-water outfalls. At the Southeast Treatment Plant, during peak wet-weather events, secondary treated effluent also can be discharged through a shallow water outfall to Islais channel. The combined sewer system is designed to handle wet-weather events and its permits explicitly authorize combined sewer discharges from the system’s 35 combined sewer discharge outfalls when a storm exceeds the capacity of the system. See “– Combined Sewage and Stormwater System.”

The combined sewer and stormwater system has the capacity to divert, manage, and treat a large volume of wastewater and stormwater. Some extreme storms can exceed the capacity of the system. Building infrastructure large enough to prevent flooding in extremely large storms is not feasible. Flooding did occur in some areas of San Francisco during the extreme storms that occurred in late December 2022 and early January 2023. Such storms did not have a significant impact on the operation of the Wastewater System, but did cause some damage, including damage to motors and sludge pumps at the Southeast Treatment Plant, pumps and equipment at the North Shore Pump Station, compressors, instruments at the Westside Pump Station and instruments within the Westside transport structure and an inlet gate at the Channel Pump Station and created sinkholes at various locations throughout San Francisco. The SFPUC anticipates that both short- and long-term capital projects will be required to complete repairs to damaged facilities. Total cost of damages is expected to be at least \$4.1 million; however, final costs will not be known until at least 2025. The SFPUC anticipates it will be able to pay such costs from reserves, revenues of the Wastewater Enterprise, and/or proceeds of existing Wastewater Enterprise bonds. The City has applied for federal and State disaster relief funding, and the SFPUC plans to seek reimbursement for qualified expenses. See also “RISK FACTORS – Risks Related to Wastewater Enterprise Facilities and Operation – *Natural and Man-Made Disasters; Flooding.*”

## Current System Demands

Wastewater Enterprise facilities collected, treated and discharged an average of approximately 58.8 mgd of sanitary wastewater during dry-weather periods between calendar years 2019 to 2023.

**TABLE 9  
AVERAGE DRY WEATHER TREATMENT  
CALENDAR YEARS 2019 TO 2023  
(MILLION GALLONS PER DAY)**

<b>Plant</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Southeast Treatment Plant	52.6	48.3	48.1	42.7	44.2
Oceanside Treatment Plant	12.4	11.6	12.6	10.9	10.4
Total	65.0	59.9	60.7	53.6	54.6

*Source: SFPUC, Wastewater Enterprise.*

### **Recent Factors Impacting Wastewater Revenues**

Billed sewer discharge volumes are based on metered water usage; therefore, lower than anticipated water usage results in lower than anticipated revenues. Retail water usage was approximately 59.5 mgd in Fiscal Year 2018-19, and approximately 52.0 mgd in Fiscal Year 2022-23, approximately 13% lower than pre-pandemic Fiscal Year 2018-19 levels. Several factors have contributed to the SFPUC’s reduced retail water sales in recent years, including, but not limited to, certain developments in the local San Francisco economy and weather conditions. See “– Service Area – *Recent Economic Developments*.” For example, there has been a general decline in San Francisco’s population in recent years due to, among other factors, widespread business closures, worker migration out of San Francisco as a result of remote work policies, a general decline in tourism, and unemployment concentrated recently in the technology-heavy information, professional and business services sectors, which can be attributed in some part to the COVID-19 pandemic.

Specifically, according to the United States Census Bureau, in calendar year 2019, prior to the onset of the COVID-19 pandemic, the daytime population in San Francisco was 1,150,041 people and the nighttime (resident) population was 881,549 people. In calendar year 2022 (most recent data available from the United States Census Bureau), the daytime population decreased by 18.1% to 942,433 people and the nighttime population (resident) population decreased by 8.7% to 804,437 people. See also “Table 5 – City and County of San Francisco Population – Calendar Years 2018 to 2022.” While comparable data is not yet available from the United States Census Bureau for calendar year 2023, reports from the California Department of Finance, Demographic Research Unit, show a 0.6% decline in the resident population between July 2022 and July 2023. In addition, San Francisco still lags the State as a whole in time spent at workplaces, and weekly office attendance has only reached approximately 44% of pre-pandemic levels, as compared to 63% in Austin, Texas, 49% in Los Angeles, California and 53% in New York, New York, all as of June 5, 2024. The City has also experienced the largest increase in office vacancy among major urban office markets in the United States. Office vacancy in San Francisco was estimated at 32% as of March 2024, as compared to approximately 5% before the COVID-19 pandemic, and as further compared to 23% in Austin, Texas, 27% in Los Angeles, California and 18% in New York, New York, as of March 2024.

In addition, weather conditions and actions taken in response thereto over the past several years have resulted in reduced water usage. Water Years 2020 to 2022 represent the driest three-year period on record for California. During such time, retail water sales declined as customers were asked to conserve water. Precipitation and snowpack in Water Year 2023 was significantly above average, while precipitation and snowpack in Water Year 2024 is trending at or above average. In years with greater than normal rainfall, retail water sales generally decline as customers typically reduce water use for outdoor irrigation. Because billed sewer discharge volumes are based on metered water usage, lower than anticipated water usage results in lower than anticipated revenues for the Wastewater Enterprise.

### **Projected Future Demand**

The 2025 Financial Plan (as defined herein) projects that in-City wastewater flows will increase through Fiscal Year 2025-26 as water usage recovers from its all-time low during Fiscal Year 2021-22 caused by the combined effects of the pandemic and recent drought. After Fiscal Year 2025-26, water usage is projected to decrease slightly over time despite an assumed population growth of approximately 0.6% annually. See “– Service

Area” and “– Customer Base.” This differential is attributable to decreases in average per capita water usage due to ongoing conservation initiatives, including plumbing codes which apply to all new development, as well as the impact of price elasticity on demands caused by large rate increases.

This growth includes the SFPUC’s planned expansion of its service area to include Treasure Island and Yerba Buena Island. In connection with such expansion, the SFPUC is constructing the Treasure Island Water Resource Recovery Facility, a new facility that will provide reliable service for Treasure Island and Yerba Buena Island residents and meet the recycled water demands of future redevelopment on Treasure Island and Yerba Buena Island. See “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Treasure Island Capital Improvements.”

The Board of Supervisors and Mayor Breed approved the City’s housing plan for the next eight years (2022-2030) on February 1, 2023 (the “**Housing Element 2022 Update**”). The Housing Element 2022 Update targets the creation of 82,000 units by 2031. To maintain a more conservative revenue outlook, the 2025 Financial Plan used a forecast based on the prior Housing Element 2020 Update to forecast population growth. In addition to the Treasure Island Water Resource Recovery Facility, this population growth may require dry-weather treatment capacity expansion at Wastewater Enterprise’s treatment plants over the next 10-20 years.

Because the SFPUC maintains a combined sewer system, there may be other factors in the future, including environmental changes and regulatory developments, that could require expanded collection or treatment capacity. See “REGULATORY MATTERS.”

## Cybersecurity

**City Measures.** The City, like many other large public and private entities, relies on a large and complex technology environment to conduct its operations, and faces multiple cybersecurity threats including, but not limited to, hacking, viruses, malware and other attacks on its computing and other digital networks and systems (collectively, “**Systems Technology**”). As a recipient and provider of personal, private, or sensitive information, the City has been the subject of cybersecurity incidents that have resulted in or could have resulted in adverse consequences to the City’s Systems Technology and that required a response action to mitigate the consequences.

Cybersecurity incidents could result from unintentional events, or from deliberate attacks by unauthorized entities or individuals attempting to gain access to the City’s Systems Technology for the purposes of misappropriating assets or information or causing operational disruption and damage. To mitigate the risk of business operations impact and/or damage from cybersecurity incidents or cyber-attacks, the City invests in multiple forms of cybersecurity and operational safeguards. In 2016, the City adopted a City-wide Cyber Security Policy (the “**City Cyber Policy**”) to support, maintain, and secure critical infrastructure and data systems. The objectives of the City Cyber Policy include the protection of critical infrastructure and information, manage risk, improve cyber security event detection and remediation, and facilitate cyber awareness across all City departments. The City’s Department of Technology has established a cybersecurity team to work across all City departments, including the SFPUC, to implement the City Cyber Policy. The City Cyber Policy is reviewed periodically.

The City has also appointed a City Chief Information Security Officer (the “**CCISO**”), who is directly responsible for understanding the business and related cybersecurity needs of the City’s 54 departments, including the SFPUC. The CCISO is responsible for identifying, evaluating, responding, and reporting on information security risks in a manner that meets compliance and regulatory requirements, and aligns with and supports the risk posture of the City. Mayor Breed addressed this issue on June 4, 2021 in Executive Directive 21-02, Ensuring Strong and Organized City Defense Against Cybersecurity Attacks (“**Executive Directive 21-02**”), which sets forth requirements for City departments to strengthen and improve the City’s cyber functions and programs.

**SFPUC Measures.** The SFPUC also relies on a large and complex technology environment to conduct its operations. Although the SFPUC maintains its own business and control networks that are separate from the City’s network, the SFPUC faces similar cybersecurity threats as the City, including hacking, viruses, malware and other attacks on its computing and other digital networks and systems. To mitigate the risk of and damage from cybersecurity incidences or cyberattacks, the SFPUC abides by the City Cyber Policy and also maintains its own cybersecurity program (the “**SFPUC Cybersecurity Program**”). The SFPUC Cybersecurity Program is based on National Institute of Standards and Technology cybersecurity guidance. In addition, control networks for the Water

Enterprise and the Wastewater Enterprise adhere to the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency's Cross-Sector Cybersecurity Performance Goals, as recommended by the EPA. The control networks for the Power Enterprise adhere to the North American Electric Reliability Corporation critical infrastructure protection controls. The SFPUC Cybersecurity Program includes industry standard cybersecurity solutions, and the SFPUC's technologies are continuously tested as part of an internal vulnerability program. The SFPUC's technical controls are prescriptive for hardening servers, network devices and databases, and for addressing system administrator controls, mobile device management, incident response, security patching, antivirus, email, passwords, remote access, secure asset disposal, end user controls, and timely removal of access to systems and facilities for staff that leave employment at the SFPUC. In addition to the SFPUC's controls and in alignment with Executive Directive 21-02, the SFPUC has deployed the city-wide-real-time threat monitoring and alerting solution. The SFPUC Cybersecurity Program is periodically reviewed for effectiveness by independent consultants, most recently in June 2022. Pursuant to the SFPUC's policies, the City Services Auditor and independent cybersecurity auditors performed extensive penetration and vulnerability testing on the SFPUC's business and control networks. In addition, the City Services Auditor conducts annual cybersecurity maturity assessments.

The SFPUC has also appointed a Chief Information Security Officer (the "CISO"), who reports to the SFPUC's Chief Information Officer. In addition to working with the CCISO on cybersecurity policy development and solution sharing, the CISO is responsible for annual updates to the SFPUC's policies, is charged with identifying and monitoring threats which are typically addressed by the SFPUC's information technology services team, educating staff concerning vulnerabilities and constantly improving the SFPUC Cybersecurity Program. While the SFPUC Cybersecurity Program is periodically reviewed, no assurances can be given by the SFPUC that such measures will ensure against other cybersecurity threats and attacks. The SFPUC currently purchases liability insurance covering cyber-losses and requires its technology vendors to purchase technology errors and omissions insurance coverage.

See also "RISK FACTORS – Risks Related to Wastewater Enterprise Facilities and Operation – Cybersecurity."

### **Climate Change, Risk of Sea Level Rise and Flooding Damage**

***Impact on City of San Francisco.*** Numerous scientific studies on global climate change show that, among other effects on the global ecosystem, sea levels will rise, extreme temperatures will become more common, and extreme weather events will become more frequent as a result of increasing global temperatures attributable to atmospheric pollution.

The *Fourth National Climate Assessment*, published by the United States Global Change Research Program in November 2018 ("NCA4"), finds that more frequent and intense extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to damage infrastructure, ecosystems and social systems over the next 25 to 100 years. NCA4 states that rising temperatures, sea level rise, and changes in extreme events are expected to increasingly disrupt and damage critical infrastructure and property and regional economies and industries that depend on natural resources and favorable climate conditions. Disruptions could include more frequent and longer-lasting power outages, fuel shortages and service disruptions. NCA4 states that the continued increase in the frequency and extent of high-tide flooding due to sea level rise threatens coastal public infrastructure. NCA4 also states that expected increases in the severity and frequency of heavy precipitation events will affect inland infrastructure, including access to roads, the viability of bridges and the safety of pipelines.

Sea levels will continue to rise in the future due to the increasing temperature of the oceans causing thermal expansion and growing ocean volume from glaciers and ice caps melting into the ocean. Between 1854 and 2016, sea level rose about nine inches according to the tidal gauge at Fort Point, a location underneath the Golden Gate Bridge. Weather and tidal patterns, including 100-year or more storms and king tides, may exacerbate the effects of climate related sea level rise. Coastal areas like San Francisco are at risk of substantial flood damage over time, affecting private development and public infrastructure, including roads, utilities, emergency services, schools, and parks. As a result, the City could lose considerable tax revenues and many residents, businesses, and governmental operations along the waterfront could be displaced. The City may elect to mitigate these effects to maintain its current shoreline and protect critical infrastructure at a potentially significant cost.

Adapting to sea level rise is a key component of the City's policies. The City and its enterprise departments have been preparing for future sea level rise for many years and have issued a number of public reports. For example, in March 2016, the City released a report entitled "Sea Level Rise Action Plan," identifying geographic zones at risk of sea level rise and providing a framework for adaptation strategies to confront these risks. That study shows an upper range of end-of-century projections for permanent sea level rise, including the effects of temporary flooding due to a 100-year storm, of up to 108 inches above the 2015 average high tide. To implement this plan, the Mayor's Sea Level Rise Coordinating Committee, co-chaired by the Planning Department and Office of Resilience and Capital Planning, joined the Port, the SFPUC and other public agencies in moving several initiatives forward. This included a Citywide Sea Level Rise Vulnerability and Consequences Assessment to identify and evaluate sea level rise impacts across the City and in various neighborhoods that was released in February 2020.

In April 2017, the Working Group of the California Ocean Protection Council Science Advisory Team (in collaboration with several state agencies, including the California Natural Resource Agency, the Governor's Office of Planning and Research, and the California Energy Commission) published a report, that was formally adopted in March 2018, entitled "Rising Seas in California: An Update on Sea Level Rise Science" (the "**Sea Level Rise Report**") to provide a new synthesis of the state of science regarding sea level rise. The Sea Level Rise Report provides the basis for State guidance to State and local agencies for incorporating sea level rise into design, planning, permitting, construction, investment and other decisions. Among many findings, the Sea Level Rise Report indicates that the effects of sea level rise are already being felt in coastal California with more extensive coastal flooding during storms, exacerbated tidal flooding, and increased coastal erosion. In addition, the report notes that the rate of ice sheet loss from Greenland and Antarctic ice sheets poses a particular risk of sea level rise for the California coastline.

In March 2020, a consortium of State and local agencies, led by the Bay Area Conservation and Development Commission, released a detailed study entitled, "Adapting to Rising Tides Bay Area: Regional Sea Level Rise Vulnerability and Adaptation Study," on how sea level rise could alter the Bay Area. The study states that a 48-inch increase in the bay's water level in coming decades could cause more than 100,000 Bay Area jobs to be relocated, nearly 30,000 lower-income residents to be displaced, and 68,000 acres of ecologically valuable shoreline habitat to be lost. The study further argues that without a far-sighted, nine-county response, the region's economic and transportation systems could be undermined along with the environment. For example, runways at SFO could largely be under water.

The City has already incorporated site specific adaption plans in the conditions of approval for certain large waterfront development projects, such as the Candlestick/Hunters Point Shipyard, Treasure Island, Pier 70 and Mission Rock projects. Also, the City has partnered with the U.S. Army Corps of Engineers to develop a plan to fortify the Port's seawall from sea level rise. A draft plan estimates the total cost of that project at \$13.5 billion; and, subject to U.S. Army Corps of Engineers and Congressional approval, 65% of the cost would be eligible for federal funding. The City is developing a financing strategy to provide the remaining funds, including using funding from the November 2018 approved Proposition A, authorizing the issuance of up to \$425 million in general obligation bonds for repair and improvement projects on the seawall.

Portions of the San Francisco Bay Area, including San Francisco, are built on fill that was placed over saturated silty clay known as "Bay Mud." Bay Mud is soft and compressible, and the consolidation of the Bay Mud under the weight of the existing fill is ongoing. A report issued in March 2018 by researchers at the University of California, Berkeley ("**UC Berkeley**") and the University of Arizona suggests that flooding risk from climate change could be exacerbated in the San Francisco Bay Area due to the sinking or settling of the ground surface, known as subsidence. The study claims that the risk of subsidence is more significant for certain parts of San Francisco built on fill.

Projections of the effects of global climate change on San Francisco are complex and depend on many factors that are outside the City's control. The various scientific studies that forecast climate change and its adverse effects, including sea level rise and flooding risk, are based on assumptions contained in such studies, but actual events may vary materially. Also, the scientific understanding of climate change and its effects continues to evolve. Accordingly, the City is unable to forecast when sea level rise or other adverse effects of climate change (*e.g.*, the occurrence and frequency of 100-year storm events and king tides) will occur. In particular, the City cannot predict the timing or precise magnitude of adverse economic effects, including, without limitation, material adverse effects

on the business operations or financial condition of the City and the local economy during the term of the 2024ABCD Bonds. While the effects of climate change may be mitigated by the City's past and future investment in adaptation strategies, the City can give no assurance about the net effects of those strategies and whether the City will take additional adaptive mitigation measures. If necessary, such additional measures could require significant capital resources.

In September 2017, the San Francisco City Attorney filed a lawsuit on behalf of the People of the State of California in San Francisco Superior Court against the five largest investor-owned oil companies seeking to have the companies pay into an abatement fund to help fund infrastructure for climate change adaptation. In July 2018, the United States District Court for the Northern District of California denied the plaintiff's motion for remand to State court and then dismissed the lawsuit, which the City had joined as a plaintiff. The plaintiffs appealed these decisions to the United States Court of Appeals for the Ninth Circuit, which in May 2020 vacated the District Court's order that found the case arose under federal law, remanding the case back to the District Court to determine if there were any other grounds for federal jurisdiction. In June 2021, the U.S. Supreme Court declined to review the Ninth Circuit's decision. In October 2022, the District Court ordered the case remanded to State court and stayed the remand pending any appeals. In November 2022, the defendants appealed the District Court's decision to the Ninth Circuit. In November 2023, the Ninth Circuit rejected defendants' appeal of remand to state court. The City's case has been remanded to and coordinated with similar municipal lawsuits and the State of California's lawsuit in San Francisco Superior Court. In June 2024, the San Francisco City Attorney moved to file an amended complaint seeking abatement funds and damages. While the City believes that the claims in this lawsuit are meritorious, it can give no assurance regarding whether the lawsuit will be successful and obtain the requested relief from the courts, or contributions to the abatement fund from the defendant oil companies.

***Impact on SFPUC Wastewater Enterprise.*** The impacts of climate change that would most affect the Wastewater Enterprise relate to changing rainfall patterns, sea level rise and rising tides. Existing climate change models show varied results in terms of projected rainfall patterns, making proactive, long-term planning difficult. If changes in rainfall patterns do occur, significant changes in rainfall (*e.g.*, intensity, duration or frequency or certain combinations thereof) could substantially alter the likelihood of flooding.

Projected levels for sea level rise and rising tides is expected to result in a backflow (or inflow) of San Francisco Bay water into the sewer system at the lowest weir elevation and increased infiltration due to higher groundwater in coastal areas. In response, the Wastewater Enterprise is planning to implement, through the SSIP, a monitoring program and backflow mitigation measures at some points where tides may backflow into the system. In addition, the SFPUC is working collaboratively with various other City agencies on immediate-, mid- and long-term solutions focused on city-wide perimeter protection from sea level rise and rising tides.

In 2016, the SFPUC completed a city-wide flood resilience analysis to characterize the impact of storms, develop a risk-based framework to identify and prioritize investments in projects to reduce or mitigate flooding risks, and confirm the City's standard design storm through a benefit-cost analysis. This study served as the foundation for prioritizing certain capital investments including the projects designed to increase the collection system conveyance capacity in low-lying areas (*i.e.*, the Folsom Stormwater Improvement Project, the Wawona Area Stormwater Improvement Project and the Lower Alemany Area Stormwater Improvement Project). See "WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program – *Program Scope* – Stormwater Management/Flood Resilience." In 2017, in conjunction with other City departments and industry experts, the SFPUC developed a suite of programmatic strategies for flood resilience intended to reduce flood risk citywide from storms that exceed the capacity of the SFPUC's stormwater collection system. However, the effect of climate change on future storms will be significant, leading to more powerful storms that exceed the capacity of most urban conveyance systems across the United States, including the SFPUC's system. Planning for these future storms will require strategies and solutions that extend beyond the SFPUC's system.

The SFPUC has developed a 100-Year Storm Flood Risk Map that shows parcels in San Francisco where deep and contiguous flooding from storm runoff (rather than from inundation from the San Francisco Bay or Pacific Ocean) is highly likely to occur during a 100-year storm. A "100-year storm" means a storm with a 1% chance of occurring in a given year. The SFPUC used computer modeling that simulated flooding occurring Citywide under a 100-year storm to identify such parcels. The purpose of the flood risk map is to inform existing and future property owners about flood risk on their properties and promote resilience. The flood risk map is based on past hydrology

patterns and does not reflect recent developments, such as the study on extreme precipitation in the San Francisco region described above, or future projected hydrology patterns.

The City undertook a unique, first of its kind in the nation climate modeling collaboration between a municipality, climate scientists at Lawrence Berkeley National Laboratory (“**LBL**”) and climate consultants at Pathways Climate Institute to create a research team that focused on a better understanding of future precipitation events through climate modeling. Using supercomputing resources at LBNL’s scientific computing center, the research team found that the effect of climate change on future storms is predicted to be significant, leading to more powerful events unleashing substantially more water. The City is transitioning toward efforts that would consolidate and coordinate sea level rise adaptation and overall resilience planning so that City departments can maximize efficiency and the co-benefits of investment dollars. The City has developed and continues to refine the governance structure of the Climate Resilience Program (also known as ClimateSF) to improve how the City manages, finances and implements climate resilience projects and/or programs.

**2024 Grand Jury Report.** The civil grand jury examines the conduct of public business of county government. In San Francisco, the function of the civil grand jury is to investigate the operations of various officers, departments and agencies of the government of the City. On June 11, 2024, a civil grand jury comprised of 19 citizen volunteers issued a report entitled “Come Hell or High Water: Flood Management in a Changing Climate.” In the report, the members noted a number of improvements that the City and its various departments might make to improve climate change planning, solution efficacy, and citywide awareness. The members suggest that greater coordination between different city departments is needed, with greater authority created at the citywide-level, specifically to navigate flooding projects and solutions. Greater transparency of the cost of flooding and climate change is recommended in budgeting, and solutions to finance the costs of climate change projects beyond the use of existing debt financing facilities is noted, amongst other recommendations. While the City is not legally required to implement the members’ recommendations, the SFPUC and the City are considering such recommendations, including which and how to incorporate into future climate change and flooding planning efforts.

## **Climate Action Plan**

In September 2021, the City adopted a set of emissions reduction targets: achieve net-zero greenhouse gas emissions generated by the City by 2040 and reduce emissions associated with consumption of all goods and services in the City (regardless of where emissions originate) 80% by 2050. In December 2021, Mayor Breed released the City’s Climate Action Plan (the “**Climate Action Plan**”) detailing the actions needed to accomplish these targets, developed through a multi-agency and stakeholder process led by the San Francisco Environment Department (the “**Environment Department**”). The Climate Action Plan is a roadmap of goals, strategies and actions to achieve emission reductions across six sectors: energy supply, building operations, transportation and land use, housing, responsible production and consumption, and healthy ecosystems. Key strategies include, but are not limited to, provision of 100% carbon-free energy, decarbonization of buildings, and increases in the public transit, active transportation, and vehicle electrification networks. In addition to reducing emissions to zero over the next 20 years, the Climate Action Plan strives to ensure all San Franciscans have the skills, knowledge, and resources to meet future interconnected challenges, including climate change. To do so, the proposed strategies aim to leverage community strengths, advance racial and social equity, and provide critical benefits to the entire community. The Climate Action Plan includes sections on funding and investment, monitoring and reporting. The City also maintains a public-facing reporting mechanism to keep stakeholders and residents informed on progress made against performance metrics laid out in the Climate Action Plan. The Environment Department contracted with the University of California, Berkeley, Center for Law, Energy & the Environment (the “**CLEE**”) to assess options for funding the equitable implementation of the Climate Action Plan. CLEE released its report entitled “Funding San Francisco Climate Action” in November 2022.

In 2023, together with the Environment Department, the SFPUC released the San Francisco’s Climate Action Plan 2021 – Water Supply Addendum 2023, which adds “water supply” as a seventh sector to the Climate Action Plan. The addendum focuses on how the City plans to address and secure water supplies that are impacted by multiple climate challenges, including climate change, by continuing to implement effective water conservation programs; deploying innovative ways to conserve, recover, and reuse water; and augmenting the SFPUC’s Regional Water System by investing in alternative water supply projects.

## WASTEWATER ENTERPRISE CAPITAL PROGRAM

### Capital and Financial Planning Process

The SFPUC's long-term capital and financial planning is performed on an annual rolling 10-year forward looking basis. The SFPUC prepares a 10-year capital plan for each of its enterprises, as required by the Charter, which serves as the basis for the development of the annual 10-year financial plan. Proposed long-term capital programs, projects and investments, and related costs are included in the 10-year financial plan. Consistent with the Charter, updates to the 10-year capital plan and 10-year financial plan are generally reviewed at least annually and adopted by the Commission each February. The 10-year financial plan provides estimated rate impacts of projected capital and operating spending and assures compliance with the SFPUC's adopted financial policies, including its debt service coverage and fund balance reserve policy targets.

The 10-year capital plan is not a budget and is not "appropriated" like a budget. The annual capital programs can be revised during the development of the budget and final projects, costs and totals for specific capital improvements to be financed can change. Consequently, even though the annual budgets passed are based on the 10-year capital plan, they may occasionally differ from it.

The Wastewater Enterprise's 10-year capital plan for Fiscal Years 2024-25 to 2033-34, adopted by the Commission on February 13, 2024 (the "**2025 Capital Plan**"), totals approximately \$6.040 billion, which includes approximately \$892.5 million budgeted for Fiscal Year 2024-25. See "FINANCING PLAN FOR WASTEWATER ENTERPRISE CAPITAL PROGRAM." The 2025 Capital Plan includes projects in four categories, each of which is further described below: (i) the SSIP; (ii) Renewal and Replacement; (iii) Treasure Island Capital Improvements; and (iv) Wastewater Facilities and Infrastructure.

The total cost of the 2025 Capital Plan is approximately \$1.161 billion more than the previous capital plan adopted by the Commission in February 2023. The increase is primarily driven by the inclusion of the Mainstream Nutrient Reduction Project, which is needed to meet expected regulatory requirements, increasing the assumed borrowing rate from 5% to 6%, and cost increases in existing projects, such as the Biosolids Digester Facilities Project and the Folsom Area Stormwater Improvements Project. For more information about these projects, see " – Sewer System Improvement Program – *Program Scope – Treatment Facilities – Mainstream Nutrient Reduction Project,*" " – *Biosolids Digester Facilities Project*" and " – Stormwater Management/Flood Resilience – *Folsom Stormwater Improvement Project (Phase 1 and 2).*"

### Sewer System Improvement Program

**Program Summary.** The Sewer System Improvement Program was initiated as a citywide investment to upgrade the SFPUC's existing infrastructure to ensure a reliable, sustainable, and seismically safe sewer system. The SSIP contains a series of major capital improvement projects that are necessary to maintain the City's combined sewage and stormwater system in a state of good repair, as well as to continue meeting Commission-endorsed goals and levels of service. The Commission's original authorization of the SSIP in August 2012 contemplated a three-phase implementation approach over a 20-year period to manage rate impacts, considered construction sequencing impacts, and maintained existing operations and permit compliance. The highest priority and best-defined projects, which focused on maintaining regulatory compliance, enhancing process reliability and redundancy, implementing pilot green infrastructure projects, improving plant odor control, and replacing existing biosolids and headworks facilities with state-of-the-art technology, were included in the first phase of the SSIP ("**Phase 1 Projects**"). The SFPUC has since transitioned from implementing the original three-phase approach over a 20-year period to implementing Phase 1 Projects and initiating projects originally identified for the second and third phases of the SSIP (referred to herein as the "**Other SSIP Projects**") based on priority, schedule, and affordability, as part of its rolling 10-year capital plan. The budget for Phase 1 Projects in the 2025 Capital Plan is \$839.9 million and the budget for Other SSIP Projects in the 2025 Capital Plan is \$3.162 billion, for a total of \$4.002 billion.

**Program Objectives and Goals.** The SSIP capital improvement projects are designed to address infrastructure challenges and needs facing the Wastewater Enterprise, maximize system reliability and flexibility, improve operational and seismic reliability, and promote current and future regulatory compliance. The SSIP project development considers environmental benefits, sustainability, and community benefits in addressing long-term

wastewater needs. The program goals for the SSIP include the following: (1) maintain a compliant, reliable, resilient and flexible system that can respond to catastrophic events; (2) integrate grey and green infrastructure to manage stormwater and minimize flooding; (3) provide benefits to impacted communities; (4) modify the system to adapt to climate change; (5) achieve economic and environmental sustainability; and (6) maintain ratepayer affordability.

***Program Scope.*** The SSIP is further separated into four major categories: (i) Program Management, which make up approximately \$134.3 million of the 2025 Capital Plan, (ii) Treatment Facilities, which make up approximately \$2.859 billion of the 2025 Capital Plan, (iii) Sewer/Collection System, which make up approximately \$206.0 million of the 2025 Capital Plan, and (iv) Stormwater Management/Flood Resilience, which make up approximately \$802.5 million of the 2025 Capital Plan. Each category is further described below.

***Program Management.*** This category includes overall program management support for SSIP capital projects and associated land reuse projects. The SFPUC aims to identify the best utilization of the Southeast Treatment Plant land development and building assets to develop the most efficient and economic approach to transform the existing wastewater plant into an integrated, well-connected campus that fulfills operation needs while prioritizing public safety and cultivating a healthy and inspired workforce. Various conceptual design efforts will create a site-wide prioritized vision of how the Southeast Treatment Plant campus will function and develop for the next generation. This category also includes support for securing low-interest loans and grants, including SRF loans and WIFIA loans (see “OBLIGATIONS PAYABLE FROM NET REVENUES – Parity Loans” and “– Water Infrastructure Finance and Innovation Act Loans”). Furthermore, this category includes support for continuous internal process improvements in an effort to achieve better efficiencies and outcomes with project delivery, as well as for asset management integration and regulatory compliance.

***Treatment Facilities.*** Phase 1 Projects focus mainly on improvements to the treatment plants and wet-weather facility. Treatment plant projects provide improvements at the Southeast Treatment Plant, Oceanside Treatment Plant and North Point Facility are aimed at updating existing infrastructure and technologies, increasing seismic and operational reliability, and reducing odors, noise, visual and other negative public impacts. These projects also help maintain regulatory compliance by ensuring continued and reliable asset performance.

A majority of the Phase 1 Projects are occurring at the Southeast Treatment Plant to upgrade the buildings and systems that were originally constructed in the 1950s (for example, see “– *Biosolids Digester Facilities Project*” below). There are also other Phase 1 projects focused on liquid treatment and basic infrastructure, including construction of a new all-weather headworks facility (see “– *SEP New Headworks (Grit) Replacement Project*” below), improvements to existing clarifiers, facility-wide distributed control systems, and power feed and switchgear. The Southeast Treatment Plant will be operational throughout the construction of these capital improvements. See also “WASTEWATER ENTERPRISE – Wastewater Treatment – *Southeast Treatment Plant*” and “RISK FACTORS – Risks Related to Wastewater Enterprise Facilities and Operation – *Limited Redundancy.*”

In addition to the work at Southeast Treatment Plant, there are also Phase 1 Projects being implemented to improve the seismic, electrical and general reliability to both the Oceanside Treatment Plant and the North Point Facility. Other SSIP Projects have also been initiated to provide various process improvements to the Southeast Treatment Plant, Oceanside Treatment Plant and North Point Facility.

Significant projects within the treatment facilities category include the following:

- ***Biosolids Digester Facilities Project.*** The largest component of the Phase 1 Projects is the Biosolids Digester Facilities Project, which will replace and relocate the SFPUC’s existing solids treatment facilities at the Southeast Treatment Plant with more reliable, efficient, and modern technologies and facilities. The Biosolids Digester Facilities Project, which consists of new digester and solids handling facilities to replace the existing facilities at the Southeast Treatment Plant, will include more modern treatment processes designed to produce “Class A” biosolids. Biosolids treatment processes are expected to include solids thickening, screening, dewatering, thermal hydrolysis pretreatment, digestion, gas handling, biogas utilization, and odor control. As of December 2023, construction is at approximately 50% completion, and the construction work packages for all the major biosolids facilities have been bid and awarded. Construction of the five digester vessels is in its final stages. Mechanical, electrical, and plumbing installations have been initiated in the digester basement, solids pretreatment building, and

supporting facilities and pipe galleries. Foundation work and underground utilities for biosolids dewatering building are near complete and concrete slabs are being placed. Project completion is scheduled for 2029. The original budget for the Biosolids Digester Facilities Project, approved by the Commission in August 2012, was \$1.681 billion; however, the budget for the project has significantly increased to \$2.673 billion, with \$753.5 million in the 2025 Capital Plan. While the scope and schedule of the project remains the same, the budget has increased due in part to, complex site and construction conditions, volatile commodity costs, supply chain issues related to the COVID-19 pandemic, and a limited pool of potential and qualified bidders on contracts. The SFPUC can provide no assurance that the total cost of the Biosolids Digester Facilities Project will not be higher than, or that the ultimate completion date of the project will not be later than, currently estimated. See also “RISK FACTORS – Cost of Capital Program Projects; Timely Completion of Capital Program Projects” and “– Construction Related Risks.” The SFPUC has secured an SRF loan in the amount of \$132.0 million, the BDFP WIFIA Loan in the amount of up to \$699 million, and the STPI WIFIA Loan in the amount of up to \$514 million for a portion of the project. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Parity Loans” and “– Water Infrastructure Finance and Innovation Act Loans.”

The SFPUC is also developing a biogas utilization facility to process biogas produced by the Biosolids Digester Facilities Project. The biogas utilization facility will accept biogas from the new biosolids digesters, treat and upgrade the biogas to natural gas quality, and compress and inject the biogas into an existing PG&E pipeline. The SFPUC anticipates that the biogas utilization facility will be ready for operation in alignment with the start-up and commissioning of the Biosolids Digester Facilities Project; however, the SFPUC can provide no assurance with respect to the ultimate completion date for the entire project. The biogas utilization facility is expected to have a construction cost of approximately \$100 million. The economic and financing features of the biogas utilization facility are under development and this project cost is not currently included in the 2025 Capital Plan.

- *Mainstream Nutrient Reduction Project.* Reducing nutrient loading into San Francisco Bay is one of the most pressing water quality issues facing the San Francisco Bay Area. The Southeast Treatment Plant Mainstream Nutrient Reduction Project is needed to meet expected regulatory requirements and to help meet the regulatory compliance level of service goals for the Wastewater Enterprise. The purpose of the project is to reduce the amount of nutrients, specifically total inorganic nitrogen, discharged in the effluent from the Southeast Treatment Plant into the San Francisco Bay. Based on a preliminary project scoping efforts, the proposed project assumes maximizing the use and/or retrofit of existing infrastructure in an effort to reduce costs. The proposed project includes planning, environmental review, design, construction and facility start-up and commissioning. The current project budget is \$1.470 billion, with \$1.185 billion in the 2025 Capital Plan. However, the SFPUC can provide no assurance that the total cost of the Mainstream Nutrient Reduction Project will not be higher than currently estimated.

- *SEP New Headworks (Grit) Replacement Project.* The Southeast Treatment Plant has two existing headworks facilities. The new 250 mgd headworks project (the “**SEP New Headworks (Grit) Replacement Project**”) consists of the following: new influent junction structure and influent monitoring; new primary influent distribution structure; new bar screens, washer-compacters and screenings handling facility; new grit basins; grit washers and grit handling facility; a new odor control facility; two new primary substations; electrical, instrumentation and control rooms/building; demolition of the two existing headworks facilities; rehabilitation of the existing Southeast Lift Station; and upgrades to the Bruce Flynn Pump Station. The purpose of the project is to meet new design seismic standards and achieve a higher level of debris, screening, and grit removal. The project is currently in construction and anticipated to be completed in 2027. The total project budget is \$716.7 million, with \$25.4 million in the 2025 Capital Plan; however, the SFPUC can provide no assurance that the total cost of the project will not be higher than currently estimated. The SFPUC has secured an SRF loan in the amount of \$112.0 million and the STPI WIFIA Loan in the amount of up to \$514 million for a portion of the project. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Water Infrastructure Finance and Innovation Act Loans” and “– Parity Loans.”

Sewer/Collection System. This category includes projects focused on increasing the reliability of the sewer system and/or increasing the operational flexibility to collect and convey combined sewage to the treatment plants. The wastewater assets covered in this category include sewers, conveyance pump stations and force mains, transport/storage boxes, and combined sewer discharge structures. By continuing to maintain the collection system

assets in a state of good repair, these projects will also ensure continued current and future regulatory compliance, including minimum control requirements, such as maximizing use of the collection system for storage and maximizing flows to the treatment plant. In addition, projects are prioritized to address the reliability of critical force mains that serve as an artery to convey combined sewage to the treatment plants. The collection system projects also include interdepartmental projects that capture sewer improvement opportunities arising from capital projects initiated by other City agencies.

Stormwater Management/Flood Resilience. This category includes projects focused on stormwater management and flood resilience, including increasing conveyance capacity and improving flood resilience in low-lying areas. Phase 1 Projects in this category included planning-level grey infrastructure project assessments and evaluation of green infrastructure through implementation of low-impact design projects in various areas throughout San Francisco. Since no sewer system, including the City's sewer system, can be designed to manage all stormwater in all storms, the SFPUC encourages property owners to obtain flood insurance and provides other resources, such as floodwater grants that offer up to \$100,000 to eligible property owners to help protect their properties against flooding during heavy rainstorms. Specific improvements for the collection system have been prioritized through a strategy of balancing the needs of the collection system for system reliability and stormwater management. Project prioritization and phasing was guided by the Commission-endorsed levels of service, the timing of critical needs, and opportunities for capital investments.

Significant projects within the stormwater management/flood resilience category include the following:

- Folsom Stormwater Improvement Project (Phase 1 and 2). This project includes the construction of approximately 3,500 linear foot, 12-foot internal diameter tunnel from the vicinity of Alameda/Treat Streets to the vicinity of 7th/Berry Streets, and the construction of nearly 12,500 linear feet of sewer pipes to divert wastewater flows, including large volumes of stormwater during heavy rains, towards the new tunnel infrastructure. The majority of the project is currently in the design phase and the first package of small diameter work is currently in construction. Recent cost increases for the project, as reflected in the 2025 Capital Plan, reflect higher design costs and anticipated construction durations due to added complexity of tunnel and large sewer boxes work in congested city streets. The total project budget for phase 1, which covers the project through the design phase, is \$38.4 million, all of which has been previously appropriated, and the total project budget for phase 2, which covers the construction phase, is \$391.2 million, with \$318.8 million in the 2025 Capital Plan. The SFPUC has applied for an SRF loan for a portion of the Folsom Project. See "OBLIGATIONS PAYABLE FROM NET REVENUES – Parity Loans."

- Wawona Area Stormwater Improvement Project. This project includes the installation of a new sewer pipe under Vicente Street, from Wawona Street to 34th Avenue. Replacement of existing water transmission and distribution mains on Wawona Street, 15th Avenue and on Vicente Street west of 19th Avenue has been coordinated and is being constructed jointly under the same construction contract. The project is designed to increase the conveyance capacity at the intersection of 15th Avenue and Wawona Street to reduce the frequency of flooding in the area. Construction was completed in spring 2024 and this project is currently in the closeout phase. The total project budget is \$28.4 million, all of which has been previously appropriated.

- Lower Alemany Area Stormwater Improvements Project. The Lower Alemany Area Stormwater Improvements Project includes construction of a 10-foot diameter underground pipe from Stoneybrook Avenue to Industrial Street designed to carry stormwater away from the lower Alemany area and to reduce the frequency of flooding in the area. This project is currently in the design phase. The total project budget is \$299.6 million, with \$269.4 million in the 2025 Capital Plan.

The SFPUC has secured the Project 1 WIFIA Loan for a portion of each of these projects as well as other projects. See "OBLIGATIONS PAYABLE FROM NET REVENUES – Water Infrastructure Finance and Innovation Act Loans."

## Renewal and Replacement

The Wastewater Enterprise undertakes renewal and replacement projects to improve performance or extend the service life of an existing asset. These projects are typically annual ongoing projects and fall into two categories: (i) Renewal and Replacement Collection System and (ii) Renewal and Replacement Treatment Plants. Renewal and replacement projects make up approximately \$1.738 billion of the 2025 Capital Plan.

The Renewal and Replacement Collection System category includes the following projects: condition assessment projects to clean, inspect, and perform condition assessment of sewer facilities; sewer improvement projects to maintain the existing functionality of the collection system and repair and replace sewers; and spot sewer repair projects, which consist of as-needed repair of localized sections of existing sewer facilities.

The Renewal and Replacement Treatment Plants category includes projects to maintain the capacity and reliable performance, and extend the useful life of aging assets such as transport/storage boxes, discharge structures, pump stations, force mains, tunnels and treatment plants.

The Wastewater Enterprise sewer system consists of two all-weather treatment plants (Southeast and Oceanside) and one wet-weather treatment facility (North Point), 28 pump stations, eight transport/storage boxes, and 35 combined sewer discharge outfalls. Priority lists are maintained for both collection and treatment projects, with collection system projects identified using an asset management approach which considers the current condition of the section in question and applicable risks of failure. See “THE WASTEWATER ENTERPRISE – Combined Sewage and Stormwater System – *Sewer Lines*.”

## Treasure Island Capital Improvements

The Wastewater Enterprise currently operates wastewater treatment facilities on Treasure Island and Yerba Buena Island through agreements with TIDA. The SFPUC does not expect to acquire these facilities, and the SFPUC is planning to expand its service area to include Treasure Island and Yerba Buena Island utilizing new-constructed, SFPUC-owned infrastructure. See “THE WASTEWATER ENTERPRISE – Wastewater Treatment – *Contract Services*.” The Treasure Island Water Resource Recovery Facility will provide reliable service for Treasure Island and Yerba Buena Island residents and meet the recycled water demands of future redevelopment on Treasure Island and Yerba Buena. The project is further described below. Treasure Island capital improvement projects make up approximately \$40.9 million of the 2025 Capital Plan.

***Treasure Island Water Resource Recovery Facility.*** The Treasure Island Water Resource Recovery Facility, which is being constructed immediately adjacent and to the south of the existing facility, is expected to have the capacity to treat an estimated 1.3 mgd of average dry-weather flow and a peak wet-weather flow of 3.9 mgd. The preliminary treatment would remove rags, large objects, and grit. The secondary treatment process would use biological nutrient removal reactors/basins to remove biochemical oxygen demand and suspended solids. The membrane bioreactor is a combination of suspended growth biological treatment system (activated sludge) in combination with membrane filtration equipment which is used to perform solid-liquid separation. Secondary-treated effluent will be disinfected via series of UV trains. The disinfected secondary-treated effluent would pass through constructed wetlands, and then be discharged into the adjacent stormwater outfall pipe for discharge to San Francisco Bay. Solids generated in the treatment processes would be thickened and transported to the Oceanside Treatment Plant for digestion. The resulting biosolids would be transported to an off-site landfill or suitable location for land application. In addition, the new facility will be designed to achieve the disinfected tertiary treatment. Approximately 0.43 to 0.98 mgd of recycled water is expected to be diverted from the new facility for landscape irrigation, urban farming, and toilet flushing. The remainder of the disinfected effluent from the treatment plant would be directed to the wetlands and ultimately to receiving water. The SFPUC awarded a design-build contract to build the Treasure Island Water Resource Recovery Facility in 2022. The project is now in construction and anticipated to be completed in August 2026. The total project budget is \$222.2 million, with \$40.9 million in the 2025 Capital Plan. The SFPUC has applied for an SRF loan and has secured the Project 1 WIFIA Loan for a portion of the Treasure Island Water Resource Recovery Facility. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Parity Loans” and “– Water Infrastructure Finance and Innovation Act Loans.”

## Wastewater Facilities and Infrastructure

Wastewater facilities and infrastructure projects are intended to provide necessary upgrades to existing facilities to maintain their intended functions. Wastewater facilities and infrastructure projects make up approximately \$258.9 million of the 2025 Capital Plan. Significant projects within the wastewater facilities and infrastructure category include the following:

- ***Ocean Beach Climate Change Adaptation Project.*** This project is necessary to protect the integrity of wastewater assets built to protect public health and the environment, including the existing Lake Merced Tunnel, the Westside Pump Station and the Oceanside Treatment Plant. This project is one of the first City Climate Change Adaptation projects led by the SFPUC. The Lake Merced Tunnel has a storage capacity of up to 10 million gallons for combined sewage and stormwater flows and is located closest to the section of Ocean Beach most severely impacted from, and most vulnerable to, continued bluff erosion. The Lake Merced Tunnel could become structurally compromised if sudden bluff retreat is experienced during a large storm event. This project will implement a comprehensive shoreline management and protection plan in partnership with stakeholders and regulatory agencies to provide a long-term solution to the erosion issues to the City along Ocean Beach, and to mitigate potential impacts to the Lake Merced Tunnel and other critical wastewater assets at this location. The majority of the project is currently in design, except for the annual contract to reduce excess loading on the existing sewer boxes from sand. The total project budget is estimated to cost approximately \$209.6 million, with \$152.6 million in the 2025 Capital Plan. The SFPUC is the lead agency for the project with other City departments contributing funds for non-utility infrastructure and facilities.

- ***Southeast Bay Outfall and Southeast Treatment Plant Booster Station Replacement.*** Southeast Bay Outfall is a critical asset that conveys final effluent from the Southeast Treatment Plant to the San Francisco Bay. This project is needed to continue providing reliable operations, protecting water quality in San Francisco Bay, and aligning with the City’s waterfront adaptation plans for sea level rise. This project would evaluate and recommend improvements for the existing Southeast Bay Outfall and the associated booster station. This project assumes construction of a new booster station and outfall that would convey effluent from the Southeast Treatment Plant to the San Francisco Bay. This project is being developed in close collaboration with the Port in conjunction with the City’s efforts with the U.S. Army Corps of Engineers to plan and implement coastal defenses in the Islais Channel area to mitigate sea level rise. See also “THE WASTEWATER ENTERPRISE – Climate Change, Risk of Sea Level Rise and Flooding Damage – *Impact on City of San Francisco.*” This project includes all phases of work, planning, environmental review, right-of-way, design, construction contract procurement, construction, and closeout. The SFPUC is in the planning phase for this project and construction is expected to begin outside of the 2025 Capital Plan. The total project budget is estimated to cost approximately \$3.0 billion, with \$80.3 million in the 2025 Capital Plan. The SFPUC also has a current project underway to perform a condition assessment (and any needed interim repairs) on the outfall and another separate project to rehabilitate the booster station. The intent of these two other projects is to prolong the life span of the respective assets and allow for proper planning and construction of this outfall project and its multiple layers of jurisdictions and coordination with outside agencies.

## Environmental Planning Considerations

Projects undertaken by the SFPUC are subject to CEQA and certain projects involving the participation of federal agencies, including projects on federal land, are also subject to the National Environmental Policy Act (“NEPA”). The San Francisco Planning Department (the “**Planning Department**”), acting as the CEQA lead agency under Chapter 31 of the City’s Administrative Code (“**Chapter 31**”), generally coordinates CEQA review of SFPUC projects. The SFPUC also coordinates with federal NEPA lead agencies to prepare NEPA documentation for SFPUC projects.

Under CEQA, a project that may have a significant effect on the environment and is to be carried out or approved by a public agency must comply with a comprehensive environmental review process, including the preparation of an environmental impact report (“EIR”). The EIR reflects not only an independent technical analysis of the project’s potential environmental impacts, but also the comments of other agencies with some form of jurisdiction over the project and the comments of interested members of the public. Contents of the EIR include a detailed statement of the project’s significant environmental effects; any such effects that cannot be avoided if the

project is implemented; mitigation measures proposed to minimize such effects; alternatives to the proposed project; the relationship between short-term and long-term impacts; any significant irreversible environmental changes that would result from the project; the project's growth-inducing impacts; and a brief statement setting forth the agency's reasons for determining that certain effects are not significant and hence do not require discussion in the EIR. Before approving a project, the SFPUC must make findings on whether or how it can mitigate the significant environmental effects of the project. If the project requires mitigation, the SFPUC must adopt a mitigation monitoring and reporting plan on how the mitigation is carried out during project implementation. If a project's significant effects can be mitigated, the SFPUC can adopt a written statement (called a mitigated negative declaration) or if the project will not have a significant effect on the environment, the SFPUC may adopt a written statement (called a negative declaration) to that effect and in both cases need not prepare an EIR. After deciding to approve or carry out a project, either following the EIR process or after adopting a mitigated negative declaration or a negative declaration, the Planning Department must file a notice of such determination with the Office of the County Clerk. CEQA also contains several exemptions, which the SFPUC uses for its projects when appropriate.

Any action or proceeding challenging the Planning Department determination must be brought within 30 days following the filing of such notice. Actions have been, and in the future may be, filed challenging a project's compliance with CEQA, including the adequacy of the EIR and other environmental documents for particular projects. If an action challenging the SFPUC's compliance with CEQA is successful, the particular project could be delayed, revised, suspended or canceled.

As part of its regular planning and budgetary process, the SFPUC gives careful attention to environmental considerations. All projects are evaluated under the SFPUC's environmental evaluation procedures (Infrastructure Procedures 7.01 and 7.02), developed in compliance with federal and State laws and regulations, City ordinances and the City's Administrative Code procedures, including Chapter 31.

Prior to the sale of bonds, the Planning Department will issue a "Planning Certificate" required under Proposition E. The Planning Certificate will identify the status of environmental review for each capital project to be funded under the proposed bond sale and the type of CEQA document either completed or to be completed for each project. CEQA compliance must be completed for each project prior to project approval or approval to award a construction contract to implement any project to be funded by the proposed bond sale. The Planning Certificate for the projects to be financed by the 2024ABCD Bonds was issued in August 2023.

## **FINANCING PLAN FOR WASTEWATER ENTERPRISE CAPITAL PROGRAM**

### **Long Term Financing of Capital Program**

Pursuant to the Wastewater Enterprise's 10-year financial plan for Fiscal Years 2024-25 to 2033-34 (the "**2025 Financial Plan**"), which is based on the 2025 Capital Plan, and which was adopted by the SFPUC Commission on February 13, 2024, long-term debt financing is projected to fund approximately \$4.9 billion of the 2025 Capital Plan. Revenue (pay-as-you-go) funding is projected to provide approximately \$1.1 billion of funds and capacity fees is projected to provide approximately \$61.0 million of the remaining portion of the 2025 Capital Plan. Long-term debt financing is expected to be comprised primarily of Additional Bonds and Parity Loans (such as additional SRF loans or WIFIA loans). See "PLAN OF FINANCE," "OBLIGATIONS PAYABLE FROM NET REVENUES – Parity Loans" and "– Water Infrastructure Finance and Innovation Act Loans."

### **Interim Funding Program Facilities**

The SFPUC utilizes the Interim Funding Program to meet the expenditure and encumbrance needs of capital projects on an interim basis through design and into the early project construction phase. The Interim Funding Program is authorized for the Wastewater Enterprise in the amount of \$750 million. The SFPUC may issue Commercial Paper Notes or make draws on the U.S. Bank Credit Facility. See "OBLIGATIONS PAYABLE FROM NET REVENUES – Subordinate Debt and Interim Funding Program." Interim funding program obligations are then refunded and consolidated into either long-term revenue bond issues or a Parity Loan when the outstanding and encumbered amount of the interim funding obligations approaches authorized limits. This approach allows the SFPUC to take advantage of historically lower short-term interest rates, and to size and closely time long-term financings with projected need.

The SFPUC has approximately \$342.0 million principal amount of Commercial Paper Notes outstanding and no outstanding principal balance on any of the Revolving Notes. Approximately \$344.3 million of principal amount of and interest on tax-exempt Commercial Paper Notes will be retired with proceeds of the 2024C Bonds and 2024D Bonds. See “PLAN OF FINANCE.” The SFPUC anticipates issuing additional Commercial Paper Notes and making draws directly on the U.S. Bank Credit Facility to provide interim financing for Wastewater Enterprise capital projects. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Subordinate Debt and Interim Funding Program.”

### **Sources and Uses of Funding the Capital Program**

The table below sets forth projected sources and uses of funds for the Wastewater Enterprise’s capital program, including the SSIP, for Fiscal Years 2024-25 through 2028-29. Non-SSIP capital program categories include Renewal and Replacement projects, Treasure Island Capital Improvement projects and Wastewater Facilities and Infrastructure projects. Sources of funding for the capital program include debt financing, wastewater revenues and capacity charge revenues. The projected repayment of principal and interest on future debt financings has been incorporated into the SFPUC’s rates for Fiscal Years 2025-26 through 2025-26, as approved by the Commission in May 2023, as well as the remaining projection period set forth in the 2025 Financial Plan, as adopted by the Commission on February 13, 2024. The approved rate changes are expected to increase revenues by 10.7% for Fiscal Year 2024-25 and by 10.0% for Fiscal Year 2025-26, and projected rate changes are expected to increase revenues by 10.7% to 11.7% annually for Fiscal Years 2026-27 through 2028-29. Any future rate increases are subject to future approval by the Commission and the ability to reject rate increases by the Board of Supervisors. See “FINANCIAL OPERATIONS – Wastewater Enterprise Rate Setting” and “– Rates and Charges.”

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**TABLE 10**  
**WASTEWATER ENTERPRISE CAPITAL PROGRAM**  
**FINANCING PLAN FOR FISCAL YEARS 2024-25 TO 2028-29**  
**(IN THOUSANDS)<sup>(1)</sup>**

	<u>2024-25</u>	<u>2025-26</u>	<u>2026-27</u>	<u>2027-28</u>	<u>2028-29</u>
<b>USES OF FUNDS</b>					
SSIP	\$638,396	\$594,418	\$689,828	\$350,747	\$156,748
Renewal and Replacement	152,539	167,124	170,727	174,026	162,986
Treasure Island Capital Improvements	36,625	4,273	0	0	0
Wastewater Facilities & Infrastructure	64,961	57,097	48,295	7,506	5,376
Total Uses <sup>(2)</sup>	\$892,521	\$822,912	\$908,850	\$532,279	\$325,111
<b>SOURCES OF FUNDS</b>					
Revenue Bonds/Parity Loans <sup>(3)</sup>	\$774,782	\$683,538	\$806,528	\$447,426	\$253,145
Wastewater Revenues	112,415	133,891	96,674	79,036	65,974
Capacity Charge Revenues	5,323	5,483	5,647	5,817	5,991
Total Sources <sup>(2)</sup>	\$892,521	\$822,912	\$908,850	\$532,279	\$325,111

<sup>(1)</sup> Amounts set forth are projections. Actual results may differ materially from these projections. See “FORWARD-LOOKING STATEMENTS.”

<sup>(2)</sup> Totals may not add due to rounding.

<sup>(3)</sup> Reflects anticipated long-term debt financing needs, which may come from the issuance of Additional Bonds and Parity Loans (such as SRF loans and/or WIFIA loans). Specific amounts for each funding source are not currently available. See also “Table 26 – Projected Revenue, Operating and Maintenance Expense and Debt Service Coverage for Fiscal Year Ending June 30 (In Thousands)” and “PROJECTED OPERATING RESULTS – Assumptions Used in Projections – *Projected Debt Service*.”

Source: SFPUC, Financial Services.

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## FINANCIAL OPERATIONS

### General

The SFPUC is a department of the City and, as such, the financial operations of the SFPUC's three enterprises are included in the Annual Comprehensive Financial Report of the City and shown as enterprise funds. *The City's Annual Comprehensive Financial Report is not incorporated by reference herein.*

The following information is provided with respect to the Wastewater Enterprise only and does not purport to reflect the financial position of the SFPUC or the City as a whole.

***Basis of Accounting.*** The accounts of the Wastewater Enterprise are organized based on a proprietary fund type, specifically an enterprise fund. The financial activities of the Wastewater Enterprise are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with its operations are included on the statement of net position; revenues are recognized when earned, and expenses are recognized when liabilities are incurred.

The SFPUC applies all applicable GASB pronouncements.

***City Budget Process.*** The SFPUC's operating and capital budget preparation and approval is a part of a City-wide process. The SFPUC is one of several departments that prepares biannual budgets. The Commission reviews and approves the SFPUC's two-year budget, which is then submitted to the Mayor's Office for review. The Mayor then incorporates the proposed budget, with amendments, into the City-wide budget that is submitted to the Board of Supervisors for approval. Under the Charter, the Board of Supervisors may increase or decrease any proposed expenditure in the Mayor's budget so long as the aggregate changes do not cause the expenditures to exceed the total amount of expenditures proposed by the Mayor. The Charter further provides that the Mayor may reduce or reject any expenditure authorized by the Board of Supervisors except appropriations for bond interest, redemption or other fixed charges, subject to reinstatement of any such expenditure by a two-thirds vote of the Board of Supervisors.

***City Services Auditor.*** On November 4, 2003, voters of San Francisco adopted Proposition C, an ordinance that established the City Services Auditor ("CSA"), an audit function within the Office of the City Controller. Pursuant to the provisions of this ordinance, which have been incorporated into the Charter, the CSA has broad oversight authority and responsibilities including, but not limited to, (i) reporting upon level of effectiveness for City public services, (ii) auditing financial and management performance of City departments and functions, (iii) ensuring the financial integrity and improving the overall performance and efficiency of City government, and (iv) maintaining a whistleblower hotline to investigate upon reports of fraud, waste and abuse.

CSA has engaged HKA Global, Inc. and Yano Accountancy Corporation to conduct a three-phase performance audit of select revenue bonds issued by the SFPUC to determine whether revenue bond funds were spent in accordance with the stated purposes and permissible use of such bonds. The first phase included the audit of three series of revenue bonds issued by the Wastewater Enterprise and three series of revenue bonds issued by the Water Enterprise. In February 2022, CSA issued the audit report for the first phase, which concluded that the revenue bond expenditures for such bonds were spent appropriately, and made two recommendations that (i) the SFPUC coordinate with RBOC to determine the most effective method to comprehensively report project expenditures by funding source and uses of revenue bond proceeds, and (ii) the SFPUC comply with its policies regarding quality assurance audits. The SFPUC has since implemented both recommendations from the first phase audit report.

The second phase included the audit of three series of revenue bonds issued by the Wastewater Enterprise, two series of revenue bonds issued by the Water Enterprise and one series of revenue bonds issued by the Power Enterprise. In August 2023, CSA issued the audit report for the second phase, which concluded that nearly all revenue bond expenditures were spent appropriately. The audit identified two contracts with expenditures totaling \$15.36 million (representing less than 1.5% of the audited expenditures) in which CSA determined that the SFPUC did not comply with certain internal control guidance and preferred procurement practices. CSA recommended that

the SFPUC: (i) follow guidance from the COSO Internal Control-Integrated Framework (the “**COSO Framework**”) and require completion of impartiality/confidentiality statement forms on certain procurements to strengthen its control environment, which the SFPUC partially concurred, (ii) follow guidance from the COSO Framework and request publicly available information from the City Attorney on its investigations of SFPUC procurement practices and periodically report such information to the RBOC to strengthen its monitoring activities, which the SFPUC did not concur. In addition, CSA recommended that the SFPUC coordinate with RBOC and San Francisco Public Works (“**SFPW**”) to quantify, evaluate, and report on monetary impacts of SFPW’s overhead rates on total sewer engineering direct labor and benefits so that RBOC can exercise proper oversight, which the SFPUC did not concur.

The third phase is currently ongoing and includes the audit of three series of revenue bonds issued by the Wastewater Enterprise, one series of revenue bonds issued by the Water Enterprise, and two series of revenue bonds issued by the Power Enterprise. The SFPUC anticipates that the audit report for the third phase will be issued by August 2024.

**Financial Management Policies.** To support sound financial management practices during periods of instability, ensure organizational accountability and disciplined decision making, and maintain the highest practical credit ratings, the SFPUC conducted an extensive peer review study to compare the financial policies of other United States municipal utilities, analyze rating agency evaluations of financial policies and recommend changes to the SFPUC’s existing financial policies. Based on this study, the Commission adopted in 2017 a Debt Service Coverage Policy, a Capital Financing Policy and a Fund Balance Reserve Policy. The SFPUC subsequently revised its Debt Management Policies and Procedures, which the Commission adopted in 2019. See “– Financial Management Policies.” In addition, the Commission adopted a Ratepayer Assurance Policy to address the prudent use of ratepayer funds and the establishment of rates and charges and to ensure process transparency.

### **Wastewater Enterprise Rate Setting**

**General.** Sewer service charges are the primary funding source for the payment of costs associated with the Wastewater Enterprise’s combined sewer system to manage sewage, wastewater and sanitary waste. Pursuant to the Charter, an independent consultant prepares an analysis of projected revenues and revenue requirements of the Wastewater Enterprise at least once every five years. Based on this analysis, the SFPUC sets rates projected to be sufficient to fund the proposed budget, to maintain an adequate operating reserve and to comply with Indenture requirements. In addition to meeting the SFPUC’s capital financing, debt service coverage and reserve policy targets, the rates must also comply with regulations or policies promulgated by the EPA, the State Water Resources Control Board and the Board of Supervisors and with the requirements of the City’s Charter and the State Constitution; however, the SFPUC’s sewer service rates are not subject to any approval proceedings by the California Public Utilities Commission or any other State or federal agencies. See “CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS – State Law Limitations.”

**Federal and State Requirements.** Under federal clean water laws and regulations, entities accepting federal grant funds and loans (such as the SFPUC) must comply with certain requirements related to the sufficiency of revenues and system operations, maintenance and replacement. Federal and State requirements related to grant and loan funding are administered and enforced by the State Water Resources Control Board. See “REGULATORY MATTERS” for a more detailed discussion of State and federal regulations affecting the Wastewater Enterprise.

**Summary of Charter Rate-Setting Requirements.** Pursuant to certain provisions of Proposition E, which became effective with respect to the Wastewater Enterprise on January 3, 2003, the Charter was amended to authorize the Commission to set rates, fees and other charges in connection with providing Wastewater Enterprise services. These rate changes are subject to rejection, within 30 days of submission, by the Board of Supervisors. If the Board of Supervisors does not act within 30 days, the rates become effective without further action.

In setting Wastewater Enterprise rates, fees and charges, the Commission must:

- (a) establish rates, fees and charges at levels sufficient (i) to improve or maintain financial condition and bond ratings at or above levels equivalent to highly rated utilities, (ii) to meet requirements and covenants under all bond resolutions and indentures (including the Indenture) and (iii) to

provide sufficient resources for the continued financial health (including appropriate reserves), operation, maintenance and repair, consistent with good utility practice;

- (b) retain an independent rate consultant to conduct rate and cost of service studies at least every five years;
- (c) set retail rates, fees and charges based on the cost of service;
- (d) conduct all studies mandated by applicable State or federal law to consider implementing connection fees servicing new development;
- (e) conduct studies of rate-based conservation incentives and/or lifeline rates and similar rate structures to provide assistance to low income users, and to take the results of each study into account when establishing rates, fees and charges, in accordance with State and federal laws; and
- (f) adopt annually a rolling five-year forecast of rates, fees and charges.

**Rate Setting Process.** The Wastewater Enterprise periodically adjusts rates based on a comprehensive cost of service analysis and the resulting revenue requirement analysis, as required by the Charter. The biannual budget submitted to the Commission, the Mayor and the Board of Supervisors for approval, along with the long-term projections in the 10-year financial plan adopted by the Commission, are used as the basis for determining annual revenue requirements. The Wastewater Enterprise projects revenues under the existing schedule of rates for sufficiency. If additional revenues are required to meet budgetary sufficiency or if the cost structure of the Wastewater Enterprise has changed, recommended rate schedule increases are submitted to the Commission for its consideration. After following public notice procedures established by the California Constitution and the City's Administrative Code and receiving public comment, the Commission adopts a rate resolution and transmits its recommended rate schedules to the Board of Supervisors. Once submitted, the Board of Supervisors has authority under the Charter to vote to reject the proposed rate schedules within 30 days. If rejected, the existing rate schedules remain in effect until a new rate schedule is resubmitted by the Commission and not rejected by the Board of Supervisors.

As part of the annual 10-year financial plan process, the Wastewater Enterprise develops a 10-year rate forecast using projected revenues under existing rates plus additional revenues from projected rate increases, as required, to meet the projected revenue requirements during the forecast period. This forecast is updated each year resulting in a "rolling" rate forecast that is intended to moderate the effects of any significant changes in revenue requirements in any year.

In addition to complying with the requirements of the Charter, the rate-setting process must comply with the requirements of the State Constitution. See "CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS – State Law Limitations."

**SFPUC Citizens Advisory Committee and Rate Fairness Board.** The Public Utilities Commission Citizens' Advisory Committee ("CAC"), established by a Charter amendment in 2002, provides recommendations to the SFPUC's General Manager and the Board of Supervisors regarding the SFPUC's long-term strategic, financial and capital improvement plans for all of its enterprises. The CAC is comprised of 17 appointees. Each member of the Board of Supervisors may appoint one member who must be a resident of their supervisory district. Candidates must demonstrate one or more of the following qualifications: represent a community, business, environmental or environmental justice organization, or have demonstrated knowledge, skill or experience in a field related to public utilities, environmental justice or environmental science. Two additional members of the CAC are appointed by the President of the Board of Supervisors, one of whom represents a small business and the other of whom represents an environmental justice organization. Four members are appointed by the Mayor and must include one member who represents regional water customers of the SFPUC, one member who represents a large San Francisco water user, one member who has knowledge of engineering or financial management and one member who represents a regional or statewide environmental organization.

Proposition E, approved by San Francisco voters in 2002, directed the establishment of a Rate Fairness Board to advise the SFPUC on water, sewer and power rate matters. The Rate Fairness Board consists of seven members: the City Administrator or their designee; the Controller or their designee; the Director of the Mayor's Office of Public Finance or their designee; two residential San Francisco retail customers, consisting of one appointed by the Mayor and one by the Board of Supervisors; and two San Francisco retail business customers, consisting of a large business customer appointed by the Mayor and a small business customer appointed by the Board of Supervisors. Specific powers for the Rate Fairness Board include the authority to: (1) annually review the five-year rate forecasts produced by the SFPUC enterprises, including the Wastewater Enterprise; (2) hold one or more public hearings on annual rate recommendations before the SFPUC adopts rates; (3) provide a report and recommendations to the SFPUC on any rate proposal; and (4) in connection with periodic rate studies, submit to the SFPUC rate policy recommendations for the Commission's consideration, including recommendations to reallocate costs among various retail utility customer classifications, subject to any outstanding bond requirements. The Rate Fairness Board is not authorized, however, to reject proposed rates approved by the Commission.

### **Wastewater Enterprise Rates and Charges**

**General.** The SFPUC's wastewater system is a combined sewer system to manage sewage, wastewater, and sanitary waste. Within this combined system, sanitary sewer and stormwater generally comprise approximately 89% and 11%, respectively, of the annual flows treated by the Wastewater Enterprise, though these percentages vary year-to-year based on rainfall.

Prior to July 1, 2023, customers' sewer service charges were comprised of a fixed monthly service charge and a variable sewer service charge per discharge unit based only on their sanitary sewage contributions to the system and sewage loading for non-residential customers. Generally, the amount of monthly discharge units is determined by multiplying a customer's monthly metered water consumption by a "flow factor" applicable to such account. The calculation is designed to approximate that portion of the account's total water use returned to the sewer system as wastewater. For example, a customer using 10 units of water and having a flow factor of 90% would be billed for nine discharge units. Each discharge unit represents 100 cubic feet of water discharged.

Beginning July 1, 2023, the Wastewater Enterprise's sewer service charges include a fixed monthly service charge, a variable sanitary sewer component per discharge unit and a stormwater runoff component based on property size and/or parcel characteristics. This approach allows the SFPUC to more directly recover costs related to collecting and treating stormwater runoff based on property characteristics that result in greater stormwater runoff, while sanitary sewer costs continue to be based on the assumed percentage of metered water usage discharged into the sewer system. To support the implementation of the stormwater runoff component of the sewer service charge, the SFPUC has also initiated a stormwater credit program to offer bill discounts to customers that manage stormwater on their property through the use of green infrastructure. This update increases transparency about the components of sewer service charges while simultaneously providing incentives for customers to manage stormwater on their properties and divert it from the collection system.

In May 2023, the Commission approved three years of annual retail water and sewer service rate increases beginning July 1, 2023, and applicable to Fiscal Years 2023-24 through 2025-26. Overall, the rate changes are expected to increase revenues by 9.0% annually for each of the three Fiscal Years.

On December 12, 2023, the City was served with a purported class action lawsuit challenging the compliance of the rates charged by the Wastewater Enterprise with the requirements of Proposition 218. See "CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS – State Law Limitations – *Proposition 218*" and "– *Proposition 218 Litigation*."

**Historical Wastewater Rates and Charges.** In April 2018, the Commission approved four years of annual retail water and sewer service rate increases beginning July 1, 2018, and applicable to Fiscal Years 2018-19 through 2021-22. There was no rate increase in Fiscal Year 2022-23. As further described below, separate rate schedules applied to residential and non-residential customers.

Historical Residential

Prior to July 1, 2023, the Wastewater Enterprise’s rate structure for residential customers included a fixed monthly service charge and a variable sewer service charge per discharge unit based on the assumed percentage of metered water usage discharged into the sewer system, calculated assuming domestic strength sewage. The standard flow factor applied to metered water usage to determine billable discharge units is 90% for single-family residential accounts and 95% for multi-family residential accounts.

Pursuant to the rate schedule applicable to Fiscal Years 2018-19 through 2022-23, the SFPUC could automatically implement a temporary drought surcharge if the Commission declared a drought emergency and triggered certain drought response actions set forth in the SFPUC’s water shortage allocation plan. The surcharge could not exceed the requested volumetric reduction in water usage and only applied to volumetric water and wastewater charges. A temporary drought surcharge was in place from April 1, 2022 through May 1, 2023. The temporary drought surcharge was designed to be bill-neutral for customers who met established conservation targets.

The following table sets forth the historical single- and multi-family residential monthly service charge and sewer service charge for Fiscal Years 2018-19 through 2021-22, which were approved in April 2018, and for Fiscal Year 2022-23, for which there was no rate increase.

**TABLE 11  
HISTORICAL SINGLE-FAMILY AND MULTI-FAMILY RESIDENTIAL  
MONTHLY SERVICE CHARGES  
FOR FISCAL YEARS 2018-19 THROUGH 2022-23**

<b>Fiscal Year</b>	<b>Monthly Service Charge</b>	<b>Sewer Service Charge<sup>(1)</sup> (per discharge unit<sup>(2)</sup>)</b>
2018-19	\$0.98	\$13.06
2019-20	2.19	13.88
2020-21	3.60	14.89
2021-22 <sup>(1)</sup>	5.21	15.97
2022-23 <sup>(1)(3)</sup>	5.21	15.97

<sup>(1)</sup> Does not include the temporary drought surcharge of 5% on volumetric rates in effect from April 1, 2022, through May 1, 2023.

<sup>(2)</sup> One discharge unit equals 100 cubic feet of wastewater.

<sup>(3)</sup> There was no rate increase in Fiscal Year 2022-23.

Source: SFPUC, Financial Services.

The following table sets forth historical single- and multi-family residential estimated average monthly bills (comprised of the monthly service charge and the sewer service charge) for Fiscal Years 2018-19 through 2022-23.

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**TABLE 12**  
**HISTORICAL SINGLE-FAMILY AND MULTI-FAMILY RESIDENTIAL**  
**ESTIMATED AVERAGE MONTHLY BILL**  
**FOR FISCAL YEARS 2018-19 THROUGH 2022-23**

<u>Fiscal Year</u>	<u>Single-Family<sup>(1)</sup></u>	<u>Multi-Family (per dwelling unit)<sup>(1)</sup></u>
2018-19	\$61.19	\$52.02
2019-20	65.56	55.67
2020-21	75.37	60.14
2021-22 <sup>(2)</sup>	72.44	64.95
2022-23 <sup>(2)(3)</sup>	72.51	64.95

<sup>(1)</sup> Average billable wastewater volume for single-family residential customers is based on historical mean. Average water consumption amount for multi-family residential customers is assumed to be 1,250 cubic feet of water per month, or 1,187.5 billable discharge units, for 3 dwelling units.

<sup>(2)</sup> A temporary drought surcharge of 5% on volumetric rates was in effect from April 1, 2022, through May 1, 2023. Single-family residential average monthly bill reflects actual historical average usage (including actual conservation achieved) and drought surcharge for Fiscal Year 2022-23. Multi-family residential average monthly bill reflects estimated historical average usage (including estimated conservation achieved) and drought surcharge for Fiscal Year 2022-23, resulting in no net change to the average monthly bill.

<sup>(3)</sup> There was no rate increase in Fiscal Year 2022-23.

Source: SFPUC, Financial Services.

Historical Non-Residential

Prior to July 1, 2023, the Wastewater Enterprise’s rate structure for non-residential customers included a fixed monthly service charge and a variable sewer service charge per discharge unit based on the assumed percentage of metered water usage discharged into the sewer system and sewage loading, which measures the pollutant concentrations within customer discharges (*i.e.*, suspended solids, oil/grease and chemical oxygen demand). The standard flow factor applied to metered water usage to determine billable discharge units is 90% for non-residential accounts. Non-residential customers whose sewage loadings were not based on periodic sampling were charged based on standard parameter loadings established by the SFPUC for each Standard Industrial Classification code.

The following table sets forth the historical non-residential monthly service charge, the sewer service charge, and sewage loading charges for each pollutant parameter for Fiscal Years 2018-19 through 2021-22, which were approved in April 2018, and for Fiscal Year 2022-23, for which there was no rate increase.

**TABLE 13**  
**HISTORICAL NON-RESIDENTIAL**  
**MONTHLY SERVICE CHARGES**  
**FOR FISCAL YEARS 2018-19 THROUGH 2022-23**

<u>Fiscal Year</u>	<u>Monthly Service Charge</u>	<u>Sewer Service Charge (per discharge unit<sup>(1)</sup>)</u>	<u>Suspended Solids (per pound)</u>	<u>Oil/Grease (per pound)</u>	<u>Chemical Oxygen Demand (per pound)</u>
2018-19	\$0.98	\$ 7.84	\$1.320	\$1.331	\$0.519
2019-20	2.19	8.29	1.412	1.424	0.555
2020-21	3.60	8.86	1.525	1.538	0.599
2021-22	5.21	9.46	1.647	1.661	0.647
2022-23 <sup>(2)</sup>	5.21	9.46	1.647	1.661	0.647

<sup>(1)</sup> One discharge unit equals 100 cubic feet of wastewater.

<sup>(2)</sup> There was no rate increase in Fiscal Year 2022-23.

Source: SFPUC, Financial Services.

In July 2018, the Commission adopted rules for billing stormwater-related sewer service charges for unmetered properties (*i.e.*, vacant lots, parking lots, and other properties that do not have water or wastewater service). Non-residential owners of unmetered properties were charged a monthly sewer service charge based on whether they had “low runoff” or “standard runoff.” The following table sets forth the historical monthly service charges attributable to stormwater runoff for unmetered parcels for Fiscal Years 2018-19 through 2021-22, and for Fiscal Year 2022-23, for which there was no rate increase.

**TABLE 14  
HISTORICAL MONTHLY SERVICE CHARGES  
ATTRIBUTABLE TO STORMWATER RUNOFF FOR UNMETERED PARCELS<sup>(1)</sup>  
FOR FISCAL YEARS 2018-19 THROUGH 2022-23**

<u>Fiscal Year</u>	<u>Low Runoff</u>	<u>Standard Runoff</u>
2018-19	\$19.83	\$32.49
2019-20	20.47	33.56
2020-21	21.31	34.93
2021-22	22.16	36.31
2022-23 <sup>(2)</sup>	22.16	36.31

<sup>(1)</sup> This was a monthly sewer service charge attributable to stormwater runoff for property owners who did not have water and wastewater accounts with the SFPUC.

<sup>(2)</sup> There was no rate increase in Fiscal Year 2022-23.

Source: SFPUC, *Financial Services*.

**Current Wastewater Rates and Charges.** The sewer service rates applicable to Fiscal Years 2023-24 through 2025-26 are described below. Separate rate schedules apply to residential and non-residential customers.

Current Residential

Beginning July 1, 2023, the Wastewater Enterprise’s sewer service charges for residential customers include a fixed monthly service charge, a variable sanitary sewer component, and a stormwater runoff component based on property size and/or parcel characteristics. The sanitary sewer component continues to be based on the assumed percentage of metered water usage discharged into the sewer system, or “flow factor,” and is calculated assuming domestic strength sewage. The standard flow factor applied to metered water usage to determine billable discharge units is 90% for single-family residential accounts and 95% for multi-family residential accounts.

Pursuant to the rate schedule applicable to Fiscal Years 2023-24 through 2025-26, the SFPUC can automatically implement a temporary drought surcharge if the Commission declares a drought emergency and triggers certain drought response actions set forth in the SFPUC’s water shortage allocation plan. The surcharge may not exceed the requested volumetric reduction in water usage and would only be applied to volumetric water and wastewater charges. No drought surcharge is currently in place.

The following table sets forth the adopted single- and multi-family residential monthly service charges and sanitary sewer component of the sewer service charges for Fiscal Years 2023-24 through 2025-26, which were approved in May 2023.

**TABLE 15**  
**ADOPTED SINGLE-FAMILY AND MULTI-FAMILY RESIDENTIAL**  
**MONTHLY SEWER SERVICE CHARGES<sup>(1)</sup>**  
**FOR FISCAL YEARS 2023-24 THROUGH 2025-26**

<b>Fiscal Year</b>	<b>Monthly Service Charge</b>	<b>Sanitary Sewer Component (per discharge unit<sup>(2)</sup>)</b>
2023-24 <sup>(3)</sup>	\$4.85	\$16.91
2024-25 <sup>(3)</sup>	5.28	17.80
2025-26 <sup>(3)</sup>	5.76	18.72

<sup>(1)</sup> Does not include stormwater runoff component of the sewer service charge. See “Table 16 – Adopted Simplified Residential Monthly Stormwater Runoff Component of the Sewer Service Charge By Tier” below.

<sup>(2)</sup> One discharge unit equals 100 cubic feet of wastewater.

<sup>(3)</sup> Rates approved on May 23, 2023.

Source: SFPUC, Financial Services.

The stormwater runoff component is based on the property characteristics of the City assessor’s parcel on which a sewer account is located. Single- and multi-family residential wastewater customers with 6,000 square feet or less net parcel area and having six or fewer dwelling units are assessed a “Simplified Residential” amount, one of three tiered amounts based on their total parcel area. Residential parcels greater than 6,000 square feet of net parcel area or having more than six dwelling units, and any other parcels which do not meet the eligibility criteria for the “Simplified Residential” amount are assessed a “Standard Stormwater” amount based on the measured permeable and impermeable areas of the parcel. See “– Current Non-Residential” below. If there is more than one active sewer account on a parcel, the calculated stormwater runoff component for the City assessor’s parcel amount is split equally to all accounts. The following table sets forth the adopted “Simplified Residential” monthly stormwater runoff component of the sewer service charge by tier for Fiscal Years 2023-24 through 2025-26.

**TABLE 16**  
**ADOPTED SIMPLIFIED RESIDENTIAL**  
**MONTHLY STORMWATER RUNOFF COMPONENT**  
**OF THE SEWER SERVICE CHARGE BY TIER<sup>(1)</sup>**  
**FOR FISCAL YEARS 2023-24 THROUGH 2025-26**

<b>Fiscal Year</b>	<b>Tier 1<sup>(2)</sup> (per 100 cubic feet)</b>	<b>Tier 2<sup>(2)</sup> (per 100 cubic feet)</b>	<b>Tier 3<sup>(2)</sup> (per 100 cubic feet)</b>
2023-24 <sup>(3)</sup>	\$2.31	\$ 3.60	\$ 5.41
2024-25 <sup>(3)</sup>	5.04	7.84	11.79
2025-26 <sup>(3)</sup>	8.24	12.82	19.27

<sup>(1)</sup> For single- and multi-family residential customers with 6,000 square feet or less net parcel area and with six or fewer dwelling units.

<sup>(2)</sup> Tier 1: 0-1,700 square feet parcel area; Tier 2: 1,701-3,300 square feet parcel area; and Tier 3: 3,301-6,000 square feet parcel area.

<sup>(3)</sup> Rates approved on May 23, 2023.

Source: SFPUC, Financial Services.

The following table sets forth single- and multi-family projected average monthly bills (comprised of the monthly service charge, the sanitary sewer component of the sewer service charge and assuming Tier 2 of the stormwater runoff component of the sewer service charge) for Fiscal Years 2023-24 through 2025-26.

**TABLE 17**  
**SINGLE-FAMILY AND MULTI-FAMILY RESIDENTIAL**  
**PROJECTED AVERAGE MONTHLY BILL**  
**FOR FISCAL YEARS 2023-24 THROUGH 2025-26**

<b>Fiscal Year</b>	<b>Single-Family<sup>(1)</sup></b>	<b>Multi-Family (per dwelling unit)<sup>(1)</sup></b>
2023-24 <sup>(2)</sup>	\$77.14	\$69.75
2024-25 <sup>(2)</sup>	86.37	74.83
2025-26 <sup>(2)</sup>	96.56	80.29

<sup>(1)</sup> Average billable wastewater volume for single-family residential customers is based on projected volumes ranging from 410 to 420 cubic feet of billable wastewater discharges. Average water consumption amount for multi-family residential customers is assumed to be 1,250 cubic feet of water per month, or 1,187.5 billable discharge units, for 3 dwelling units. Assumes Tier 2 of the Simplified Residential amounts for the stormwater runoff component of the sewer service charge.

<sup>(2)</sup> Rates approved on May 23, 2023.

Source: SFPUC, Financial Services.

Effective September 2023, the SFPUC’s Customer Assistance Program offers a two-tiered discount off wastewater charges for individually metered single-family residential customers. Customers with incomes below 50% of the area median income (“AMI”) receive a 25% discount and customers with incomes below 30% of the AMI receive a 40% discount. In addition, the SFPUC’s Low-Income Non-Profit Housing Program offers a 15% discount off wastewater charges for residential customers in properties owned and operated by certain nonprofits. Finally, the SFPUC’s Community Housing Program offers a 50% discount off wastewater charges for certain single-room-occupancy hotels providing transitional housing to the homeless and general assistance recipients.

**Current Non-Residential**

Beginning July 1, 2023, the Wastewater Enterprise’s sewer service charges for non-residential customers include a fixed monthly service charge, a variable sanitary sewer component, and a stormwater runoff component based on property size and/or parcel characteristics. The sanitary sewer component continues to be based on the assumed percentage of metered water usage discharged into the sewer system and sewage loading, which measures the pollutant concentrations within customer discharges (*i.e.*, suspended solids, oil/grease and chemical oxygen demand). The standard flow factor applied to metered water usage to determine billable discharge units is 90% for non-residential accounts. Non-residential customers whose sewage loadings are not based on periodic sampling are charged based on standard parameter loadings established by the SFPUC for each Standard Industrial Classification code.

The following table sets forth the adopted non-residential monthly service charge, the sanitary sewer component of the sewer service charge, and sewage loading charges for each pollutant parameter for Fiscal Years 2023-24 through 2025-26, which were approved in May 2023.

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**TABLE 18**  
**ADOPTED NON-RESIDENTIAL**  
**MONTHLY SEWER SERVICE CHARGES<sup>(1)</sup>**  
**FOR FISCAL YEARS 2023-24 THROUGH 2025-26**

<b>Fiscal Year</b>	<b>Monthly Service Charge</b>	<b>Sanitary Sewer Component (per discharge unit<sup>(2)</sup>)</b>	<b>Suspended Solids (per pound)</b>	<b>Oil/Grease (per pound)</b>	<b>Chemical Oxygen Demand (per pound)</b>
2023-24 <sup>(3)</sup>	\$4.85	\$9.74	\$1.681	\$1.053	\$0.861
2024-25 <sup>(3)</sup>	5.28	10.09	1.808	1.142	0.925
2025-26 <sup>(3)</sup>	5.76	10.43	1.944	1.239	0.944

<sup>(1)</sup> Does not include stormwater runoff component of the sewer service charge. See “Table 19 – Adopted Standard Stormwater – Monthly Stormwater Runoff Component of the Sewer Service Charge” below.

<sup>(2)</sup> One discharge unit equals 100 cubic feet of wastewater.

<sup>(3)</sup> Rates approved on May 23, 2023.

Source: SFPUC, Financial Services.

The stormwater runoff component is based on the property characteristics of the City assessor’s parcel on which a sewer account is located. Non-residential parcels, mixed-use parcels, lots without wastewater service, residential parcels greater than 6,000 square feet of net parcel area or having more than six dwelling units, and any other parcels which do not meet the eligibility criteria for “Simplified Residential” are assessed the “Standard Stormwater” amount based on the measured permeable and impermeable areas of the parcel. Impermeable areas include sidewalks, roofs, pavement and other surfaces which do not allow for infiltration of stormwater and therefore generate greater runoff. Permeable areas include lawns, gardens, and other surfaces which do allow infiltration. Permeable and impermeable areas are determined for each parcel using geospatial analysis. If there is more than one active sewer account on a parcel, the calculated stormwater runoff component for the City assessor’s parcel amount is split equally to all accounts. The following table sets forth the adopted “Standard Stormwater” monthly stormwater runoff component of the sewer service charge for Fiscal Years 2023-24 through 2025-26.

**TABLE 19**  
**ADOPTED STANDARD STORMWATER**  
**MONTHLY STORMWATER RUNOFF COMPONENT**  
**OF THE SEWER SERVICE CHARGE<sup>(1)</sup>**  
**FOR FISCAL YEARS 2023-24 THROUGH 2025-26**

<b>Fiscal Year</b>	<b>Permeable Area (per 100 cubic feet)</b>	<b>Impermeable Area (per 100 cubic feet)</b>
2023-24 <sup>(2)</sup>	\$0.19	\$1.89
2024-25 <sup>(2)</sup>	0.41	4.11
2025-26 <sup>(2)</sup>	0.67	6.72

<sup>(1)</sup> For non-residential, mixed-use, and large residential parcels (over 6,000 square feet or with more than six dwelling units).

<sup>(2)</sup> Rates approved on May 23, 2023.

Source: SFPUC, Financial Services.

**Appeals.** While most customers are billed for sewer usage based on standard flow factor assumptions, customers may appeal this determination. For example, it is assumed that 90% of the volume of water measured at the customer meter for a single-family residential user is discharged to the sewer system as wastewater requiring treatment. Customers who can demonstrate higher rates of consumptive use than that reflected in the applicable flow factor, such as irrigation, can apply to the Residential Users Appeals Board for a lower flow factor (*i.e.*, percentage of metered water returned to the sewage system).

## Revenues

**Sewer Service Charges.** Sewer service charges are imposed based on discharge volume estimates and, in the case of non-residential users, suspended solids, oil and grease and chemical oxygen demand. See “– Wastewater Enterprise Rates and Charges.” The following table shows billed discharge by category for Fiscal Years 2018-19 to 2022-23.

**TABLE 20  
ANNUAL BILLED DISCHARGE BY CATEGORY  
FOR FISCAL YEARS 2018-19 TO 2022-23**

Fiscal Year	Volume (Hundred Cubic Feet)	Suspended Solids (Thousand Pounds) <sup>(1)</sup>	Oil and Grease (Thousand Pounds) <sup>(1)</sup>	Chemical Oxygen Demand (Thousand Pounds) <sup>(1)</sup>
2018-19	23,869,718	41,543	12,656	101,847
2019-20	23,671,422	41,198	12,551	101,001
2020-21	21,242,770	36,971	11,264	90,638
2021-22	20,958,241	36,523	11,127	89,541
2022-23	21,014,073	36,573	11,142	89,663

<sup>(1)</sup> Listed pounds of strength parameters include both usage by non-residential users, for whom strengths are calculated and assessed separately, as well as assumed usage for residential users, for whom assumed strengths are embedded in the billed volumetric rate.

Source: SFPUC, Financial Services.

The following table shows sewer billings by customer class for Fiscal Years 2018-19 to 2022-23. For Fiscal Year 2022-23, the top 10 retail customers accounted for approximately 3.9% of sewer billings.

**TABLE 21  
ANNUAL SEWER BILLINGS BY USER TYPE  
FOR FISCAL YEARS 2018-19 TO 2022-23  
(IN THOUSANDS)**

User Type	2018-19	2019-20	2020-21	2021-22	2022-23
Multi-Family Residential	\$133,454	\$146,630	\$153,697	\$161,553	\$167,375
Single-Family Residential	79,971	89,688	95,297	96,687	96,545
<i>Subtotal Residential</i>	<u>\$213,425</u>	<u>\$236,318</u>	<u>\$248,994</u>	<u>\$258,240</u>	<u>\$263,920</u>
Commercial	\$90,781	\$86,237	\$60,490	\$78,207	\$86,205
Municipal Customers	7,517	7,400	6,114	8,829	9,197
Suburban	3	3	3	2	3
<b>Total</b>	<b><u>\$311,726</u></b>	<b><u>\$329,958</u></b>	<b><u>\$315,601</u></b>	<b><u>\$345,278<sup>(1)</sup></u></b>	<b><u>\$359,325<sup>(2)</sup></u></b>

<sup>(1)</sup> Increase in Fiscal Year 2021-22 billings primarily due to planned rate increase implemented on July 1, 2021; also includes two months of mandatory temporary drought surcharge of 5% effective as of April 1, 2022.

<sup>(2)</sup> Increase in Fiscal Year 2022-23 billings primarily due to mandatory temporary drought surcharge of 5% in place through May 1, 2023.

Source: SFPUC, Financial Services.

**Sewer Account Billing and Delinquencies.** Sewer service charges are billed on a combined water and sewer utility bill on either a monthly or bi-monthly basis. Payments are due 15 days after the bill date. If payments are not made, late payment charges are assessed 15 days from the due date or 30 days from the bill date. Accounts are considered delinquent 15 days after a second unpaid combined water and sewer utility bill. Water service may be disconnected, or a lien may be assessed against the property for non-payment of water and sewer services.

Current accounts receivables as of June 30, 2023, are shown in the following table. These amounts exclude receivables from Municipal Customers.

**TABLE 22**  
**ACCOUNTS RECEIVABLES AGING REPORT**  
**AS OF JUNE 30, 2023**

<b>Period</b>	<b>Amount</b>	<b>Percent of Total</b>	<b>Percent of Total Fiscal Year 2022-23 Revenues<sup>(1)</sup></b>
Current	\$15,810,268	45.58%	4.59%
31 – 60 Days	2,620,040	7.55	0.76
61 – 90 Days	1,653,812	4.77	0.48
Over 90 Days <sup>(2)</sup>	14,604,581	42.10	4.24
Total	<u>34,688,702</u>	<u>100.00%</u>	
Credit Balances	<u>(1,306,835)</u>		
Total Aged Receivables	33,381,867		
Less Allowance For Doubtful Accounts	<u>(10,626,516)</u>		
Accounts Receivable, Net of Allowance	\$22,755,351		

<sup>(1)</sup> Revenues consists of sewer service charges only.

<sup>(2)</sup> Includes approximately \$11.8 million in outstanding tax liens and balances forwarded to the City Treasurer’s Bureau of Delinquent Revenue for collection.

Source: SFPUC, Financial Services.

Once an account is delinquent, a series of notices are sent to the customer and if payment is still not made, action to shut off the water supply is initiated. However, if the delinquent account is in the name of the property owner and payment is still not made despite such notices, the customer will receive a lien warning notice. After a lien notice is delivered, a lien hearing is held and, if the bill still remains outstanding, the lien is recorded and can only be removed upon full payment of all unpaid charges, plus administrative fees and interest. Liens not paid during the Fiscal Year in which they are recorded are transferred to the City Tax Collector’s Office, Bureau of Delinquent Revenues for collection as a lien against the property. Accounts for which property transfers occurred prior to recording the lien and closed accounts with amounts less than \$25 are normally written off as uncollectible.

Since the start of the COVID-19 pandemic, the number of SFPUC account bills that are 90 days or more past due has grown from approximately \$631,000 in March 2020 to approximately \$14.6 million at the end of Fiscal Year 2023. Such increase is primarily driven by a moratorium on water shutoffs, liens and other collections processes resulting from the COVID-19 pandemic, which allowed customers to accrue large arrearages without any financial penalties. The moratorium is still currently in effect; however, the SFPUC has discretion to restart severance and liens processes to multifamily residential accounts carrying balances greater than \$25,000 which are 90 days or more past due and plans to resume such processes in Fiscal Year 2024-25.

The State Water Resources Control Board previously created the California Water and Wastewater Arrearages Payment Program to provide relief to community water and wastewater systems for unpaid bills related to the COVID-19 pandemic. The funding covered water debt from residential and commercial customers accrued between March 4, 2020 and June 15, 2021. The SFPUC received approximately \$15.2 million of funding under the original arrearages program, \$9.3 million of which has been credited against eligible wastewater accounts. In July 2023, Governor Newsom signed a budget trailer bill expanding the program to December 31, 2022. The SFPUC has received approximately \$19.7 million of funding under the extended arrearages program, \$11.6 million of which has been credited against eligible wastewater accounts.

As part of the SFPUC’s Customer Assistance Program effective July 1, 2023, the Commission approved the suspension of the application of late payment charges to single-family residential water and wastewater accounts

which are past-due on their bills, as well as a shutoff and lien policy which establishes that all accounts with household incomes at or below 50% of AMI that are enrolled in the SFPUC’s Customer Assistance Program and maintain engagement with the SFPUC are eligible to be exempted from disconnection or lien due to nonpayment. For more information regarding the SFPUC’s Customer Assistance Program, see “– Wastewater Enterprise Rates and Charges – *Current Wastewater Rates and Charges* – Current Residential.”

Because of these collections processes, the SFPUC’s annual write-offs for wastewater accounts remain relatively low. The following table shows a five-year history of write-offs for uncollectible accounts, excluding Municipal Customers:

**TABLE 23  
WRITE-OFFS FOR UNCOLLECTIBLE ACCOUNTS  
FISCAL YEARS 2018-19 TO 2022-23**

<b>Fiscal Year</b>	<b>Amount</b>
2018-19	\$2,232
2019-20	1,631
2020-21	1,801
2021-22 <sup>(1)</sup>	0
2022-23	1,784

<sup>(1)</sup> No amount for write-offs for uncollectible accounts in Fiscal Year 2021-22 due in part to the suspension in collection activities from the COVID-19 pandemic.

Source: SFPUC, Financial Services.

**Capacity Charges.** Effective July 1, 2005, any customer requesting a new connection to the sewer system or requiring additional collection or treatment capacity because of any addition, improvement, modification or change in use of an existing connection as determined solely by the General Manager must pay a capacity charge for the new or additional capacity required to serve the customer. The capacity charge is site specific and may not be sold, traded or conveyed in a manner to another site or customer. The capacity charge does not convey or imply ownership in or of any facilities of the Wastewater Enterprise.

Effective July 1, 2014, capacity charges are assessed based on water meter equivalents, which provide a direct estimate of wastewater flow to the system, and Standard Industrial Classification code, which accounts for wastewater strength. For a single residential customer with a 5/8” water meter, the wastewater capacity charge fee for Fiscal Year 2023-24 is \$5,834. The capacity charge is adjusted on July 1 of each subsequent year by the annual change in the 20-City Average Construction Cost Index published by Engineering News Record Magazine.

Capacity charges have averaged approximately 1.3% of revenues from Fiscal Year 2019-2020 through 2022-23.

### **Operating and Maintenance Expenses**

“**Operating and Maintenance Expenses**” cover the general operational expenses of the Wastewater Enterprise. These expenses include labor and employment benefits, contractual services, materials and supplies, depreciation, general and administrative, services from other departments and other miscellaneous costs. See “HISTORICAL OPERATING RESULTS” and “THE PUBLIC UTILITIES COMMISSION – Employee Relations.” Services from other departments include payment for services from other City departments, such as the City Attorney’s Office and the General Services Agency.

**Allocation of Costs.** Various common costs incurred by the SFPUC are allocated among the Wastewater Enterprise, the Water Enterprise and the Power Enterprise. Allocations are based on methodology established by an independent indirect cost study, and SFPUC management’s best estimates and may change from year to year depending on activities undertaken by each enterprise and information available.

For Fiscal Years 2021-22 and 2022-23, the SFPUC allocated \$36.4 million and \$37.6 million, respectively, in administrative costs to the Wastewater Enterprise. For Fiscal Year 2023-24, the SFPUC has budgeted \$39.0 million in administrative costs to the Wastewater Enterprise. Administrative costs are recorded as personal service expenses and also in other various operating expenses in the Wastewater Enterprise financial statements.

**Payments to/from the City.** The SFPUC receives payments from other City agencies for their share of the proportionate cost of the wastewater utility service provided to them. For Fiscal Years 2021-22 and 2022-23, these service deliveries generated approximately \$7.8 million and \$8.0 million in revenues, respectively. Over the past five Fiscal Years, including Fiscal Year 2022-23, revenues from service deliveries have averaged approximately 1.9% of Wastewater Enterprise revenues. For Fiscal Year 2023-24, the SFPUC has budgeted \$8.0 million in revenues from service deliveries.

A variety of City departments provide services such as engineering, purchasing, legal, telecommunications and human resources to the Wastewater Enterprise, and charge amounts designed to recover those costs. For Fiscal Years 2021-22 and 2022-23, these charges totaled approximately \$37.7 million and \$35.7 million, respectively. For Fiscal Year 2023-24, the SFPUC has budgeted \$38.8 million for such charges.

The SFPUC makes payments to the City relating to the financing of the SFPUC's headquarters at 525 Golden Gate Avenue, San Francisco, California. See "OBLIGATIONS PAYABLE FROM NET REVENUES – Other Subordinate Obligations Payable from Net Revenues."

### **Financial Management Policies**

*The SFPUC makes no representation that the following policies and targets will not be revised or amended and, except to the extent required for compliance with the terms of the Indenture, makes no representation that these policies will be followed by the SFPUC or that targets will be met.*

**Debt Management Policies and Procedures.** The SFPUC has established "Debt Management Policies and Procedures" (the "**Debt Policies**") for debt financing under its jurisdiction. The SFPUC has also established separate "SFPUC Municipal Securities Disclosure Policies and Procedures" (the "**Disclosure Policies**") which are appended to the Debt Policies. The Debt Policies, including the appended Disclosure Policies, apply to all SFPUC enterprises, including the Wastewater Enterprise, and are intended to enable the SFPUC to effectively manage its debt issuance and administration practices and comply with all debt issuance and administration rules and regulations. The Debt Policies are reviewed bi-annually and revised, as necessary, with Commission approval.

Revisions to the Debt Policies were most recently adopted by the Commission in 2019. This included revisions to three key areas:

(1) Disclosure – The Disclosure Policies now cover two amendments that were made to Rule 15c2-12, effective February 27, 2019 (the "**Rule 15c2-12 Amendments**"). See the Listed Events 15 and 16 in "APPENDIX D – FORM OF CONTINUING DISCLOSURE CERTIFICATE." In addition, pursuant to the Disclosure Policies, the SFPUC developed a Disclosure Practices Working Group (the "**DPWG**"). The DPWG meets at least semiannually to better and more effectively administer the SFPUC's continuing disclosure requirements, particularly to monitor the SFPUC's financial obligations and financial difficulties, if any, in light of the Rule 15c2-12 Amendments. The DPWG is comprised of the Chief Financial Officer and Assistant General Manager, Business Services, two Deputy Chief Financial Officers and the Debt Manager of the SFPUC, with legal consultation from the City Attorney's Office and the SFPUC's outside disclosure counsel.

(2) Variable Rate Obligations – The Debt Policies, which set forth and describe various types of debt obligations that the SFPUC may issue, now allow the SFPUC to issue variable rate obligations of the Wastewater Enterprise with more market-standard provisions.

(3) WIFIA Loans – The Debt Policies were revised to add WIFIA loans as a permitted form of low-cost debt financing instrument, comparable to the low-cost State Revolving Fund loans that the SFPUC has, from

time-to-time, executed with the State. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Water Infrastructure Finance and Innovation Act Loans.”

**Debt Service Coverage Policy.** The Commission adopted a debt service coverage policy (the “**Debt Service Coverage Policy**”) in 2017, which applies to all SFPUC enterprises, including the Wastewater Enterprise. Pursuant to the Debt Service Coverage Policy, to ensure that the SFPUC maintains access to low-cost capital and retains financial flexibility for contingencies, the SFPUC will aim to adopt budgets, rates and financial plans that generate revenues such that debt service coverage calculated on an Indenture basis (including certain available fund balances) will be at least 1.35 times and debt service coverage calculated on a current basis (Net Revenues divided by debt service on Bonds and Parity Loans) will be at least 1.10 times.

Separate from the Debt Service Coverage Policy, the Indenture includes a rate covenant that debt service coverage calculated on an Indenture basis (including certain available fund balances) will be at least 1.25 times. See “SECURITY FOR THE BONDS – Rate Covenants – *Debt Service Coverage*.”

**Capital Financing Policy.** The Commission adopted a capital financing policy (the “**Capital Financing Policy**”) in 2017, which applies to all SFPUC enterprises, including the Wastewater Enterprise. The SFPUC relies mainly on current revenue and debt financing to pay for capital assets or improvements. According to the Capital Financing Policy, the appropriate mix of current revenues versus debt financing depends, in part, on the capital investment lifecycle of the Wastewater Enterprise. Accordingly, the SFPUC has determined that over the 10-year financial planning horizon, the SFPUC will aim to pay for a minimum ranging between 15% and 30% of the Wastewater Enterprise’s capital budget from current revenues.

**Fund Balance Reserve Policy.** The Commission adopted a fund balance reserve policy (the “**Fund Balance Reserve Policy**”) in 2017, which applies to all SFPUC enterprises, including the Wastewater Enterprise. Pursuant to the Fund Balance Reserve Policy, for the time period covered in the 10-year financial plan, the SFPUC will aim to propose operating and capital budgets and rates for adoption such that the Fund Balance Reserve totals a minimum of 90 days or 25% of operations and maintenance expenses (including programmatic projects and excluding debt service and revenue-funded capital) throughout the forecast period. Amounts in excess of such minimum will be considered for contingencies and rate stabilization.

**Affordability Policy.** The Commission adopted its most recent affordability policy (the “**Affordability Policy**”) in 2023, which applies to the Wastewater Enterprise and the Water Enterprise. Pursuant to the Affordability Policy, the SFPUC will, when adopting rates and approving budgets and financial plans, review the average residential combined water and sewer bill over the next 20 years, and aim to set rates that will result in the average residential combined bill not exceeding 3% of income for a “typical” customer (defined as the 40<sup>th</sup> percentile San Francisco household income), 7% of income for a “low-income” customer (defined as the 20<sup>th</sup> percentile San Francisco household income), and 5% of income for a “low-income” customer after accounting for enrollment in applicable low-income discount programs (see “FINANCIAL OPERATIONS – Wastewater Enterprise Rates and Charges”). If such average residential combined bills are projected to exceed the targets within the 20-year period, the SFPUC must provide a rationale and develop strategies to reduce costs, including providing progress reports to the Commission in subsequent budget and financial plan adoptions.

## **Investment of SFPUC Funds**

The SFPUC’s pooled deposits and investments are invested pursuant to State law and the investment policy established from time to time by the City Treasurer and overseen by the Treasury Oversight Committee. The current policy seeks the preservation of capital, liquidity and yield, in that order of priority. Under the City Treasurer’s current investment procedures, the SFPUC’s pooled deposits and investments are invested in the City’s larger pooled investment fund (the “**City Pool**”). Among other purposes, the City Pool serves in effect as a disbursement account for expenditures from the City’s various segregated and pooled funds. Investments are generally made so that securities can be held to maturity. The City Treasurer calculated the weighted average maturity of these investments as of March 31, 2024, to be 438 days (most recent data available).

The following table sets forth the approximate book values of the investments held in the City Pool reported by the City Treasurer as of March 31, 2024. The Wastewater Enterprise’s pooled deposits and investments

accounted for approximately \$397.92 million, or approximately 2.497%, of such amounts. The Water Enterprise and the Power Enterprise each have their own pooled deposits and investments that are separate from the Wastewater Enterprise.

**TABLE 24  
CITY POOLED INVESTMENT FUND  
(AS OF MARCH 31, 2024)**

<b>Investments</b>	<b>Book Value (millions)</b>
U.S. Treasuries	\$3,551.2
Federal Agencies	6,804.0
Public Time Deposits	40.0
Negotiable CDs	2,080.0
Commercial Paper	1,164.1
Money Market Funds	1,688.3
Supranationals	608.1
<b>Total</b>	<b>\$15,935.7</b>

*Source: Office of the Treasurer and Tax Collector of the City and County of San Francisco.*

The SFPUC’s non-pooled deposits and investments consist primarily of funds related to the SFPUC’s Outstanding Bonds, which are invested pursuant to policy established by the SFPUC, subject to the restrictions contained in the applicable bond documentation.

**Risk Management and Insurance**

The SFPUC’s risk management program encompasses both self-insured and insured coverage. Risk assessments and coverage are coordinated by the SFPUC Enterprise Risk Manager through the City Office of Risk Management. With certain exceptions, the City and SFPUC’s general approach is to first evaluate self-insurance for the risk of loss to which it is exposed. Based on this analysis, the SFPUC has determined that mitigating risk through a “self-retention” mechanism is more economical as it manages risks internally and administers, adjusts, settles, defends and pays claims from budgeted resources (*i.e.*, pay-as-you-go). When economically more viable or when required by debt financing covenants, the SFPUC obtains commercial insurance.

At least annually, the City reviews and actuarially determines general liability and workers’ compensation liabilities, which are recorded as “Damages and Claims” and “Accrued Worker’s Compensation” in the financial statements.

The SFPUC does not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the Property Insurance program.

The following is a summary of the SFPUC’s coverage approach to risk:

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<b>Primary Risks</b>	<b>Typical Coverage Approach</b>
General Liability	Purchased Insurance & Self-Insured
Property	Purchased Insurance & Self-Insured
Electronic Data Processing	Purchased Insurance & Self-Insured
Workers' Compensation	Self-Insured through City-Wide Pool
<b>Other Risks</b>	<b>Typical Coverage Approach</b>
Surety Bonds	Purchased and Contractually Transferred
Professional Liability	Combination of Self-Insured, Purchased Insurance and Contractual Risk Transfer
Errors & Omissions	Combination of Self-Insured, Purchased Insurance and Contractual Risk Transfer
Builders Risk	Purchased Insurance & Contractual Risk Transfer
Public Officials Liability	Purchased Insurance
Employment Practices Liability	Purchased Insurance
Crime	Purchased Insurance
Cyber Liability	Purchased Insurance

The SFPUC's property risk management approach varies depending on whether the facility is currently under construction, or if the property is part of revenue-generating operations. The majority of purchased insurance is for revenue-generating facilities, debt-financed facilities and mandated coverage to meet statutory or contractual requirements. The SFPUC's insured coverage is through an insurance policy purchased by the City specifically for the SFPUC, which provides up to \$500 million of coverage against certain losses with respect to scheduled property. The schedule includes properties for the SFPUC's enterprises which have a total value of approximately \$3.0 billion.

Additionally, the SFPUC acknowledges the importance of aligning strategic planning to the risk management process and has implemented an Enterprise Risk Management program to meet this need. The framework provides a strategic approach to managing operational risks. The Enterprise Risk Management program has been implemented thus far for Information Technology Services, the Power Enterprise and CleanPowerSF and plans are in place to continue implementation across the remainder of the SFPUC as needed.

**Capital Project Risk Management.** For capital construction projects, similar to the City's practice, the SFPUC has utilized traditional contractual risk transfer, contractor-controlled insurance programs or other alternative insurance programs. Under the latter two approaches, the insurance program usually provides coverage for the entire construction project, along with multiple risk coverages, such as general liability and workers compensation. When a contractual risk transfer is used for capital construction risks, the SFPUC requires each contractor to provide its own insurance, while ensuring that the full scope of work be covered with satisfactory levels to limit the SFPUC's risk exposure balanced by that which is commercially available.

Performance bonds are required, and builder's risk insurance must be purchased, in most phases of the construction contracting process for such phases, as bid, performance, and payment or maintenance. Additionally, bonds may be required in other contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty.

Professional liability policies are either directly purchased insurance on behalf of the SFPUC, transferred through contract to the contracted professional, or retained through self-insurance on a case-by-case basis depending on the size, complexity or scope of construction or professional service contracts. Professional liability policies are typically purchased for services provided by engineers, architects, design professionals and other licensed or certified professional service providers.

Builder's risk policies of insurance are required to be provided either through an owner-controlled insurance program or the contractor on all construction projects for the full value of the construction.

## HISTORICAL OPERATING RESULTS

### Summary of Historical Operating Results and Debt Service Coverage

The historical results of operations reflected in the following table are based on the tables contained in the SFPUC's financial statements entitled "Statements of Revenues, Expenses and Changes in Net Position" and "Statements of Cash Flows" for the Fiscal Years listed. Table 25 excludes certain non-operating revenue and expenses included in the "Statements of Revenues, Expenses and Changes in Net Position" table in the audited financial statements. Consequently, "Operating and Investment Income" presented in Table 25 differs from "Change in net position" in the "Statements of Revenues, Expenses and Changes in Net Position" table in the audited financial statements. The calculation of debt service coverage includes net operating income and funds not budgeted to be spent in the next twelve months and legally available to pay debt service, as permitted under the Indenture. The audited financial statements of the Wastewater Enterprise for Fiscal Years 2022-23 and 2021-22, prepared by the SFPUC, are attached as APPENDIX B to this Official Statement. The audited financial statements for Fiscal Year 2022-23 were audited by Macias Gini & O'Connell LLP, independent certified public accountants, and the audited financial statements for Fiscal Year 2021-22 were audited by KPMG LLP, independent certified public accountants. The following table should be read in conjunction with such financial statements. Macias Gini & O'Connell LLP and KPMG LLP have not reviewed the following table. See "APPENDIX B – SFPUC WASTEWATER ENTERPRISE FINANCIAL STATEMENTS."

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**TABLE 25**  
**HISTORICAL REVENUE, OPERATING & MAINTENANCE EXPENSE**  
**AND DEBT SERVICE COVERAGE FOR FISCAL YEARS ENDED JUNE 30**  
**(IN THOUSANDS)<sup>(1)</sup>**

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
<b>OPERATING &amp; INVESTMENT REVENUE</b>					
Sewer Service Charges <sup>(2)</sup>	\$317,761	\$331,721	\$316,766	\$354,526	\$352,986
Other Revenues <sup>(3)</sup>	6,443	6,511	5,719	7,037	7,048
Investing Activities <sup>(4)</sup>	20,701	12,137	(1,187)	(7,087)	2,556
Capacity Charges <sup>(5)</sup>	6,877	5,896	3,710	6,280	3,077
Total Revenues	<u>\$351,782</u>	<u>\$356,265</u>	<u>\$325,008</u>	<u>\$360,756</u>	<u>\$365,667</u>
<b>OPERATING &amp; MAINTENANCE EXPENSE</b>					
Salary and Fringe Benefits <sup>(6)</sup>	\$80,693	\$91,013	\$90,449	\$63,456	\$89,726
Contractual Services	19,040	19,357	18,861	19,115	20,777
Materials and Supplies <sup>(7)</sup>	9,853	8,991	9,091	11,844	14,306
Depreciation <sup>(8)</sup>	60,033	62,967	72,018	77,573	78,035
Services of Other Departments	36,629	37,309	38,313	39,645	40,999
General and Administrative <sup>(9)</sup>	6,470	4,969	3,854	6,353	(950)
Other <sup>(10)</sup>	47,095	37,653	58,151	37,024	11,390
Total Operating Expenses	<u>\$259,813</u>	<u>\$262,259</u>	<u>\$290,737</u>	<u>\$255,010</u>	<u>\$254,283</u>
<b>OPERATING AND INVESTMENT INCOME</b>	<u>\$91,969</u>	<u>\$94,006</u>	<u>\$34,271</u>	<u>\$105,746</u>	<u>\$111,384</u>
<b>COVERAGE CALCULATION<sup>(11)</sup></b>					
Operating and Investment Income	\$91,969	\$94,006	\$34,271	\$105,746	\$111,384
+ Adjustment to Investing Activities <sup>(12)</sup>	(8,047)	2,950	4,356	8,422	2,392
+ Depreciation & Non-Cash Expenses	68,568	68,603	78,368	77,806	84,450
+ Changes in Working Capital <sup>(13)</sup>	(2,125)	523	(8,596)	(36,470)	(19,376)
= "Net Revenues"	150,365	166,082	108,399	155,504	178,850
+ Other Available Funds <sup>(14)</sup>	103,281	215,722	197,778	155,331	134,593
Funds Available for Bond Debt Service	<u>\$253,646</u>	<u>\$381,804</u>	<u>\$306,177</u>	<u>\$310,835</u>	<u>\$313,443</u>
Bond and Loan Debt Service <sup>(15)(16)</sup>	\$60,347	\$62,797	\$82,066	\$86,619	\$98,811
<b>DEBT SERVICE COVERAGE<sup>(15)</sup></b>					
Indenture Basis <sup>(14)(17)</sup>	4.20x	6.08x	3.73x	3.59x	3.17x
Current Basis <sup>(18)</sup>	2.49x	2.64x	1.32x	1.80x	1.81x

(1) Operating and Investment Income presented in this table differs from the "Change in net position" presented in the "Statements of Revenues, Expenses and Changes in Net Position" in the audited financial statements set forth in "APPENDIX B – SFPUC WASTEWATER ENTERPRISE FINANCIAL STATEMENTS." This table presents Debt Service Coverage as defined under the Indenture and excludes certain elements of non-operating revenue and expenses included in the "Statements of Revenues, Expenses and Changes in Net Position" table in the audited financial statements. Examples of excluded elements are grant revenue, interest expense and gains from sale of assets. Totals may not add due to independent rounding.

(2) Decrease in Fiscal Year 2022-23 is mainly due to an increase in allowance for doubtful accounts as there were more sewer charge receivables aging over 120 days, offset by a 5% drought surcharge and a sanitary flow increase of 47,124 ccf or 0.2% from residential and non-residential customers.

(3) Includes approximately \$476,000 in non-operating revenues in Fiscal Year 2021-22 and \$680,000 in non-operating revenues in Fiscal Year 2022-23 only. Does not include non-operating revenues for prior Fiscal Years.

(4) Increase in Fiscal Year 2022-23 is mainly due to a decrease in unrealized loss in City Treasury pooled investments attributed to improved market value of investments and higher interest rates, an increase in interest earned from pooled cash due to increase in cash balances and higher annualized interest rate, increase in interest earned from fiscal agent account due to increase in fiscal agent cash balances and rising interest rates, and interest earned from lease receivables.

(footnotes continue on following page)

- (5) Decrease in Fiscal Year 2022-23 is mainly due to a decrease in revenue resulting from decreases in average permit price by 55% and permits issued by 12.2%, offset by decrease in allowance for doubtful accounts and adjustments.
  - (6) Decrease in Fiscal Year 2021-22 mainly related to GASB 68 pension adjustment offset by a 4% increase in cost of living adjustment (“COLA”). Increase in Fiscal Year 2022-23 is mainly due to an increase in expenses related to GASB 68 pension adjustment and 5.25% increase in COLA.
  - (7) Increase in Fiscal Year 2022-23 is mainly due to increase in water sewage treatment supplies for Bayside Operations.
  - (8) Increase in Fiscal Year 2022-23 is mainly due to more capitalized assets put in service.
  - (9) Decrease in Fiscal Year 2022-23 is mainly due to decrease in judgment and claims expenses.
  - (10) Decrease in Fiscal Year 2022-23 is mainly due to increased capitalized expenditures to fixed assets.
  - (11) The Indenture defines “Net Revenues” on a cash basis.
  - (12) Represents adjustments to show investing activities on a cash basis.
  - (13) Represents adjustments to bring net income to a cash basis.
  - (14) Per the Indenture, includes any fund balances of the SFPUC or the Wastewater Enterprise available for payment of debt service and not budgeted to be expended during the 12 months following a calculation date, excluding monies held in any Reserve Account established under the Indenture.
  - (15) Bond and Loan Debt Service and Debt Service Coverage calculated per Indenture are net of capitalized interest, federal interest subsidy payments and Excluded Principal; these differ from amounts presented in previous Annual Reports (as defined herein) and financial statements.
  - (16) Bond and Loan Debt Service and Debt Service Coverage does not include debt service on subordinate obligations, including the Wastewater Enterprise’s share of lease payments associated with the 2009 Golden Gate COPs and debt service on Commercial Paper Notes.
  - (17) Calculated as the sum of Net Revenues plus “Other Available Funds,” divided by debt service on Bonds (including Parity Loans). The Indenture includes a rate covenant of 1.25x “Debt Service Coverage.” See “SECURITY FOR THE BONDS – Rate Covenants – *Debt Service Coverage*.”
  - (18) Calculated as Net Revenues divided by debt service on Bonds (including Parity Loans).
- Source: SFPUC, Financial Services.*

## **PROJECTED OPERATING RESULTS**

The following table presents projected operating results for the Wastewater Enterprise. These projections are based on an analysis of historical trends, adjusted where appropriate for known or anticipated changes in operations. The projections are also based on the assumption that all rate increases necessary to finance future expenses, including the Wastewater Enterprise’s capital program, will be approved and implemented.

THESE PROJECTIONS, ALL OR SOME OF WHICH MAY OR MAY NOT BE REALIZED, ARE BASED ON THE ISSUANCE OF ADDITIONAL BONDS FOR THE CAPITAL PROGRAM. CHANGES IN THE CIRCUMSTANCES THAT FORM THE BASES FOR THE ASSUMPTIONS USED IN DEVELOPING THESE PROJECTIONS, AS WELL AS UNANTICIPATED EVENTS, MAY OCCUR SUBSEQUENT TO THE DATE OF THIS OFFICIAL STATEMENT. THEREFORE, ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THE PROJECTIONS SHOWN.

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**TABLE 26**  
**PROJECTED REVENUE, OPERATING AND MAINTENANCE EXPENSE**  
**AND DEBT SERVICE COVERAGE FOR FISCAL YEAR ENDING JUNE 30**  
**(IN THOUSANDS)<sup>(1)</sup>**

	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>
<b>REVENUE</b>					
Sewer Service <sup>(2)</sup>	\$386,109	\$434,041	\$478,757	\$535,308	\$598,926
Capacity Charges	5,168	5,323	5,483	5,647	5,817
Interest Income <sup>(3)</sup>	6,639	2,056	1,941	1,795	2,251
Other Miscellaneous Income	8,064	7,161	7,334	7,540	7,751
Total Revenues	<u>\$405,979</u>	<u>\$448,582</u>	<u>\$493,515</u>	<u>\$550,289</u>	<u>\$614,746</u>
<b>OPERATION AND MAINTENANCE COSTS OF THE WASTEWATER ENTERPRISE<sup>(4)</sup></b>	\$224,124	\$224,568	\$224,752	\$231,559	\$238,731
<b>less FUND BALANCE BUDGETED AND APPROPRIATED NET REVENUES<sup>(5)</sup></b>	<u>(10,085)</u>	<u>(9,428)</u>	<u>(12,008)</u>	<u>(14,657)</u>	<u>(14,635)</u>
<b>plus OTHER AVAILABLE FUNDS<sup>(6)</sup></b>	<u>\$155,887</u>	<u>\$159,101</u>	<u>\$147,093</u>	<u>\$132,435</u>	<u>\$117,800</u>
<b>FUNDS AVAILABLE FOR DEBT SERVICE</b>	\$347,827	\$392,543	\$427,864	\$465,823	\$508,450
<b>DEBT SERVICE<sup>(7)(8)</sup></b>	\$95,114	\$119,236	\$145,076	\$234,597	\$309,486
<b>DEBT SERVICE COVERAGE<sup>(8)</sup></b>					
Indenture Basis <sup>(9)</sup>	3.66x	3.29x	2.95x	1.99x	1.64x
Current Basis <sup>(10)</sup>	2.02x	1.96x	1.94x	1.42x	1.26x

(1) Amounts set forth in the table are projections. Projections for Fiscal Year 2023-24 are based on the SFPUC's quarterly audit and performance review report for the third quarter of Fiscal Year 2023-24, ending March 31, 2024. Projections for Fiscal Years 2024-25 through 2027-28 are based on the 2025 Financial Plan, adopted by the Commission on February 13, 2024. Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" and "-- Assumptions Used in Projections." Totals may not add due to independent rounding.

(2) Reflects approved annual rate increases of 9% for Fiscal Years 2023-24 through 2025-26 and estimated annual rate increases of 12% for Fiscal Years 2026-27 and 2027-28, which are subject to future approval. See "-- Assumptions Used in Projections."

(3) Assumes a 1.2% earnings rate on invested cash balance through Fiscal Year 2026-27 and 1.7% for Fiscal Year 2027-28.

(4) Operating and Maintenance Expenses net of depreciation and other non-cash items per Indenture.

(5) Represents Net Revenues under the Indenture.

(6) Per the Indenture, includes any fund balances of the SFPUC or the Wastewater Enterprise available for payment of debt service and not budgeted to be expended during the 12 months following a calculation date, excluding monies held in any Reserve Account established under the Indenture.

(7) Projected debt service consists of the projected, not actual, debt service on the 2010B Bonds (net of anticipated Refundable Credits), 2013B Bonds, 2016A Bonds, 2016B Bonds, 2018A Bonds, 2018B Bonds, 2021A Bonds, 2021B Bonds, 2022B Bonds, BDFP WIFIA Bond, 2023A Bonds, 2023B Bonds, 2023C Bonds, 2024ABCD Bonds (all net of capitalized interest), Additional Bonds and seven existing Parity Loans. Projected debt service does not include debt service on the STPI WIFIA Bond or the Project 1 WIFIA Bond. Assumes continuation of current 5.7% sequestration rate for Refundable Credits (see "SECURITY FOR THE BONDS – Rate Covenants – Debt Service Coverage"). See also "-- Assumptions Used in Projections – Projected Debt Service."

(8) Debt Service and Debt Service Coverage does not include debt service on subordinate obligations, including the Wastewater Enterprise's share of lease payments associated with the 2009 Golden Gate COPs and debt service on Commercial Paper Notes.

(footnotes continue on following page)

- (9) Calculated as the sum of Net Revenues plus “Other Available Funds,” divided by debt service on Bonds and Parity Loans. The Indenture includes a rate covenant of 1.25x “Debt Service Coverage.” See “SECURITY FOR THE BONDS – Rate Covenants – *Debt Service Coverage*.”
- (10) Calculated as Net Revenues divided by debt service on Bonds and Parity Loans.
- Source: *SFPUC, Financial Services*.

### **Assumptions Used in Projections**

The projections for Fiscal Year 2023-24 are based on the SFPUC’s quarterly audit and performance review report for the third quarter of Fiscal Year 2023-24, ending March 31, 2024, and the projections for Fiscal Years 2024-25 through 2027-28 are based on the 2025 Financial Plan, adopted by the Commission on February 13, 2024. In the preparation of the projections set forth in the table above, the SFPUC has made certain assumptions with respect to conditions that may occur in the future. While the SFPUC believes these assumptions are reasonable for the purpose of the projections, they are dependent on future events, and actual conditions are likely to differ, perhaps materially, from those assumed. To the extent actual future conditions differ from those assumed by the SFPUC or provided to the SFPUC by others, actual results will vary from those projected. This projected information has not been compiled, reviewed or examined by the SFPUC’s independent auditors.

The assumptions used in the table above include the following:

***Projected Revenue and Rate Increases.*** Projected revenues are based on projected wastewater service sales and the schedules of rates to be effective in each year. Projected revenues assume a 9.0% annual rate increase for Fiscal Years 2023-24 through 2025-26, as approved by the Commission in May 2023 (see “FINANCIAL OPERATIONS – Wastewater Enterprise Rates and Charges”), and a 12.0% annual rate increase for Fiscal Years 2026-27 and 2027-28, which are subject to future approval by the Commission and the ability to reject rate increases by the Board of Supervisors and the voters to the extent permitted by Proposition 218.

***Projected Operation and Maintenance Costs of the Wastewater Enterprise.*** Operation and Maintenance Costs of the Wastewater Enterprise are projected to grow by 0.2% for Fiscal Year 2024-25, 0.1% for Fiscal 2025-26, 3.0% for Fiscal Year 2026-27, and 3.1% for Fiscal Year 2027-28. Assumptions for Fiscal Years 2026-27 and 2027-28 reflect inflationary increases. Projections do not reflect labor negotiations recently completed between the City and labor unions. See “THE PUBLIC UTILITIES COMMISSION – Employee Relations – *SFPUC*.”

***Projected Debt Service.*** Projected debt service consists of the projected, not actual, debt service on the 2010B Bonds (net of anticipated Refundable Credits), 2013B Bonds, 2016A Bonds, 2016B Bonds, 2018A Bonds, 2018B Bonds, 2021A Bonds, 2021B Bonds, 2022B Bonds, BDFP WIFIA Bond, 2023A Bonds, 2023B Bonds, 2023C Bonds, 2024ABCD Bonds (all net of capitalized interest), Additional Bonds and seven existing Parity Loans. Projected debt service does not include debt service on the STPI WIFIA Bond or the Project 1 WIFIA Bond. Assumes continuation of current 5.7% sequestration rate for Refundable Credits (see “SECURITY FOR THE BONDS – Rate Covenants – *Debt Service Coverage*”).

Following the issuance of the 2024ABCD Bonds, the SFPUC anticipates that it will issue approximately \$2.6 billion of Additional Bonds between Fiscal Years 2024-25 and 2027-28 to finance Wastewater Enterprise capital projects pursuant to the 2025 Capital Plan. The projected debt service during the projection period for the 2024ABCD Bonds and the Additional Bonds assumes 30-year term with level debt service, a 6% interest rate, no debt service reserve fund and up to 24 months of capitalized interest during projection period. The actual issuance dates, borrowing rates and capitalized interest periods may vary from these assumptions. The SFPUC may also issue refunding bonds from time to time in response to market conditions in order to achieve debt service savings.

## RISK FACTORS

*This section provides a general overview of certain risk factors which should be considered, in addition to the other matters set forth in this Official Statement, in evaluating an investment in the 2024ABCD Bonds. This section is not meant to be a comprehensive or definitive discussion of all of the risks associated with an investment in the 2024ABCD Bonds. The order in which this information is presented does not necessarily reflect the relative importance of various risks or the probability of their occurrence.*

*Potential investors in the 2024ABCD Bonds are advised to consider the following factors, among others, and to review this entire Official Statement to obtain information essential to the making of an informed investment decision. Any one or more of the risk factors discussed below, among others, could lead to a decrease in the market price and/or in the marketability of the 2024ABCD Bonds or adversely affect the ability of the SFPUC to make timely payments of principal of or interest on the 2024ABCD Bonds. There can be no assurance that other risk factors not discussed herein will not become material in the future, and the SFPUC has not undertaken to update investors about the emergence of the risk factors in the future.*

### General

The ability of the SFPUC to comply with its covenants under the Indenture and to generate Net Revenues sufficient to pay principal of and interest on the Bonds may be adversely affected by actions and events outside of the control of the SFPUC and may be adversely affected by actions taken (or not taken) by voters, property owners, taxpayers or persons obligated to pay fees and charges. Among other matters, general and local economic conditions and changes in law and government regulations could adversely affect the amount of Net Revenues realized by the SFPUC or significantly raise the cost of operating the Wastewater Enterprise.

In addition, the realization of future Net Revenues is subject to, among other things, the capabilities of management of the SFPUC, the ability of the SFPUC to provide service to its customers, the ability of the SFPUC to establish, fix and prescribe charges from its customers and the ability of the SFPUC to establish, fix and prescribe rates and charges sufficient to pay for Operation and Maintenance Costs of the Wastewater Enterprise, the Bonds and other obligations payable from Net Revenues. See “FINANCIAL OPERATIONS” and “OBLIGATIONS PAYABLE FROM NET REVENUES.”

### Limited Obligation

If the SFPUC defaults on its obligations to make debt service payments on the Bonds, the Trustee has the right under the Indenture to accelerate the total unpaid principal amount of the Bonds. However, in the event of a default and such acceleration, there can be no assurance that the SFPUC, and correspondingly the Trustee, will have sufficient moneys available for payment of the Bonds.

**The SFPUC is not obligated to pay the principal of, premium, if any, or interest on the Bonds except from Net Revenues. The SFPUC has no taxing power. The General Fund of the City is not liable for the payment of the principal of, premium, if any, or interest on the Bonds, and neither the credit nor the taxing power of the City is pledged to the payment of the principal of, premium, if any, or interest on the Bonds. The Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any of the property of the City or of the SFPUC or any of its income or receipts, except Net Revenues of the Wastewater Enterprise. See “SECURITY FOR THE BONDS.”**

### No Reserve Account

No Reserve Account has been established for the 2024ABCD Bonds. The Reserve Accounts established with respect to other Series of Bonds do not secure the 2024ABCD Bonds. See “SECURITY FOR THE BONDS – No Reserve Account for 2024ABCD Bonds.”

## **WIFIA Loan Agreements**

Disbursements under the WIFIA Loan Agreements are subject to various conditions. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Water Infrastructure Finance and Innovation Act Loans – Conditions to Disbursements under WIFIA Loan Agreements.” If the SFPUC is unable to make draws under the WIFIA Loan Agreements to finance eligible costs of the Biosolids Digester Facilities Project, the Southeast Treatment Plant Improvements Project or the Project 1 Projects, as applicable, the SFPUC may need to issue additional notes, revenue bonds or other revenue secured obligations to pay for such project costs. There can be no assurance that the SFPUC will be able to issue such obligations or that the issuance of such obligations will not result in higher borrowing costs. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Water Infrastructure Finance and Innovation Act Loans.”

## **Access to Capital Markets**

The SFPUC expects that the source of repayment of the principal of the 2024A Bonds will be the proceeds of Take-Out Obligations to be issued by the SFPUC on or prior to the maturity date of the 2024A Bonds. It is possible that the occurrence of an unforeseen circumstance could prevent or delay the SFPUC’s ability to access the capital markets and issue Take-Out Obligations. Such market disruptions may occur in connection with an economic downturn. Discrete and short-term market disruptions are rare, but have occurred in the past as a result of a variety of factors and events, such as the COVID-19 pandemic, terrorist attacks, natural disasters or the failure or dissolution of, or other economic trouble being experienced by, an entity of systemic importance to the financial industry or the economy in general. No assurance can be given that the SFPUC will be able to issue Take-Out Obligations or that the SFPUC will have sufficient funds on hand to pay the principal of the 2024A Bonds on their maturity date. See “PLAN OF FINANCE.”

## **Interim Funding Program Facilities**

**Commercial Paper Notes.** The bank credit facilities supporting the Commercial Paper Notes are subject to early termination upon the occurrence of certain events, including the failure of the SFPUC to make certain payments, the occurrence of certain bankruptcy or insolvency-related events, the reduction below specified levels or the withdrawal or suspension of ratings on certain obligations of the SFPUC payable from Net Revenues or certain other specified events of default. Upon the occurrence of such termination, one or more of the following would likely occur: (a) the SFPUC would be prohibited from issuing additional notes supported by such credit facilities; (b) any outstanding reimbursement obligation of the SFPUC to the bank providing such facility for draws made for the payment of principal of or interest on Commercial Paper Notes could bear interest at rates higher than the rates borne by the Commercial Paper Notes; and (c) any such outstanding reimbursement obligation of the SFPUC could be accelerated and become immediately due and payable. The Commercial Paper Notes and any reimbursement obligations are payable from Net Revenues on a basis subordinate to the Bonds.

**Revolving Notes.** The commitment of the bank to make advances under the U.S. Bank Credit Facility (the repayment obligation of the SFPUC for which are evidenced by the Revolving Notes) may be terminated by the bank upon the occurrence of certain events, including the failure of the SFPUC to make certain payments, the occurrence of certain bankruptcy or insolvency-related events, the reduction below specified levels or the withdrawal or suspension of ratings on certain obligations of the SFPUC payable from Net Revenue or certain other specified events of defaults. Upon such an event of default, (a) the outstanding repayment obligation of the SFPUC evidenced by the Revolving Notes would bear interest at substantially increased interest rates and (b) the bank could declare all amounts outstanding under the Revolving Notes to be immediately due and payable. The Revolving Notes and any payment obligations thereunder are payable from Net Revenues on a basis subordinate to the Bonds.

See “OBLIGATIONS PAYABLE FROM NET REVENUES – Subordinate Debt and Interim Funding Program.”

## **Risks Related to Net Revenues**

***Unanticipated Decreases in Water Sales Volumes.*** Under the SFPUC’s current rate structure, customers’ sewer service charges are comprised of a fixed monthly service charge, a variable sanitary sewer component and a stormwater runoff component based on property size and/or parcel characteristics. The variable sanitary sewer component is based on the assumed percentage of metered water usage discharged into the sewer system, or “flow factor.” As a result, water deliveries at less than expected levels would result in lower than expected Revenues of the Wastewater Enterprise. Reduced water deliveries could result from, among other circumstances, changes in the local economy, reduced water supply, conservation measures or damage to storage, transportation, treatment or delivery systems of the SFPUC’s Water Enterprise. See “FINANCIAL OPERATIONS – Wastewater Enterprise Rates and Charges – *Current Wastewater Rates and Charges*” and “– Risks Related to Wastewater Enterprise Facilities and Operation – *Seismic Hazards*” and “– *Natural and Man-Made Disasters; Flooding.*”

***Increased Operating and Maintenance Expenses.*** There can be no assurance that the Operating and Maintenance Expenses of the SFPUC, such as wages and salaries, pension and other benefits, and purchased power costs, will not increase, perhaps substantially. See “FINANCIAL OPERATIONS – Operating and Maintenance Expenses.”

## **Limitations on Rate Setting and Challenge to Established Rates**

The generation of Revenues sufficient to satisfy the requirements of the Indenture and to pay the principal of and interest on the Bonds will require the SFPUC to raise wastewater rates payable by its customers. The increase of wastewater rates is subject to various substantive and procedural requirements and limitations. See “CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS.”

On December 12, 2023, the City was served with a purported class action lawsuit challenging the compliance of the rates charged by the Wastewater Enterprise with the requirements of Proposition 218. See “CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS – State Law Limitations – *Proposition 218*” and “– *Proposition 218 Litigation.*”

## **Initiative, Referendum and Charter Amendments and Future Legislation**

Under the State Constitution, California voters have the ability to initiate legislation and require a public vote on legislation passed by the State Legislature through the powers of initiative and referendum, respectively. The SFPUC is unable to predict whether any such initiatives might be submitted to or approved by the voters, the nature of such initiatives, or their potential impact on the SFPUC or the Wastewater Enterprise. See “CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS.”

Under the Charter, San Francisco voters can restrict or revise the powers of the SFPUC through the approval of a Charter amendment or other initiative. For example, in June 1998 the San Francisco electorate approved Proposition H which, subject to certain exceptions, including a limited exception to raise rates to pay debt service on voter-approved debt, froze the SFPUC’s water and sewer rates through July 1, 2006. The SFPUC can give no assurance that the electorate will not seek in the future to freeze or limit rate increases. See “CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS – Charter Limitations.”

In addition, the SFPUC is subject to various laws, rules and regulations adopted by the local, State and federal governments and their agencies. The SFPUC is unable to predict the adoption or amendment of any such laws, rules or regulations, or their effect on the operations or financial condition of the SFPUC.

## **Risks Related to Wastewater Enterprise Facilities and Operation**

The operation of the Wastewater Enterprise, and the physical condition of the Wastewater Enterprise facilities, are subject to a number of risk factors that could adversely affect the reliability of the SFPUC to provide sewage and stormwater collection and treatment services, or increase the operating expenses of the Wastewater Enterprise. Prolonged damage to the Wastewater Enterprise facilities could interrupt the ability of the SFPUC to

realize Net Revenues sufficient to pay principal of and interest on the Bonds, or require the SFPUC to increase expenditures for repairs significantly enough to adversely impact the SFPUC's ability to pay the principal of or interest on the Bonds. These factors could include, among others, the following:

***Aging Facilities.*** Certain Wastewater Enterprise facilities are near the end of their useful life. Aging assets may result in decreased reliability due to potential sewer line breakage and unplanned facility outages and place a greater maintenance burden on Wastewater Enterprise operations. See "THE WASTEWATER ENTERPRISE – Combined Sewage and Stormwater System." Aging sewers, if left unaddressed, could potentially result in increasing system failures, sinkholes in the street, reduced system reliability, regulatory violations and possibly risks to public health and safety and the environment.

The SFPUC uses a risk-based approach to improve sewers. The capital program is intended to help increase system reliability through equipment and facility improvement including, among other things, increasing sewer inspections and condition assessments in order to prioritize areas of pipeline improvements more effectively. In addition to the collection system, other types of facilities, such as treatment plants and pump stations, also face potential reliability issues due to age. As noted above, since 2011, the SFPUC has replaced an average of 11.9 miles of small diameter gravity sewers per year. The number of targeted replacement pipe miles may vary in the future based on the affordability and deliverability of such projects and of the Wastewater Enterprise's entire capital program.

***Limited Redundancy.*** Many critical Wastewater Enterprise facilities must remain constantly operational to collect and treat sewage and stormwater flows and meet relevant regulatory requirements. See "REGULATORY MATTERS." Certain of these Wastewater Enterprise facilities and systems are aging and have limited redundancy. See "*Aging Facilities.*" In addition, the Oceanside Treatment Plant and the other facilities in the Westside Watersheds are not interconnected with the Southeast Treatment Plant, the North Point Facility or the other facilities in the Bayside Watersheds. See "THE WASTEWATER ENTERPRISE – Wastewater Treatment." This limited redundancy in facilities and systems constrains the SFPUC's ability to take components of the system out of service for maintenance and repairs, or to provide backup treatment and other facilities in the event of an unplanned outage. For example, work at the Southeast Treatment Plant is being performed while the plant is operating, requiring coordination of facility and systems shutdowns with construction plans. During dry weather, however, the collection system does have excess storage capacity due to the transport/storage structures which can provide up to 200 million gallons worth of capacity and help facilitate treatment flexibility when needed. The SFPUC's capital program is adding some redundancy where feasible, including power supply redundancy for the treatment facilities, and rehabilitation and addition of redundant pumps at some major pump stations.

***Seismic Hazards.*** The Bay Area is in a seismically active region. The San Andreas Fault lies immediately west of San Francisco, and the Hayward Fault is approximately 15 miles to the east of San Francisco. A third major fault, the Calaveras Fault, is a branch of the Hayward Fault and lies east of the Hayward Fault.

During the past 150 years, the San Francisco Bay Area has experienced several major and numerous minor earthquakes. The largest was the 1906 San Francisco earthquake along the San Andreas Fault with an estimated magnitude of 8.2 on the Richter scale. The 1868 Hayward earthquake along the Hayward Fault had an estimated magnitude of between 6.8 and 7.0 on the Richter scale. The 1989 Loma Prieta earthquake along the San Andreas Fault had an estimated magnitude of 6.9 on the Richter scale. The most recent significant earthquake was the 2014 South Napa earthquake on the West Napa Fault, the northern extension of the Calaveras Fault, which had a magnitude of 6.0 on the Richter scale and an epicenter near the city of Napa, approximately 50 miles north of San Francisco. According to United States Geological Survey findings, a significant earthquake along these or other faults is probable during the repayment period of the Bonds. A significant earthquake that impacts San Francisco could adversely affect the ability of Wastewater Enterprise customers to pay for service and the capital and operating expenses of the Wastewater Enterprise.

Older facilities may have an increased risk of failure in the event of an earthquake. The capital program includes recently completed, planned and proposed improvements to such older facilities for the purpose of improving seismic reliability.

With certain minor exceptions, the SFPUC does not maintain commercial earthquake insurance coverage for the facilities. See “FINANCIAL OPERATIONS – Risk Management and Insurance.”

***Natural and Man-Made Disasters.*** Natural disasters such as earthquakes, landslides and fires, and man-made disasters or accidents, could interrupt operation of the Wastewater Enterprise, resulting in liability claims against the Wastewater Enterprise, or otherwise adversely impacting the ability of the Wastewater Enterprise to provide services and/or collect Revenues. See also “– Risks Related to Net Revenues – *Unanticipated Decreases in Water Sales Volumes.*”

***Climate Change, Risk of Sea Level Rise and Flooding Damage.*** The effect of climate change on future storms may be significant, leading to more powerful storms that exceed the capacity of the SFPUC’s combined sewer system and cause damage to the Wastewater Enterprise’s facilities. The costs of remedying any such damage could be substantial. Further, flooding damage could expose the SFPUC to litigation and other legal risks, which could cause the SFPUC to incur significant costs related to such legal claims or proceedings. See also “THE WASTEWATER ENTERPRISE – System Capacity” and “– Climate Change, Risk of Sea Level Rise and Flooding Damage.”

In San Francisco, during severe storm events, properties in low-lying areas with structures built on or near land that was originally channels or bays may experience surface flooding or backups through their building’s internal plumbing fixtures. In the last 10 years, severe rainstorms caused flooding in certain low-lying areas and resulted in some property damage in 2017, 2021, the end of 2022 and the beginning of 2023. The storm events at the end of 2022 and the beginning of 2023 have given rise to over 100 claims and seven individual lawsuits with private property-owner plaintiffs. The SFPUC answered two lawsuits covering a majority of the plaintiffs on December 19, 2023. The SFPUC is vigorously defending all of these lawsuits.

***Statutory and Regulatory Compliance.*** The operation of the Wastewater Enterprise is subject to a variety of federal and State statutory and regulatory requirements concerning matters such as water quality, discharge requirements and biosolids management. Significant fines and penalties, as well as orders requiring capital improvement plans and projects, could result should the SFPUC fail to comply with applicable laws and regulations. Claims could also be made by private parties. Changes in the scope and standards for public agency wastewater systems such as the Wastewater Enterprise may also lead to administrative orders issued by federal or State regulators. Such regulatory actions could also require significant capital expenditures to achieve statutory and regulatory compliance, which may impact the SFPUC’s capital improvement plans, projects and priorities for the Wastewater Enterprise. Future compliance with increased regulatory requirements or enforcement orders could impose substantial additional operating expenses on the Wastewater Enterprise. See “REGULATORY MATTERS.”

***Labor Actions.*** A work stoppage or other labor action could limit the SFPUC’s ability to operate the Wastewater Facilities and adversely impact Revenues. See “THE PUBLIC UTILITIES COMMISSION – Employee Relations – *San Francisco.*”

***Casualty Losses.*** The SFPUC’s risk management program includes both self-insured and insured coverages; however, the program does not provide coverage for every conceivable risk of loss. Damage attributable to seismic events and environmental pollution are excluded. In situations where the SFPUC has not purchased commercial coverage, the Wastewater Enterprise has a “self-retention” program that it administers and retains budgeted resources internally to provide coverage for loss liabilities. See also “FINANCIAL OPERATIONS – Risk Management and Insurance.” The SFPUC is not required to either insure against or self-insure against every potential risk of loss, and there is a risk that damage or destruction of property and equipment comprising the Wastewater Enterprise could occur for which no insurance or self-insurance funds will be available. There can be no assurance that insurance providers will pay claims under any policies promptly, or at all, should a claim be made under such policies in connection with property loss or damage. It is possible that an insurance provider will refuse to pay a claim, especially if it is substantial, and force the SFPUC to sue to collect on or settle the insurance claim. Further, there can be no assurances that any insurance proceeds will be sufficient to rebuild or replace any damaged property.

***Safety and Security.*** The occurrence of military conflicts and terrorist activities may adversely impact the operations of the SFPUC, including the Wastewater Enterprise, and/or the finances of the SFPUC. The SFPUC

continually plans and prepares for emergency situations. However, there can be no assurance that any existing or additional safety and security measures will prove adequate in the event that military conflicts or terrorist activities are directed against the assets of the Wastewater Enterprise or that costs of security measures will not be greater than presently anticipated.

**Cybersecurity.** Cybersecurity breaches could damage the SFPUC’s information security systems and cause disruption to the SFPUC’s operations and the provision of SFPUC services. The costs of remedying any such damage or protecting against future attacks could be substantial. Further, cybersecurity breaches could expose the SFPUC to litigation and other legal risks, which could cause the SFPUC to incur significant costs related to such legal claims or proceedings. For more information regarding the SFPUC’s cybersecurity measures, see “THE WASTEWATER ENTERPRISE – Cybersecurity.”

### **Cost of Capital Program Projects; Timely Completion of Capital Program Projects**

The completion of various capital program projects could be delayed and the overall cost of such projects could increase for a variety of reasons, including, but not limited to, actions by State or federal regulatory agencies, voter initiatives, legal challenges on environmental or other grounds, prolonged contractor disputes, changes in price of commodities or labor, unanticipated geologic, soil, hydrologic or hydraulic conditions, the occurrence of an earthquake or other natural disaster, or the occurrence of a worldwide health concern such as the COVID-19 pandemic. See “WASTEWATER ENTERPRISE CAPITAL PROGRAM.”

The SFPUC intends to finance the continued development and implementation of capital program projects using proceeds of certain Outstanding Bonds (including draws under the existing WIFIA Loan Agreements) and draws under the existing SRF loan documents, as well as through the issuance of Additional Bonds and Parity Loans (such as additional SRF loans or WIFIA loans). If capital program projects are completed at the cost and on the schedule presently under consideration by the SFPUC, the cost of such projects will require a significant planned increase in the amount of debt payable from Revenues, which will result in significant planned rate increases. Correspondingly, debt service coverage for the Bonds will also be significantly lower than it is currently. Were capital program projects delayed or the cost of capital program projects to increase without an offsetting reduction in the program scope, the SFPUC would be required either to incur more debt payable from Revenues or to cash fund those costs from Revenues. Either option would likely increase rates payable by SFPUC customers to levels higher than presently anticipated by the SFPUC, and could result in lower debt service coverage ratios than presently anticipated by the SFPUC. See “OBLIGATIONS PAYABLE FROM NET REVENUES – Water Infrastructure Finance and Innovation Act Loans” and “FINANCING PLAN FOR WASTEWATER ENTERPRISE CAPITAL PROGRAM.”

Over the next several years the SFPUC expects to issue Additional Bonds and Parity Loans to fund development and implementation of Wastewater Enterprise capital projects. The issuance by the SFPUC of such debt is subject to various approval requirements. See “OBLIGATIONS PAYABLE FROM NET REVENUES.”

The ability of the SFPUC to issue Additional Bonds and Parity Loans to finance the development and implementation of capital program projects may also be adversely affected by any adverse change in the financial position of the SFPUC or by general market conditions. There can be no assurance that the SFPUC will be able to issue Additional Bonds or Parity Loans in an aggregate amount sufficient to finance all of the costs of completing the capital program projects.

### **Construction Related Risks**

**General.** Construction projects in the Wastewater Enterprise’s capital program are subject to ordinary construction risks and delays applicable to projects of their kind, including but not limited to (i) inclement weather affecting contractor performance and timeliness of completion, which could affect the costs and availability of, or delivery schedule for, equipment, components, materials, labor or subcontractors; (ii) contractor claims or nonperformance; (iii) failure of contractors to execute within contract price; (iv) work stoppages or slowdowns; (v) failure of contractors to meet schedule terms; (vi) supply chain issues; (vii) errors or omissions in contract documents requiring change orders; (viii) the occurrence of a major seismic event; or (ix) unanticipated project site conditions, including the discovery of hazardous materials on the site or other issues regarding compliance with

applicable environmental standards, and other natural hazards or seismic events encountered during construction. In addition, given the limited redundancy of certain Wastewater Enterprise facilities and systems, such systems must remain operational during construction, which could affect construction schedules or budgets. See “– Risks Related to Wastewater Enterprise Facilities and Operation.”

In addition, the SFPUC expects numerous other large construction projects to be scheduled in the region simultaneously, which could potentially limit contractor resources available to the SFPUC during bidding or construction phases. The SFPUC conducts regular contractor outreach and expects to continue to work closely with potential contractors to attempt to mitigate the impact of such simultaneous scheduling of large projects.

Furthermore, much of the construction work for the Wastewater Enterprise’s capital program will occur at a single physical location, the Southeast Treatment Plant. The phasing staging, materials and/or equipment laydown areas, parking, truck routes, security, and operating needs are being clearly defined for the plant and each individual project by the SFPUC, with consideration of multiple project interfaces. The Southeast Treatment Plant will remain in operation while these projects are being implemented. Currently logistics planning is identifying on and off site parking, construction laydown and staging areas, truck routing for regular operations and construction and the overall facility and equipment shut-down schedule required to maintain permit compliance and complete capital program projects.

Increased construction costs or delays for any reason in connection with the Wastewater Enterprise’s capital program could impact the Wastewater Enterprise’s financial condition in general and the implementation of its capital programs in particular.

See also “– Cost of Capital Program Projects; Timely Completion of Capital Program Projects.”

**Land Acquisition.** Certain of the Wastewater Enterprise’s capital projects will require the SFPUC to acquire land in and around its facilities in San Francisco. For example, the Southeast Treatment Plant is located in a densely urban environment with industrial and residential buildings – as such, securing space around the Southeast Treatment Plant will be critical. A right-of-way manager has been hired to manage land issues because many parcels require long lead times to gain site control. Property is challenging to acquire or lease in the Bay Area generally and in San Francisco in particular. Real estate prices in San Francisco and throughout the Bay Area can be volatile and have in general been increasing during recent years. The approved project budgets currently include estimated costs related to future land purchases required for the expansion of the Southeast Treatment Plant and potential land leases for construction staging areas. At present, the SFPUC cannot predict the final cost of such acquisitions and leases; but it is possible that such costs may exceed budgeted amounts.

## **Pandemics; COVID-19 Pandemic**

A pandemic, epidemic or outbreak of an infectious disease can have significant adverse health and financial impacts on global and local economies. For example, the COVID-19 pandemic significantly impacted the City and resulted in prolonged stay-at-home orders that impacted each of the SFPUC’s enterprises, including the Wastewater Enterprise. In addition to certain direct impacts on the operations and finances of the Wastewater Enterprise, COVID-19 had significant and varied impacts on general economic activity at the local, national and global levels, including supply chain and labor market disruptions. Such disruptions, among other effects, resulted in increases in materials, labor, transportation and other costs across a wide number of sectors, as well as delays in delivery of projects and equipment. The Wastewater Enterprise experienced, and may in the future experience, increases in certain costs, such as for bulk chemical supplies, and delays in the delivery of equipment as a result of COVID-19’s disruption of supply chains. Additionally, such disruptions may result in schedule delays for the Wastewater Enterprise’s capital projects or increased costs for such projects.

## **Green Bonds**

The 2024 Green Bonds are being designated by the SFPUC as “Green Bonds” and have been certified by the CBI as “Climate Bonds Standard Certified.” See “GREEN BONDS DESIGNATION AND CLIMATE CERTIFICATION.” The purpose of designating the 2024 Green Bonds as “Green Bonds” is to allow investors to

invest directly in bonds that finance the cost of environmentally beneficial projects. The SFPUC does not make any representation, however, as to the suitability of the 2024 Green Bonds to fulfill the environmental and sustainability criteria of particular investors. The 2024 Green Bonds may not be a suitable investment for all investors seeking exposure to green or sustainable assets. There is currently no market consensus on what precise attributes are required for a particular project to be defined as “green” or “sustainable,” and therefore no assurance can be provided to investors that the projects financed or refinanced by proceeds of the 2024 Green Bonds will continue to meet investor expectations.

The terms “Green Bonds” and “Green Projects” are neither defined in nor related to provisions in the Indenture or otherwise defined under State or federal laws. The use of such terms herein is for identification purposes only and is not intended to provide or imply that owners of the 2024 Green Bonds are entitled to any additional security other than as provided in the Indenture. The SFPUC assumes no obligation to ensure that these projects comply with the principles of “Green Projects” as such principles may hereafter evolve.

### **Inverse Condemnation**

Under the doctrine of inverse condemnation (a legal concept that entitles property owners to just compensation if their private property is damaged by a public use), California courts have imposed liability on public agencies in legal actions brought by private property holders for damages caused by such public agencies’ infrastructure. In *City of Oroville v. Superior Court of Butte County*, 7 Cal. 5th 1091 (2019), however, the California Supreme Court held that damage to private property must be substantially caused by an inherent risk presented by the deliberate design, construction or maintenance of the public improvement. Thus, if the inherent risks associated with the SFPUC’s facilities, including wastewater and stormwater collection facilities (other than flood control projects), as deliberately designed, constructed or maintained, are determined to be the substantial cause of damage to private property from flooding, sewage back-up or otherwise, and the doctrine of inverse condemnation applies, the SFPUC could be liable for direct and indirect property damage to private parties and such liability, in the aggregate, could be substantial. In addition to such claims for property damage, the SFPUC could also be liable for punitive damages and other damages under other theories of liability, including if the SFPUC were found to have acted unreasonably or to have been negligent, which liability, in the aggregate, could be substantial.

### **Economic, Political, Social and Environmental Conditions**

Changes in economic, political, social, or environmental conditions on a local, State, federal, and/or international level may adversely affect investment risk generally. Such conditional changes may include (but are not limited to) fluctuations in business production, consumer prices, or financial markets, unemployment rates, availability of skilled labor, technological advancements, shortages or surpluses in natural resources or energy supplies, changes in law, social unrest, fluctuations in the crime rate, political conflict, acts of war or terrorism, environmental damage, and natural disasters.

### **Bankruptcy**

The SFPUC, being an enterprise department of the City, likely cannot itself file for bankruptcy. While an involuntary bankruptcy petition cannot be filed against the City, the City is only authorized to file for bankruptcy under certain circumstances. Should the City file for bankruptcy, there could be adverse effects on the holders of the Bonds.

To the extent that Revenues are “special revenues” under the United States Bankruptcy Code (the “**Bankruptcy Code**”), the Revenues collected after the date of the bankruptcy filing should be subject to the lien of the Indenture. If any or all of the Revenues are determined not to be “special revenues,” then any such amounts collected after the commencement of the bankruptcy case will likely not be subject to the lien of the Indenture. “Special revenues” are defined to include revenues derived from the ownership or operation of projects or systems that are primarily used to provide utility services. No assurance can be given that a court would hold that any or all Revenues are special revenues. In a case arising from the insolvency proceedings of Puerto Rico, the United States Court of Appeals for the First Circuit concluded that while a debtor has the right to voluntarily apply special revenues to the payment of debt service during the pendency of a bankruptcy case, the debtor is not obligated to do so, even though the special revenues are subject to the lien of the bond documents. The holders of the Bonds may

not be able to assert a claim against any property of the City other than the Net Revenues, and if any or all of the Revenues are no longer subject to the lien of the Indenture, then there may be limited, if any, funds from which the holders of the Bonds are entitled to be paid.

The Bankruptcy Code provides that “special revenues” can be applied to necessary operating expenses of the project or system, before they are applied to other obligations. This rule applies regardless of the provisions of the transaction documents. It is not clear precisely which expenses would constitute necessary operating expenses, and any definition in the transaction documents may not be applicable.

If the City is in bankruptcy, the parties (including the Trustee and the holders of the Bonds) may be prohibited from taking any action to collect any amount from the City or to enforce any obligation of the City, unless the permission of the bankruptcy court is obtained. These restrictions may also prevent the Trustee from making payments to the holders of the Bonds from funds in the Trustee’s possession. The rate covenants (see “SECURITY FOR THE BONDS – Rate Covenants”) may not be enforceable in bankruptcy by the Trustee or the holders of the Bonds.

Revenues are deposited with and held by the City Treasurer and may be commingled with other City funds. See “SECURITY FOR THE BONDS – Flow of Funds.” If the City is in bankruptcy, the City may not be required to turn over to the Trustee any Revenues that are in its possession at the time of the bankruptcy filing or come into its possession after the bankruptcy filing. In addition, if the City has possession of Revenues (whether collected before or after commencement of the bankruptcy) and if the City does not voluntarily turn over such Revenues to the Trustee, it is not entirely clear what procedures the Trustee and the holders of the Bonds would have to follow to attempt to obtain possession of such Revenues, how much time it would take for such procedures to be completed, or whether such procedures would ultimately be successful. The United States Court of Appeals for the First Circuit, in another case involving the insolvency proceedings of Puerto Rico, concluded that a bankruptcy court does not have the power to order a debtor to comply with state law.

The City may be able to borrow additional money that is secured by a lien on any of its property (including the Revenues), which lien could have priority over the lien of the Indenture, or to cause some of the Revenues to be released to it, free and clear of the lien of the Indenture, in each case as long as the bankruptcy court determines that the rights of the Trustee and the holders of the Bonds will be adequately protected.

If the City is in bankruptcy, it may be able, without the consent and over the objection of the Trustee and the holders of the Bonds, to alter the priority, interest rate, principal amount, payment terms, collateral, maturity dates, payment sources, covenants (including tax-related covenants and the rate covenant), and other terms or provisions of the Indenture and the Bonds, as long as the bankruptcy court determines that the alterations are fair and equitable.

There may be delays in payments on the Bonds while the court considers any of these issues. There may be other possible effects of a bankruptcy of the City that could result in delays or reductions in payments on the Bonds, or result in losses to the holders of the Bonds. Regardless of any specific adverse determinations in a City bankruptcy proceeding, the fact of a City bankruptcy proceeding could have an adverse effect on the liquidity and value of the Bonds.

The SFPUC invests Revenues in the City’s Pooled Investment Fund. See “FINANCIAL OPERATIONS – Investment of SFPUC Funds.” In the event of a bankruptcy of the City, there may be delays or reductions in payments on the Bonds.

### **Limitations on Remedies**

The remedies available to the owners of the Bonds upon the occurrence of an event of default under the Indenture in many respects depend upon judicial actions which are themselves often subject to discretion and delay and could prove both expensive and time consuming to obtain. In addition to the limitations on remedies contained in the Indenture, the rights and obligations under the Bonds and the Indenture may be subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting

creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to limitations on legal remedies against charter cities and counties in California. The opinion to be delivered by Bond Counsel, concurrently with the issuance of the 2024ABCD Bonds, that the 2024ABCD Bonds constitute valid and binding, limited obligations of the SFPUC, and the Indenture constitutes a valid and binding obligation of the SFPUC, will also be subject to such limitations. The various other legal opinions to be delivered concurrently with the issuance of the 2024ABCD Bonds will be similarly qualified. See "APPENDIX C – PROPOSED FORM OF OPINION OF BOND COUNSEL."

If the SFPUC fails to comply with its covenants under the Indenture or to pay principal of or interest on the Bonds, there can be no assurance that the available legal remedies will be adequate to protect the interests of the holders of the Bonds.

### **Loss of Tax Exemption/Risk of Tax Audit of Municipal Issuers**

As discussed under "TAX MATTERS," interest on the Tax-Exempt Bonds could fail to be excluded from the gross income of the owners thereof for purposes of federal income taxation retroactive to the date of the issuance of the Tax-Exempt Bonds as a result of future acts or omissions of the SFPUC in violation of its covenants to comply with requirements of the Code. Should such an event of taxability occur, the Tax-Exempt Bonds are not subject to redemption or any increase in interest rate and will remain outstanding until maturity.

The Internal Revenue Service (the "IRS") has an expanded program for the auditing of tax-exempt obligations, including both random and targeted audits. It is possible that the Tax-Exempt Bonds could be selected for audit by the IRS. It is also possible that the market value of the Tax-Exempt Bonds would be affected as a result of such an audit of the Tax-Exempt Bonds (or by an audit of similar securities).

### **Change in Tax Law**

As discussed under "TAX MATTERS," current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the Tax-Exempt Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to state income taxation, or otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest.

### **Failure to Maintain Credit Ratings**

Certain rating agencies have assigned ratings to the 2024ABCD Bonds. The ratings issued reflect only the views of such rating agencies. Any explanation of the significance of these ratings should be obtained from the respective rating agencies. See "RATINGS." There is no assurance current ratings will continue for any given period or that such ratings will not be revised downward or withdrawn entirely by the rating agencies if, in the respective judgment of such rating agencies, circumstances so warrant. Any such downward revision or withdrawal of such ratings could be expected to have an adverse effect on the market price or the marketing of the 2024ABCD Bonds. The SFPUC undertakes no obligation to maintain its current credit ratings on the 2024ABCD Bonds or to oppose any such downward revision, suspension or withdrawal.

### **Secondary Market**

There can be no guarantee that there will be a secondary market for the 2024ABCD Bonds or, if a secondary market exists, that the 2024ABCD Bonds can be sold for any particular price. Occasionally, because of general market conditions or because of adverse history or economic prospects connected with a particular issue, secondary marketing practices in connection with a particular issue are suspended or terminated. Additionally, prices of issues for which a market is being made will depend upon then prevailing circumstances. Such prices could be substantially different from the original purchase price.

## **Uncertainties of Projections, Forecasts and Assumptions**

Certain information contained in this Official Statement is based upon assumptions and projections. Projections and assumptions are inherently subject to significant uncertainties. Inevitably, some assumptions will not be realized and unanticipated events and circumstances may occur and actual results are likely to differ, perhaps materially, from those projected. Accordingly, such projections are not necessarily indicative of future performance, and the SFPUC assumes no responsibility for the accuracy of such projections. See “FORWARD-LOOKING STATEMENTS.”

## **Other Risks**

The discussion in this section, “RISK FACTORS,” is not meant to be a comprehensive or definitive list of the risks associated with an investment in the 2024ABCD Bonds. There may be other risks inherent in ownership of the 2024ABCD Bonds in addition to those described in this section. Investors are advised to read the entire Official Statement in order to obtain information necessary to make an investment in the 2024ABCD Bonds.

## **REGULATORY MATTERS**

The SFPUC believes that the Wastewater Enterprise is in material compliance with the Porter-Cologne Act and the Clean Water Act (each as described below). This section summarizes the regulatory framework governing the Wastewater Enterprise and its operations.

### **History and Background**

In 1969, the State adopted the Porter-Cologne Water Quality Act (the “**Porter-Cologne Act**”), creating the State’s current legal framework for the protection of water quality. This adoption was followed at the federal level by the Water Pollution Control Act Amendments of 1972 (the “**Clean Water Act**”). The Clean Water Act provided an aggressive timetable for eliminating pollution of the nation’s waters and established the basic secondary treatment requirement that 85% of pollutants, as defined in administrative regulations, be removed from sanitary wastewater. The Clean Water Act also required the issuance of discharge permits on a nationwide basis and established a federal grant program for construction of publicly owned wastewater facilities, subsequently replaced by the state revolving fund loan program. Although the EPA has ultimate responsibility for administering the Clean Water Act, many functions have been delegated to the State. The administration of the current loan program and enforcement of regulations are a joint undertaking of the State Water Resources Control Board, the Regional Water Quality Control Board, and EPA Region IX.

### **Federal and State Clean Water Act Permits**

Under the Porter-Cologne Act and the Clean Water Act, the Regional Water Quality Control Board administers water pollution control programs. The EPA and the Regional Water Quality Control Board issue discharge permits under Section 402 of the Clean Water Act, which establishes the National Pollutant Discharge Elimination System (“**NPDES**”) permit system. These permits, issued for a five-year period, are also wastewater discharge requirements for the purposes of the Porter-Cologne Act and apply to discharges from the SFPUC’s treatment plants and combined sewer discharge facilities.

A small portion of the Wastewater Enterprise system within San Francisco, representing less than 3% of the City’s total sewer mileage, consists of separate storm and sanitary sewers. This portion of the system is regulated under the State General Permit for Small Municipal Separate Storm Sewer Systems (MS4) (NPDES Permit No. CAS000004) and the State Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ).

The Wastewater Enterprise’s combined sewer system is regulated under two wastewater NPDES permits: the 2013 Bayside Permit (NPDES Permit No. CA0037664; issued by the Regional Water Quality Control Board), covering the Southeast Treatment Plant, the North Point Facility and other bayside facilities that discharge into the San Francisco Bay; and the 2019 Oceanside Permit (NPDES Permit No. CA0037681; issued jointly by the Regional

Water Quality Control Board and EPA Region IX), covering the Oceanside Treatment Plant discharges and other westside facilities that discharge into the Pacific Ocean. The City has appealed two provisions of the 2019 Oceanside Permit that impose generic prohibitions against causing or contributing to a violation of water quality standards. The appeal is now pending before the United States Supreme Court, pursuant to the City's petition for certiorari filed in January 2024, which was granted in May 2024.

In February 2016, the EPA and the Regional Water Quality Control Board initiated an investigation of the SFPUC's operations of the City's combined sewer system with a particular focus on the SFPUC's operations during wet weather conditions. In October 2019, the EPA issued a Notice of Violation (“NOV”) to San Francisco, but the NOV did not impose any penalties or require any specific corrective actions. The City Attorney's Office, the SFPUC, the Regional Water Quality Control Board and EPA have continued to discuss the allegations. In November 2021, the SFPUC and the Regional Water Quality Control Board entered into a negotiated settlement that resolves the Regional Water Quality Control Board's claims relating to flooding in low-lying areas. Under the settlement the SFPUC is required to construct three flood resilience capital projects already included in the Wastewater Enterprise capital improvement plan (*i.e.*, the Folsom Stormwater Improvement Project, the Wawona Area Stormwater Improvement Project and the Lower Alemany Area Stormwater Improvement Project), at a cost of approximately \$632 million, and to implement specified storm response activities. See “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program – *Program Scope* – Stormwater Management/Flood Resilience.” The EPA's National Enforcement Investigations Center conducted an inspection of the SFPUC's facilities in early 2022 and issued an inspection report in June 2022. The SFPUC responded to the report within the required timeframe.

On May 1, 2024, the EPA and the Regional Water Quality Control Board filed a lawsuit alleging Clean Water Act violations. The regulators allege that combined sewage discharges from the Bayside system from November 2013 to the present are discharging pollutants that cause violations of applicable water quality standards and that an injunction is required to prevent any further violations. The regulators further allege violations of the Oceanside and Bayside discharge permits based on failure to perform condition assessments, inspections, cleaning, repair and replacement and performance monitoring requirements for various components of the combined sewer system. SFPUC is developing factual and legal arguments in response to these allegations. The parties have entered into a court-approved stipulation staying the litigation so that the parties can participate in private mediation. At this time, the SFPUC cannot determine any further potential costs associated with resolving the EPA and the Regional Water Quality Control Board's allegations or the extent to which the pending action will result in penalties or affect the SFPUC's current operations or the Wastewater Enterprise's short-term and long-term capital improvement plans. The City intends to vigorously defend the action.

In addition, in April 2023, the City and the Regional Water Quality Control Board finalized a settlement to pay approximately \$236,500 to resolve administrative civil liability claims regarding alleged permit violations that occurred from approximately October 2013 to October 2021. Under the settlement, SFPUC paid half of the full amount towards a supplemental environmental project.

In a letter dated March 6, 2024, San Francisco Baykeeper (“**Baykeeper**”) provided the City with a notice regarding alleged violations of the Clean Water Act and the discharge permit for the Bayside combined sewer facilities (the “**Bayside Permit**”). The letter alleges that historical and ongoing discharges of pollutants in and near Mission Channel, Islais Channel, and other parts of the San Francisco Bay are occurring in violation of the Clean Water Act and the Bayside Permit. In May 2024, Baykeeper filed a citizen suit enforcement action alleging violations largely consistent with its notice letter. Baykeeper is seeking to intervene in the lawsuit filed by the EPA and the Regional Water Quality Control Board. The suit seeks (i) penalties and injunctive relief to prevent further alleged violations and (ii) Baykeeper's costs, including attorneys' and experts' fees. Baykeeper has joined the court-approved stipulation staying the litigation so that the parties can participate in private mediation. At this time, the SFPUC cannot determine any specific costs associated with resolving Baykeeper's allegations or the extent to which the Baykeeper action will result in penalties or affect the SFPUC's current operations or the Wastewater Enterprise's short-term and long-term capital improvement plans. The City intends to vigorously defend the action.

## **Combined Sewer Overflow Control Policy**

To address the unique characteristics of combined sewer systems, the EPA adopted the Combined Sewer Overflow Control Policy (the “**CSO Control Policy**”) in 1994. The CSO Control Policy established a consistent national approach for controlling discharges from combined sewer overflow outfalls to the nation’s water, and has since been incorporated into the Clean Water Act by the Wet Weather Water Quality Act of 2000. That approach includes the identification of nine minimum controls (“**Nine Minimum Controls**”) that combined sewer systems can implement to reduce water quality impacts from their combined sewer discharges.

Consistent with the CSO Control Policy requirements and the Nine Minimum Controls, the SFPUC has undertaken decades of planning and implemented a multi-billion dollar long-term control plan to reduce and control its combined sewer discharges. This plan resulted in, among other improvements, substantial increases in treatment and storage capacity, including construction of transport/storage boxes, which can hold millions of gallons of flows. These improvements resulted in substantial reductions in the annual average number of combined sewer discharges from the collection system. The SFPUC continues to maintain and operate the combined sewer system consistent with the CSO Control Policy requirements and the Nine Minimum Controls, including collecting discharge monitoring data .

The SFPUC’s discharge permits require the preparation of reports analyzing the efficacy of the system’s wet weather operations and the compliance with the Nine Minimum Controls.

## **Stormwater Regulations**

In 1987, the Clean Water Act was revised to more effectively address pollution caused by stormwater runoff. The regulations require stormwater management plans for municipalities and controls on certain construction sites and other industries. Urban areas with combined sewers, such as most of San Francisco, are exempt from such regulations. However, because a small portion of San Francisco is served by separate storm sewer systems, the permit for small Municipal Separate Storm Sewer System (“**MS4**”) (NPDES Permit No. CAS000004) issued by the State Water Resources Control Board regulates the stormwater discharge from the SFPUC’s separate storm sewer systems. The SFPUC operates a stormwater management program that complies with the requirements of the MS4 permit.

## **Regulatory Trends**

Regulatory developments at the State and federal level, as well as ongoing permit reissuance activities, may increase operations costs and capital needs of the Wastewater Enterprise and may have an effect on the Wastewater Enterprise operations and its revenues. In the future, additional contaminants of emerging concern will likely be identified, and additional requirements for biosolids or effluent may be developed as improved analytical techniques and treatment technologies and methodologies become available. Additional source control measures, public education and outreach, and additional or advanced treatment processes may be necessary to achieve compliance. The SFPUC is actively engaged with regulatory officials and the public in the development of these regulatory matters.

These topics and their possible effect on the Wastewater Enterprise are briefly described below:

***Impaired Water Bodies and Total Maximum Daily Loads.*** The Clean Water Act requires states to identify all water bodies that do not achieve designated water quality standards or objectives. Such water bodies are designated as “impaired,” and states are required to identify all sources contributing to the impairment under the Total Maximum Daily Load (“**TMDL**”) program. States are required to designate wasteload allocations to each contributing point source, such as the SFPUC discharges, in order to promote the recovery of the water body. Central and lower San Francisco Bay are currently listed as “impaired” for a number of organic and inorganic pollutants, as well as invasive species and trash. The Regional Water Quality Control Board has completed San Francisco Bay TMDLs for mercury and polychlorinated biphenyl (“**PCBs**”) and has issued a fecal indicator bacteria TMDL for San Francisco Bay beaches.

The San Francisco Bay mercury and PCBs TMDLs are implemented through a group watershed permit (Order No. R2-2020038) that applies to all municipal, industrial and stormwater discharges to San Francisco Bay. The watershed permit contains effluent limitations for mercury and PCB discharges from the Southeast Treatment Plant with which the SFPUC currently complies.

***Contaminated Bay Sediments.*** California Water Code, Division 7, Chapter 5.6, established a program to assess sediment contamination of the State's enclosed bays and estuaries. Known as the Bay Protection and Toxic Cleanup Program, the focus of this effort was to identify contaminated sediments with elevated levels of toxins.

In 1999, a Statewide plan identified Mission Channel and Islais Channel as high priority toxic hot spots. For Mission Channel, the plan included a preliminary estimate of investigation and study costs at \$1 million, remediation and follow-up monitoring ranging from \$0.8 to \$1.8 million, and possible sewer system structural changes up to \$75 million. For Islais Channel, the plan included a preliminary estimate of investigation and study costs at \$1 million, remediation and follow-up monitoring ranging from \$0.8 to \$5.2 million, and possible sewer system structural changes up to \$75 million. Such estimated costs were developed by the Regional Water Quality Control Board and State Water Resources Control Board in 1998 and 1999. The SFPUC provided comments and data studies disputing both the extent of contamination in the channels and any asserted causal relationship to SFPUC activities. The plan is not self-executing, and requires further regulatory action by the Regional Water Quality Control Board, which has indicated that contaminated sediment issues will be addressed through the TMDL analysis and implementation programs mentioned above. In 2002, both Mission Channel and Islais Channel were added to the Clean Water Act 303(d) list of water quality limited segments (*i.e.*, impaired waterways). A TMDL (or related action) must be completed for the listed waterways. Pursuant to a directive issued in June 2023, the Regional Water Quality Control Board is requiring the SFPUC to conduct an investigation to determine whether Mission Channel and Islais Channel remain impaired, or whether they may be removed from the impaired waters list. The SFPUC disputes the extent of the contamination in the channels and any causal relationship to SFPUC activities. Nevertheless, the SFPUC is complying with the directive and will actively participate in the development of any TMDLs for such areas.

The 1999 Statewide plan also identified Central Basin (adjacent to the San Francisco Bayside shoreline) as a moderate priority toxic hot spot, but did not identify investigation or remediation costs (costs were only developed for the high priority sites). Central Basin has also been placed on the Clean Water Act 303(d) list of water quality limited segments. To date, the SFPUC has not been issued any directives relating to the Central Basin. The SFPUC disputes any causal relationship to SFPUC activities and will actively participate in the development of any TMDLs for such areas.

***CERCLA.*** The EPA has listed Yosemite Slough as a "Superfund" site under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"). The site (which lies adjacent to Hunters Point and the former United States Navy Shipyard) is approximately 1,600 feet long and 400 feet wide, and depending on tide, is either a mudflat or shallow submerged waterway. Studies have been conducted since the 1990s to better understand the nature of the sediments and contamination at the site, and to develop a remediation plan for the removal of such material. The primary contaminants of concern are PCBs and lead. In 2013, the EPA estimated the cost for site remediation at \$15.5 million on a present value basis, but the SFPUC can give no assurance whether such amount is or will be the final clean-up cost estimate as such amount is subject to the completion of additional studies and the EPA's adoption of a final remediation plan. In 2016, the EPA determined that additional studies were required to develop the cleanup plan, and those studies are expected to be completed in 2025. The EPA named the City a potentially responsible party under CERCLA for the cleanup because of the role the City's combined sewer system may have played in transporting contaminants to the slough. The City, along with other potentially responsible parties, is participating in a voluntary nonbinding mediation to allocate financial responsibility for the cleanup. The SFPUC cannot reasonably predict whether or to what extent it may be financially responsible for remediation of the contamination, or whether such cleanup obligations will have any adverse impact on the financial condition of the Wastewater Enterprise or sewer system operations.

Pursuant to GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, the Wastewater Enterprise reported \$8.1 million and \$7.8 million in pollution remediation liability as of June 30, 2022, and June 30, 2023, respectively.

Considering CERCLA, the SFPUC makes best efforts to address the impacts of Wastewater Enterprise outputs on natural resources, including impacts from contaminants appropriately or illegally discharged into sewers and whether those contaminants remain in biosolids end-product.

***Contaminants of Emerging Concern.*** Contaminants of emerging concern include alkyl phenols, endocrine disrupting chemicals, flame retardants, hormones, personal care products, pharmaceuticals, steroids, human-made chemicals such as perfluoroalkyl substances (PFAS) and perfluorooctane sulfonate (PFOS), microplastics and pesticides. Pharmaceuticals typically include prescription and over-the-counter therapeutic drugs for both human and veterinary treatment. Personal care products typically include soaps, fragrances and cosmetics. Secondary treatment facilities remove some of these contaminants, even though they are not specifically designed for this purpose. Currently no water quality standards exist for most of these compounds, therefore, the SFPUC permits do not contain effluent limitations for them.

***Nutrient Control for the Bayside.*** San Francisco Bay has long been recognized as a nutrient-enriched estuary; however, until recently, it had not experienced negative effects of over-enrichment. Changes recently observed in San Francisco Bay indicate that its resilience to the effects of nutrient enrichment may be declining. In response to these changes, the Regional Water Quality Control Board issued a regional permit (NPDES No. CA0038873) in 2014 requiring all municipal dischargers to the San Francisco Bay monitor and report nutrient discharges. The Regional Water Quality Control Board re-issued this permit in 2019 and stated its intent to consider establishing effluent limitations in future permits to prevent further increases in nutrient loads from municipal wastewater treatment plants. In 2022, San Francisco Bay experienced a very large algal bloom that resulted in significant fish die-offs. Monitoring of this bloom indicated that, while nitrogen discharges from municipal wastewater treatment plants did not cause the bloom, they contributed to the size and duration. In response to this bloom, the San Francisco Bay Regional Water Quality Control Board has drafted a revised regional permit that it currently is scheduled to issue in 2024 with requirements that will ultimately necessitate substantially reducing nitrogen loads from municipal wastewater treatment plants, including the Southeast Treatment Plant. The SFPUC and regional groups such as the Bay Area Clean Water Association (of which the SFPUC is a member) are working with the Regional Water Quality Control Board on this permit revision.

In anticipation of this permit revision and future permit revisions, the SFPUC has established the Mainstream Nutrient Reduction Project. See “WASTEWATER ENTERPRISE CAPITAL PROGRAM – Sewer System Improvement Program – *Program Scope – Treatment Facilities – Mainstream Nutrient Reduction Project.*”

### **Other Regulatory Agencies with Jurisdiction Over the Wastewater Enterprise**

Other regulatory agencies with approval or oversight responsibilities over the siting, construction or operational impacts of the Wastewater Enterprise on air, water and natural resources include the Bay Area Air Quality Management District, the Bay Conservation and Development Commission, the California Coastal Commission, the California Department of Toxic Substances Control, the State Lands Commission, the California Department of Public Health, the National Marine Fisheries Service, the United States Fish and Wildlife Service, the California Department of Fish and Wildlife, and the U.S. Army Corps of Engineers.

### **Other Laws Affecting the Wastewater Enterprise**

As a public agency the SFPUC’s actions must be consistent with CEQA and, where federal approvals or funding is involved, NEPA. The federal Clean Air Act and the California Clean Air Act of 1988 also regulate emissions from the treatment facilities. All of the SFPUC’s treatment facilities meet present Bay Area Air Quality Management District standards.

## **CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS**

The activities of the SFPUC and the Wastewater Enterprise, including, without limitation, the establishment of rates for sewer service and the issuance of Bonds (which include Parity Loans), are subject to several limitations under both State and local law. Certain of such limitations are summarized below. Additionally, such limitations may be revised, enhanced, expanded or otherwise altered as provided under State and local law, including in certain

instances by legislation adopted by State, regional or local authorities, including the State Legislature or the Board of Supervisors, or by California or San Francisco voters themselves through the power of initiative or referendum, by voting in favor of amendments to the Charter or in any other lawful manner.

## **State Law Limitations**

***Tax and Spending Limitations.*** The taxing powers of public agencies in the State are limited by Article XIII A of the California Constitution, added by an initiative amendment approved by the voters on June 6, 1978, and commonly known as Proposition 13.

Article XIII A limits the maximum ad valorem tax on real property to 1% of “full cash value,” which is defined as “the County Assessor’s valuation of real property as shown on the Fiscal Year 1975-76 tax bill under ‘full cash value’ or, thereafter, the appraised value of real property when purchased, newly constructed, or a change in ownership has occurred after the 1975 assessment.” The full cash value may be adjusted annually to reflect inflation at a rate not to exceed 2% per year, or reduction in the consumer price index or comparable local data, or declining property value caused by damage, destruction, or other factors.

The tax rate limitation referred to above does not apply to ad valorem taxes to pay the debt service on any indebtedness approved by the voters before July 1, 1978, or on any bonded indebtedness for the acquisition or improvement of real property approved by two-thirds of the votes cast by the voters voting on the proposition.

Under the terms of Article XIII A and pursuant to an allocation system created by implementing legislation, each county is required to levy the maximum ad valorem tax permitted by Article XIII A and to distribute the proceeds to local agencies.

Assessed valuation growth allowed under Article XIII A (new construction, change of ownership and up to 2% annual value growth) is allocated among the jurisdictions that serve the tax rate area within which the growth occurs. Local agencies and schools share the growth of base revenues from the tax rate area. Each year’s growth allocation becomes part of each agency’s allocation in the following year. The availability of revenues from tax bases to such entities may be affected by the existence of certain successor agencies to former redevelopment agencies that, under certain circumstances, may be entitled to such revenues resulting from the upgrading of certain property values.

Under State law, any fee that exceeds the reasonable cost of providing the service for which the fee is charged may be considered a “special tax” that must be authorized by a two-thirds vote of the electorate. Accordingly, if a portion of the SFPUC’s wastewater user rates or capacity charges were determined by a court to exceed the reasonable cost of providing service, the SFPUC might not be permitted to continue to collect that portion unless it were authorized to do so by a two-thirds majority of the votes cast in an election to authorize the collection of that portion of the rates or fees. If the SFPUC were unable to obtain such a two-thirds majority vote and were unable to reduce costs, such failure could adversely affect the SFPUC’s ability to pay the debt service on the Bonds.

The United States Supreme Court has upheld Article XIII A against a challenge alleging violation of equal protection under the Fourteenth Amendment to the United States Constitution.

***Proposition 218.*** Proposition 218, a State ballot initiative known as the “Right to Vote on Taxes Act,” was approved by California voters on November 5, 1996. The initiative added Articles XIIC and XIID to the California Constitution, creating additional requirements for the imposition by most local governments of “general taxes,” “special taxes,” “assessments,” “fees,” and “charges.” Articles XIIC and XIID became effective, pursuant to their terms, as of November 6, 1996, although compliance with some of the provisions was deferred until July 1, 1997, and certain of the provisions purport to apply to any tax imposed for general governmental purposes (*i.e.*, “general taxes”) imposed, extended or increased on or after January 1, 1995 and prior to November 6, 1996.

Article XIID imposes substantive and procedural requirements on the imposition, extension or increase of any “fee” or “charge” subject to its provisions. A “fee” or “charge” subject to Article XIID includes any levy, other

than an ad valorem tax, special tax or assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership. Article XIID prohibits, among other things, the imposition of any proposed fee or charge, and, possibly, the increase of any existing fee or charge, in the event written protests against the proposed fee or charge are presented at a required public hearing on the fee or charge by a majority of owners of the parcels upon which the fee or charge is to be imposed. Except for fees and charges for water, sewer and refuse collection services, the approval of a majority of the property owners subject to the fee or charge, or at the option of the agency, by a two-thirds vote of the electorate residing in the affected area, is required not less than 45 days following the public hearing on any such proposed new or increased fee or charge.

The California Supreme Court decisions in *Richmond v. Shasta Community Services District*, 32 Cal. 4th 409 (2004) (“**Richmond**”), and *Bighorn-Desert View Water Agency v. Verjil*, 39 Cal. 4th 206 (2006) (“**Bighorn**”) have clarified uncertainty surrounding the applicability of Section 6 of Article XIID to service fees and charges. In *Richmond*, the Shasta Community Services District charged a water connection fee, which included a capacity charge for capital improvements to the water system and a fire suppression charge. The Court held that both the capacity charge and the fire suppression charge were not subject to Article XIID because a water connection fee is not a property-related fee or charge because it results from the property owner’s voluntary decision to apply for the connection. In both *Richmond* and *Bighorn*, however, the Court stated that a fee for ongoing water service through an existing connection is imposed “as an incident of property ownership” within the meaning of Article XIID, rejecting, in *Bighorn*, the water agency’s argument that consumption-based water charges are not imposed “as an incident of property ownership” but as a result of the voluntary decisions of customers as to how much water to use.

The SFPUC provides public notice of proposed wastewater rate increases in accordance with the requirements of Article XIID through means that include, among others, holding informational presentations at community group meetings, mailings to residential and commercial customers of public hearings on rate increases, and press releases and media campaigns regarding rate increases, followed by public hearings conducted by the SFPUC’s Rate Fairness Board and by the SFPUC itself. The SFPUC also develops and adopts retail utility user rates and fees in accordance with the requirements of Article XIID(6)(b) that limit property-related fees and charges.

Article XIIC extends the people’s initiative power to reduce or repeal previously authorized local taxes, assessments, fees and charges. This extension of the initiative power is not limited by the terms of Article XIIC to fees, taxes, assessment fees and charges imposed after November 6, 1996 and absent other authority could result in retroactive reduction in any existing taxes, assessments, fees or charges. In *Bighorn*, the Court concluded that under Article XIIC local voters by initiative may reduce a public agency’s water rates and delivery charges. The Court noted, however, that it was not holding that the authorized initiative power is free of all limitations, stating that it was not determining whether the electorate’s initiative power is subject to the public agency’s statutory obligation to set water service charges at a level that will “pay the operating expenses of the agency, ... provide for repairs and depreciation of works, provide a reasonable surplus for improvements, extensions, and enlargements, pay the interest on any bonded debt, and provide a sinking or other fund for the payment of the principal of such debt as it may become due.”

Article XIID imposes the substantive requirement that any wastewater charges may not exceed the proportional cost of providing service to customers. The Fourth District of the California Court of Appeal decision in *Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano*, 235 Cal.App.4th 1493 (2015), clarified that tiered rate structures are compatible with the cost of service limitations of Article XIID when each tier structure is supported by cost of service calculations. The court held that San Juan Capistrano’s water rates violated Article XIID because no evidence in the record adequately showed that each tier corresponded to the cost of providing service at a given level of usage.

The courts have not fully interpreted the provisions of Proposition 218. The SFPUC is unable to predict how courts will further interpret Article XIIC and Article XIID, and what, if any, further implementing legislation will be enacted. Under the *Bighorn* case, San Francisco voters could adopt an initiative measure that reduces or repeals the SFPUC’s wastewater rates and charges, though it is not clear whether (and courts have not decided whether) any such reduction or repeal by initiative would be enforceable in a situation in which such rates and charges are pledged to the repayment of bonded indebtedness. There can be no assurance that the courts will not further interpret, or the voters will not amend, Article XIIC and Article XIID to limit the ability of the SFPUC to impose, levy, charge and collect increased fees and charges for the Wastewater Enterprise, or to call into question

wastewater rate increases previously adopted by the SFPUC. No assurance may be given that Articles XIII C and XIII D will not have a material adverse impact on Net Revenues.

On December 12, 2023, the City was served with a purported class action lawsuit challenging the compliance of the rates charged by the Wastewater Enterprise with the requirements of Proposition 218. See “– *Proposition 218 Litigation*.”

***Proposition 218 Litigation.*** The Wastewater Enterprise provides sewer system services for the collection, treatment and disposal of sanitary wastewater and stormwater. Unlike most California municipal systems, where sanitary wastewater and stormwater are collected separately and stormwater is not treated, the Wastewater Enterprise is a combined sewer system providing treatment for sewage, wastewater, and sanitary waste. See “THE WASTEWATER ENTERPRISE – Combined Sewage and Stormwater System.” To increase transparency about the elements of sewer service charges while simultaneously providing incentives for customers to manage stormwater on their properties and divert it from the collection system, the Wastewater Enterprise revised its sewer service charges, effective July 1, 2023, to include both a sanitary sewer component and a stormwater runoff component. See “THE WASTEWATER ENTERPRISE – Wastewater Enterprise Rates and Charges.”

On December 12, 2023, the City was served with a purported class action lawsuit filed in California Superior Court challenging the compliance of the rates charged by the Wastewater Enterprise with the requirements of Proposition 218. *Gluck, et al. v. City and County of San Francisco, et al.*, SF. Superior Court Case No. CGC-23-609954. See also “– *Proposition 218*.” The complaint asserted that the Wastewater Enterprise sewer service charges exceed the cost of providing sewer service because a portion of the proceeds of such charges has been and will continue to be used to fund the cost of “stormwater management” and that the Wastewater Enterprise has imposed “stormwater charges” without required voter approval. The plaintiffs sought refunds of certain sewer service fees paid by customers, interest, attorneys’ fees and other costs, and injunctive relief.

On February 26, 2024, the Superior Court issued an order sustaining the City’s demurrer to the complaint without leave to amend as to all of the plaintiffs’ claims and dismissing the case in full. The plaintiffs filed a notice of appeal of this order to the California Court of Appeal on March 29, 2024. The plaintiffs’ opening brief is expected in July 2024. The City intends to continue vigorously defending the action.

Were the plaintiffs to prevail upon appeal and were the outcome of the lawsuit to be unfavorable to the City, there could be an adverse impact on the operations and/or financial condition of the Wastewater Enterprise. The SFPUC believes, though, that any settlement obligations or adjudicated liability could be lawfully funded through future sewer service charges.

***Proposition 26.*** Proposition 26, which amended Article XIII A and XIII C of the California Constitution, was approved by the electorate at the November 2, 2010 election. Proposition 26 imposes a two-thirds voter approval requirement for the imposition of fees and charges by the State. It also imposes a majority voter approval requirement on local governments with respect to fees and charges for general purposes, and a two-thirds voter approval requirement with respect to fees and charges for special purposes. According to its supporters, Proposition 26 was designed to prevent the circumvention of tax limitations imposed by the voters pursuant to Proposition 13, approved in 1978, Proposition 218, and other measures through the use of non-tax fees and charges.

Proposition 26 expressly excludes from its scope “a charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable cost to the governmental entity of providing the service or product to the payor” and “assessments and property-related fees imposed in accordance with the provisions of Article XIII D.” The SFPUC believes that the initiative is not intended to, and would not, apply to fees for wastewater services charged by the SFPUC. The SFPUC, however, is unable to predict how Proposition 26 will be interpreted by the courts to apply to the provision of wastewater services by local governments such as the SFPUC.

## **Initiative and Referendum**

Article XIII A and Articles XIII C and XIII D of the California Constitution were adopted pursuant to the State's constitutional initiative process. From time to time other initiative measures could be adopted by California or San Francisco voters, placing additional limitations on the ability of the SFPUC to increase revenues.

## **Charter Limitations**

The Charter requires that bonds (such as the Bonds) secured by revenues, other than refunding bonds, may be issued only with the assent of a majority of voters. However, under the Charter amendments enacted by the voters in November 2002 (Proposition E) and in June 2018 (Proposition A), the SFPUC may issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities, clean water facilities, power facilities, or combinations of water, clean water and power facilities under the jurisdiction of the SFPUC or for any other lawful purpose of the water, clean water or power utilities of the City in furtherance of the purposes provided in the Charter, including the refunding of existing obligations (and subject to the further conditions contained in Proposition E and Proposition A). See "OBLIGATIONS PAYABLE FROM NET REVENUES – Authority for Issuance of Revenue Bonds and Other Obligations Payable from Net Revenues" and "SECURITY FOR THE BONDS – Additional Series of Bonds," "– Additional Parity Loans" and "– Refunding Bonds."

## **Future Charter Amendments**

San Francisco voters could adopt additional Charter amendments in the future which would limit the ability of the SFPUC to issue debt or to enact rate increases, affect the financial condition or operation of the Wastewater Enterprise or implement other changes affecting the financial condition or operations of the SFPUC and the Wastewater Enterprise. See "RISK FACTORS – Initiative, Referendum and Charter Amendments and Future Legislation."

## **LITIGATION**

The SFPUC is not aware of any litigation, pending or threatened, questioning the political existence of the City or the SFPUC or contesting the SFPUC's power to fix wastewater rates and charges, or in any way questioning or affecting:

- (i) the proceedings under which the 2024ABCD Bonds are to be issued;
- (ii) the validity of any provision of the 2024ABCD Bonds or the Indenture;
- (iii) the pledge of Net Revenues by the SFPUC under the Indenture; or
- (iv) the titles to office of the present members of the Board of Supervisors and the Commission.

There are several suits and claims pending against the City and the SFPUC impacting the Wastewater Enterprise, which may include personal injury, wrongful death and other suits and claims against which the City may self-insure. The aggregate amount of the self-insured liabilities of the City and the SFPUC which may result from such suits and claims if determined adversely to the City or the SFPUC will not, in the opinion of the City Attorney, materially impair the ability of the SFPUC to pay principal of or interest on the 2024ABCD Bonds as they become due. Other than as disclosed elsewhere in this Official Statement, there is no litigation pending, with service of process having been accomplished, against the City or the SFPUC which if determined adversely to the City or the SFPUC would, in the opinion of the City Attorney, materially impair the ability of the SFPUC to pay principal of and interest on the 2024ABCD Bonds as they become due. See also "RISK FACTORS – Risks Related to Wastewater Enterprise Facilities and Operation – *Natural and Man-Made Disasters; Flooding*," "REGULATORY MATTERS – Federal and State Clean Water Act Permits" and "CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS – State Law Limitations – *Proposition 218 Litigation*."

## TAX MATTERS

### Tax-Exempt Bonds

***Federal Tax Exemption.*** In the opinion of Bond Counsel to the SFPUC, under existing statutes, regulations, rulings and judicial decisions, and assuming compliance by the SFPUC with certain covenants in the applicable resolution, the Tax Certificate and other documents pertaining to the Tax-Exempt Bonds and requirements of the Code regarding the use, expenditure and investment of proceeds of the Tax-Exempt Bonds and the timely payment of certain investment earnings to the United States, interest on the Tax-Exempt Bonds is not included in the gross income of the owners of the Tax-Exempt Bonds for federal income tax purposes. Failure to comply with such covenants and requirements may cause interest on the Tax-Exempt Bonds to be included in gross income retroactive to the date of issuance of the Tax-Exempt Bonds.

In the further opinion of Bond Counsel, interest on the Tax-Exempt Bonds is not treated as an item of tax preference for purposes of the federal alternative minimum tax on individuals. Bond Counsel expresses no opinion regarding the applicability of the federal corporate alternative minimum tax to the adjusted financial statement income of certain corporations.

Ownership of, or the receipt of interest on, tax-exempt obligations may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, certain foreign corporations doing business in the United States, certain S corporations with excess passive income, individual recipients of Social Security or Railroad Retirement benefits, taxpayers that may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations and taxpayers who may be eligible for the earned income tax credit. Bond Counsel expresses no opinion with respect to any collateral tax consequences and, accordingly, prospective purchasers of the Tax-Exempt Bonds should consult their tax advisors as to the applicability of any collateral tax consequences.

Certain requirements and procedures contained or referred to in the applicable resolution, the Tax Certificate or other documents pertaining to the Tax-Exempt Bonds may be changed, and certain actions may be taken or not taken, under the circumstances and subject to the terms and conditions set forth in such documents, upon the advice or with the approving opinion of counsel nationally recognized in the area of tax-exempt obligations. Bond Counsel expresses no opinion as to the effect of any change to any document pertaining to the Tax-Exempt Bonds or of any action taken or not taken where such change is made or action is taken or not taken without the approval of Bond Counsel or in reliance upon the advice of counsel other than Bond Counsel with respect to the exclusion from gross income of the interest on the Tax-Exempt Bonds for federal income tax purposes.

Bond Counsel's opinion is not a guarantee of result, but represents its legal judgment based upon its review of existing statutes, regulations, published rulings and judicial decisions and the representations and covenants of the SFPUC described above. No ruling has been sought from the IRS with respect to the matters addressed in the opinion of Bond Counsel, and Bond Counsel's opinion is not binding on the IRS. The IRS has an ongoing program of examining the tax-exempt status of the interest on municipal obligations. If an examination of the Tax-Exempt Bonds is commenced, under current procedures the IRS is likely to treat the SFPUC as the "taxpayer," and the owners of the Tax-Exempt Bonds would have no right to participate in the examination process. In responding to or defending an examination of the tax-exempt status of the interest on the Tax-Exempt Bonds, the SFPUC may have different or conflicting interests from the owners. Additionally, public awareness of any future examination of the Tax-Exempt Bonds could adversely affect the value and liquidity of the Tax-Exempt Bonds during the pendency of the examination, regardless of its ultimate outcome.

### ***Tax Accounting Treatment of Bond Premium and Original Issue Discount***

**Bond Premium.** To the extent a purchaser acquires a Tax-Exempt Bond at a price in excess of the amount payable at its maturity, such excess will constitute "bond premium" under the Code. The Code and applicable Treasury Regulations provide generally that bond premium on a tax-exempt obligation is amortized over the remaining term of the obligation (or a shorter period in the case of certain callable obligations) based on the obligation's yield to maturity (or shorter period in the case of certain callable obligations). The amount of premium so amortized reduces the owner's basis in such obligation for federal income tax purposes, though such amortized

premium is not deductible for federal income tax purposes. This reduction in basis will increase the amount of any gain (or decrease the amount of any loss) recognized for federal income tax purposes upon a sale or other taxable disposition of the obligation. Bond Counsel is not opining on the accounting for bond premium or the consequence to a Tax-Exempt Bond purchaser of purchasing a Tax-Exempt Bond with bond premium. Accordingly, persons considering the purchase of Tax-Exempt Bonds with bond premium should consult their own tax advisors with respect to the determination of bond premium on such Tax-Exempt Bonds for federal income tax purposes and with respect to the state and local tax consequences of owning and disposing of such Tax-Exempt Bonds.

**Original Issue Discount.** The excess, if any, of the stated redemption price at maturity of Tax-Exempt Bonds of a particular maturity over the initial offering price to the public of the Tax-Exempt Bonds of that maturity at which a substantial amount of the Tax-Exempt Bonds of that maturity is sold to the public is “original issue discount.” Original issue discount accruing on a Tax-Exempt Bond is treated as interest excluded from the gross income of the owner thereof for federal income tax purposes under the same conditions and limitations as are applicable to interest payable on such Tax-Exempt Bond. Original issue discount on a Tax-Exempt Bond of a particular maturity purchased pursuant to the initial public offering at the initial public offering price at which a substantial amount of the Tax-Exempt Bonds of that maturity is sold to the public accrues on a semiannual basis over the term of the Tax-Exempt Bond on the basis of a constant yield; and within each semiannual period accrues on a ratable daily basis. The amount of original issue discount on a Tax-Exempt Bond accruing during each period is added to the adjusted basis of such Tax-Exempt Bond, which will affect the amount of taxable gain upon disposition (including sale, redemption or payment on maturity) of such Tax-Exempt Bond. The Code includes certain provisions relating to the accrual of original issue discount in the case of purchasers that purchase Tax-Exempt Bonds other than at the initial offering price. Bond Counsel is not opining on the accounting for or consequence to a Tax-Exempt Bond purchaser of purchasing a Tax-Exempt Bond with original issue discount. Accordingly, persons considering the purchase of Tax-Exempt Bonds with original issue discount should consult their own tax advisors with respect to the determination of original issue discount on such Tax-Exempt Bonds for federal income tax purposes and with respect to the state and local tax consequences of owning and disposing of such Tax-Exempt Bonds.

***Information Reporting and Backup Withholding.*** Interest paid on the Tax-Exempt Bonds will be subject to information reporting in a manner similar to interest paid on taxable obligations. Although such reporting requirement does not, in and of itself, affect the excludability of such interest from gross income for federal income tax purposes, such reporting requirement causes the payment of interest on the Tax-Exempt Bonds to be subject to backup withholding if such interest is paid to beneficial owners who (a) are not “exempt recipients,” and (b) either fail to provide certain identifying information (such as the beneficial owner’s taxpayer identification number) in the required manner or have been identified by the IRS as having failed to report all interest and dividends required to be shown on their income tax returns. Generally, individuals are not exempt recipients, whereas corporations and certain other entities are exempt recipients. Amounts withheld under the backup withholding rules from a payment to a beneficial owner are allowed as a refund or credit against such beneficial owner’s federal income tax liability so long as the required information is furnished to the IRS.

***State Tax Exemption.*** In the further opinion of Bond Counsel, interest on the Tax-Exempt Bonds is exempt from personal income taxes imposed by the State of California.

***Future Developments.*** Existing law may change to reduce or eliminate the benefit to owners of the Tax-Exempt Bonds of the exclusion of the interest on the Tax-Exempt Bonds from gross income for federal income tax purposes or of the exemption of interest on the Tax-Exempt Bonds from State of California personal income taxation. Any proposed legislation, whether or not enacted, or administrative action, whether or not taken, could also affect the value and marketability of the Tax-Exempt Bonds. Prospective purchasers of the Tax-Exempt Bonds should consult their own tax advisors with respect to any proposed or future change in tax law.

***Proposed Form of Opinion.*** A copy of the form of opinion of Bond Counsel relating to the Tax-Exempt Bonds is included in APPENDIX C hereto.

## **Taxable Bonds**

**General.** The issuance and delivery of the Taxable Bonds is subject to the delivery of an opinion of Bond Counsel that under existing State of California law, interest on the Taxable Bonds is exempt from personal income taxes imposed by the State of California.

Below is a general summary of the United States federal income tax consequences of the purchase and ownership of the Taxable Bonds. The discussion below is based upon the Code, Treasury Regulations, rulings and judicial decisions now in effect, all of which are subject to change (possibly with retroactive effect) or possibly a differing interpretation. No assurance can be given that future changes in the law will not alter the statements herein. The discussion below does not purport to deal with United States federal income tax consequences applicable to all categories of investors. Further, the discussion below does not purport to cover all aspects of United States federal income taxation that may be relevant to a particular investor in the Taxable Bonds in light of the investor's particular personal investment circumstances or to certain types of investors subject to special treatment under United States federal income tax laws (including insurance companies, tax-exempt organizations, financial institutions, broker-dealers and persons that have hedged the risk of owning the Taxable Bonds). Such discussion is therefore limited to certain issues relating to initial investors that will hold the Taxable Bonds as "capital assets" within the meaning of Section 1221 of the Code, and that acquire such Taxable Bonds for investment and not as a dealer or for resale. Except as specifically discussed below, the discussion below addresses the United States federal income tax consequences applicable only to beneficial owners of the Taxable Bonds that are "United States persons" within the meaning of Section 7701(a)(30) of the Code ("United States persons") and does not address any consequence to persons other than United States persons. Prospective investors should note that no rulings have been or will be sought from the IRS with respect to any of the U.S. federal income tax consequences discussed herein, and no assurance can be given that the IRS will not take contrary positions. A form of Bond Counsel's anticipated opinion is included as Appendix C.

PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS IN DETERMINING THE FEDERAL, STATE, LOCAL, FOREIGN AND ANY OTHER TAX CONSEQUENCES TO THEM RELATING TO THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE TAXABLE BONDS.

**Payments of Stated Interest on the Taxable Bonds.** The stated interest paid on the Taxable Bonds will be included in the gross income, as defined in Section 61 of the Code, of the beneficial owners of the Taxable Bonds, and will be subject to U.S. federal income taxation when received or accrued, depending on the tax accounting method used by the beneficial owners thereof.

**Original Issue Discount.** If a substantial amount of the Taxable Bonds of any stated maturity is purchased at original issuance for a purchase price (the "**Issue Price**") that is less than their face amount by more than one quarter of one percent times the number of complete years to maturity, the Taxable Bonds of such maturity will be treated as being issued with "original issue discount." The amount of the original issue discount will equal the excess of the principal amount payable on such Taxable Bonds at maturity over the Issue Price of such Taxable Bonds, and the amount of the original issue discount on the Taxable Bonds will be amortized over the life of the Taxable Bonds using the "constant yield method" provided in the Treasury Regulations. As the original issue discount accrues under the constant yield method, the beneficial owners of the Taxable Bonds, regardless of their regular method of accounting, will be required to include such accrued amount in their gross income as interest. This can result in taxable income to the beneficial owners of the Taxable Bonds that exceeds actual cash distributions to the beneficial owners in a taxable year.

The amount of the original issue discount that accrues on the Taxable Bonds each taxable year will be reported annually to the IRS and to the beneficial owners. The portion of the original issue discount included in each beneficial owner's gross income while the beneficial owner holds the Taxable Bonds will increase the adjusted tax basis of the Taxable Bonds in the hands of such beneficial owner.

**Premium.** If a beneficial owner purchases a Taxable Bond for an amount that is greater than its stated redemption price at maturity, such beneficial owner will be considered to have purchased the Taxable Bond with "amortizable bond premium" equal in amount to such excess. A beneficial owner may elect to amortize such premium using a constant yield method over the remaining term of the Taxable Bond and may offset interest

otherwise required to be included in respect of the Taxable Bond during any taxable year by the amortized amount of such premium for the taxable year. Bond premium on a Taxable Bond held by a beneficial owner who does not make such an election will decrease the amount of gain or increase the amount of loss otherwise recognized on the sale, exchange, redemption or retirement of a Taxable Bond. However, if the Taxable Bond may be optionally redeemed after the beneficial owner acquires it at a price in excess of its stated redemption price at maturity, special rules would apply under the Treasury Regulations which could result in a deferral of the amortization of some bond premium until later in the term of the Taxable Bond. Any election to amortize bond premium applies to all taxable debt instruments held by the beneficial owner on or after the first day of the first taxable year to which such election applies, and may be revoked only with the consent of the IRS.

**Medicare Contribution Tax.** Pursuant to Section 1411 of the Code, as enacted by the Health Care and Education Reconciliation Act of 2010, an additional tax is imposed on individuals beginning January 1, 2013. The additional tax is 3.8% of the lesser of (i) net investment income (defined as gross income from interest, dividends, net gain from disposition of property not used in a trade or business and certain other listed items of gross income), or (ii) the excess of “modified adjusted gross income” of the individual over \$200,000 for unmarried individuals (\$250,000 for married couples filing a joint return and a surviving spouse). Holders of the Taxable Bonds should consult their tax advisors concerning this additional tax, as it may apply to interest earned with respect to the Taxable Bonds as well as gain on the sale of a Taxable Bond.

**Disposition of Bonds and Market Discount.** A beneficial owner of Taxable Bonds will generally recognize gain or loss on the redemption, sale or exchange of Taxable Bonds equal to the difference between the redemption or sales price (exclusive of the amount paid for accrued interest) and the beneficial owner’s adjusted tax basis in the Taxable Bonds. Generally, the beneficial owner’s adjusted tax basis in the Taxable Bonds will be the beneficial owner’s initial cost, increased by the original issue discount previously included in the beneficial owner’s income to the date of disposition. Any gain or loss generally will be capital gain or loss and will be long-term or short-term, depending on the beneficial owner’s holding period for the Taxable Bonds.

Under current law, a purchaser of Taxable Bonds who did not purchase the Taxable Bonds in the initial public offering (a “**subsequent purchaser**”) generally will be required, on the disposition (or earlier partial principal payment) of the Taxable Bonds, to recognize as ordinary income a portion of the gain, if any, to the extent of the accrued “market discount.” In general, market discount is the amount by which the price paid for the Taxable Bonds by a subsequent purchaser is less than the sum of Issue Price and the amount of original issue discount previously accrued on the Taxable Bonds. The Code also limits the deductibility of interest incurred by a subsequent purchaser on funds borrowed to acquire Taxable Bonds with market discount. As an alternative to the inclusion of market discount in income upon disposition, a subsequent purchaser may elect to include market discount in income currently as it accrues on all market discount instruments acquired by the subsequent purchaser in that taxable year or thereafter, in which case the interest deferral rule will not apply. The re-characterization of gain as ordinary income on a subsequent disposition of Taxable Bonds could have a material effect on the market value of the Taxable Bonds.

**Legal Defeasance.** If the District elects to defease the Taxable Bonds by depositing in escrow sufficient cash and/or obligations to pay when due outstanding Taxable Bonds (a “**legal defeasance**”), under current tax law, a beneficial owner of Taxable Bonds may be deemed to have sold or exchanged its Taxable Bonds. In the event of such a legal defeasance, a beneficial owner of Taxable Bonds generally would recognize gain or loss in the manner described above. Ownership of the Taxable Bonds after a deemed sale or exchange as a result of a legal defeasance may have tax consequences different from those described above, and each beneficial owner should consult its own tax advisor regarding the consequences to such beneficial owner of a legal defeasance of the Taxable Bonds.

**Backup Withholding.** Under Section 3406 of the Code, a beneficial owner of the Taxable Bonds that is a United States person may, under certain circumstances, be subject to “backup withholding” on payments of current or accrued interest on the Taxable Bonds or with respect to proceeds received from the disposition of the Taxable Bonds. This withholding applies if such beneficial owner of Taxable Bonds: (i) fails to furnish to the payor such beneficial owner’s social security number or other taxpayer identification number (“**TIN**”); (ii) furnishes the payor an incorrect TIN; (iii) fails to properly report interest, dividends or other “reportable payments” as defined in the Code; or (iv) under certain circumstances, fails to provide the payor with a certified statement, signed under penalty

of perjury, that the TIN provided to the payor is correct and that such beneficial owner is not subject to backup withholding.

Backup withholding will not apply to beneficial owners that are corporations or that fall within certain categories and (if and when required) demonstrate that fact. Beneficial owners of the Taxable Bonds should consult their own tax advisors regarding their qualification for exemption from backup withholding and the procedures for obtaining such exemption. The backup withholding tax is not an additional tax, and taxpayers may use amounts withheld as a credit against their federal income tax liability or may claim a refund as long as they timely provide certain information to the Service.

***Withholding on Payments to Nonresident Alien Individuals and Foreign Corporations.*** Under Sections 1441 and 1442 of the Code, nonresident alien individuals and foreign corporations are generally subject to withholding at the rate of 30% on periodic income items arising from sources within the United States, provided that such income is not “effectively connected” with the conduct of a United States trade or business, within the meaning of Section 864 of the Code. Where interest on the Taxable Bonds received by nonresident aliens and foreign corporations is not treated as effectively connected income, such interest will be subject to 30% withholding, or any lower rate specified in an income tax treaty, unless such income is treated as “portfolio interest” within the meaning of Sections 871 and 881 of the Code. Interest will be treated as portfolio interest under such sections if: (i) the beneficial owner provides a statement to the payor certifying, under penalties of perjury, that such beneficial owner is not a United States person, and provides the name and address of such beneficial owner; (ii) such interest is treated as not effectively connected with the beneficial owner’s United States trade or business; (iii) interest payments are not made to a person within a foreign country that the IRS has included on a list of countries having provisions inadequate to prevent United States tax evasion; (iv) interest payable on the Taxable Bonds is not deemed contingent interest within the meaning of the portfolio debt provision; (v) such beneficial owner is not a controlled foreign corporation, within the meaning of Section 957 of the Code; and (vi) such beneficial owner is not a bank receiving interest with respect to the Taxable Bonds pursuant to a loan agreement entered into in the ordinary course of the bank’s trade or business.

Assuming payments with respect to the Taxable Bonds are treated as portfolio interest within the meaning of Sections 871 and 881 of the Code, no backup withholding under Section 1441 and 1442 of the Code and no backup withholding under Section 3406 of the Code will be required with respect to beneficial owners or intermediaries that have furnished Form W-8BEN, Form W-8BEN-E, Form W-8EXP or Form W-8IMY, as applicable, provided the payor does not have actual knowledge or reason to know that such person is a United States person.

***Foreign Account Tax Compliance Act.*** Sections 1471 through 1474 of the Code impose a 30% withholding tax on certain types of payments made to a foreign financial institution, unless the foreign financial institution enters into an agreement with the U.S. Treasury to, among other things, undertake to identify accounts held by certain United States persons or U.S.-owned entities, annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent the foreign financial institution from complying with these and other reporting requirements, or unless the foreign financial institution is otherwise exempt from those requirements. In addition, the Foreign Account Tax Compliance Act (“**FATCA**”) imposes a 30% withholding tax on the same types of payments to a non-financial foreign entity unless the entity certifies that it does not have any substantial U.S. owners or the entity furnishes identifying information regarding each substantial United States owner. Failure to comply with the additional certification, information reporting and other specified requirements imposed under FATCA could result in the 30% withholding tax being imposed on payments of the interest on and principal of the Taxable Bonds and sales proceeds of Taxable Bonds held by or through a foreign entity. In general, withholding under FATCA currently applies to payments of U.S. source interest (including OID) and will apply to “foreign passthru payments” but no earlier than two years after the date of publication of final regulations defining the term “foreign passthru payment.” Prospective investors should consult their own tax advisors regarding FATCA and its effect on them.

***Reporting of Interest Payments.*** Subject to certain exceptions, interest payments made to beneficial owners of the Taxable Bonds will be reported to the IRS. Such information will be filed each year with the IRS on Form 1099-INT (or other appropriate reporting form), which will reflect the name, address and TIN of the beneficial

owner. A copy of Form 1099 will be sent to each beneficial owner of a Taxable Bond for U.S. federal income tax purposes.

**Proposed Form of Opinion.** The proposed form of opinion of Bond Counsel regarding the Taxable Bonds is attached in APPENDIX C.

The preceding discussion of certain United States federal income tax consequences is for general information only and is not tax advice. Accordingly, each investor should consult with its own tax advisor as to particular tax consequences to it of purchasing, owning and disposing of the Taxable Bonds, including the applicability and effect of any state, local or foreign tax law, and of any proposed change in applicable law.

## CERTAIN LEGAL MATTERS

Certain legal matters incident to the authorization, sale and delivery of the 2024ABCD Bonds are subject to the approval of Norton Rose Fulbright US LLP, San Francisco, California, Bond Counsel to the SFPUC. Certain legal matters are being passed upon for the SFPUC by the City Attorney and by Orrick, Herrington & Sutcliffe LLP, San Francisco, California (“**Disclosure Counsel**”). Certain legal matters are being passed upon for the Underwriters by Hawkins Delafield & Wood LLP, San Francisco, California. Bond Counsel and Disclosure Counsel will receive compensation that is contingent upon the sale and delivery of the 2024ABCD Bonds.

The form of approving opinion of Bond Counsel is set forth in Appendix C, and will be available at the time of delivery of the 2024ABCD Bonds. Bond Counsel is not passing upon and undertakes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement.

Orrick, Herrington & Sutcliffe LLP has served as Disclosure Counsel to the SFPUC and in such capacity has advised the SFPUC with respect to the requirements of applicable securities laws and participated with responsible SFPUC officials and staff in conferences and meetings where information contained in this Official Statement was reviewed for accuracy and completeness. Disclosure Counsel is not responsible for the accuracy or completeness of the information presented in this Official Statement and has not undertaken to independently verify any of such information. Rather, the SFPUC is solely responsible for the accuracy and completeness of the information contained in this Official Statement. Upon the issuance of the 2024ABCD Bonds, Orrick, Herrington & Sutcliffe LLP will deliver a letter to the SFPUC concerning certain matters with respect to this Official Statement. No purchaser or holder of the 2024ABCD Bonds, or other person or party other than the SFPUC, will be entitled to rely on such letter or on the fact that Orrick, Herrington & Sutcliffe LLP has acted as Disclosure Counsel to the SFPUC.

## RATINGS

Moody’s Investors Service (“**Moody’s**”) has assigned a long-term municipal bond rating of “Aa2” to the 2024ABCD Bonds. S&P Global Ratings, a division of Standard & Poor’s Financial Services LLC (“**S&P**”), has assigned a long-term municipal bond rating of “AA” to the 2024B Bonds, 2024C Bonds and 2024D Bonds. S&P has not assigned a long-term municipal bond rating to the 2024A Bonds, which S&P considers to be a short-term note, based on S&P’s rating criteria and analysis of the 2024A Bonds.

The ratings assigned by Moody’s and S&P express only the views of the respective rating agencies. The explanation of the significance of these ratings, and any outlook associated with these ratings, may be obtained from Moody’s and S&P, respectively. Each rating agency generally bases its rating on its own investigations, studies, and assumptions. The SFPUC has provided certain additional information and materials to the rating agencies (some of which does not appear in this Official Statement).

A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time. There is no assurance such ratings will continue for any given period of time or that such ratings will not be revised downward or withdrawn entirely by the rating agencies, if in the judgment of such rating agencies, circumstances so warrant. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price of the 2024ABCD Bonds. The SFPUC undertakes no responsibility to maintain its current ratings on the 2024ABCD Bonds or to oppose any such downward revision, suspension or withdrawal.

## UNDERWRITING

### 2024AB Bonds

The 2024AB Bonds are being purchased by BofA Securities, Inc., on behalf of itself, Morgan Stanley & Co. LLC, J.P. Morgan Securities LLC, Jefferies LLC, Samuel A. Ramirez & Co., Inc., and Siebert Williams Shank & Co., LLC (collectively, the “**2024AB Underwriters**”).

The 2024AB Underwriters have agreed to purchase from the SFPUC the 2024A Bonds at a purchase price of \$430,499,607.41 (consisting of \$431,110,000.00 aggregate principal amount of the 2024A Bonds, less an underwriters’ discount of \$610,392.59), and the 2024B Bonds at a purchase price of \$87,126,465.97 (consisting of \$87,250,000.00 aggregate principal amount of the 2024B Bonds, less an underwriters’ discount of \$123,534.03). Under the bond purchase contract to be entered into in connection with the purchase of the 2024AB Bonds, the 2024AB Underwriters will be obligated to purchase all of the 2024AB Bonds if any are purchased, the obligation to make such purchase being subject to certain terms and conditions to be satisfied by the SFPUC.

The 2024AB Underwriters have certified the reoffering prices with respect to the 2024AB Bonds set forth on the inside cover pages of this Official Statement. The SFPUC takes no responsibility for the accuracy of these prices. The 2024AB Underwriters may offer and sell the 2024AB Bonds to certain dealers and others at prices lower than the offering prices stated on the inside cover pages. The offering prices may be changed from time to time by the 2024AB Underwriters.

The 2024AB Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the 2024AB Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the SFPUC for which they received or will receive customary fees.

In the ordinary course of their various business activities, the 2024AB Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the SFPUC.

BofA Securities, Inc., one of the 2024AB Underwriters of the 2024AB Bonds, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated (“**MLPF&S**”). As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the 2024AB Bonds.

Morgan Stanley & Co. LLC, one of the 2024AB Underwriters of the 2024AB Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the 2024AB Bonds.

J.P. Morgan Securities LLC (“**JPMS**”), one of the 2024AB Underwriters of the 2024AB Bonds, has entered into negotiated dealer agreements with each of Charles Schwab & Co., Inc. (“**CS&Co.**”) and LPL Financial LLC (“**LPL**”) for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each dealer agreement, each of CS&Co. and LPL may purchase 2024AB Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any 2024AB Bonds that such firm sells.

## 2024CD Bonds

The 2024CD Bonds are being purchased by Morgan Stanley & Co. LLC, on behalf of itself, BofA Securities, Inc., J.P. Morgan Securities LLC, Jefferies LLC, Samuel A. Ramirez & Co., Inc., and Siebert Williams Shank & Co., LLC (collectively, the “**2024CD Underwriters**”).

The 2024CD Underwriters have agreed to purchase from the SFPUC the 2024C Bonds at a purchase price of \$603,753,224.02 (consisting of \$539,720,000.00 aggregate principal amount of the 2024C Bonds, plus an original issue premium of \$64,812,627.15, less an underwriters’ discount of \$779,403.13), and the 2024D Bonds at a purchase price of \$94,955,917.70 (consisting of \$84,895,000.00 aggregate principal amount of the 2024D Bonds, plus an original issue premium of \$10,183,513.55, less an underwriters’ discount of \$122,595.85). Under the bond purchase contract to be entered into in connection with the purchase of the 2024CD Bonds, the 2024CD Underwriters will be obligated to purchase all of the 2024CD Bonds if any are purchased, the obligation to make such purchase being subject to certain terms and conditions to be satisfied by the SFPUC.

The 2024CD Underwriters have certified the reoffering yields with respect to the 2024CD Bonds set forth on the inside cover pages of this Official Statement. The SFPUC takes no responsibility for the accuracy of these yields. The 2024CD Underwriters may offer and sell the 2024CD Bonds to certain dealers and others at yields higher than the offering yields stated on the inside cover pages. The offering yields may be changed from time to time by the 2024CD Underwriters.

The 2024CD Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the 2024CD Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the SFPUC for which they received or will receive customary fees.

In the ordinary course of their various business activities, the 2024CD Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the SFPUC.

Morgan Stanley & Co. LLC, one of the 2024CD Underwriters of the 2024CD Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the 2024CD Bonds. In addition, Morgan Stanley & Co. LLC serves as a non-exclusive dealer with respect to the offering and sale from time to time of the Wastewater Enterprise’s tax-exempt Commercial Paper Notes, \$120 million of which are expected to be retired with proceeds of the 2024C and 2024D Bonds. See “PLAN OF FINANCE.”

BofA Securities, Inc., one of the 2024CD Underwriters of the 2024CD Bonds, has entered into a distribution agreement with its affiliate MLPF&S. As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the 2024CD Bonds.

J.P. Morgan Securities LLC, one of the 2024CD Underwriters of the 2024CD Bonds, has entered into negotiated dealer agreements with each of Charles Schwab & Co., Inc. and LPL Financial LLC (“**LPL**”) for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each dealer agreement, each of CS&Co. and LPL may purchase 2024CD Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any 2024CD Bonds that such firm sells.

## FINANCIAL STATEMENTS

Attached as Appendix B are the audited financial statements of the Wastewater Enterprise for Fiscal Years 2022-23 and 2021-22, prepared by the SFPUC. The audited financial statements for Fiscal Year 2022-23 were audited by Macias Gini & O'Connell LLP, independent certified public accountants, and the audited financial statements for Fiscal Year 2021-22 were audited by KPMG LLP, independent certified public accountants. These audited financial statements are included for convenience.

*The audited financial statements of the SFPUC are public documents and the SFPUC has not requested nor did the SFPUC obtain permission from the auditors to include the audited financial statements as an Appendix to this Official Statement. Accordingly, the auditors have made no representation in connection with inclusion of the audited financial statements herein that there has been no material change in the financial condition of the SFPUC since the most recent audit was concluded. The auditors have not been engaged to perform and have not performed, since the date of the report included herein, any procedures on the financial statements addressed in that report. The auditors also have not performed any procedures relating to this Official Statement.*

## CONTINUING DISCLOSURE

The SFPUC will covenant for the benefit of the Owners and Beneficial Owners of the 2024ABCD Bonds, under a continuing disclosure certificate dated as of the date of delivery (the “**Disclosure Certificate**”), to provide certain financial information and operating data regarding the Wastewater Enterprise (the “**Annual Report**”) not later than March 31 following the end of its Fiscal Year (presently June 30), beginning on March 31, 2025, with the report for Fiscal Year 2023-24, and to promptly provide notices of the occurrence of certain enumerated events set forth in the Disclosure Certificate (“**Listed Events**”).

The SFPUC will agree to file the Annual Report and any notice of Listed Events as described in the Disclosure Certificate. The specific nature of the information to be contained in the Annual Report or the notices of Listed Events is set forth in the Disclosure Certificate. These covenants have been made to assist the Underwriters in complying with the Rule. The form of the Disclosure Certificate is attached to this Official Statement as APPENDIX D.

In 2017, the SFPUC and U.S. Bank National Association (“**U.S. Bank**”) entered into revolving credit agreements providing for the extension of credit to the SFPUC in the amount of \$100,000,000 for the Water Enterprise and \$75,000,000 for the Wastewater Enterprise. The SFPUC has not drawn on either credit facility and has no outstanding obligations thereunder. On January 7, 2022, the SFPUC and U.S. Bank entered into amendments to such credit facilities extending the respective commitment expiration dates to July 18, 2024. The SFPUC filed listed event notices regarding such extensions on February 3, 2022.

## VERIFICATION OF MATHEMATICAL ACCURACY

Upon delivery of the 2024B Bonds, the Verification Agent will deliver a report on the mathematical accuracy of certain computations, contained in schedules provided to them on behalf of the SFPUC, relating to (a) the sufficiency of the anticipated receipts from the cash deposited in the Escrow Fund to refund the Refunded 2018B Bonds and the Refunded 2023B Bonds, and (b) the “yield” on the investments deposited in the Escrow Fund for the Refunded 2018B Bonds and the Refunded 2023B Bonds.

## CO-MUNICIPAL ADVISORS

Montague DeRose and Associates, LLC, Walnut Creek, California, and Backstrom McCarley Berry & Co., LLC, San Francisco, California (the “**Co-Municipal Advisors**”), are acting as co-municipal advisors to the SFPUC with respect to the 2024ABCD Bonds. The Co-Municipal Advisors have assisted the SFPUC in the preparation of this Official Statement and in other matters relating to the planning, structuring, execution and delivery of the 2024ABCD Bonds. The Co-Municipal Advisors have not independently verified any of the data contained herein or conducted a detailed investigation of the affairs of the SFPUC to determine the accuracy or completeness of this Official Statement. Because of its limited participation, the Co-Municipal Advisors assume no responsibility for the

accuracy or completeness of any of the information contained herein. The Co-Municipal Advisors will not purchase or make a market in any of the 2024ABCD Bonds.

The compensation to be received by the Co-Municipal Advisors from the SFPUC for services provided in connection with the planning, structuring, execution and delivery of the 2024AB Bonds is contingent upon the sale and delivery of the 2024AB Bonds. The compensation to be received by the Co-Municipal Advisors from the SFPUC for services provided in connection with the planning, structuring, execution and delivery of the 2024CD Bonds is contingent upon the sale and delivery of the 2024CD Bonds.

#### **INDEPENDENT PRICING CONSULTANT**

PFM California Advisors LLC, San Francisco, California, is acting as an independent pricing consultant to the SFPUC with respect to the 2024ABCD Bonds (the “**Pricing Consultant**”). As required by the SFPUC’s Debt Policies, the Pricing Consultant will monitor the pricing process and provide an independent pricing report to the SFPUC certifying whether the pricing results were fair and reasonable to the SFPUC in light of prevailing market conditions. The Pricing Consultant has not independently verified any of the data contained herein or conducted a detailed investigation of the affairs of the SFPUC to determine the accuracy or completeness of this Official Statement. Because of its limited participation, the Pricing Consultant assumes no responsibility for the accuracy or completeness of any of the information contained herein. The Pricing Consultant will not purchase or make a market in any of the 2024ABCD Bonds.

The compensation to be received by the Pricing Consultant from the SFPUC for services provided in connection with the planning, structuring, execution and delivery of the 2024AB Bonds is contingent upon the sale and delivery of the 2024AB Bonds. The compensation to be received by the Pricing Consultant from the SFPUC for services provided in connection with the planning, structuring, execution and delivery of the 2024CD Bonds is contingent upon the sale and delivery of the 2024CD Bonds.

#### **MISCELLANEOUS**

References made in this Official Statement to certain documents and reports are brief summaries thereof that do not purport to be complete or definitive, and reference is made to such documents and reports for full and complete statements of the contents thereof.

The appendices to this Official Statement are integral parts of this Official Statement. Investors must read the entire Official Statement, including the appendices, to obtain information essential to making an informed investment decision.

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**APPROVAL AND EXECUTION**

This Official Statement has been duly approved, executed and delivered by the SFPUC.

PUBLIC UTILITIES COMMISSION OF THE  
CITY AND COUNTY OF SAN FRANCISCO

By: \_\_\_\_\_  
Deputy General Manager  
and Chief Operating Officer

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## APPENDIX A

### SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

*This Appendix contains summaries of certain provisions of the Indenture, which are in addition and complementary to the summaries found in the Official Statement under the captions “INTRODUCTION,” “THE 2024ABCD BONDS” and “SECURITY FOR THE BONDS.” The following summaries are qualified in their entirety by reference to the Indenture, a copy of which can be obtained from the SFPUC.*

The 2024ABCD Bonds are issued under the Indenture, dated as of January 1, 2003, as amended and supplemented (the “Indenture”), including as supplemented by the Seventeenth Supplemental Indenture (the “Seventeenth Supplemental Indenture”) with respect to the 2024A Bonds, and an Eighteenth Supplemental Indenture (the “Eighteenth Supplemental Indenture”) with respect to the 2024B Bonds, the 2024C Bonds and the 2024D Bonds, each dated as of July 1, 2024. The Indenture, which is summarized below under the caption “THE INDENTURE,” includes definitions of terms and other provisions specific to the 2024ABCD Bonds and the provisions applicable to all of the Bonds. The terms of the Seventeenth Supplemental Indenture are summarized under the caption “THE SEVENTEENTH SUPPLEMENTAL INDENTURE” below and include provisions specific to the 2024A Bonds. The terms of the Eighteenth Supplemental Indenture are summarized under the caption “THE EIGHTEENTH SUPPLEMENTAL INDENTURE” below and include provisions specific to the 2024B Bonds, 2024C Bonds and 2024D Bonds.

### THE INDENTURE

#### DEFINITIONS; EQUAL SECURITY; CERTIFICATES AND OPINIONS

Unless the context otherwise requires, the terms defined in the Indenture will, for all purposes of the Indenture and of any Supplemental Indenture and of any certificate, opinion or other document mentioned in the Indenture, have the meanings specified in the Indenture. Unless otherwise defined in the Indenture, all terms used in the Indenture will have the meanings assigned to such terms in the Law.

“Accreted Value” means, with respect to any Capital Appreciation Bond, the principal amount thereof plus the interest accrued thereon from its date, compounded at the approximate interest rate thereof on each date specified in the Supplemental Indenture pursuant to which such Capital Appreciation Bonds are issued. The Accreted Value on any such date of compounding will be the amount set forth in the Accreted Value Table and, with respect to any date other than a date on which compounding occurs, will be determined by straight-line interpolation (based on a year consisting of 12 30-day months), as calculated by the Trustee. The calculation of Accreted Value by the Trustee will be binding and conclusive as to the Accreted Value of Capital Appreciation Bonds.

“Accreted Value Table” means, with respect to any Capital Appreciation Bonds, the corresponding table attached as an Exhibit to a Supplemental Indenture pursuant to which Additional Bonds constituting Capital Appreciation Bonds are issued.

“Additional Bonds” means bonds, notes or other obligations of the Commission (other than Parity Loans) payable from Net Revenues and ranking on a parity with the Bonds and issued pursuant to a Supplemental Indenture in compliance with the Indenture, as applicable.

“Annual Debt Service” means the sum of principal and interest on all Outstanding Bonds (including Parity Loans) as computed for the twelve-month period ending June 30 to which reference is made, and calculated by the Commission using the following assumptions:

- (a) In determining the principal amount due for such twelve-month period ending June 30, payment will (unless a different subsection of this definition applies for purposes of determining principal maturities or amortization) be assumed to be made in accordance with the amortization schedule established for such debt, including any Minimum Sinking Fund Account Payments or any scheduled redemption or payment of Bonds on the basis of Accreted Value, and for such purpose, the redemption payment or payment

of Accreted Value will be deemed a principal payment and interest that is compounded and paid as Accreted Value will be deemed due on the scheduled redemption or Payment Date of such Capital Appreciation Bond, but excluding Excluded Principal.

(b) If any Outstanding Bonds constitute Variable Rate Indebtedness, the interest rate will, as of the date of calculation, be: (i) the greater of (a) the average SIFMA rate over the past 3 years times 150% or (b) 4 percent or (ii) if, designated in writing by the Commission in the Supplemental Indenture authorizing such Bonds (which the Commission must certify, in the case of obligations interest on which is not excluded from gross income for federal income tax purposes under the Code), a fixed rate of interest reasonably determined by the Commission for obligations with similar duration, which interest rate has been certified by a Qualified Financial Advisor as reasonable concurrent with the execution and delivery of such Supplemental Indenture.

(c) If Defeasance Obligations have been deposited with and are held by the Trustee or another fiduciary to be used to pay principal and/or interest on specified Bonds, or any amounts have been deposited in the Interest Fund from the proceeds of any Series of Bonds or from any other source to pay interest on such Bonds, then the principal and/or interest to be paid from such Defeasance Obligations or from the earnings thereon, or from such amounts in the Interest Fund, will be disregarded and not included in calculating Annual Debt Service.

(d) In determining the amount of interest coming due during any twelve-month period ending June 30 on any Series of Bonds that are issued as Build America Bonds or obligations issued under any future program similar to Build America Bonds, amounts equal to the Refundable Credits the Commission is scheduled to receive during each twelve-month period ending June 30 will be deducted from such interest.

“Arbitrage Certificate” means the arbitrage certificate or similar tax certificate delivered or to be delivered by the Commission at the time of issuance and delivery of a Series of Bonds, as the same may be amended or supplemented in a accordance with its terms.

“Authorized Officer” of the Trustee means and includes the chairman of the board of directors, the president, every vice president, every assistant vice president, the cashier, every assistant cashier, every trust officer, and every other officer and assistant officer of the Trustee to whom any trust matter is referred because his or her knowledge of, and familiarity with, a particular subject.

“Average Annual Debt Service” means, as of the date of calculation, total remaining Debt Service divided by the number of twelve-month periods ending on June 30 (including any fractional periods) remaining until the last maturity date of any Outstanding Bond, calculated by the Commission using the following assumptions:

(a) In determining the principal amount due in each year, payment will (unless a different subsection of this definition applies for purposes of determining principal maturities or amortization) be assumed to be made in accordance with any amortization schedule established for such debt, including any Minimum Sinking Fund Account Payments or any scheduled redemption or payment of Bonds on the basis of Accreted Value, and for such purpose, the redemption payment or payment of Accreted Value will be deemed a principal payment and interest that is compounded and paid as Accreted Value will be deemed due on the scheduled redemption or Payment Date of such Capital Appreciation Bond, but excluding Excluded Principal.

(b) If any of the Outstanding Series of Bonds constitute Balloon Indebtedness or Balloon Indebtedness and Variable Rate Indebtedness or if Bonds then proposed to be issued would constitute Balloon Indebtedness or Balloon Indebtedness and Variable Rate Indebtedness, then, for purposes of determining Average Annual Debt Service, such Bonds the principal of which the Commission has not specified as Excluded Principal will be amortized for a period specified by the Commission (but no longer than forty (40) years from the date of the issuance of the Bonds to which such Balloon Indebtedness relates) on a substantially level debt service basis or other amortization basis designated by the Commission, calculated based on a fixed rate equal to the rate at which the Commission could borrow for such period, as certified by a Qualified Financial Advisor.

(c) If any Outstanding Bonds constitute Variable Rate Indebtedness, the interest rate will, as of the date of calculation, be: (i) the greater of (a) the average SIFMA rate over the past 3 years times 150% or (b) 4 percent or (ii) if, designated in writing by the Commission in the Supplemental Indenture authorizing such Bonds (which the Commission must certify, in the case of obligations interest on which is not excluded from gross income for federal income tax purposes under the Code), a fixed rate of interest reasonably determined by the Commission for obligations with similar duration, which interest rate has been certified by a Qualified Financial Advisor as reasonable concurrent with the execution and delivery of such Supplemental Indenture.

(d) If Defeasance Obligations have been deposited with and are held by the Trustee or another fiduciary to be used to pay principal and/or interest on specified Bonds, or any amounts have been deposited in the Interest Fund from the proceeds of any Series of Bonds or from any other source to pay interest on such Bonds, then the principal and/or interest to be paid from such Defeasance Obligations or from the earnings thereon, or from such amounts in the Interest Fund, will be disregarded and not included in calculating Average Annual Debt Service.

(e) In determining the amount of interest coming due during any twelve-month period ending June 30 on any Series of Bonds that are issued as Build America Bonds or obligations issued under any future program similar to Build America Bonds, amounts equal to the Refundable Credits the Commission is scheduled to receive during each twelve-month period ending June 30 will be deducted from such interest.

“Balloon Indebtedness” means a Series of Bonds 25% or more of the principal of which matures on the same date and is not required by the documents governing such Bonds to be amortized by payment or redemption prior to such date. For purposes of this definition, an optional or mandatory tender of Bonds for purchase as described within the definition of Tender Indebtedness will not be treated as a maturity.

“Board of Supervisors” means the Board of Supervisors of the City from time to time or any other governing board of the City hereafter provided for by law.

“Bond Obligation” means, as of any given date of calculation, (1) with respect to any Outstanding Current Interest Bond, the principal amount of such Bond, (2) with respect to any Outstanding Capital Appreciation Bond, the Accreted Value thereof as of the most recent date of the compounding of interest thereon preceding such date of calculation (unless such date of calculation is a date on which interest thereon is compounded, in which case as of such date), and (3) with respect to any outstanding Parity Loan, the unpaid principal amount of the Parity Loan.

“Bond Reserve Fund” means the fund by that name established under the Indenture.

“Bond Reserve Fund Policy” means a financial guaranty issued to satisfy all or a portion of the Required Reserve for a Series of Bonds, which may be (a) a policy of insurance or surety bond issued by a Bond Reserve Fund Policy Provider, obligations insured by which have, at the time of the issuance of such financial guaranty, a rating by Moody’s and S&P which is at least as high as the underlying rating on the related Series of Bonds (i.e., the rating given without regard to any municipal bond or financial guaranty insurance, letter of credit, or similar guaranty or credit enhancement on that Series of Bonds), or (b) a Letter of Credit issued by a Qualified Bank.

“Bond Reserve Fund Policy Provider” means a municipal bond insurance company or other insurance company that is the issuer of a Bond Reserve Fund Policy.

“Bondowner” or “Owner” means any person who is the registered owner of any Outstanding Bond, or the bearer of any Outstanding Bond that has a maturity of one year or less and is issued in bearer form, or with respect to any Parity Loan, the State of California (or any board, department or agency thereof) or the federal government (or any board, department or agency thereof), as applicable.

“Bonds” means Clean Water Revenue Bonds authorized by, and at any time Outstanding under, the Indenture or any Supplemental Indenture, including any Additional Bonds authorized by, and at any time Outstanding under, the Indenture and any Supplemental Indenture, and for purposes of the provisions of the Indenture described in this

Appendix A under the captions “REVENUES AND FUNDS — Pledge and Assignment of Net Revenues; Revenue Fund — Pledge of Net Revenues; Perfection of Lien,” “EVENTS OF DEFAULT AND REMEDIES OF BONDOWNERS — Events of Default; Acceleration; Waiver of Default” and “— Application of Funds Upon Acceleration” and in the Official Statement under the caption “SECURITY FOR THE BONDS — Rate Covenants,” the term “Bonds” includes Parity Loans.

“Build America Bonds” means any bonds or other obligations issued as Build America Bonds under Section 54AA of the Code, or under any provision of the Code that creates a substantially similar direct-pay subsidy program.

“Business Day” means any day other than (a) a Saturday, Sunday or day upon which commercial banks in San Francisco, California, or New York, New York are authorized or required to be closed and (b) for purposes of payments and other actions relating to Bonds secured by a Letter of Credit, a day upon which commercial banks are authorized to be closed in the city in which is located the office of the Qualified Bank at which demands for payment under the Letter of Credit are to be presented.

“Capital Appreciation Bonds” means all or any portion of a Series of Bonds designated as Capital Appreciation Bonds and on which interest is compounded and paid either at maturity or on prior redemption.

“Capital Project Account” means each account by that name established within the Capital Project Fund.

“Capital Project Fund” means the fund by that name established under the Indenture.

“Certificate of the Commission” means an instrument in writing signed by the President or by the General Manager or by any other officer of the Commission duly authorized by the Commission for that purpose, and by the Secretary. Any such instrument and supporting opinions or representations, if any, may, but need not, be combined in a single instrument with any other instrument, opinion or representation, and the two or more so combined will be read and construed as a single instrument. If and to the extent required by the provisions of the Indenture, each Certificate of the Commission will include the statements provided for in the Indenture.

“Charter” means the Charter of the City as it now exists or as it may hereafter be amended, and any new or successor Charter.

“City” means the existing political subdivision known as the City and County of San Francisco, in the State of California, as the same is organized and existing under and by virtue of the Constitution and laws of the State of California and the Charter, and any public body hereafter created as a successor thereto.

“Closing Date” means July 31, 2024, with respect to the date of the original issuance and delivery of the 2024 Series A Bonds and the 2024BCD Bonds.

“Code” means the Internal Revenue Code of 1986, as amended.

“Commission” means the Public Utilities Commission of the City, and all commissions, agencies or public bodies hereafter created which succeed to or take over the powers and duties of the Commission with respect to the Enterprise.

“Consulting Engineers” means any engineer or firm of engineers retained by the Commission having a wide and favorable reputation for skill and experience in evaluating the construction and operation of public utilities, including public sanitary waste and storm water collection, treatment and disposal systems, or in other revenue producing publicly-owned enterprises, to perform the acts and carry out the duties provided for such consulting engineers in the Indenture.

“Controller” means the Controller of the City from time to time, and includes any deputy acting for the Controller.

“Credit Provider” means a Municipal Bond Insurer that has issued an outstanding policy of municipal bond or financial guaranty insurance or a Qualified Bank that has issued an outstanding Letter of Credit which, in each case, secures payment of principal of, and interest on, or tender price of, all or a portion of a Series of Bonds; provided that “Credit Provider” will not refer to a Bond Reserve Fund Policy Provider.

“Current Interest Bonds” means all or any portion of a Series of Bonds designated as Current Interest Bonds and which pay interest at least semiannually to the Owners thereof excluding the first payment of interest thereon.

“Debt Service” means the sum of all principal and interest due on all Outstanding Bonds and Parity Loans as of the date of calculation.

“Defeasance Obligations” means:

- (a) Cash;
- (b) Federal Securities;
- (c) The interest component of Resolution Funding Corporation strips which have been stripped by request to the Federal Reserve Bank of New York in book entry form;
- (d) Pre-refunded municipal bonds rated “Aaa” by Moody’s and “AAA” by S&P, provided that, if the issue is rated only by S&P (i.e., there is no Moody’s rating), then the pre-refunded municipal bonds must have been pre-refunded with cash, direct U.S. or U.S. guaranteed obligations, or “AAA” rated pre-refunded municipals; and
- (e) Bonds, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following federal agencies and provided such obligations are backed by the full faith and credit of the United States of America (stripped securities are only permitted if they have been stripped by the agency itself): (i) direct obligations or fully guaranteed certificates of beneficial ownership of the U.S. Export-Import Bank; (ii) certificates of beneficial ownership of the Farmers Home Administration; (iii) participation certificates of the General Services Administration; (iv) Federal Financing Bank bonds and debentures; (v) guaranteed Title XI financings of the U.S. Maritime Administration; and (vi) project notes, local authority bonds, new communities debentures and U.S. public housing notes and bonds of the U.S. Department of Housing and Urban Development.

“Eighteenth Supplemental Indenture” means that certain Eighteenth Supplemental Indenture dated as of July 1, 2024, between the Commission and the Trustee.

“Enterprise” means the whole and each and every part of the municipal sanitary waste and storm water collection, treatment and disposal system and auxiliary or related facilities of the Commission, including all of the presently existing system of the Commission for the collection, treatment and disposal of sanitary waste and storm water, and all future additions, betterments, and extensions to that system or any part thereof.

“Event of Default” means an event of that name described in the Indenture.

“Excluded Principal” means each payment of principal of Bonds with a remaining term, on the date of calculation, of not greater than 60 months and which the Commission specifies in a Certificate of the Commission and filed with the Trustee that the Commission intends to pay from the proceeds of Bonds or Parity Loans, other bonds, notes or other obligations of the Commission or moneys other than Net Revenues. No such determination will affect the security for the Bonds, Senior State Loans or Parity Loans or the obligation of the Commission to pay the Bonds, Senior State Loans and Parity Loans from Net Revenues.

“Federal Securities” means United States treasury notes, bonds, bills or certificates of indebtedness, or obligations for which the faith and credit of the United States of America are pledged for the payment of principal and interest (including obligations issued or held in book-entry form and securities which represent an undivided interest

in such direct obligations and CATs and TGRS), and also any securities now or hereafter authorized, both the principal of and interest on which is guaranteed directly by the full faith and credit of the United States of America.

“Financial Newspaper or Journal” means *The Wall Street Journal* or *The Bond Buyer*, or any other newspaper or journal publishing financial news and selected by the Trustee, whose decision will be final and conclusive, printed in the English language, customarily published on each Business Day and circulated in San Francisco, California.

“First Amendment” means that certain First Amendment to Indenture dated as of May 1, 2010, between the Commission and the Trustee.

“Fiscal Year” means the period beginning on July 1 of each year and ending on the next succeeding June 30, or such other fiscal year as may be adopted by the Commission for its general accounting purposes or the then current accounting period of the City if the Commission has no separate accounting period.

“Fitch” means Fitch, Inc., doing business as Fitch Ratings, a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, and its successors and assigns, except that if such corporation is dissolved or liquidated or no longer performs the functions of a securities rating agency, then the term “Fitch” will be deemed to refer to any other nationally recognized securities rating agency selected by the Commission.

“General Manager” means the general manager of the Commission appointed by the Mayor from time to time pursuant to the Charter or any other applicable provision of law, and includes any other person acting on behalf of the General Manager.

“Indenture” means the Indenture, dated as of January 1, 2003, by and between the Commission and the Trustee, as originally executed or as it may from time to time be supplemented or amended by any Supplemental Indenture delivered under the provisions of the Indenture.

“Independent Certified Public Accountant” means any certified public accountant or firm of such accountants appointed and paid by the Commission, and who, or each of whom --

- (a) is in fact independent and not under control of the City or the Commission;
  - (b) does not have any substantial interest, direct or indirect, with the City or the Commission;
- and
- (c) is not connected with the City or the Commission as an officer or employee of the City or the Commission, but who may be regularly retained to make annual or other audits of the books of or reports to the City or the Commission.

“Information Services” means:

- (a) Financial Information, Inc.’s “Daily Called Bond Service,” 30 Montgomery Street, 10<sup>th</sup> Floor, Jersey City, New Jersey 07302, Attention: Editor;
- (b) Mergent/FIS, 5250 77 Center Drive, Suite 150, Charlotte, North Carolina, 28217, Attn: Called Bond Dept.; and
- (c) Kenny S&P, 55 Water Street, 45th Floor, New York, New York 10041, Attention: Notification Department;

or, in accordance with then-current guidelines of the Securities and Exchange Commission, such other addresses or such other services providing information with respect to called bonds, or no such services, as the Commission may designate in a Written Request of the Commission delivered to the Trustee.

“Interest Payment Date” means those interest payment dates set forth for the 2003 Refunding Series A Bonds in the Indenture, and those interest payment dates set forth for any Additional Bonds in a Supplemental Indenture in accordance with the Indenture, as appropriate. With respect to the 2024 Series A Bonds and the 2024BCD Bonds, Interest Payment Date means April 1 and October 1 of each year, commencing on October 1, 2024.

“Interim Funding Program” means, together, the tax-exempt or taxable notes captioned “Public Utilities Commission of the City and County of San Francisco Commercial Paper Notes (Wastewater Series, Proposition E)” pursuant to one or more of the five available bank credit facilities in the aggregate principal amount as provided in the Indenture and tax-exempt obligations captioned “Public Utilities Commission of the City and County of San Francisco Revolving Obligations (Wastewater Series, Proposition E)” in the aggregate principal amount as provided in the Indenture.

“Law” means the Charter, the San Francisco Administrative Code, and all laws of the State of California supplemental thereto, including the Revenue Bond Law of 1941 to the extent made applicable by the Charter or by the San Francisco Administrative Code. Whenever reference is made in the Indenture to the “Law,” reference is made to the Law as in force on the date of the Indenture or any Supplemental Indenture, unless the context otherwise requires.

“Legal Investments” means bonds, notes, certificates of indebtedness, bills, acceptances or other securities in which funds of the Commission may now or hereafter be legally invested as provided by the law in effect at the time of such investment.

“Letter of Credit” means an irrevocable and unconditional letter of credit, a standby purchase agreement, a line of credit or other similar credit arrangement issued by a Qualified Bank to secure payment of Balloon Indebtedness, Variable Rate Indebtedness, Tender Indebtedness or a Series of Bonds, or to satisfy all or a portion of the Required Reserve.

“Letter of Credit Agreement” means an agreement between the Commission and a Qualified Bank pursuant to which the Qualified Bank agrees to issue a Letter of Credit and which sets forth the repayment obligation of the Commission to the Qualified Bank on account of any advances under the Letter of Credit.

“Letter of Representations” means the letter or letters of representation of the Commission delivered to and accepted by The Depository Trust Company setting forth the basis on which The Depository Trust Company serves as depository for the Bonds, as originally executed or as it may be supplemented or revised or replaced by a letter to a substitute depository.

“Maturity Date” means the maturity dates set forth for the 2003 Refunding Series A Bonds in the Indenture, and each maturity date set forth for any Additional Bonds in a Supplemental Indenture in accordance with the Indenture, as appropriate.

“Maximum Annual Debt Service” means, as of the date of calculation, the largest amount of Debt Service in the then current or any future Fiscal Year, calculated by the Commission using the following assumptions:

(a) In determining the principal amount due in each year, payment will (unless a different subsection of this definition applies for purposes of determining principal maturities or amortization) be assumed to be made in accordance with any amortization schedule established for such debt, including any Minimum Sinking Fund Account Payments or any scheduled redemption or payment of Bonds on the basis of Accreted Value, and for such purpose, the redemption payment or payment of Accreted Value will be deemed a principal payment and interest that is compounded and paid as Accreted Value will be deemed due on the scheduled redemption or Payment Date of such Capital Appreciation Bond, but excluding Excluded Principal.

(b) If any of the Outstanding Series of Bonds constitute Balloon Indebtedness or Balloon Indebtedness and Variable Rate Indebtedness or if Bonds then proposed to be issued would constitute Balloon Indebtedness or Balloon Indebtedness and Variable Rate Indebtedness, then, for purposes of determining

Maximum Annual Debt Service, such Bonds the principal of which the Commission has not specified as Excluded Principal will be amortized for a period specified by the Commission (but no longer than forty (40) years from the date of the issuance of the Bonds to which such Balloon Indebtedness relates) on a substantially level debt service basis or other amortization basis designated by the Commission, calculated based on a fixed rate equal to the rate at which the Commission could borrow for such period, as certified by a Qualified Financial Advisor.

(c) If any Outstanding Bonds constitute Variable Rate Indebtedness, the interest rate will, as of the date of calculation, be: (i) the greater of (a) the average SIFMA rate over the past 3 years times 150% or (b) 4 percent or (ii) if, designated in writing by the Commission in the Supplemental Indenture authorizing such Bonds (which the Commission must certify, in the case of obligations interest on which is not excluded from gross income for federal income tax purposes under the Code), a fixed rate of interest reasonably determined by the Commission for obligations with similar duration, which interest rate has been certified by a Qualified Financial Advisor as reasonable concurrent with the execution and delivery of such Supplemental Indenture.

(d) If Defeasance Obligations have been deposited with and are held by the Trustee or another fiduciary to be used to pay principal and/or interest on specified Bonds, or any amounts have been deposited in the Interest Fund from the proceeds of any Series of Bonds or from any other source to pay interest on such Bonds, then the principal and/or interest to be paid from such Defeasance Obligations or from the earnings thereon, or from such amounts in the Interest Fund, will be disregarded and not included in calculating Maximum Annual Debt Service.

(e) In determining the amount of interest coming due during any twelve-month period ending June 30 on any Series of Bonds that are issued as Build America Bonds or obligations issued under any future program similar to Build America Bonds, amounts equal to the Refundable Credits the Commission is scheduled to receive during each twelve-month period ending June 30 will be deducted from such interest.

“Mayor” means the Mayor of the City from time to time.

“Minimum Sinking Fund Account Payments” means the aggregate amounts required by the Indenture and any subsequent Supplemental Indenture to be deposited in Sinking Fund Accounts for the payment of Term Bonds.

“Moody’s” means Moody’s Investors Service, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, and its successors and assigns, except that if such corporation is dissolved or liquidated or no longer performs the functions of a securities rating agency, then the term “Moody’s” will be deemed to refer to any other nationally recognized securities rating agency selected by the Commission.

“Municipal Bond Insurer” means any insurance company or companies which is or are designated as such in the Indenture or a Supplemental Indenture, and which has or have issued a policy of municipal bond insurance or a financial guaranty insurance policy insuring payment of the principal of and interest on any of the Bonds of any Series of Bonds.

“Net Revenues” means all of the Revenues less all Operation and Maintenance Costs of the Enterprise.

“Operation and Maintenance Costs of the Enterprise” means the reasonable and necessary costs of operating and maintaining the Enterprise, calculated on generally accepted accounting principles, including (among other things) salaries and wages, fees for services, costs of materials, supplies and fuel, reasonable expenses of management, legal fees, accounting fees, repairs and other expenses necessary to maintain and preserve the Enterprise in good repair and working order, and reasonable amounts for administration, overhead, insurance, taxes (if any), and the payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the Commission may establish or the Board of Supervisors may require with respect to employees of the Commission, as provided in the Charter. However, the term “Operation and Maintenance Costs of the Enterprise” excludes in all cases (a) depreciation and obsolescence charges or reserves therefor, (b) amortization of intangibles or other bookkeeping entries of a similar nature, (c) costs of capital additions, replacements, betterments, extensions or improvements to the

Enterprise, which under generally accepted accounting principles are chargeable to a capital account or to a reserve for depreciation, (d) charges for the payment of principal and interest on any revenue bonds or other indebtedness heretofore or hereafter issued for Enterprise purposes and (e) such costs as are scheduled to be paid by the Commission from moneys other than Revenues, such moneys to be clearly available for such purpose.

“Opinion of Counsel” means a written opinion of counsel (who may be counsel for the City or the Commission) retained by the Commission. If and to the extent required by the provisions of the Indenture, each Opinion of Counsel will include the statements provided for in the Indenture.

“Outstanding” when used as of any particular time with reference to Bonds, means (subject to the provisions of the Indenture) all Bonds theretofore executed, issued and delivered by the Commission under the Indenture except

--

- (a) Bonds theretofore cancelled by the Trustee or surrendered to the Trustee for cancellation;
- (b) Bonds for the payment or redemption of which funds or securities in the necessary amount (as set forth in the Indenture) have theretofore been deposited with a fiduciary (whether upon or prior to the maturity or redemption date of such Bonds), provided that, if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption is given as in provided in the Indenture, or provision satisfactory to the Trustee is made for the giving of such notice; and
- (c) Bonds in lieu of or in substitution for which other Bonds have been executed, issued and delivered by the Commission pursuant to the Indenture.

For purposes of this definition and within the meaning of the Indenture, any Bonds, the principal of or interest on which has been paid by a Credit Provider, will not be deemed paid by or on behalf of the Commission, will not be defeased and will remain Outstanding under the Indenture until the Credit Provider has been paid or reimbursed for such payment by the Commission.

“Parity Loans” means those loan agreements entered into between the Commission and the State of California (or any board, department or agency thereof) or the federal government (or any board, department or agency thereof) to finance additions, betterments, extensions, repairs, renewals or replacements to the Enterprise, which are entered into after the issuance of the 2003 Refunding Series A Bonds and which, by their terms, are secured by a pledge and lien on Net Revenues on a parity basis with debt service on the Bonds. Parity Loans may be evidenced by or secured by Bonds.

“Payment Date” means any date on which payment of the principal of or interest on the Bonds is due, or on which any Term Bonds are required to be redeemed from any Minimum Sinking Fund Account Payments.

“Permitted Investments” means any of the following, to the extent permitted by law and by any policy guidelines promulgated by the Commission or the City:

- (a) Cash;
- (b) Federal Securities;
- (c) the interest component of Resolution Funding Corporation strips which have been stripped by request to the Federal Reserve Bank of New York in book entry form;
- (d) bonds, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following federal agencies and provided such obligations are backed by the full faith and credit of the United States of America (stripped securities are only permitted if they have been stripped by the agency itself): (i) direct obligations or fully guaranteed certificates of beneficial ownership of the U.S. Export-Import Bank; (ii) certificates of beneficial ownership of the Farmers Home Administration; (iii) Federal Housing Administration debentures; (iv) participation certificates of the General Services Administration; (v) Federal

Financing Bank bonds and debentures; (vi) guaranteed mortgage-backed bonds or guaranteed pass-through obligations of the Government National Mortgage Association; (vii) guaranteed Title XI financings of the U.S. Maritime Administration; and (viii) project notes, local authority bonds, new communities debentures and U.S. public housing notes and bonds of the U.S. Department of Housing and Urban Development;

(e) bonds, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following non-full faith and credit U.S. government agencies (stripped securities only as stripped by the agency itself): (i) senior debt obligations of the Federal Home Loan Bank System; (ii) participation certificates and senior debt obligations of the Federal Home Loan Mortgage Corporation; (iii) mortgaged-backed securities and senior debt obligations of the Fannie Mae; (iv) senior debt obligations of the Student Loan Marketing Association; (v) obligations of the Resolution Funding Corporation; and (vi) consolidated system-wide bonds and notes of the Farm Credit System;

(f) money market funds registered under the Federal Investment Company Act of 1940, whose shares are registered under the Federal Securities Act of 1933, and having a rating by S&P of at least "AAAm-G," "AAAm" or "AAm," and a rating by Moody's of "Aaa," "Aa1" or "Aa2" (such funds may include funds for which the Trustee, its affiliates, parent or subsidiaries provide investment advisory or other management services);

(g) certificates of deposit (including those of the Trustee, its parent and its affiliates) secured at all times by collateral described in (a) or (b) above, which have a maturity not greater than one year from the date of investment and which are issued by commercial banks, savings and loan associations or mutual savings banks whose short-term obligations are rated "A-1+" or better by S&P and "Prime-1" by Moody's, which collateral must be held by a third party and provided that the Trustee must have a perfected first security interest in such collateral;

(h) certificates of deposit, savings accounts, deposit accounts or money market deposits (including those of the Trustee and its affiliates) which are fully insured by FDIC, including BIF and SAIF;

(i) investment agreements, including guaranteed investment contracts, forward purchase agreements, reserve fund put agreements and collateralized investment agreements acceptable to the Credit Provider;

(j) commercial paper rated "Prime-1" by Moody's and "A-1+" or better by S&P;

(k) bonds or notes issued by any state or municipality which are rated by Moody's and S&P in one of the two highest rating categories assigned by such agencies;

(l) federal funds or bankers acceptances with a maximum term of one year of any bank which an unsecured, uninsured and unguaranteed obligation rating of "Prime-1" or "A3" or better by Moody's, and "A-1+" by S&P;

(m) the Local Agency Investment Fund which is administered by the California Treasurer for the investment of funds belonging to local agencies within the State of California, provided for investment of funds held by the Trustee, the Trustee is entitled to make investments and withdrawals in its own name as Trustee; and

(n) any other investment approved in writing by the Credit Provider

"Policy Costs" means the amounts owing to a Bond Reserve Fund Policy Provider, including the principal amount of any draw on a Bond Reserve Fund Policy, interest thereon and reasonable expenses incurred by the Bond Reserve Fund Policy Provider in enforcing payment of Policy Costs, as more fully set forth in the agreement pursuant to which such Bond Reserve Fund Policy is issued.

“President” means the President of the Commission from time to time, or any other person acting on behalf of the President.

“Principal Payment Date” means the principal payment date set forth for the 2003 Refunding Series A Bonds in the Indenture, and the principal payment date set forth for any Additional Bonds in a Supplemental Indenture in accordance with the Indenture, as appropriate. With respect to the 2024 Series A Bonds and the 2024BCD Bonds, Principal Payment Date means October 1 of each year set forth in the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture.

“Project” means any repairs, replacements, additions, enlargements, betterments, extensions and other improvements to or benefiting, and the equipping of, the Enterprise, including, without limitation, the acquisition of land therefor.

“Proportionate Basis.” when used with respect to the redemption of Bonds, means that the amount of Bonds of each maturity to be redeemed will be determined as nearly as practicable by multiplying the total amount of funds available for redemption by the ratio which the amount of Bond Obligation of Bonds of such maturity bears to the amount of all Bond Obligation of Bonds to be redeemed, provided that if the amount available for redemption of Bonds of any maturity is insufficient to redeem a multiple of \$5,000 principal amount or Accreted Value payable at maturity, such amount will be applied to the redemption of the highest possible integral multiple (if any) of \$5,000 principal amount or Accreted Value payable at maturity. For purposes of the foregoing, Term Bonds will be deemed to mature in the years and in the amounts of the Minimum Sinking Fund Account Payments and Capital Appreciation Bonds and Current Interest Bonds maturing or subject to Minimum Sinking Fund Account Payments in the same year will be treated as separate maturities.

When used with respect to the payment or purchase of Bonds, “Proportionate Basis” will have the same meaning set forth above except that “pay” or “purchase” will be substituted for “redeem” or “redemption” and “paid” or “purchased” will be substituted for “redeemed.”

“Qualified Bank” means a state or national bank or trust company or savings and loan association or a foreign bank with a domestic branch or agency which is organized and in good standing under the laws of the United States or any state thereof or any foreign country, which has a debt rating at least as high as the underlying rating on the related Series of Bonds at the time such Qualified Bank delivers a Letter of Credit or a Bond Reserve Fund Policy (i.e., the rating given without regard to any municipal bond or financial guaranty insurance, letter of credit, or similar guaranty or credit enhancement on that Series of Bonds) as provided by Moody’s, by S&P or Fitch.

“Qualified Financial Advisor” means a person or a firm selected by the Commission who or which engages in the business of advising the management of public agencies similar to the Commission concerning the issuance of debt.

“Qualified Independent Consultant” means a person or a firm who or which engages in the business of advising the management of public agencies concerning the operation and financing of public utilities, including public municipal sanitary waste and storm water collection, treatment and disposal systems, and also including advice and consultation generally concerning the use and operation of public utilities, including public municipal sanitary waste and storm water collection, treatment and disposal systems, and which person or firm, by reason of his or its knowledge and experience, has acquired a reputation as a recognized consultant. Such Qualified Independent Consultant may include a person or firm rendering professional engineering or accounting services in addition to his or its occupation as a public utility consultant and may include any person or firm regularly employed by the City or the Commission as a consultant to the City or the Commission.

“Rebate Fund” means the fund established and so designated for a Series of Bonds.

“Refundable Credits” means (a) with respect to a Series of Bonds issued as Build America Bonds under Section 54AA of the Code, the amounts which are payable by the Federal government under Section 6431 of the Code, which the Commission has elected to receive under Section 54AA(g)(1) of the Code, and (b) with respect to a Series of Bonds issued as Build America Bonds under any other provision of the Code that creates a substantially similar

direct-pay subsidy program, the amounts which are payable by the Federal government under the applicable provisions of the Code, which the Commission has elected to receive under the applicable provisions of the Code.

“Required Reserve” means, with respect to Series of Bonds issued prior to the effective date of the amendments set forth in the First Amendment, but only until the effective date of the amendments set forth in the First Amendment, for any Series of Bonds, as of any date of calculation, an amount equal to the lesser of: (i) Maximum Annual Debt Service on all such Series of Bonds (excluding from such calculation Parity Loans, if any) then Outstanding; or (ii) 125% of Average Annual Debt Service on all such Series of Bonds (excluding from such calculation Parity Loans, if any) then Outstanding; provided, that (i) on and after the effective date of the amendments set forth in the First Amendment, “Required Reserve” will mean, with respect to a Series of Bonds issued prior to the effective date of the amendments set forth in the First Amendment, 50% of Maximum Annual Debt Service on all such Series of Bonds (excluding from such calculation Parity Loans, if any) then Outstanding, and (ii) in no event will the Commission, in connection with issuance of a Series of Additional Bonds, be obligated to deposit an amount in the Bond Reserve Fund which is in excess of the amount permitted by the applicable provisions of the Code to be so deposited from the proceeds of tax-exempt bonds without having to restrict the yield of any investment purchased with any portion of such deposit.

“Required Reserve” means, with respect to Series of Bonds issued on or after the effective date of the amendments set forth in the First Amendment, for any Series of Bonds, as of any date of calculation, the amount, if any, required to be deposited into a Reserve Account for that Series of Bonds, as defined in and provided by the Supplemental Indenture pursuant to which such Series of Bonds is issued; provided, however, that in no event will the Commission, in connection with issuance of a Series of Additional Bonds, be obligated to deposit an amount in the Bond Reserve Fund which is in excess of the amount permitted by the applicable provisions of the Code to be so deposited from the proceeds of tax-exempt bonds without having to restrict the yield of any investment purchased with any portion of such deposit.

“Reserve Account” means each account established in the Bond Reserve Fund with respect to each Series of Bonds issued under the Indenture on or after the effective date of the amendments set forth in the First Amendment and for which an amount is required to be deposited into a Reserve Account for that Series of Bonds, as defined in and provided by the Supplemental Indenture pursuant to which such Series of Bonds is issued.

“Revenue Fund” means the fund by that name established pursuant to the Indenture.

“Revenues” means all gross revenues of the Enterprise, including all charges received for and all other income and receipts derived by, the Commission from the operation of the Enterprise, or arising from the Enterprise, including connection and installation charges, but excluding –

- (a) any money received by or for the account the Commission from the levy or collection of taxes,
- (b) moneys received from the State of California and the United States of America and required to be deposited in restricted funds,
- (c) refundable deposits made to establish credit,
- (d) advances and contributions made to the Commission to be applied to construction,
- (e) moneys received constituting casualty insurance proceeds with respect to all or any part of the Enterprise (which will be received and disposed of pursuant to the Indenture) and moneys received constituting other insurance proceeds,
- (f) moneys received from the sale or disposition of all or any part of the Enterprise (which will be received and disposed of pursuant to the Indenture),

(g) moneys received upon the taking by or under the threat of eminent domain of all or any part of the Enterprise (which moneys will be received and disposed of pursuant to the Indenture),

(h) proceeds from Bonds issued by the Commission or proceeds from loans or other indebtedness obtained by the Commission, and

(i) moneys or securities received by the Commission as gifts or grants, the use of which is restricted by the donor or grantor.

The term “Revenues” also includes (i) all interest or other income (excluding profits or losses from the sale or disposition of Permitted Investments or other securities owned by or on behalf of the Commission) derived from the deposit or investment of any moneys in any fund or account established under the Indenture (excluding any Rebate Fund and any escrow fund pledged for the payment of defeased bonds) or in any fund or account of the Enterprise and legally available to pay Debt Service, and (ii) any other moneys, proceeds and other amounts that the Commission determines should be “Revenues” under the Indenture.

“S&P” means Standard & Poor’s Ratings Services, a corporation duly organized and existing under and by virtue of the laws of the State of New York, and its successors and assigns, except that if such corporation is dissolved or liquidated or no longer performs the functions of a securities rating agency, then the term “S&P” will be deemed to refer to any other nationally recognized securities rating agency selected by the Commission.

“Secretary” means the Secretary of the Commission from time to time.

“Securities Depositories” means The Depository Trust Company, 711 Stewart Avenue, Garden City, New York 11530, Fax-(516) 227-4039 or 4190; or, in accordance with then-current guidelines of the Securities and Exchange Commission, to such other addresses or such other securities depositories, or no such depositories, as the Commission may designate in a Written Request of the Commission delivered to the Trustee.

“Senior State Loans” means those loan agreements entered into between the Commission and the State of California (or any board, department or agency thereof) to finance additions, betterments, extensions, repairs, renewals or replacements to the Enterprise, which (i) have been entered into and are in effect prior to the issuance of the 2003 Refunding Series A Bonds, or (ii) which are entered into after the issuance of the 2003 Refunding Series A Bonds and which, by their terms, are payable from Revenues on a basis senior to Debt Service. The Commission acknowledges that the payment of the Senior State Loans described in (i) above is not, by the terms of such Senior State Loans, senior to the payment of Debt Service, but has, for purposes of the Indenture, elected to treat such payment of such Senior State Loans as senior to the payment of Debt Service.

“Serial Bonds” means all or any portion of a Series of Bonds designated as Serial Bonds and for which no Minimum Sinking Fund Account Payments are provided.

“Series” means any series of Bonds executed, authenticated and delivered pursuant to the Indenture and identified as a separate Series of Bonds, including any Additional Bonds issued pursuant to a Supplemental Indenture and the Indenture.

“Seventeenth Supplemental Indenture” means that certain Seventeenth Supplemental Indenture dated as of July 1, 2024, between the Commission and the Trustee.

“SIFMA” means, as of any date, the most recent rate determined on the basis of the seven-day high grade market index of tax-exempt variable rate demand obligations, as calculated and published by Bloomberg and made available by the Securities Industry and Financial Markets Association on its SIFMA Municipal Swap Index, or if the SIFMA Municipal Swap Index is no longer published or reported, the rate per annum published or reported on the S&P Municipal Bond 7 Day High Grade Rate Index, or if neither the SIFMA Municipal Swap Index nor the S&P Municipal Bond 7 Day High Grade Rate Index is published, a per annum rate equal to 60% of the yield of the three-month U.S. Treasury bill as reported as of the end of each trading day.

“Sinking Fund Accounts” means any special account or accounts established by the Indenture or any Supplemental Indenture or Indentures in the Principal Fund (established pursuant to the Indenture) for the payment of Term Bonds.

“Sixth Supplemental Indenture” means that certain Sixth Supplemental Indenture, dated July 1, 2018, by and between the Commission and the Trustee.

“Supplemental Indenture” means any indenture amendatory of or supplemental to the Indenture that complies with the provisions of the Indenture for amendments and supplements, and includes any amended and restated indenture that complies with the provisions of the Indenture for amendments and supplements.

“Tender Indebtedness” means any Bonds or portions of Bonds a feature of which is an option, on the part of the Bondowners, or an obligation, under the terms of such Bonds, to tender all or a portion of such Bonds to the Commission, the Trustee or other fiduciary or agent for payment or purchase and requiring that such Bonds or portions of Bonds be purchased if properly presented.

“Term Bonds” means all or any portion of a Series of Bonds designated as Term Bonds and which are payable at or before their specified maturity date or dates from Minimum Sinking Fund Account Payments established for that purpose and calculated to retire such Bonds on or before their specified maturity date or dates.

“Treasurer” means the Treasurer of the City and includes any deputy acting for the Treasurer.

“Trustee” means U.S. Bank Trust Company, National Association, as successor trustee to U.S. Bank, National Association, acting as an independent trustee with the duties and powers provided in the Indenture, its successors and assigns, and any other corporation or association which may at any time be substituted in its place, as provided in the Indenture.

“Variable Rate Indebtedness” means any portion of indebtedness, the interest rate on which is not fixed at the time such indebtedness is incurred, and has not at some subsequent date been fixed for the entire term of the indebtedness.

“Written Request of the Commission,” “Written Requisition of the Commission” and “Written Statement of the Commission” mean, respectively, a written request, requisition or statement signed by or on behalf of the Commission by the President or the General Manager or the Secretary or by any person (whether or not an officer of the Commission) who is authorized by resolution of the Commission (which resolution will be provided to the Trustee) or otherwise to sign or execute such a document on its behalf.

“2003 Refunding Series A Bonds” has the meaning set forth in the Indenture.

“2024BCD Bonds” means the 2024 Series B Bonds, the 2024 Series C Bonds and the 2024 Series D Bonds.

“2024 Continuing Disclosure Certificate” means the Continuing Disclosure Certificate, dated the date of initial issuance of the 2024 Series A Bonds and the 2024BCD Bonds, executed and delivered by the Commission, as it may be supplemented and amended in accordance with its terms.

“2024 Series A Bonds” means the Public Utilities Commission of the City and County of San Francisco Wastewater Revenue Bonds, 2024 Series A (SSIP) (Green Bonds) (Federally Taxable) authorized pursuant to the Seventeenth Supplemental Indenture.

“2024 Series A Capital Project Account” means the account by that name established within the Capital Project Fund pursuant to the Seventeenth Supplemental Indenture.

“2024 Series A Capitalized Interest Account” means the account by that name established within the Interest Fund pursuant to the Seventeenth Supplemental Indenture.

“2024 Series A Project” means financing costs of the Biosolids Digester Facilities Project, including capitalized interest related thereto, and financing or refinancing (through the retirement of commercial paper notes) various capital projects benefiting the Enterprise (including reimbursing the Commission for certain capital costs previously paid from other moneys).

“2024 Series B Bonds” means the Public Utilities Commission of the City and County of San Francisco Wastewater Revenue Bonds, 2024 Series B (Non-SSIP) (Federally Taxable) authorized pursuant to the Eighteenth Supplemental Indenture.

“2024 Series C Bonds” means the Public Utilities Commission of the City and County of San Francisco Wastewater Revenue Bonds, 2024 Series C (SSIP) (Green Bonds) authorized pursuant to the Eighteenth Supplemental Indenture.

“2024 Series C Capital Project Account” means the account by that name established within the Capital Project Fund pursuant to the Eighteenth Supplemental Indenture.

“2024 Series C Capitalized Interest Account” means the account by that name established within the Interest Fund pursuant to the Eighteenth Supplemental Indenture.

“2024 Series C Project” means financing, from amounts on deposit in the 2024 Series C Capital Project Account, the reconstructing, replacing, expanding, repairing or improving of facilities that are part of, or of benefit to the Enterprise pursuant to the Law, including Section 8B.124 of the Charter.

“2024 Series C Rebate Fund” means the fund by that name established pursuant to the Eighteenth Supplemental Indenture.

“2024 Series C Reimbursement Account” means the account by that name established within the Capital Project Fund pursuant to the Eighteenth Supplemental Indenture.

“2024 Series C Sinking Fund Account” means the account by that name established within the Principal Fund pursuant to the Eighteenth Supplemental Indenture.

“2024 Series C Term Bonds” means the 2024 Series C Bonds as provided in the Eighteenth Indenture.

“2024 Series D Bonds” means the Public Utilities Commission of the City and County of San Francisco Wastewater Revenue Bonds, 2024 Series C (Non-SSIP) authorized pursuant to the Eighteenth Supplemental Indenture.

“2024 Series D Capital Project Account” means the account by that name established within the Capital Project Fund pursuant to the Eighteenth Supplemental Indenture.

“2024 Series D Capitalized Interest Account” means the account by that name established within the Interest Fund pursuant to the Eighteenth Supplemental Indenture.

“2024 Series D Project” means financing, from amounts on deposit in the 2024 Series D Capital Project Account, the reconstructing, replacing, expanding, repairing or improving of facilities that are part of, or of benefit to the Enterprise pursuant to the Law, including Section 8B.124 of the Charter.

“2024 Series D Rebate Fund” means the fund by that name established pursuant to the Eighteenth Supplemental Indenture.

“2024 Series D Reimbursement Account” means the account by that name established within the Capital Project Fund pursuant to the Eighteenth Supplemental Indenture.

“2024 Series D Sinking Fund Account” means the account by that name established within the Principal Fund pursuant to the Eighteenth Supplemental Indenture.

“2024 Series D Term Bonds” means the 2024 Series D Bonds as provided in the Eighteenth Indenture.

**Equal Security.** In consideration of the acceptance of the Bonds by those who will hold the same from time to time, the Indenture will be deemed to be and will constitute a contract between the Commission, the Trustee and the Owners from time to time of the Bonds to secure the full and final payment of the interest and principal on the Bonds, subject to the agreements, conditions, covenants and terms contained therein; and the covenants and agreements therein set forth to be performed on behalf of the Commission or the Trustee will be for the equal and proportionate benefit, security and protection of all Owners of the Bonds without preference, priority or distinction as to security or otherwise of any of the Bonds over any of the others by reason of the Series, number or date thereof or the time of issue, sale, execution or delivery thereof, or otherwise for any cause whatsoever, except as expressly provided in the Indenture or in the Bonds.

#### **Content of Certificates and Opinions.**

(a) Every certificate or opinion with respect to compliance with a condition or covenant provided for in the Indenture, including each Certificate of the Commission, will include (i) a statement that the person or persons making or giving such certificate or opinion have read such covenant or condition and the definitions in the Indenture relating thereto; (ii) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based; (iii) a statement that, in the opinion of the signers, they have made or caused to be made such examination or investigation as is necessary to enable them to express an informed opinion as to whether or not such covenant or condition has been complied with; and (iv) a statement as to whether, in the opinion of the signers, such condition or covenant has been complied with.

(b) Any such certificate or opinion made or given by an officer of the Commission may be based, insofar as it relates to legal, accounting or Enterprise matters, upon a certificate or opinion of or representations by counsel, accountants or consultants, unless such officer knows, or in the exercise of reasonable care should have known, that the certificate or opinion or representations with respect to the matters upon which his certificate or opinion may be based, as aforesaid, are erroneous. Any such certificate or opinion made or given by counsel, accountants or consultants may be based, insofar as it relates to factual matters, information with respect to which is in the possession of the Commission, upon the certificate or opinion of or representations by an officer or officers of the Commission, unless such counsel, accountant or consultant knows, or in the exercise of reasonable care should have known, that the certificate or opinion or representations with respect to the matters upon which his opinion may be based as aforesaid are erroneous.

## THE BONDS

### Authorization.

(a) Issuance of Bonds.

(i) Bonds may be issued under the Indenture from time to time in order to obtain funds for the purposes authorized therein. The Bonds will be issued under the Charter and the Law for the purpose of financing or refinancing the acquisition, construction, replacement, reconstruction, extension, improvement and development of the Enterprise.

(ii) The aggregate principal amount of Bonds which may be issued under the Indenture is not limited (subject, however, to the right of the Commission and the Board of Supervisors of the City, which is reserved by the Indenture, to limit or restrict the aggregate principal amount of Bonds which may at any time be issued and Outstanding under the Indenture) and consists or may consist of one or more Series of varying denominations, dates, maturities, interest rates and other provisions, all issued and to be issued pursuant to the Indenture and the Law, subject to the limitations contained in the Indenture.

(iii) The Indenture constitutes a continuing agreement with the Owners of all of the Bonds issued or to be issued under the Indenture and then Outstanding to secure the full and final payment of the principal of and the premiums, if any, and the interest on all Bonds which may from time to time be executed and delivered under the Indenture, subject to the covenants, agreements, provisions and conditions contained in the Indenture.

(iv) The Bonds are designated generally as the "Clean Water Revenue Bonds," each Series thereof to bear such additional designation as may be necessary or appropriate to distinguish such Series from every other Series of Bonds. The Bonds may be issued in such Series as from time to time will be established and authorized by the Commission, subject to the provisions and conditions contained in the Indenture.

### Execution of Bonds.

(a) The Bonds will be executed on behalf of the Commission by the manual or facsimile signatures of its President or General Manager and the Controller and under the seal of the Commission attested by the manual or facsimile signature of the Secretary. Such seal may be in the form of a facsimile of the Commission's seal and may be imprinted or impressed upon the Bonds. The Bonds will then be delivered to the Trustee for authentication by it. In case any of the officers who will have signed or attested any of the Bonds will cease to be such officer or officers before the Bonds so signed or attested will have been authenticated or delivered by the Trustee or issued by the Commission, such Bonds may nevertheless be authenticated, delivered and issued and, upon such authentication, delivery and issue, will be as binding upon the Commission as though those who signed and attested the same had continued to be such officers, and also any Bond may be signed and attested on behalf of the Commission by such persons as on the actual date of the execution of such Bond will be the President or General Manager or the Secretary or the Controller although at the nominal date of such Bond any such person will not have held such title.

(b) Except as may be provided in any Supplemental Indenture, only such of the Bonds as will bear thereon a certificate of authentication and registration in the form recited in the Indenture, executed by the Trustee, will be valid or obligatory for any purpose or entitled to the benefits of the Indenture, and such certificate of the Trustee will be conclusive evidence that the Bonds so authenticated have been duly authenticated and delivered under the Indenture and are entitled to the benefits of the Indenture.

### **Transfer of Bonds.**

(a) Any Bond may, in accordance with its terms, be transferred, upon the books required to be kept pursuant to the provisions of the Indenture, by the person in whose name it is registered, in person or by his or her duly authorized attorney, upon surrender of such Bond for cancellation, accompanied by delivery of a written instrument of transfer in a form approved by the Trustee duly executed.

(b) Whenever any Bond or Bonds will be surrendered for transfer, the Commission will execute and the Trustee will authenticate and deliver a new Bond or Bonds of the same Series, tenor and maturity, for a like aggregate principal amount. The Trustee will require the payment by any Bondowner requesting any such transfer of any tax or other governmental charge required to be paid with respect to such transfer.

(c) No transfer of Current Interest Bonds will be required to be made by the Trustee after the fifteenth day of the month next preceding each interest payment date, or, as to any Bonds called for redemption, within 30 days of the date fixed for redemption.

### **Exchange of Bonds.**

(a) Bonds may be exchanged at the principal corporate trust office of the Trustee in San Francisco, California, for a like aggregate principal amount of Bonds of other authorized denominations of the same Series, tenor and maturity. The Trustee will require the payment by the Bondowner requesting such exchange of any tax or other governmental charge required to be paid with respect to such exchange.

(b) No exchange of Current Interest Bonds will be required to be made by the Trustee after the fifteenth day of the month next preceding each interest payment date, or, as to any Bonds called for redemption, within thirty days of the date fixed for redemption.

**Bond Register.** The Trustee will keep or cause to be kept, at the principal corporate trust office of the Trustee in St. Paul, Minnesota, sufficient books for the registration and transfer of the Bonds, which will during regular business hours of the Trustee be open to inspection by the Commission; and, upon presentation for such purpose, the Trustee will, under such reasonable regulations as the Trustee may prescribe, register or transfer or cause to be registered or transferred, on said books, Bonds as provided in the Indenture.

**Temporary Bonds.** The Bonds may be initially issued in temporary form exchangeable for definitive Bonds when ready for delivery. The temporary Bonds may be printed, lithographed or typewritten, will be of such denominations as may be determined by the Commission, will be in registered, form without coupons and may contain such reference to any of the provisions of the Indenture as may be appropriate. Every temporary Bond will be executed by the Commission and be authenticated by the Trustee upon the same conditions and in substantially the same manner as the definitive fully registered Bonds. If the Commission issues temporary Bonds it will execute and furnish definitive Bonds without delay, and thereupon the temporary Bonds may be surrendered, for cancellation, in exchange therefor at the principal corporate trust office of the Trustee in St. Paul, Minnesota, and the Trustee will deliver in exchange for such temporary Bonds definitive Bonds of an equal aggregate principal amount of Bonds of the same Series, tenor and maturity or maturities. Until so exchanged, the temporary Bonds will be entitled to the same benefits under the Indenture as definitive Bonds executed and delivered under the Indenture.

**Bonds Mutilated, Lost, Destroyed or Stolen.** If any Bond becomes mutilated, the Commission, at the expense of the Owner of said Bond, will execute, and the Trustee will thereupon authenticate and deliver, a new Bond of like tenor and number in exchange and substitution for the Bond so mutilated (except that such number may be preceded by a distinguishing prefix), but only upon surrender to the Trustee of the Bond so mutilated. Every mutilated Bond so surrendered to the Trustee will be cancelled by it and delivered to, or upon the order of, the Commission. If any Bond becomes lost, destroyed or stolen, evidence of such loss, destruction or theft may be submitted to the Commission and the Trustee and, if such evidence is satisfactory to both and indemnity satisfactory to them will be given, the Commission, at the expense of the Owner, will execute, and the Trustee will thereupon authenticate and deliver a new Bond in lieu of and in substitution for the Bond so lost, destroyed or stolen (except that such number

may be preceded by a distinguishing prefix). The Commission may require payment of a sum not exceeding the actual cost of preparing each new Bond issued under the Indenture and of the expenses which may be incurred by the Commission and the Trustee in the premises. Any Bond issued under the provisions of the Indenture in exchange for any Bond mutilated or in lieu of any Bond alleged to be lost, destroyed or stolen will constitute an original additional contractual obligation on the part of the Commission, whether or not the Bond so mutilated or so alleged to be lost, destroyed or stolen be at any time enforceable by anyone, and will be equally and proportionately entitled to the benefits of the Indenture with all other Bonds secured by the Indenture. Neither the Commission nor the Trustee will be required to treat both the original Bond and any duplicate Bond as being Outstanding for the purpose of determining the principal amount of Bonds which may be issued under the Indenture or for the purpose of determining any percentage of Bonds Outstanding thereunder, but both the original and duplicate Bond will be treated as one and the same.

### **CAPITAL PROJECT FUND**

(a) The Commission has covenanted and agreed to maintain under the Indenture the separate fund known as the “Clean Water Revenue Bond Capital Project Fund” (called the “Capital Project Fund” in the Indenture). The Treasurer will hold the amounts on deposit in the Capital Project Fund. The Controller will maintain and account for the Capital Project Fund so long as any moneys are on deposit therein. The Commission will establish within the Capital Project Fund separate Capital Project Accounts relating to separate Series of Bonds, to the extent needed for a Series of Bonds.

(b) Upon completion of the acquisition and construction of the Project, the Commission may direct the transfer of any remaining balance in the Capital Project Fund to the Interest Fund. Upon completion of acquisition or construction of the Project or any portion thereof, the Commission will file with the Trustee a Certificate or Written Statement of the Commission stating the fact and date of such completion of construction.

(c) The moneys in the Capital Project Fund will be held by the Treasurer in trust and applied to the costs of acquisition, construction, expansion, improvement, financing and refinancing of the Project and the expenses incident thereto or connected therewith, including, if necessary, interest to the extent permitted by law, reimbursement to the Commission for expenses incurred prior to the issuance of the applicable Series of Bonds to the extent permitted by law, and the costs incurred in connection with the issuance of the applicable Series of Bonds to the extent not provided for.

(d) The Treasurer will pay out moneys from the Capital Project Fund only upon warrants drawn by the Controller in the manner provided by law. No withdrawals will be made from the Capital Project Fund for any purpose not authorized by law.

### **ISSUANCE OF ADDITIONAL SERIES OF BONDS**

In addition to the 2003 Refunding Series A Bonds, the Commission may, subject to the requirements of the Law, by Supplemental Indenture establish one or more other Series of Bonds payable from Net Revenues on a parity with the 2003 Refunding Series A Bonds and secured by a lien upon and pledge of Net Revenues equal to the lien and pledge securing the 2003 Refunding Series A Bonds, and the Commission may issue and the Trustee may authenticate and deliver Bonds of any Series so established, in such principal amount and for such lawful purpose or purposes (including refunding of any Bonds issued under the Indenture and then Outstanding) as will be determined by the Commission in said Supplemental Indenture, but only upon compliance by the Commission with the provisions of the Indenture, and subject to the following specific conditions, which have been made conditions precedent to the issuance of any such additional Series of Bonds by the Indenture:

(a) No Event of Default has occurred and is continuing under the Indenture or any Supplemental Indenture and no event has occurred which, but for the passage of time or the giving of notice, would constitute an Event of Default under the Indenture or any Supplemental Indenture.

(b) The Supplemental Indenture providing for the issuance of such additional Series of Bonds may require that the amount on deposit in the Bond Reserve Fund to be established pursuant to the Indenture be increased, if and to the extent necessary, immediately upon the receipt of the proceeds of the sale of such additional Series of Bonds, to an amount equal to the Required Reserve. This deposit may be made from such proceeds or any other source, as provided in the Supplemental Indenture.

(c) The Supplemental Indenture providing for the issuance of such additional Series of Bonds provides for the payment of interest and principal as follows:

(i) Principal on such Additional Bonds will be payable either semiannually on April 1 and October 1 of each year in which principal falls due or annually on October 1 of each year in which principal falls due, and Term Bonds of any Series will have a principal maturity date of October 1. Interest on such Additional Bonds that are Current Interest Bonds will be payable semiannually on April 1 and October 1 of each year excepting the first year, provided that the first installment of interest will be payable on either April 1 or October 1 and will be for a period of not longer than twelve months and that the interest will be payable thereafter semiannually on April 1 and October 1.

(ii) Notwithstanding the foregoing, the Supplemental Indenture authorizing the issuance of such Additional Bonds may provide for the payment of principal and interest on dates other than those specified above if the Supplemental Indenture provides for the monthly payment of a portion of interest and principal becoming due and payable on the succeeding Interest Payment Date and Principal Payment Date, as applicable, as set forth in detail in the Supplemental Indenture.

(iii) Interest on any Bonds constituting Variable Rate Indebtedness or Tender Indebtedness may be payable on such Payment Dates as will be specified in the Supplemental Indenture.

(d) Fixed serial maturities or mandatory Minimum Sinking Fund Account Payments, or any combination thereof, will be established in amounts sufficient to provide for the retirement of all of the Bonds of such additional Series on or before their respective maturity dates; provided, however, that such requirement will not apply to Balloon Indebtedness or principal amounts of such Series of Bonds which the Commission has specified as Excluded Principal.

(e) The aggregate principal amount of Bonds issued under the Indenture does not exceed any limitation imposed by law or by any Supplemental Indenture.

(f) After the sale of the Series of Additional Bonds proposed to be issued (but prior to the issuance and delivery thereof and receipt of payment therefor), the Commission will file the following documents with the Trustee; these documents will, with respect to such Series of Additional Bonds, be based upon the actual interest rate or rates determined at the time of sale thereof (except that, with respect to Variable Rate Indebtedness, the interest rate for the Series of Additional Bonds will be calculated in accordance with the provisions of subsection (b) of the definition of Annual Debt Service).

(i) A Certificate of the Commission setting forth for each of the next three Fiscal Years estimates of (A) Revenues, (B) Operation and Maintenance Costs of the Enterprise and (3) Net Revenues.

(ii) A Certificate of the Commission demonstrating that (1) the ratio of (A) Net Revenues for the most recent Fiscal Year for which audited financial statements are available, or any consecutive twelve calendar month period during the eighteen calendar month period prior to the issuance of such additional Series of Bonds, to (B) Annual Debt Service for the current Fiscal Year, calculated as of the date of sale of, and including such additional Series of Bonds, will not be less than 1.25:1; or (2) the ratio of (A) Net Revenues projected by the Commission for each of the next three Fiscal Years as described in clause (f)(i) above, and including in such projections amounts

projected to be received from any adopted rate increases and fund balances of the Commission which are projected to be available for the payment of Debt Service (but excluding the Bond Reserve Fund), to (B) Annual Debt Service in each of such three Fiscal Years, calculated as of the date of sale of and including such additional Series of Bonds, will not be less than 1.25:1 in each of such Fiscal Years.

**Issuance of Additional Bonds for Refunding.** In addition to the 2003 Refunding Series A Bonds, the Commission may, subject to the requirements of the Law, by Supplemental Indenture establish one or more other Series of Bonds payable from Net Revenues on a parity with the 2003 Refunding Series A Bonds and secured by a lien upon and pledge of Net Revenues equal to the lien and pledge securing the 2003 Refunding Series A Bonds, and the Commission may issue, and the Trustee may authenticate and deliver, Bonds of any Series so established, for the purpose of refunding any Bonds issued under the Indenture and then Outstanding, but only upon compliance by the Commission with the provisions of the Indenture, and subject to the following specific conditions, which are made conditions precedent to the issuance of any such additional Series of Bonds by the Indenture:

(a) No Event of Default has occurred and is continuing under the Indenture or any Supplemental Indenture and no event has occurred which, but for the passage of time or the giving of notice would constitute an Event of Default under the Indenture or any Supplemental Indenture.

(b) The Supplemental Indenture providing for the issuance of such additional Series of Bonds may require that the amounts on deposit in the Bond Reserve Fund to be established pursuant to the Indenture be increased, if necessary, upon the receipt of the proceeds of the sale of such additional Series of Bonds to an amount equal to the Required Reserve. This deposit may be made from such proceeds or any other source, as provided in the Supplemental Indenture.

(c) The Supplemental Indenture providing for the issuance of such additional Series of Bonds will provide for the payment of interest and principal as follows:

(i) Principal on such Additional Bonds will be payable either semiannually on April 1 and October 1 of each year in which principal falls due or annually on October 1 of each year in which principal falls due, and Term Bonds of any Series will have a principal maturity date of October 1. Interest on such Additional Bonds that are Current Interest Bonds will be payable semiannually on April 1 and October 1 of each year excepting the first year, provided that the first installment of interest will be payable on either April 1 or October 1 and will be for a period of no longer than twelve months and that the interest will be payable thereafter semiannually on April 1 and October 1.

(ii) Notwithstanding the foregoing, the Supplemental Indenture authorizing the issuance of such Additional Bonds may provide for the payment of principal and interest on dates other than those specified above if the Supplemental Indenture provides for the monthly payment

of a portion of interest and principal becoming due and payable on the succeeding Interest Payment Date and Principal Payment Date, as applicable, as set forth in detail in the Supplemental Indenture.

(iii) Interest on any Bonds constituting Variable Rate Indebtedness or Tender Indebtedness may be payable on such Payment Dates as specified in the Supplemental Indenture providing for the issuance of such Bonds.

(d) Fixed serial maturities or mandatory Minimum Sinking Fund Account Payments, or any combination thereof, will be established in amounts sufficient to provide for the retirement of all of the Bonds of such additional Series on or before their respective maturity dates, unless such Bonds are Balloon Indebtedness.

(e) The aggregate principal amount of Bonds issued under the Indenture will not exceed any limitation imposed by law or by any Supplemental Indenture.

(f) After giving effect to the application of the proceeds of the additional Series of Bonds, either (i) Annual Debt Service will not be increased in any Fiscal Year (excluding Debt Service on the Outstanding Bonds to be refunded) in an amount in excess of 5% or (ii) the Average Annual Debt Service for the Bonds of such additional Series (during the period from their issuance to their last maturity date) will be equal to or less than the Average Annual Debt Service on the Bonds to be refunded (during the period from the issuance of the additional Series to the last maturity date of the Bonds to be refunded).

(g) After the sale of the additional Series of Bonds proposed to be issued (but prior to the issuance and delivery thereof and receipt of payment therefor), the Commission will file the following documents with the Trustee; these documents will, with respect to such additional Series of Bonds, be based upon the actual interest rate or rates determined at the time of sale thereof.

(i) A Certificate of the Commission that all of the requirements of the Indenture have been met.

(ii) A certificate of one or more Qualified Financial Advisors that the requirements of clause (f) above have been met.

#### **Proceedings for the Issuance of Additional Series of Bonds.**

(a) Whenever the Commission determines to issue an additional Series of Bonds pursuant to the Indenture, the Commission will execute or adopt a Supplemental Indenture providing for the issuance of such additional Series of Bonds.

(b) Such Supplemental Indenture will specify the maximum principal amount of Bonds of such Series, provide for the distinctive designation of Bonds of such Series, and prescribe the other terms and conditions of such additional Series of Bonds in accordance with the Indenture and subject to the provisions of the Indenture. The Commission may by such Supplemental Indenture prescribe any provisions respecting the Bonds of such Series not inconsistent with the terms of the Indenture, including registration, transfer and exchange provisions, provisions for the payment of principal and interest and sinking fund provisions.

(c) Before such additional Series of Bonds may be issued and delivered, the Commission will file the following documents with the Trustee:

(i) An Opinion of Counsel setting forth (1) that such counsel has examined the Supplemental Indenture and found it to be in compliance with the requirements of the Indenture; (2) that the execution and delivery of the additional Series of Bonds have been sufficiently and duly authorized by the Commission; (3) that said additional Series of Bonds, when duly executed by the Commission and, if required, authenticated and delivered by the Trustee, will be valid and binding special obligations of the Commission, payable from Net Revenues as provided in the Indenture; and (4) that the issuance of the additional Series of Bonds will not adversely affect the exclusion from federal income taxation of interest on any Bonds then Outstanding.

(ii) The certificates and reports required by the Indenture (if the Additional Bonds constitute an additional lien on the Net Revenues or if the Additional Bonds are issued to refund any Outstanding Bonds), as appropriate.

(iii) The Supplemental Indenture, duly executed or certified and approved by the Trustee.

(d) Upon the delivery to the Trustee of the foregoing instruments, the Trustee will authenticate and deliver said additional Series of Bonds, in the aggregate principal amount specified in such Supplemental

Indenture, to, or upon the Written Request of, the Commission, when such additional Series of Bonds is presented to it for that purpose.

**No Issuance of Additional Bonds or Other Obligations Except as Permitted in the Indenture; Exceptions.** So long as any of the Bonds remain Outstanding, the Commission may issue any Additional Bonds or obligations payable from Net Revenues on a parity with the Bonds only pursuant to the provisions of the Indenture, described under “- Issuance of Additional Bonds,” “Issuance of Additional Bonds for Refunding,” and “Proceedings for the Issuance of Additional Series of Bonds,” above, except under any of the following conditions, in which case none of the limitations or restrictions on the issuance of additional Series of Bonds set forth in such provisions of the Indenture will be applicable: (a) if the Owners of a majority in aggregate amount of the Bond Obligation and any Credit Provider consent in writing to the issuance of such Additional Bonds or obligations, or (b) the obligation constitutes debt of the Commission (including without limitation loan agreements entered into between the Commission and the State of California (or any board, department or agency thereof) to finance or refinance additions, betterments, extensions, repairs, renewals or replacements to the Enterprise) payable by its terms from Net Revenues on a subordinate basis to the payment of Debt Service on the Bonds.

In addition, the Commission may enter into Parity Loans if no Event of Default has occurred and is continuing under the Indenture or any Supplemental Indenture (and no event has occurred which, but for the passage of time or the giving of notice, would constitute an Event of Default under the Indenture or any Supplemental Indenture) and, on the date of the execution and delivery of such Parity Loans and with respect to Parity Loans executed and delivered prior to the effective date of the amendments set forth in the Sixth Supplemental Indenture, on the effective date of the amendments set forth in the Sixth Supplemental Indenture, the Commission delivers a Certificate to the Trustee setting forth, for each of the next three Fiscal Years after the delivery of the Parity Loans, and in the case of Parity Loans executed and delivered prior to the effective date of the amendments set forth in the Sixth Supplemental Indenture, the next three Fiscal Years, determined on such date, (i) the Revenues, Operation and Maintenance Costs of the Enterprise and Net Revenues and (ii) the Annual Debt Service (assuming the delivery of the Parity Loans), and demonstrating that the estimated Net Revenues (together with any fund balances of the Commission, which are available for Debt Service, but excluding the Bond Reserve Fund), in each of such Fiscal Years is at least equal to 1.25 times the Annual Debt Service in each of such Fiscal Years.

**Validity of Bonds.** The validity of the authorization and issuance of the Bonds will not be dependent on or affected in any way by any proceedings taken by the Commission for the improvement of the Enterprise, or by any contracts made by the Commission in connection therewith, or the failure to construct the Project, the Enterprise or any part thereof. The recital contained in the Bonds that they are regularly issued pursuant to the Law will be conclusive evidence of their validity and of compliance with the provisions of law in their issuance.

## GENERAL REDEMPTION PROVISIONS

**Selection of Bonds for Redemption.** Whenever less than all of the Bonds of any one maturity and tenor of any Series are called for redemption and such Bonds are redeemable by lot, the Trustee will select the Bonds of such maturity and tenor to be redeemed, from the Outstanding Bonds of such maturity and tenor, by lot or by any other manner which the Trustee deems fair and equitable. For purposes of such selection, Bonds will be deemed to be composed of \$5,000 portions (of principal in the case of Current Interest Bonds or of Accreted Value at maturity in the case of Capital Appreciation Bonds) and any such portion may be redeemed separately. The Trustee will promptly notify the Commission in writing of the numbers of the Bonds so selected for redemption.

### Notice of Redemption.

(a) The Trustee will mail notice of redemption, not less than 30 nor more than 60 days prior to the redemption date, to (i) the respective Owners of any Bonds designated for redemption at their addresses appearing on the bond registration books of the Trustee, (ii) the Securities Depositories and (iii) one or more Information Services.

(b) Each notice of redemption will state the date of such notice, the Series of Bonds to be redeemed, the date of issue of such Series of Bonds, the redemption date, the redemption price including, in the case of Capital Appreciation Bonds, the Accreted Value thereof, the place or places of redemption

(including the name and appropriate address or addresses of the Trustee), the CUSIP number (if any) of the maturity or maturities, and, if less than all of any such maturity is to be redeemed, the distinctive certificate numbers of the Bonds of such maturity, to be redeemed, and, in the case of Bonds to be redeemed in part only, the respective portions of the principal amount thereof to be redeemed. Each such notice will also state that on said date there will become due and payable on each of said Bonds the principal amount thereof or of said specified portion of the principal amount thereof in the case of a Bond to be redeemed in part only, together with interest accrued thereon to the redemption date, and the premium, if any, thereon (such premium to be specified) and that from and after such redemption date interest thereon will cease to accrue, and will require that such Bonds be then surrendered at the address or addresses of the Trustee specified in the redemption notice.

(c) Failure by the Trustee to give notice pursuant to the Indenture to any one or more of the Information Services or Securities Depositories, or the insufficiency of any such notices will not affect the sufficiency of the proceedings for redemption. Neither failure by the Trustee to mail notice of redemption pursuant to the Indenture to any one or more of the respective Owners of any Bonds designated for redemption nor any defect in such notice will affect the sufficiency of the proceedings for redemption with respect to the Owners to whom such notice was mailed.

(d) Notice of redemption of Bonds will be given by the Commission or, at the request of the Commission, by the Trustee for and on behalf and at the expense of the Commission.

**Partial Redemption of Bond.** Upon surrender of any Bond redeemed in part only (except as otherwise provided in the Indenture) the Commission will execute and the Trustee will authenticate and deliver to the Owner thereof, at the expense of the Commission, a new Bond or Bonds of authorized denominations equal in aggregate principal amount to the unredeemed portion of the Bond surrendered and of the same Series, tenor, interest rate and maturity.

#### **Effect of Redemption.**

(a) When notice of redemption has been duly given under the Indenture, and moneys for payment of the redemption price are held by the Trustee, the Bonds so called for redemption will, on the redemption date designated in such notice, become due and payable at the redemption price specified in such notice; and from and after the date so designated, interest on the Bonds so called for redemption will cease to accrue, those Bonds will cease to be entitled to any benefit or security under the Indenture, and the Owners of those Bonds will have no rights in respect thereof except to receive payment of the redemption price thereof. The Trustee will, upon surrender for payment of any of said Bonds (except as otherwise provided in the Indenture), pay such Bonds at the redemption price as aforesaid, together with accrued interest thereon.

(b) All Bonds redeemed pursuant to the provisions of the Indenture will be cancelled upon surrender, and no Bonds will be issued in place thereof.

**Rescission of Notice of Redemption.** The Commission may, at its option, prior to the date fixed for redemption in any notice of redemption rescind and cancel such notice of redemption by Written Request to the Trustee and the Trustee will mail notice of such cancellation to the recipients of the notice of redemption being cancelled.

## **REVENUES AND FUNDS**

### **Pledge and Assignment of Net Revenues; Revenue Fund.**

(a) Establishment of Revenue Fund. In accordance with the Charter, but subject to the budget and fiscal provisions of the Charter, whenever revenue bonds issued by the Commission pursuant to the Charter or refunding bonds of such revenue bonds are Outstanding, all of the Revenues of the Enterprise will be set aside and deposited into a fund in the City treasury previously established and known as the "Enterprise Revenue Fund" (called the "Revenue Fund" in the Indenture). All amounts paid into the Revenue Fund will

be maintained by the Treasurer separate and apart from all other City funds. Separate accounts will be kept of the Revenue Fund with respect to receipts and disbursements. The Revenue Fund will be exempted from the requirements of the Charter.

(b) Priority of Disbursements from Revenue Fund. Moneys in the Revenue Fund, including earnings thereon, will be appropriated, transferred, expended or used for the following purposes, and only in accordance with the following priority: (i) the payment of the Operation and Maintenance Costs of the Enterprise; (ii) the payment of Senior State Loans; (iii) the payment of Bonds, Parity Loans, Policy Costs and amounts due as reimbursement under any Letter of Credit Agreement, as provided in the Indenture and, as applicable, any Supplemental Indenture; and (iv) any other lawful purpose of the Commission.

(c) Pledge of Net Revenues; Perfection of Lien.

(i) Subject to the provisions above, all of the Net Revenues (except amounts on deposit in the various Rebate Funds) are irrevocably pledged by the Indenture to the punctual payment of the principal of and interest and redemption premium, if any, on the Bonds and the Policy Costs, and the Net Revenues will not be used for any other purpose while any of the Bonds remain Outstanding or Policy Costs remain unpaid; except that the Net Revenues may be used for such purposes as are expressly permitted in the Charter and the Indenture. Pursuant to Section 5451 of the California Government Code, said pledge will constitute a lien on and security interest in the Net Revenues for the payment of the Bonds and the Policy Costs in accordance with the terms thereof and of the Indenture, and will immediately attach to the collateral and be effective, binding, and enforceable against the Commission, its successors, purchasers of the Net Revenues, creditors and all others asserting any rights thereto, irrespective of whether such parties have notice of such pledge and without the need for any physical delivery, recordation, filing or further act.

(ii) The Commission will not take any action which alters the pledge of Net Revenues or the order of priority of payment of the Net Revenues used for the payment of principal of and interest on the Bonds.

(d) Disposition of Excess Amounts in Revenue Fund. Except as otherwise provided in a Supplemental Indenture, all moneys remaining in the Revenue Fund on each October 5 (or on such earlier day as the amounts required for the transfers set forth in the Indenture are on deposit in the Revenue Fund), after the setting aside and transferring of all of the amounts required to be set aside or transferred by the Treasurer under the Indenture, will be applied for any lawful purpose of the Commission.

#### **Establishment and Maintenance of Funds for Net Revenues; Use and Withdrawal of Revenues.**

(a) The Trustee will establish and maintain, in trust, so long as any Bonds are Outstanding, the Interest Fund, Principal Fund, and Bond Reserve Fund. The Trustee will hold all amounts deposited in each of these funds in trust and apply, use and withdraw those funds only for the purposes authorized in the Indenture.

(b) After the making of the payments required by the Indenture the Commission will transfer all Net Revenues in the Revenue Fund, on a parity basis, as follows: (i) to the Trustee, at the times and in the amounts set forth in the Indenture, for deposit in the following funds, to the extent necessary, in the following order of priority: the Interest Fund, Principal Fund, and Bond Reserve Fund, and (ii) as needed for the payment of any Parity Loans. The requirements of the Interest Fund, the Principal Fund and the Reserve Fund at the time of deposit will be satisfied before any transfer is made to any fund subsequent in priority. The Trustee will disburse amounts on deposit in these funds in accordance with the Indenture.

#### **Interest Fund.**

(a) On or before 5 Business Days before each Interest Payment Date, the Treasurer will pay to the Trustee for deposit in the Interest Fund an amount equal to the interest becoming due and payable on the

Outstanding Current Interest Bonds on that Interest Payment Date (taking into account amounts on deposit in the Interest Fund and available for the payment of interest on such Interest Payment Date and excluding any interest for which there is moneys deposited in the Interest Fund or the Capital Project Fund from the proceeds of any Series of Bonds, or other source and reserved as capitalized interest to pay such interest on such Interest Payment Date).

(b) The Trustee will use and withdraw moneys in the Interest Fund solely for the purpose of paying the interest on the Bonds as it becomes due and payable (including accrued interest on any Bonds purchased or redeemed prior to maturity under the Indenture).

(c) All of the Refundable Credits received by the Commission will be deposited immediately upon receipt in the Interest Fund, and such Refundable Credits are irrevocably pledged by the Indenture to the punctual payment of the interest on the Bonds issued as Build America Bonds, and the Refundable Credits will not be used for any other purpose while any of the Bonds issued as Build America Bonds remain Outstanding. Pursuant to Section 5451 of the California Government Code, this pledge constitutes a lien on and security interest in the Refundable Credits for the payment of interest on the Bonds issued as Build America Bonds in accordance with the terms thereof and of the Indenture, and will immediately attach and be effective, binding, and enforceable against the Commission, its successors, purchasers of the Refundable Credits, creditors and all others asserting any rights thereto, irrespective of whether such parties have notice of such pledge and without the need for any physical delivery, recordation, filing or further act. Notwithstanding the foregoing deposit and pledge, the Refundable Credits are not considered Revenues or included in the calculation of Revenues under the Indenture. Additionally, in calculating the amount that the Treasurer pays to the Trustee for deposit in the Interest Fund as provided above, the Treasurer and the Trustee will take into account Refundable Credits only if they have been deposited in the Interest Fund on or prior to the fifth Business Day prior to the applicable Interest Payment Date and have not been previously expended to pay Debt Service on the Bonds issued as Build America Bonds or otherwise transferred out of the Interest Fund.

#### **Principal Fund; Sinking Fund Accounts.**

(a) On or before 5 Business Days before each Principal Payment Date, the Treasurer will pay to the Trustee for deposit in the Principal Fund an amount equal to at least the following:

(i) the aggregate amount of Bond Obligation becoming due and payable on the Outstanding Serial Bonds of all Series having a maturity date on the next succeeding Principal Payment Date, plus

(ii) the aggregate of the Minimum Sinking Fund Account Payments to be paid on the next succeeding Principal Payment Date into the respective Sinking Fund Accounts for the Term Bonds of all Series for which Sinking Fund Accounts have been created (all such Minimum Sinking Fund Account Payments will be made without priority of any payment into any one such Sinking Fund Account over any other such payment), plus

(iii) if any Balloon Indebtedness is Outstanding and principal is due on such Balloon Indebtedness on or prior to the next succeeding Principal Payment Date, sufficient amounts to pay when due the Balloon Indebtedness, plus

(iv) if any Letter of Credit Agreement has been entered into on a parity with the Bonds, sufficient amounts to pay when due the obligations of the Commission under such Letter of Credit Agreement due on the next succeeding Maturity Date.

(b) If the moneys in the Principal Fund on any Principal Payment Date are less than the amount of Bond Obligation and redemption premium on the Outstanding Term Bonds required to be redeemed or paid at maturity on such Principal Payment Date, plus the Balloon Indebtedness and the obligations of the Commission under any Letter of Credit Agreements due on such Principal Payment Date, then the moneys

in the Principal Fund will be applied on a Proportionate Basis and in such proportion as the Serial Bonds, Term Bonds, Balloon Indebtedness and Letter of Credit Agreement obligations bear to each other.

(c) No deposit need be made into the Principal Fund so long as it contains an amount equal to an amount sufficient to make the payment required above.

(d) The Trustee will use and withdraw all moneys in the Principal Fund solely for the purpose of paying the Bond Obligation of the Bonds, any Balloon Indebtedness and any Letter of Credit Agreement obligations when due and payable, except that the Trustee will use and withdraw all moneys in any Sinking Fund Account (except as otherwise provided in the Indenture) only to purchase or to redeem or to pay at maturity Term Bonds of the Series for which such Sinking Fund Account was created, as provided in the Indenture or in any Supplemental Indenture.

#### **Bond Reserve Fund; Reserve Accounts.**

(a) On or before 5 Business Days before each Interest Payment Date, the Treasurer will pay to the Trustee for deposit in the Bond Reserve Fund the aggregate amount of each unreplenished prior withdrawal from the Bond Reserve Fund until there is on deposit in the Bond Reserve Fund a balance equal to the Required Reserve.

(b) If a Bond Reserve Fund Policy satisfies all or a portion of the Required Reserve and a drawing is made on the Bond Reserve Fund Policy, on or before 5 Business Days before each Interest Payment Date, the Treasurer will pay to the Trustee or to the Bond Reserve Fund Policy Provider, with notice to the Trustee, an amount at least equal to the aggregate amount of Policy Costs owing with respect to such Bond Reserve Fund Policy. If the Trustee receives such payment, it will immediately remit the same to the Bond Reserve Fund Policy Provider.

(c) No deposit need be made into the Bond Reserve Fund so long as there exists in the Bond Reserve Fund an amount equal to the Required Reserve, or when and if the sum of the amounts contained (excluding all Bond Reserve Fund Policies) therein and in the Interest Fund and in the Principal Fund is at least equal to the sum of the aggregate principal amount of all of the Bonds then Outstanding and all of the interest then due or thereafter to become due on all such Bonds.

(d) The Trustee will establish and hold a Reserve Account for each Series of Additional Bonds issued under the Indenture, if and to the extent required by the Supplemental Indenture pursuant to which that Series of Bonds is issued. Upon the issuance of a Series of Additional Bonds, there will be deposited into the Reserve Account for that Series an amount equal to the Required Reserve, if any, established for that Series of Bonds under the Supplemental Indenture pursuant to which that Series of Bonds is issued. Upon the issuance of a Series of Additional Bonds, the Commission will advise the Trustee of the Required Reserve to be maintained in the Reserve Account for that Series. Unless otherwise provided in the Supplemental Indenture pursuant to which a Series of Bonds is issued, the Reserve Account established with respect to a Series of Bonds will be available only to pay Debt Service on such Series of Bonds, and will not be available to pay Debt Service on any other Series of Bonds, provided that amounts in the Reserve Accounts (the "Prior Reserve Accounts") with respect to the Series of Bonds (the "Prior Series of Bonds") issued prior to the effective date of the amendments set forth in the First Amendment, will be available to pay the Debt Service on all the Prior Series of Bonds, except that the Trustee will apply any Bond Reserve Fund Policy on deposit in a Prior Reserve Account solely to the payment of Debt Service on the Prior Series of Bonds to which such Prior Reserve Account relates, and such Bond Reserve Fund Policy will not be available for payment of any other Series of Bonds.

(e) Except with respect to the Prior Reserve Accounts and the Prior Series of Bonds, the Trustee will use and withdraw cash amounts on deposit in each respective Reserve Account within the Bond Reserve Fund solely to pay the principal of, Minimum Sinking Fund Account Payments with respect to, and interest on, the Series of Bonds with respect to which that Reserve Account was established (unless otherwise provided in the Supplemental Indenture pursuant to which a Series of Bonds was issued), in the event that no other moneys are available therefor, or for payment or redemption of such Series of Bonds. Additionally,

unless otherwise provided in the Supplemental Indenture pursuant to which a Series of Bonds was issued, the Trustee will apply any Bond Reserve Fund Policy on deposit in a Reserve Account solely to the payment of the Series of Bonds to which such Reserve Account relates, and such Bond Reserve Fund Policy will not be available to pay Debt Service on any other Series of Bonds. With respect to the Prior Reserve Accounts, the Trustee will use and withdraw cash amounts on deposit in the respective Prior Reserve Accounts within the Bond Reserve Fund on a proportionate basis solely to pay the principal of, Minimum Sinking Fund Account Payments with respect to, and interest on, any of the Outstanding Prior Series of Bonds in the event that no other moneys are available therefor, or for payment or redemption of Outstanding Bonds. However, as stated in clause (c) above, the Trustee will apply any Bond Reserve Fund Policy on deposit in a Prior Reserve Account solely to the payment of the Prior Series of Bonds to which such Prior Reserve Account relates, and such Bond Reserve Fund Policy will not be available for payment of any other Series of Bonds.

(f) Following application of all other funds held in the Reserve Account relating to a Series of Bonds, the Trustee will draw under any Bond Reserve Fund Policy issued with respect to such Series of Bonds, in a timely manner and pursuant to the terms of such Bond Reserve Fund Policy, to the extent necessary in order to obtain sufficient funds on or prior to the date such funds are needed to pay the Bond Obligation of, Minimum Sinking Fund Account Payments with respect to, and interest on such Series of Bonds when due.

(g) If the Trustee has notice, that any payment of principal of or interest on a Bond has been recovered from its Bondowner under the United States Bankruptcy Code by a trustee in bankruptcy in accordance with the final, nonappealable order of a court having competent jurisdiction, the Trustee, pursuant to the terms of the Bond Reserve Fund Policy, if any, securing the Series of Bonds of which such Bond is a part, will so notify the Bond Reserve Fund Policy Provider and draw on such policy to the lesser of the extent required or the maximum amount of such policy in order to pay to such Bondowners the principal of and interest so recovered.

(h) If and to the extent that more than one Bond Reserve Fund Policy satisfies the portion of the Required Reserve relating to a Series of Bonds, drawings under such Bond Reserve Fund Policies and payment of Policy Costs with respect to such Bond Reserve Fund Policies will be made on a pro rata basis (calculated by reference to the maximum amounts of such Bond Reserve Fund Policies).

(i) If a Bond Reserve Fund Policy is deposited in a Reserve Account in which cash has been previously deposited in satisfaction of the Required Reserve for the applicable Series of Bonds, the Trustee will release cash from that Reserve Account in an amount equal to the Bond Reserve Fund Policy being deposited, and will transfer the cash so released to the Commission to be used for any lawful purpose, *provided, however*, that the Commission will ensure that the use of any cash so released will not adversely affect the exclusion from gross income of the interest on the Bonds under Section 103 of the Code.

(j) Deposits to the Bond Reserve Fund will be applied on a pro rata basis to the respective Reserve Accounts, calculated by reference to the amounts initially deposited in such Reserve Accounts, and within each Reserve Account first to satisfying any portion of the Required Reserve to be maintained within such Reserve Account not covered by a Bond Reserve Fund Policy, and second to the pro rata payment of Policy Costs until satisfied.

(k) So long as the Commission is not in default under the Indenture, and in each Reserve Account there is a balance equal to the Required Reserve for the Series of Bonds relating to that Reserve Account, the Trustee will withdraw any amount in the Bond Reserve Fund in excess of the Required Reserve, semiannually on March 15 and September 15 of each year, and transfer that amount to the Treasurer for deposit in the Revenue Fund or, during the period of construction of the Project or any portion thereof, the Capital Project Account for the related Series of Bonds. Notwithstanding the foregoing, the Commission will have the right to request the Trustee to withdraw excess amounts on deposit in the Bond Reserve Fund at any time.

(l) Except as provided in clauses (d) and (e) above with respect to the Prior Reserve Accounts and the Prior Series of Bonds, unless otherwise provided in a Supplemental Indenture, amounts on deposit in

any Reserve Account will be available for the payment of Debt Service only with respect to the Series of Bonds for which that Reserve Account was established.

#### **Deposit and Investment of Moneys in Funds.**

(a) All moneys held by the Treasurer in the Revenue Fund or the Capital Project Fund may be invested in Legal Investments, maturing not later than the date on which such moneys are required for payment by the Treasurer.

(b) All moneys held by the Trustee and allocated to any of the funds held by it, subject to the restrictions set forth in the Arbitrage Certificate, will be invested in Permitted Investments, as directed by the Commission, maturing not later than the date on which such moneys are required for payment by the Trustee, except that moneys in the Bond Reserve Fund will be deposited or invested in Permitted Investments which mature not more than seven years from the date of investment or the final date of maturity of the Outstanding Bonds, whichever is earlier.

(c) If at any time any of the investments stated to be Permitted Investments under the Indenture cease to be a Legal Investment for the funds held under the Indenture, the Commission will so advise the Trustee by a Written Statement. The Trustee will not be responsible for making any investment which is not a Legal Investment if the Commission has not previously delivered a Written Request or Statement correctly advising the Trustee that such investment was no longer a Legal Investment.

(d) Permitted Investments on deposit in the Bond Reserve Fund or in any account therein will not have a maturity extending beyond five years from the date of acquisition thereof unless otherwise approved by the Credit Provider or unless such Permitted Investment is described in clause (i) of the definition thereof.

(e) For the purpose of determining the amount of money in the Bond Reserve Fund, all investments of moneys therein will be valued at least annually at the market value of such investments.

(f) All interest received on any moneys held and invested by the Treasurer or the Trustee under the Indenture will be deposited in the Revenue Fund, except: (i) all interest received on any moneys invested in the Principal Fund, Interest Fund or Rebate Fund will remain in the Principal Fund, Interest Fund or Rebate Fund, respectively, and (ii) prior to receipt by the Trustee of notice of completion of construction of the Project or any portion thereof, all interest received on any moneys invested in the Capital Project Fund will remain in the Capital Project Fund held by the Treasurer; and (iii) all interest on any amounts on deposit in the Bond Reserve Fund to the extent that amounts on deposit in the Bond Reserve Fund exceed the Required Reserve will be deposited in the Interest Fund.

(g) The Trustee may sell or present for redemption any obligations so purchased by it whenever it is necessary in order to provide moneys to meet any payment, and the Trustee will not be liable or responsible for any loss resulting from such investment. The Trustee may act as principal or agent in the acquisition or disposition of any investment. The Trustee may commingle any of the moneys held by it under the Indenture for investment purposes only; provided, however, that the Trustee will account separately for the moneys belonging to each fund or account established pursuant to the Indenture and held by it.

#### **Interest Rate Swaps.**

(a) The Commission may and the Trustee will, upon the Written Request or Statement of the Commission, enter into an interest rate swap agreement corresponding to the interest rate or rates payable on a Series of Bonds or any portion thereof, provided that the Trustee is supplied with an Opinion of Counsel to the effect that (i) such action is permitted under the laws of the State of California, (ii) entering into the interest rate swap agreement will not adversely affect the tax-exempt status of interest on the bonds, and (iii) entering into the interest rate swap agreement complies with the terms of the Indenture. The amounts received by the Commission or the Trustee, if any, under such a swap agreement may be applied to the

deposits required under the Indenture. The entity with which the Commission or the Trustee may contract for an interest rate swap is limited to entities that are rated in one of the two highest short-term or long-term debt rating categories by Moody's and S&P. If the Commission so designates, amounts payable under the interest rate swap agreement will be made on a parity basis with payments on the Bonds and, in such event, the Commission will pay to the Trustee for deposit in the Interest Fund, at the times and in the manner provided by the Indenture, the amounts to be paid under such interest rate swap agreement, as if such amounts were additional interest due on the Bonds to which such interest rate swap relates.

(b) Notwithstanding the foregoing, the Commission will not enter into an interest rate swap agreement without first making the determination required pursuant to Section 5922 of the California Government Code.

## **COVENANTS OF THE COMMISSION**

**Payment of Principal and Interest.** The Commission will punctually pay or cause to be paid the principal and interest (and premium, if any) to become due in respect of every Bond issued under the Indenture at the times and places and in the manner provided therein and in the Bonds, in strict conformity with the terms of the Bonds and of the Indenture, but solely from Net Revenues, as provided therein.

### **Against Encumbrances.**

(a) Subject to any rights of the United States of America or the State of California, and subject to the provisions described under "- Sale or Other Disposition of Property" below, the Commission will not mortgage or otherwise encumber, pledge or place any charge upon the Enterprise or any part thereof, or upon any of the Net Revenues, prior to or on a parity with the Bonds, provided that Letter of Credit Agreements entered into in connection with Balloon Indebtedness, Variable Rate Indebtedness or Tender Indebtedness may be payable on a parity with the Bonds.

(b) So long as any Bonds are Outstanding, the Commission will not issue any bonds or obligations payable from Net Revenues or secured by a pledge, lien or charge upon Net Revenues prior to or on a parity with the Bonds, other than the Bonds, provided that Letter of Credit Agreements entered into in connection with Balloon Indebtedness, Variable Rate Indebtedness, or Tender Indebtedness may be payable on a parity with the Bonds.

(c) Nothing in the Indenture, and particularly nothing described in the two foregoing clauses, will prevent the Commission from authorizing and issuing bonds, notes, warrants, certificates or other obligations or evidences of indebtedness which as to principal or interest, or both, (i) are payable from Net Revenues after and subordinate to the payment from Net Revenues of the principal of and interest on the Bonds, or (ii) are payable from moneys which are not Revenues as such term is defined in the Indenture.

### **Sale or Other Disposition of Property.**

(a) The Commission will not sell or otherwise dispose of the Enterprise or any part thereof essential to the proper operation of the Enterprise or to the maintenance of the Revenues except as expressly permitted in the Indenture. The Commission will not enter into any lease or agreement which impairs the operation of the Enterprise or impedes the rights of the Owners of the Bonds with respect to the Net Revenues or the operation of the Enterprise, but the Commission may enter into any lease or agreement concerning all or any part of the Enterprise if such lease or agreement will not impair the operation of the Enterprise or impede the rights of the Owners of the Bonds with respect to the Net Revenues or the operation of the Enterprise.

(b) Any real or personal property which has become nonoperative or which is not needed for the efficient and proper operation of the Enterprise, or any material or equipment which has worn out, may be sold if all of the net proceeds of such sale (less any amounts payable to the United States of America or

the State of California or required by the United States of America or the State of California to be deposited in a restricted fund) are deposited in the Revenue Fund.

(c) The Commission expressly reserves by the Indenture the right to sell all or a portion of the Enterprise, and to enter into and execute agreements for and to complete such sale, but subject to the following specific conditions, which have been made conditions precedent to such sale by the Indenture:

(i) The Commission will be in compliance with all covenants set forth in the Indenture and in all Supplemental Indentures theretofore adopted by the Commission, and no Event of Default will have occurred and be continuing under the Indenture or any Supplemental Indentures theretofore adopted by the Commission (and no event will have occurred which but for the passage of time would constitute an Event of Default under the Indenture or any Supplemental Indenture). The Commission will file a Certificate of the Commission to that effect with the Trustee.

(ii) The Commission will determine by resolution whether the net proceeds of the sale (less any amounts payable to the United States of America or the State of California or required to be deposited in a restricted fund) are to be used for the redemption of Bonds or for the making of additions or improvements to or extensions of the Enterprise.

(iii) If the Commission determines that the net proceeds of the sale (less any amounts payable to the United States of America or the State of California or required to be deposited in a restricted fund) are to be used for the redemption of Bonds, such proceeds of the sale are deposited with the Trustee, and the following conditions will be satisfied:

(A) The Commission will adopt a resolution providing for the redemption of the maximum principal amount of Bonds which can be redeemed from such proceeds of such sale, or, if no Bonds are subject to redemption on the next succeeding Interest Payment Date, directing the Trustee (1) to hold such proceeds in trust, (2) to invest such proceeds in the investments permitted in the Indenture until any Bonds become redeemable, subject to any restrictions imposed by the Indenture, (3) to deposit the interest and income on such proceeds in the Revenue Fund as such interest and income is received, and (D) to use such proceeds to redeem Bonds in the amount and manner specified in the Indenture and any Supplemental Indenture on the first Interest Payment Date on which the Bonds can be redeemed; and a certified copy of such resolution has been filed with the Trustee along with a Written Request or Certificate of the Commission containing such direction.

(B) If such proceeds are not to be immediately used for the redemption of Bonds but instead are to be held by the Trustee until Bonds become redeemable, the Commission will file with the Trustee a written report of an Independent Certified Public Accountant stating (1) the amount of proceeds to be deposited with the Trustee from such sale, (2) an estimate of the total amount of Bond Obligation and the amount of Bonds of each maturity which could be redeemed from such proceeds on the first Interest Payment Date on which Bonds are redeemable, and (3) the estimated annual interest and income to be earned on such proceeds while held and invested by the Trustee. Such interest and income on such proceeds upon receipt by the Trustee will be deposited in the Revenue Fund and will be treated as Revenues for all purposes of the Indenture, including determining whether the Commission is in compliance with the rate covenant contained in the Indenture.

(C) If such proceeds of such sale are to be immediately used to redeem Bonds, the Net Revenues for the last Fiscal Year or last recorded twelve-month period preceding the date of the adoption by the Commission of the resolution authorizing such sale, less a deduction for the portion of such Net Revenues attributable to the portion of the Enterprise to be sold, all as shown by a certificate or opinion of an Independent Certified Public Accountant or a written report of a Qualified Independent Consultant, have

produced a sum equal to at least 1.25 times Maximum Annual Debt Service on the Bonds to be Outstanding following the redemption of Bonds from the proceeds of such sale.

(D) If such proceeds are not to be immediately used for the redemption of Bonds but instead are to be held by the Trustee until Bonds become redeemable, the Net Revenues for the last Fiscal Year or last recorded twelve-month period preceding the date of adoption by the Commission of the resolution authorizing such sale, less a deduction for the portion of such Net Revenues attributable to the portion of the Enterprise to be sold, plus an allowance for the estimated annual interest or income to be earned on the invested proceeds of such sale while held and invested by the Trustee, all as shown by a certificate or opinion of an Independent Certified Public Accountant or a written report of a Qualified Independent Consultant, will have produced a sum equal to at

(iv) If the Commission determines that the net proceeds of the sale (less any amounts payable to the United States of America or the State of California or required to be deposited in a restricted fund) are to be used for the making of additions or improvements to or extensions of the Enterprise, such proceeds of the sale will be deposited by the Treasurer in a special fund in trust to be held by the Treasurer to be used for the making of additions or improvements to or extensions of the Enterprise, and the condition set forth in the following sentence will have been satisfied. The Net Revenues for the last Fiscal Year or last recorded twelve-month period preceding the date of the adoption by the Commission of the resolution authorizing such sale, less a deduction for the portion of such Net Revenues attributable to the portion of the Enterprise to be sold, all as shown by a written report of an Independent Certified Public Accountant, plus

(A) An allowance for Net Revenues from any additions or improvements to or extensions of the Enterprise to be made with the proceeds of such sale or with the proceeds of Bonds previously issued, and also for Net Revenues from any such additions, improvements or extensions which have been made from moneys from any source but which, during all or any part of such Fiscal Year or recorded twelve-month period, were not in service, all in an amount equal to 100% of the estimated additional average annual Net Revenues to be derived from such additions, improvements and extensions for the first twenty-four months in which each addition, improvement or extension is respectively to be in operation, all as shown by the certificate or opinion of a Qualified Independent Consultant; and

(B) An allowance for earnings arising from any increase in the charges made for the use of the Enterprise which has become effective prior to such sale, but which, during all or any part of such Fiscal Year or recorded twelve-month period, was not in effect, in an amount equal to 100% of the amount by which the Net Revenues would have been increased if such increase in charges had been in effect during the whole of such Fiscal Year or recorded twelve-month period, as shown by the certificate or opinion of a Qualified Independent Consultant;

will have produced a sum equal to at least 1.25 times the Maximum Annual Debt Service on the Bonds then Outstanding. Any balance of such proceeds from any such sale not required by the Commission for the purposes aforesaid will be deposited in the Revenue Fund established pursuant to the Indenture and applied as provided in the Indenture.

**Operation and Maintenance of Enterprise.** The Commission will maintain and preserve the Enterprise in good repair and working order at all times from the Revenues available for such purposes, in conformity with standards customarily followed for municipal sanitary waste and storm water collection, treatment and disposal systems of like size and character. The Commission will from time to time make all necessary and proper repairs, renewals, replacements and substitutions to the properties of the Enterprise, so that at all times business carried on in connection with the Enterprise will and can be properly and advantageously conducted in an efficient manner and at reasonable cost, and will operate the Enterprise in an efficient and economical manner, consistent with the protection of the Owners of the Bonds, and will not commit or allow any waste with respect to the Enterprise.

**Liens and Claims.** Subject to any rights of the United States of America or the State of California, the Commission will keep the Enterprise and all parts thereof free from judgments, from mechanics' and materialmen's liens and from all liens and claims of whatsoever nature or character, to the end that the security provided pursuant to the Indenture may at all times be maintained and preserved, and the Commission will keep the Enterprise and the Revenues free from any liability which might hamper the Commission in conducting its business or operating the Enterprise. Subject to the provisions of the Indenture, the Trustee at its option (after first giving the Commission thirty days' written notice to comply therewith and failure of the Commission to so comply within said thirty-day period) may defend against any and all actions or proceedings in which the validity of the Indenture is or might be questioned, or may pay or compromise any claim or demand asserted in any such actions or proceedings; provided, however, that, in defending against such actions or proceedings or in paying or compromising such claims or demands, the Trustee will not in any event be deemed to have waived or released the Commission from liability for or on account of any of its covenants and warranties contained in the Indenture, or from its liability under the Indenture to defend the validity of the Indenture and the pledge made in the Indenture and to perform such covenants and warranties.

**Insurance.** The Commission will procure, and maintain at all times while any of the Bonds are Outstanding, adequate fidelity insurance or bonds on all officers and employees handling or responsible for any Revenues or funds of the Enterprise, such insurance or bonds to be in an aggregate amount at least equal to the maximum amount of such Revenues or funds at any one time in the custody of all such officers and employees or in the amount of \$1,000,000, whichever is less.

The insurance described above may be provided as a part of any comprehensive fidelity and other insurance and not separately for the Enterprise.

The Commission may purchase, on all or any of the Bonds of any Series, insurance assuring the Bondowners that the principal of and interest on the insured Bonds will be paid when due and payable. The purchase of any such insurance will not constitute a preference or priority of the insured Bonds over any Bonds not so insured, and all Bonds Outstanding, irrespective of the providing of such insurance on some of the Bonds, will be equally and proportionately secured by the Indenture.

#### **Books and Accounts; Financial Statements.**

(a) The Commission will keep proper books of record and accounts of the Enterprise, separate from all other records and accounts of the Commission, in which complete and correct entries will be made of all transactions relating to the Enterprise. Such books of record and accounts will at all times during business hours be subject to the inspection of the Trustee (who will have no duty to inspect) or of any Owner of Bonds then Outstanding or their representatives authorized in writing, at reasonable hours, upon reasonable prior notice and under reasonable conditions.

(b) So long as any of the Bonds are Outstanding, the Commission will prepare and file with the Trustee annually, within seven months after the close of each Fiscal Year, financial statements of the Enterprise for the preceding Fiscal Year, prepared in, accordance with generally accepted accounting principles applied on a consistent basis from year to year ("Enterprise Financial Statements"), which will include a statement of net assets, statement of revenues, expenses and changes in net assets, and statement of cash flows. The Enterprise Financial Statements will be examined by and include the certificate or opinion of an Independent Certified Public Accountant. The Trustee will not be required to review any such statement.

(c) The Commission will furnish a copy of the Enterprise Financial Statements to any Bondowner upon request, and will furnish to the Trustee such reasonable number of copies thereof (not exceeding 100 copies) as may be required by the Trustee for distribution to investment bankers, security dealers and others interested in the Bonds and to the Owners of Bonds requesting copies thereof. The Trustee will not be required to incur any non-reimbursable expenses in making such distribution.

**Enterprise Budgets.** The Commission will prepare and submit to the Mayor for review and submission to the Board of Supervisors for approval an annual budget for the Enterprise for each Fiscal Year. Such budget will set forth in reasonable detail the Revenues anticipated to be derived in such Fiscal Year, the expenditures anticipated to

be paid or provided for therefrom in such Fiscal Year, and the amounts required to provide for the payment of the principal of and interest and redemption premium, if any, on the Bonds during such Fiscal Year, to pay or provide for Operation and Maintenance Costs of the Enterprise for such Fiscal Year, to make up any deficiencies in any fund or account anticipated for the then current Fiscal Year, and to pay or provide for the payment of all other claims or obligations required to be paid from Revenues in such Fiscal Year, and will show that Net Revenues will be at least adequate to satisfy the requirements of the Indenture. Such budget will comply with any conditions or restrictions set forth in any agreements between the Commission and users of the Enterprise. The Commission will take all action available and necessary to obtain approval or acceptance of the budget by the Mayor and the Board of Supervisors. The Commission will supply to the Trustee and to any Bondowners who will so request in writing a copy of the annual budget for the Fiscal Year covered by such budget. Such budget will be open for inspection by any Owner at the principal corporate trust office of the Trustee during normal business hours.

**Maintenance of Revenues.** The City will not acquire, construct, operate or maintain, and will not within the scope of its powers permit any other public or private corporation, political subdivision, district or agency or any person whatsoever to acquire, construct, operate or maintain, within the City or any part thereof, any system or utility competitive with the Enterprise. The Commission will have in effect, or cause to have in effect, at all times an ordinance or resolution requiring all customers of the Enterprise to pay the fees, rates and charges applicable to the municipal sanitary waste and storm water collection, treatment and disposal services and facilities furnished by the Enterprise. The Commission will not provide any service of the Enterprise free of charge to any person, firm or corporation, or to any public agency (including the United States of America, the State of California and any public corporation, political subdivision, city, county, district or agency of any thereof), except (i) for free use by the City and its agencies, (ii) to the extent that any such free use is required by the terms of any existing contract or agreement and (iii) for incidental insignificant free use so long as such free use does not prevent the Commission from satisfying the other covenants of the Indenture, including, without limitation, the rate covenant set forth in the Indenture.

**Payment of Taxes, Etc.** The Commission will pay and discharge, or cause to be paid and discharged, all taxes, assessments and other governmental charges which may hereafter be lawfully imposed upon the Commission on account of the Enterprise or any portion thereof or upon any Revenues and which, if unpaid, might impair the security of the Bonds, when the same becomes due, but nothing contained in the Indenture will require the Commission to pay any such tax, assessment or charge so long as it will in good faith contest the validity thereof. The Commission will duly observe and conform with all valid requirements of any governmental authority relative to the Enterprise or any part thereof.

**Acquisition and Construction of Improvements.** The Commission will commence and will continue to completion the acquisition and construction of the improvements to the Enterprise proposed to be financed from any Series of Bonds, in a timely manner in accordance with sound engineering practice, and said improvements will be acquired, constructed and completed in a sound and economical manner and in conformity with law.

**Eminent Domain Proceeds.** If all or any part of the Enterprise is taken by or under threat of eminent domain proceedings, the net proceeds realized by the Commission or the City therefrom (excluding any portion thereof payable to the United States of America or the State of California or required by the United States of America or the State of California to be deposited in a restricted fund) will be deposited by the Treasurer in a special fund in trust and applied and disbursed by the Treasurer subject to the following conditions:

(a) If such eminent domain proceedings have had a material adverse effect upon the Revenues and the security of the Bonds, the Commission will by resolution determine to apply such proceeds for one of the following purposes:

(i) The Commission may determine to apply such proceeds to the purchase, defeasance or redemption of Bonds then Outstanding. In that event, the Treasurer will transfer such proceeds to the Trustee who will apply such proceeds on a Proportionate Basis to the redemption of Bonds of each Series then Outstanding in the proportion which the Bond Obligation amount of each Series bears to the aggregate Bond Obligation amount of all Bonds then Outstanding. If no Bonds are subject to redemption on the next succeeding Interest Payment Date, the Commission will direct the Trustee (A) to hold such proceeds in trust, (B) to invest such proceeds in the investments permitted in the Indenture until any Bonds become redeemable, subject to any restrictions imposed

by the Indenture, (C) to deposit the interest and income on such proceeds in the Revenue Fund as such interest and income is received, and (D) to use such proceeds to redeem Bonds in the amount and manner specified in the Indenture and any Supplemental Indenture on the first Interest Payment Date on which the Bonds can be redeemed. Additionally, in such event, the Commission will file with the Trustee a written report of an Independent Certified Public Accountant stating (A) the amount of proceeds to be deposited with the Trustee from such eminent domain proceedings, (B) an estimate of the total amount of Bond Obligation and the amount of Bonds of each maturity that could be redeemed from such proceeds on the first Interest Payment Date on which Bonds are redeemable, and (C) the estimated annual interest and income to be earned on such proceeds while held and invested by the Trustee. Such interest and income on such proceeds upon receipt by the Trustee will be deposited in the Revenue Fund and will be treated as Revenues for all purposes of the Indenture, including determining whether the Commission is in compliance with the covenant contained in the Indenture.

(ii) The Commission may determine to apply such proceeds to the cost of additions or improvements to or extensions of the Enterprise if (A) the Commission first secures and files with the Trustee a written report of a Qualified Independent Consultant showing (1) the loss in annual Revenues, if any, suffered, or to be suffered, by the Commission by reason of such eminent domain proceedings, (2) a general description of the additions, improvements or extensions then proposed to be acquired by the Commission from such proceeds, and (3) an estimate of the additional Revenues to be derived from such additions, improvements or extensions; and (B) such written report states that such additional Revenues will sufficiently offset the loss of Revenues resulting from such eminent domain proceedings so that the ability of the Commission to meet its obligations under the Indenture will not be substantially impaired. The Commission will then promptly proceed with the construction of the additions, improvements or extensions substantially in accordance with such written report. Payments for such construction will be made by the Commission from such proceeds. Any balance of such proceeds not required by the Commission for the purposes aforesaid will be deposited in the Revenue Fund and applied as provided in the Indenture.

(b) If such eminent domain proceedings has had no effect, or at the most a relatively immaterial effect, upon the Revenues and the security of the Bonds, and a Qualified Independent Consultant so concludes in a written report filed with the Trustee, the Commission may determine to apply such proceeds to the costs of additions or improvements to or extensions of the Enterprise or may deposit such proceeds in the Revenue Fund, to be applied as provided in the Indenture.

**Compliance with Indenture.** The Commission will faithfully observe and perform all the covenants, conditions and requirements of the Indenture, and will not suffer or permit any default to occur under the Indenture, or do or permit to be done, in, upon or about the Enterprise, or any part thereof, anything that might in any way weaken, diminish or impair the security intended to be given pursuant to the Indenture.

**Observance of Laws and Regulations.** The Commission will comply promptly, fully and faithfully with and abide by any statute, law, ordinance, order, rule or regulation, judgment, decree, direction or requirement now in force or later enacted, adopted or entered by any competent governmental authority or agency applicable or with respect to or affecting the acquisition, construction or reconstruction of the Enterprise or any part thereof or applicable or with respect to or affecting the operation, manner, use or condition of the Enterprise or any part or parcel thereof or adjoining public ways; provided that the Commission need not comply with any such statute, law, ordinance, rule, regulation, judgment, decree, direction or requirement if and so long as the Commission in good faith will be contesting or permitting or causing to be contested the applicability or validity thereof by appropriate proceedings diligently prosecuted, even though such contest may result in the imposition of a lien or charge against the Enterprise or the Revenues, if (1) the Commission will effectively prevent foreclosure or enforcement of any such lien or charge and (2) the foreclosure or enforcement of any such lien or charge will be stayed, and if said stay thereafter expires, the Commission will forthwith discharge such lien or charge or cause the same to be discharged, so that pending such proceedings the Enterprise and the Revenues thereof will not be affected thereby, and the security of the Bonds will not be impaired.

**Prosecution and Defense of Suits.** The Commission will promptly from time to time take such action as may be necessary or proper to remedy or cure any defect in or cloud upon the title to the Enterprise hereafter developing, and will prosecute all such suits, actions and other proceedings as may be appropriate for such purposes and, to the extent permitted by law, will indemnify and save the Trustee and every Bondowner harmless from all loss, cost, damage and expense, including attorneys' fees, which they or any of them may incur by reason of any such defect, cloud, suit, action or proceeding.

The Commission will defend against every suit, action or proceeding at any time brought against the Trustee or any Bondowner upon any claim arising out of the receipt, application or disbursement of any of the Revenues or involving the rights of the Trustee or any Bondowner under the Indenture; provided, that the Trustee or any Bondowner at its or his election may appear in and defend any such suit, action or proceeding. The Commission will, to the extent permitted by law and without making any representation as to the enforceability of the covenants in this paragraph, indemnify and hold harmless the Trustee and the Bondowners against any and all liability claimed or asserted by any person arising out of such receipt, application or disbursement, and will indemnify and hold harmless the Bondowners against any attorneys' fees or other expenses which any of them may incur in connection with any litigation to which any of them may become a defendant by reason of his ownership of Bonds. The Commission, to the extent permitted by law, will promptly reimburse any Bondowner in the full amount of any attorneys' fees or other expenses which he may incur in litigation or otherwise in order to enforce his rights under the Indenture or the Bonds, provided that such litigation has concluded favorably to such Bondowner's contentions therein. Notwithstanding any contrary provision of the Indenture, this covenant will remain in full force and effect, even though all indebtedness and obligations issued under the Indenture may have been fully paid and satisfied, until the Commission has been dissolved.

**Governmental Approvals.** The Commission will perform any construction, reconstructions and restorations of, improvements, betterments and extensions to, and equipplings and furnishings of, and will operate and maintain the Enterprise at standards required in order that the same may continue to be approved by the proper and competent authority or authorities of the State of California as a public municipal sanitary waste and storm water collection, treatment and disposal system.

**Further Assurances.** Whenever and so often as requested so to do by the Trustee or any Bondowner, the Commission will promptly execute and deliver or cause to be executed and delivered all such other and further instruments, documents or assurances, and promptly do or cause to be done all such other and further things, as may be necessary or reasonably required in order to further and more fully vest in the Trustee and the Bondowners all rights, interest, powers, benefits, privileges and advantages conferred or intended to be conferred upon them by the Indenture.

#### **Casualty Insurance; Use of Proceeds.**

(a) The Commission will at all times maintain such insurance on the Enterprise as is customarily maintained with respect to works and properties of like character against accident to, loss of or damage to such works or properties. If any useful part of the Enterprise is damaged or destroyed, or such damage or destruction have had a material adverse effect upon the Revenues and the security of the Bonds, the Commission will by resolution determine to apply the proceeds of any insurance for such loss or damage for one of the following purposes:

(i) The Commission may determine to apply such proceeds to the purchase, defeasance or redemption of Bonds then Outstanding. In that event, the Treasurer will transfer such proceeds to the Trustee who will apply such proceeds on a Proportionate Basis to the redemption, defeasance or purchase of Bonds of each Series then Outstanding in the proportion which the Bond Obligation amount of each Series bears to the aggregate Bond Obligation amount of all Bonds then Outstanding. If no Bonds are subject to redemption on the next succeeding Interest Payment Date, the Commission will direct the Trustee (A) to hold such insurance proceeds in trust, (B) to invest such insurance proceeds in the investments permitted in the Indenture until any Bonds become redeemable, subject to any restrictions imposed by the Indenture, (C) to deposit the interest and income on such insurance proceeds in the Revenue Fund as such interest and income is received, and (D) to use such insurance proceeds to redeem Bonds in the amount and manner specified in the Indenture and any Supplemental Indenture on the first interest payment date on which the Bonds

can be redeemed. Additionally, in such event, the Commission will file with the Trustee a written report of an Independent Certified Public Accountant stating (A) the amount of insurance proceeds to be deposited with the Trustee in connection with any insured loss or damage, (B) an estimate of the total amount of Bond Obligation and the amount of Bonds of each maturity which could be redeemed from such proceeds on the first interest payment date on which Bonds are redeemable, and (C) the estimated annual interest and income to be earned on such insurance proceeds while held and invested by the Trustee. Such interest and income on such insurance proceeds upon receipt by the Trustee will be deposited in the Revenue Fund and will be treated as Revenues for all purposes of the Indenture, including determining whether the Commission is in compliance with the covenant contained in the Indenture.

(ii) The Commission may determine to apply such insurance proceeds to the cost of additions or improvements to or extensions of the Enterprise if (A) the Commission first secures and files with the Trustee a written report of a Qualified Independent Consultant showing (A) the loss in annual Revenues, if any, suffered, or to be suffered, by the Commission by reason of the loss or damage to the Enterprise, (B) a general description of the additions, improvements or extensions then proposed to be acquired by the Commission from such proceeds, and (C) an estimate of the additional Revenues to be derived from such additions, improvements or extensions; and (B) such written report states that such additional Revenues will sufficiently offset the loss of Revenues resulting from such insured loss or damage so that the ability of the Commission to meet its obligations under the Indenture will not be substantially impaired. The Commission will then promptly proceed with the construction of the additions, improvements or extensions substantially in accordance with such written report. Payments for such construction will be made by the Commission from such insurance proceeds. Any balance of such proceeds not required by the Commission for the purposes aforesaid will be deposited in the Revenue Fund and applied as provided in the Indenture.

(b) If such insured loss, damage or destruction has had no effect, or at the most a relatively immaterial effect, upon the Revenues and the security of the Bonds, and a Qualified Independent Consultant so concludes in a written report filed with the Trustee, the Commission may determine to apply such proceeds to the costs of additions or improvements to or extensions of the Enterprise, or such proceeds may be used for any other lawful purpose of the Enterprise.

(c) Any such insurance will be in the form of policies or contracts for insurance with insurers of good standing and will be payable to the Commission, or may be in the form of self-insurance by the Commission. The Commission will establish such fund or funds or reserves as it determines, in its sole judgement, are necessary to provide for its share of any such self-insurance.

## EVENTS OF DEFAULT AND REMEDIES OF BONDOWNERS

**Events of Default; Acceleration; Waiver of Default.** If one or more of the following events (called “Events of Default” in the Indenture) happens, that is to say – (a) if default is made in the due and punctual payment of the principal of, or the premium (if any) on, any Bond when and as the same becomes due and payable, whether at maturity as therein expressed, by proceedings for redemption, by declaration or otherwise, or if default is made in the redemption from any Sinking Fund Account of any Term Bonds in the amounts and at the times provided therefor; (b) if default is made in the due and punctual payment of any installment of interest on any Bond when and as such interest installment becomes due and payable; (c) if default is made by the Commission in the observance of any of the other covenants, agreements or conditions on its part in the Indenture or in the Bonds contained, and such default continues for a period of 30 days after written notice thereof, specifying such default and requiring the same to be remedied, is given to the Commission by the Trustee or by a Credit Provider, or to the Commission and the Trustee by the Owners of not less than 25% of the Bond Obligation; or (d) if the Commission or the City files a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other applicable law of the United States of America, or if a court of competent jurisdiction approves a petition, filed with or without the consent of the Commission or the City, as the case may be, seeking reorganization under the federal bankruptcy laws or any other applicable law of the United States of America, or if, under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction assumes custody or control of the Commission or the City or of the

whole or any substantial part of the property of either; then and in each and every such case during the continuance of such Event of Default, the Trustee may, and upon the written request of the Owners of not less than a majority in aggregate amount of the Bond Obligation or of a Credit Provider will, upon notice in writing to the Commission, declare the principal of all of the Current Interest Bonds then Outstanding, and the interest accrued thereon, the Capital Appreciation Bonds then Outstanding, in the amount of the Accreted Value thereof, and the Parity Loans then outstanding, in the amount of the obligations due thereunder, to be due and payable immediately, and upon any such declaration the same will become and will be immediately due and payable, anything contained in the Indenture or in the Bonds to the contrary notwithstanding.

This provision, however, is subject to the condition that if, at any time after the principal of the Bonds have been so declared due and payable, and before any judgment or decree for the payment of the moneys due will have been obtained or entered as provided in the Indenture, the Commission will deposit with the Trustee a sum sufficient to pay all principal and Accreted Value of the Bonds maturing prior to such declaration and all matured installments of interest (if any) upon all the Current Interest Bonds, with interest on such overdue payments of principal and Accreted Value and interest installments at the rate or rates of interest borne by the respective Bonds, and the reasonable expenses of the Trustee, and any and all other defaults known to the Trustee (other than in the payment of principal and Accreted Value of and interest on the Bonds due and payable solely by reason of such declaration) have been made good or cured to the satisfaction of the Trustee, or provision deemed by the Trustee to be adequate has been made therefor, then, and in every such case, (i) if such declaration has been made by the Trustee, the Trustee, or (ii) if such declaration has been made upon the written request of Bondowners, the Owners of not less than a majority in aggregate amount of the Bond Obligation of the Bonds then Outstanding, or (iii) if such declaration has been made upon the written request of a Credit Provider, such Credit Provider, may, by written notice to the Commission and, in cases (ii) and (iii) above, to the Trustee, on behalf of the Owners of all of the Bonds, rescind and annul such declaration and its consequences; but no such rescission and annulment will extend to or will affect any subsequent default, or will impair or exhaust any right or power consequent thereon.

**Application of Funds Upon Acceleration.** All of the Revenues, including all sums in all of the funds provided for in the Indenture upon the date of the declaration of acceleration as provided in the Indenture and all sums thereafter received by the Commission or the Trustee under the Indenture, will, if received by the Commission, be transmitted to the Trustee and be applied by the Trustee in the order following, upon presentation of the several Bonds, and the stamping thereon of the payment if only partially paid, or upon the surrender thereof if fully paid --

First, to the payment of the costs and expenses of the Bondowners in declaring such Event of Default, including reasonable compensation to their agents, attorneys and counsel; and to the payment of the costs and expenses of the Trustee, including but not limited to reasonable compensation to its agents, attorneys and counsel;

Second, to the payment of the whole amount of Bond Obligation then owing and unpaid upon the Bonds, with interest on, with respect to the Current Interest Bonds, the overdue principal and installments of interest, with respect to the Capital Appreciation Bonds, the Accreted Value thereof, and with respect to the Parity Loans, the obligations due thereunder, at the rate or rates of interest borne by the respective Bonds, and in case such moneys will be insufficient to pay in full the whole amount so owing and unpaid upon the Bonds, then to the payment of such principal and interest, Accreted Value and obligations (under Parity Loans) without preference or priority of principal over interest, or of interest over principal, or of any installment of interest over any other installment of interest, ratably to the aggregate of such principal and interest, Accreted Value and obligations (under Parity Loans); and

Third, to the payment of all Policy Costs, and in case such moneys are insufficient to pay in full all Policy Costs owing and unpaid, then to the payment of such Policy Costs pro rata (calculated by reference to the maximum amounts available under the respective Bond Reserve Fund Policies).

**Suits at Law or in Equity and Mandamus.** In case one or more of the Events of Default happens, then and in every such case the Owner of any Bond at the time Outstanding will be entitled to proceed to protect and enforce the rights vested in such Owner by the Indenture by such appropriate judicial proceeding as such Owner deems most effectual to protect and enforce any such right, either by suit in equity or by action at law, whether for the specific performance of any covenant or agreement contained in the Indenture, or in aid of the exercise of any power granted

in the Indenture, or to enforce any other legal or equitable right vested in the Owners of Bonds by the Indenture or by law; provided, however, that no such Bondowner will have the right to institute any such judicial proceeding pursuant to the Indenture unless (a) such Owner has previously given to the Trustee written notice of the occurrence of an Event of Default under the Indenture; (b) the Owners of at least ten percent (10%) in aggregate amount of Bond Obligation of the Bonds then Outstanding have made written request to the Trustee to exercise the powers granted in the Indenture or to institute such action, suit or proceeding in its own name; (c) such Owner or said Owners have tendered to the Trustee reasonable indemnity against the costs, expenses and liabilities to be incurred in compliance with such request; (d) the Trustee has refused or omitted to comply with such request for a period of sixty (60) days after such written request has been received by, and said tender of indemnity has been made to, the Trustee; and (e) the Trustee has not received contrary directions from the Owners of a majority in aggregate amount of Bond Obligation of the Bonds Outstanding. The provisions of the Indenture constitute a contract with the Owners of the Bonds, and such contract and duties of the Commission and of the Commission members and of the officers and employees of the Commission and of the City are enforceable by any Bondowner by mandamus or other appropriate suit, action or proceeding in any court of competent jurisdiction.

**Non-waiver.** Nothing in the Indenture, or in the Bonds, will affect or impair the obligation of the Commission, which is absolute and unconditional, to pay the principal of and the interest (and premium, if any) on the Bonds to the respective Owners of the Bonds at the respective dates of maturity, or upon call for redemption, as provided in the Indenture, but only out of the Revenues pledged in the Indenture for such payments, or affect or impair the right of action, which is also absolute and unconditional, of such Owners to institute suit to enforce such payment by virtue of the contract embodied in the Bonds.

A waiver of any default or breach of duty or contract by any Bondowner will not affect any subsequent default or breach of duty or contract, or impair any rights or remedies on the subsequent default or breach. No delay or omission of the Trustee or of any Owner of any of the Bonds to exercise any right or power arising upon the happening of any Event of Default will impair any such right or power or will be construed to be a waiver of any such Event of Default or an acquiescence therein, and every power and remedy given by the Law or the Indenture to the Trustee or to the Owners of Bonds may be exercised from time to time and as often as will be deemed expedient by the Trustee or the Owners of Bonds.

If a suit, action or proceeding to enforce any right or exercise any remedy is abandoned or determined adversely to the Bondowners, the Commission and the Bondowners will be restored to their former positions, rights and remedies as if such suit, action or proceeding had not been brought or taken.

**Actions by Trustee as Attorney-in-Fact.** Any suit, action or proceeding which any Owner of Bonds will have the right to bring to enforce any right or remedy under the Indenture may be brought by the Trustee for the equal benefit and protection of all Owners of Bonds similarly situated (notwithstanding any conditions upon the bringing of any such action, suit or proceeding set forth in the Indenture) and the Trustee is appointed (and the successive respective Owners of the Bonds issued under the Indenture, by taking and holding the same, will be conclusively deemed so to have appointed it) the true and lawful attorney-in-fact of the respective Owners of the Bonds for the purpose of bringing any such suit, action, or proceeding and to do and perform any and all acts and things for and in behalf of the respective Owners of the Bonds as a class or classes, as may be necessary or advisable in the opinion of the Trustee as such attorney-in-fact.

**Remedies Not Exclusive.** No remedy in the Indenture conferred upon or reserved to the Trustee or to the Owners of Bonds is intended to be exclusive of any other remedy. Every such remedy will be cumulative and will be in addition to every other remedy given under the Indenture or now or later existing, at law or in equity or by statute or otherwise and may be exercised without exhausting and without regard to any other remedy conferred by the Law or any other law.

**Power of Trustee to Control Proceedings.** In the event that the Trustee, upon the happening of an Event of Default, has taken any action, by judicial proceedings or otherwise, pursuant to its duties under the Indenture, whether upon its own discretion or upon the request of the Owners of at least ten percent (10%) in aggregate amount of the Bond Obligation, it will have full power, in the exercise of its discretion for the best interests of the Owners of the Bonds, with respect to the continuance, discontinuance, withdrawal, compromise, settlement or other disposal of such action; provided, however, that the Trustee will not, unless there no longer continues an Event of Default under the

Indenture, discontinue, withdraw, compromise or settle, or otherwise dispose of any litigation pending at law or in equity, if at the time there has been filed with it a written request signed by the Owners of at least a majority in aggregate amount of the Bond Obligation under the Indenture opposing such discontinuance, withdrawal, compromise, settlement or other disposal of such litigation.

**Remedies of Bond Reserve Fund Policy Provider.** If the Commission fails to pay Policy Costs to a Bond Reserve Fund Policy Provider to the extent and at the times required by the provisions of the Indenture and such failure continues for 30 days after written notice of such default is received by the Commission and the Trustee from such Bond Reserve Fund Policy Provider or if an Event of Default set forth in the Indenture occurs and is continuing, then the Bond Reserve Fund Policy Provider may exercise any remedy provided under the Indenture to the Trustee or available at law or in equity to protect and enforce its right to receive payment of Policy Costs; provided, that, in no event, will the Bond Reserve Fund Policy Provider be able to declare the principal and Accreted Value of the Bonds and the interest accrued thereon to be due and payable immediately or to exercise any remedy that the Trustee, in its sole discretion, determines would adversely affect the Bondowners.

**Rights of Credit Provider.** Each Credit Provider, during any period in which an Event of Default has occurred and is continuing, will be recognized as the Owner of each Bond which it guarantees or insures for the purposes of exercising all rights and privileges available to Bondowners. Any acceleration of principal payments with respect to Bonds guaranteed or insured by a Credit Provider are subject to such Credit Provider's prior written direction or consent (but only if such Credit Provider is not in default under its guaranty or insurance policy). Each Credit Provider, will have the right to institute any suit, action or proceeding at law or in equity under the same terms as an Owner of the Bonds that such Credit Provider guarantees or insures.

## THE TRUSTEE

**Appointment and Duties of Trustee.** The Trustee accepts by the Indenture the trusts imposed upon it as Trustee under the Indenture for the purpose of receiving all moneys which the Commission is required to deposit with the Trustee under the Indenture and agrees to allocate, use and apply the same as provided in the Indenture and otherwise to hold all the offices and to perform all the functions and duties provided in the Indenture to be held and performed by the Trustee and agrees to perform such duties and obligations, subject to the terms and conditions set forth in the Indenture. The Commission agrees that it will maintain a Trustee having an office in San Francisco or Los Angeles, California, so long as any Bonds are Outstanding and unpaid.

The Trustee will, prior to an Event of Default, and after the curing of all Events of Default which may have occurred, perform such duties and only such duties as are specifically set forth in the Indenture. The Trustee will, during the existence of any Event of Default (which has not been cured), exercise such of the rights and powers vested in it by the Indenture, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of his own affairs.

So long as there is no Event of Default under the Indenture, the Commission may remove the Trustee, by giving written notice to such Trustee and by giving Bondowners notice by mail, first class postage prepaid, of such removal, and any successor thereto, and may appoint a successor or successors thereto; provided that any such successor will be a bank or trust company doing business and having an office in San Francisco or Los Angeles, California, having a combined capital and surplus of at least \$100,000,000, and subject to supervision or examination by federal or state authority. If such bank or trust company publishes a report of condition at least annually, pursuant to law or to the requirements of any supervising or examining authority above referred to, then for the purpose of the Indenture the combined capital and surplus of such bank or trust company will be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

The Trustee may at any time resign by giving written notice to the Commission and by giving the Bondowners notice by mail, first class postage prepaid, of such resignation. Upon receiving such notice of resignation, the Commission will promptly appoint a successor Trustee by an instrument in writing. Any resignation or removal of the Trustee and appointment of a successor Trustee will become effective upon acceptance of appointment by the successor Trustee. If no successor Trustee has been appointed and has accepted appointment within forty-five days of giving notice of removal or notice of resignation as aforesaid, the resigning Trustee or any Bondowner (on behalf of himself or herself and all other Bondowners) may petition any court of competent jurisdiction for the appointment of

a successor Trustee, and such court may thereupon, after such notice (if any) as it may deem proper, appoint such successor Trustee.

Any company into which the Trustee may be merged or converted or with which it may be consolidated or any company resulting from any merger, conversion or consolidation to which it will be a party or any company to which the Trustee may sell or transfer all or substantially all of its corporate trust business, provided such company will be eligible under the Indenture, will be the successor to such Trustee without the execution or filing of any paper or any further act, anything in the Indenture to the contrary notwithstanding.

**Authorization of Trustee.** The Trustee is authorized by the Indenture to pay the principal of and interest and redemption premium, if any, on the Bonds when due and payable, or on call and redemption or on purchase by the Trustee prior to maturity, and to cancel all Bonds upon payment thereof and to return the same so cancelled to the Commission, subject to the provisions of the Indenture. The Trustee will keep accurate records of all funds administered by it and of all Bonds and interest payments paid and discharged.

The Trustee and its directors, officers, employees or agents may in good faith buy, sell, own, hold and deal in any of the Bonds and may join in any action which any Owner of a Bond may be entitled to take, with like effect as if the Trustee was not the Trustee under the Indenture. The Trustee may in good faith hold any other form of indebtedness of the Commission or of the City, own, accept or negotiate any drafts, bills of exchange, acceptances or obligations of the Commission and make disbursements for the Commission and enter into any commercial or business arrangement therewith, without limitation.

**Fees and Expenses.** The Commission will compensate the Trustee for its services rendered pursuant to the provisions of the Indenture, and also for all reasonable expenses, charges, counsel fees and other disbursements, including those of its attorneys, agents and employees, incurred in and about the performance of its powers and duties under the Indenture. The obligations of the Commission under the Indenture to compensate the Trustee for services and to pay or reimburse the Trustee for disbursements, liabilities and advances will constitute additional indebtedness under the Indenture.

#### **Liability of Trustee.**

(a) The recitals of facts, covenants and agreements in the Indenture and in the Bonds contained will be taken as statements, covenants and agreements of the Commission, and the Trustee assumes no responsibility for the correctness of the same, does not make any representations as to the validity or sufficiency of the Indenture or of the Bonds, and will not incur any responsibility in respect thereof, other than in connection with the duties or obligations in the Indenture or in the Bonds expressly assigned to or imposed upon it. The Trustee will not be liable in connection with the performance of its duties under the Indenture, except for its own negligence or default.

(b) The Trustee will not be liable for any error of judgment made in good faith by an Authorized Officer of the Trustee, unless it is proved that the Trustee was negligent in ascertaining the pertinent facts.

(c) The Trustee will not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Owners of not less than a majority in aggregate amount of Bond Obligations of the Bonds at the time Outstanding relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee under the Indenture.

(d) The Trustee will be under no obligation to exercise any of the rights or powers vested in it by the Indenture at the request, order or direction of any of the Bondowners pursuant to the provisions of the Indenture unless such Bondowners have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which may be incurred therein or thereby.

(e) The Trustee will not be liable for any action taken by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by the Indenture.

(f) The Trustee will not be deemed to have knowledge of any Event of Default under the Indenture unless and until it has actual knowledge thereof; or has received written notice thereof, at its principal corporate trust office in San Francisco, California. Except as otherwise expressly provided in the Indenture, the Trustee will not be bound to ascertain or inquire as to the performance or observance of any of the terms, conditions, covenants or agreements in the Indenture or of any of the documents executed in connection with the Bonds or the delivery of the Bonds, or as to the existence of an Event of Default thereunder. The Trustee will not be responsible for the validity or effectiveness of any collateral given to or held by it. The Trustee will not be responsible for the recording or filing of any document relating to the Indenture or of financing statements (or continuation statements in connection therewith) or of any supplemental instruments or documents of further assurance as may be required by law in order to perfect the security interests in any collateral given to or held by it.

(g) No provision of the Indenture will require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties under the Indenture, or in the exercise of any of its rights or powers.

(h) The Commission further agrees to indemnify, to the extent permitted by law and without making any representation as to the enforceability of this covenant, and save the Trustee, its directors, officers, employees and agents harmless against any liabilities which it may incur in the exercise and performance of its powers and duties under the Indenture, including but not limited to costs and expenses incurred in defending against any claim or liability, which are not due to its negligence or default.

(i) The provisions above will survive the resignation or removal of the Trustee, payment of the Bonds and discharge of the Indenture.

**Rights of Trustee to Rely Upon Documents.** The Trustee will be protected in acting upon any notice, resolution, request, consent, order, certificate, report, direction, Bond or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties. The Trustee may consult with counsel, who may be counsel to the Commission or to the City, with regard to legal questions, and the opinion of such counsel will be full and complete authorization and protection in respect of any action taken or suffered under the Indenture in good faith and in accordance therewith.

The Trustee will not be bound to recognize any person as the Owner of a Bond unless and until his title thereto is satisfactorily established, if disputed.

Whenever in the administration of its duties under the Indenture the Trustee deems it necessary or desirable that a matter be proved or established prior to taking or suffering any action under the Indenture, such matter (unless other evidence in respect thereof be in the Indenture specifically prescribed) may, in the absence of bad faith on the part of the Trustee, be deemed to be conclusively proved and established by a Certificate of the Commission, and such Certificate will be full warrant to the Trustee for any action taken or suffered under the provisions of the Indenture or any Supplemental Indenture upon the faith thereof, but in its discretion the Trustee may, in lieu thereof, accept other evidence of such matter or may require such additional evidence as to it may seem reasonable.

## MODIFICATION OR AMENDMENT OF THE INDENTURE

### Amendments Permitted.

(a) (i) The Indenture and the rights and obligations of the Commission and of the Owners of the Bonds and of the Trustee may be modified or amended at any time by a Supplemental Indenture which will become binding when the written consents of the Owners of a majority in aggregate amount of the Bond Obligation of the Bonds (or, if such Supplemental Indenture is only applicable to a Series of Bonds, such Series of Bonds) then Outstanding, exclusive of Bonds disqualified as provided in the Indenture, and of each Credit Provider (so long as such Credit Provider is not in default under the policy of municipal bond insurance or Letter of Credit issued by it in connection with any Series of Bonds) have been filed with the Trustee (provided, that no such Credit Provider will unreasonably withhold consent to such modification or amendment). (ii) The Indenture and the rights and obligations of the Commission and of the Owners of the Bonds and of the Trustee may also be modified or amended at any time by a Supplemental Indenture which will become binding when the written consents of each Credit Provider have been filed with the Trustee, provided that at such time the payment of the principal of and interest on all Outstanding Bonds will be insured by a policy or policies of municipal bond insurance or payable under a Letter of Credit issued by a Credit Provider. (iii) No such modification or amendment will (A) extend the fixed maturities of the Bonds, or extend the time for making any Minimum Sinking Fund Account Payments, or reduce the rate of interest thereon, or extend the time of payment of interest, or reduce the amount of principal thereof, or reduce any premium payable on the redemption thereof, without the consent of the Owner of each Bond so affected, or (B) reduce the aforesaid percentage of the Bond Obligation the consent of the Owners of which is required for the execution of any amendment or modification of the Indenture, or (C) modify any of the rights or obligations of the Trustee without its written consent thereto.

(b) The Indenture and the rights and obligations of the Commission and of the Owners of the Bonds may also be modified or amended at any time by a Supplemental Indenture which will become binding upon adoption, without the consent of any Bondowners or any Credit Provider (but with notice to each Credit Provider), but only to the extent permitted by law and only if the Trustee determines, which determination may be based upon a good faith reliance upon an Opinion of Counsel, that the provisions of such Supplemental Indenture will not materially adversely affect the interests of the Owners, including, without limitation, for any one or more of the following purposes – (i) to add to the covenants and agreements of the Commission contained in the Indenture other covenants and agreements thereafter to be observed or to surrender any right or power in the Indenture reserved to or conferred upon the Commission; (ii) to cure, correct or supplement any ambiguous or defective provision or omission or mistake contained in the Indenture or in regard to questions arising under the Indenture, as the Commission may deem necessary or desirable; (iii) to provide for the issuance of additional Series of Bonds, and to provide the terms and conditions under which such additional Series of Bonds may be issued, subject to and in accordance with the provisions of the Indenture; and (iv) to provide additional security for the Bonds.

**Procedure for Amendment with Written Consent of Bondowners.** The Commission may at any time adopt a Supplemental Indenture amending the provisions of the Bonds or of the Indenture or any Supplemental Indenture, to the extent that such amendment is permitted by the provisions of the Indenture described in clause (a)(i) above, to take effect when and as provided in the Indenture. A copy of or a summary of the provisions of such Supplemental Indenture, together with a request to Bondowners and to each Credit Provider for their consent thereto, will be mailed, first class postage prepaid, by the Commission to each Owner of Bonds and to each Credit Provider, but failure to mail copies of such Supplemental Indenture or summary thereof and request will not affect the validity of the Supplemental Indenture when assented to as provided in the Indenture.

Such Supplemental Indenture will not become effective unless there will be filed with the Trustee the written consents of the Owners of a majority in aggregate amount of the Bond Obligation of the Bonds then Outstanding (exclusive of Bonds disqualified as provided in the Indenture) and of each Credit Provider and a notice has been mailed as provided below. Each such consent will be effective only if accompanied by proof of ownership of the Bonds for which such consent is given, which proof will be such as is permitted by the Indenture. Any such consent will be binding upon the Owner of the Bonds giving such consent and on any subsequent Owner (whether or not such subsequent Owner has notice thereof) unless such consent is revoked in writing by the Owner giving such consent or

a subsequent Owner by filing such revocation with the Trustee prior to the date when the notice provided below for has been mailed.

After the Owners of the required percentage of Bond Obligation and each Credit Provider has filed their consents to the Supplemental Indenture, the Commission will mail a notice to the Bondowners in the manner provided above for the mailing of the Supplemental Indenture, stating in substance that the Supplemental Indenture has been consented to by the Owners of the required percentage of Bond Obligation and each Credit Provider and will be effective as provided in the Indenture (but failure to mail copies of said notice will not affect the validity of the Supplemental Indenture or consents thereto), and proof of the mailing of such notice will be filed with the Trustee. A record, consisting of the papers required by the Indenture to be filed with the Trustee, will be proof of the matters therein stated until the contrary is proved. The Supplemental Indenture will become effective upon the filing with the Trustee of the proof of the mailing of such last-mentioned notice.

In lieu of obtaining any demand, request, direction, consent or waiver in writing, the Trustee may call and hold a meeting of the Bondowners upon such notice and in accordance with such rules and regulations as the Trustee considers fair and reasonable for the purpose of obtaining any such action.

**Disqualified Bonds.** Bonds owned or held by or for the account of the Commission or of the City (but excluding Bonds held in any pension or retirement fund) will not be deemed Outstanding for the purpose of any consent or other action or any calculation of Outstanding Bonds provided for in the Indenture, and will not be entitled to consent to or take any other action provided for in the Indenture. For the purpose of the Indenture no bank organized under the laws of the State of California and no national banking association doing business in said State, or elsewhere, will be deemed to be an agency of the Commission.

The Commission may adopt appropriate regulations to require each Bondowner, before his consent provided for in the Indenture will be deemed effective, to reveal if the Bonds as to which such consent is given are disqualified as provided in the Indenture.

**Effect of Supplemental Indenture.** From and after the time any Supplemental Indenture becomes effective pursuant to the Indenture, the Indenture will be deemed to be modified and amended in accordance therewith, and the respective rights, duties and obligations under the Indenture of the Commission, the Trustee and all Owners of Bonds Outstanding will thereafter be determined, exercised and enforced under the Indenture subject in all respects to such modification and amendment, and all the terms and conditions of any such Supplemental Indenture will be deemed to be part of the terms and conditions of the Indenture for any and all purposes.

**Endorsement or Replacement of Bonds Issued Before Amendments.** The Commission may determine that Bonds issued and delivered before the effective date of any action taken as provided in the Indenture will bear a notation, by endorsement or otherwise, in form approved by the Commission, as to such action. In that case, upon demand of the Owner of any Bond Outstanding at such effective date and presentation of his Bond for the purpose at the office of the Commission or at such other office as the Commission may select and designate for that purpose, a suitable notation will be made on such Bond. The Commission may determine that new Bonds, so modified as in the opinion of the Commission is necessary to conform to such action, will be prepared, executed and delivered. In that case, upon demand of the Owner of any Bonds then Outstanding, such new Bonds will be exchanged at the principal corporate trust office of the Trustee in San Francisco, California, without cost to such Owner, for Bonds of the same character then Outstanding, upon surrender of such Bonds.

**Amendatory Endorsement of Bonds.** The provisions of the Indenture will not prevent any Bondowner from accepting any amendment as to the particular Bonds held by such Bondowner, provided that due notation thereof is made on such Bonds.

## DEFEASANCE

### **Discharge of Indenture.**

If the Commission pays and discharges the entire indebtedness on all Bonds Outstanding in any one or more of the following ways —

(1) by well and truly paying or causing to be paid the principal of (including redemption premiums, if any) and interest on all Bonds Outstanding, as and when the same become due and payable (but this clause will not include Bonds the principal of or interest on which has been paid by a Credit Provider until the Credit Provider has been paid or reimbursed for such payment by the Commission); or

(2) by depositing with the Trustee, an escrow agent or other fiduciary, in trust, at or before maturity, money which, together with the amounts then on deposit in the Principal Fund, the Interest Fund and the Bond Reserve Fund, is fully sufficient to pay or redeem all Bonds Outstanding, including all principal, interest and redemption premiums, if any; or

(3) by delivering to the Trustee, for cancellation by it, all Bonds Outstanding; or

(4) by depositing with the Trustee, an escrow agent or other fiduciary, in trust, Defeasance Obligations in such amount which, in the determination of an Independent Certified Public Accountant, who certifies such determination to the Trustee, will, together with the income or increment to accrue thereon and any other moneys of the Commission made available for such purpose, be fully sufficient to pay and discharge the indebtedness on all Bonds (including all principal, interest and redemption premiums, if any) at or before their respective maturity dates;

and if the Commission will also pay or cause to be paid all other sums payable under the Indenture by the Commission, including all Policy Costs, then and in that case, at the election of the Commission (evidenced by a Certificate of the Commission signifying its intention to pay and discharge all such indebtedness, which will be filed with the Trustee), and notwithstanding that any Bonds have been surrendered for payment, the pledge of the Net Revenues and other funds provided for in the Indenture and all other obligations of the Commission under the Indenture will cease, terminate and be completely discharged, except only as provided in the Indenture, and the Owners of the Bonds not so surrendered and paid will thereafter be entitled to payment only out of the Defeasance Obligations deposited with the Trustee, escrow agent or other fiduciary as aforesaid for their payment; subject, however, to the provisions of the Indenture. The discharge of the obligations of the Commission under the Indenture will be without prejudice to the rights of the Trustee to charge for and be reimbursed by the Commission for any expenditures which it may thereafter incur in connection with the Indenture.

The Commission may at any time surrender to the Trustee for cancellation by it any Bonds previously issued and delivered, which the Commission may have acquired in any manner whatsoever, and such Bonds, upon such surrender and cancellation, will be deemed to be paid and retired.

In the event that any portion or all of the Bonds are to be paid and discharged pursuant to the Indenture, the Credit Provider will be provided with 15 days advance notice and will be provided with a draft copy of any proposed escrow agreement establishing the defeasance trust, the form of the Independent Certified Public Accountant's certificate or letter, the preliminary official statement of the refunding issue (if applicable) and the form of Opinion of Counsel to the effect that upon the deposit of funds and investments under the escrow or other applicable agreement, the Bonds being paid and discharged will no longer be deemed to be outstanding under the Indenture. Substitution of securities held in trust under the escrow agreement will not be permitted unless there has first been delivered to the escrow agent (1) a certificate of Independent Certified Public Accountant to the effect that the escrow investments, as substituted, are sufficient to pay debt service on the Bonds being paid and discharged whether to maturity or date of

redemption, as applicable, and (2) an Opinion of Counsel to the effect that the substitution is permitted under the escrow agreement and does not, in and of itself, adversely affect the exclusion from gross income of interest on the Bonds being so paid and discharged for purposes of federal income taxation.

A final copy of any such escrow agreement and the Independent Certified Public Accountant's certificate stating that the escrow is sufficient to meet the standards of the Indenture, the final official statement for the refunding issue (if applicable), the approving opinion of bond counsel with respect to the refunding issue, the Trustee's receipt, and the Trustee's certification as to the application of funds will be furnished to the Credit Provider no later than 10 days (or such later date which is the first date practicable to deliver such items in the event that the refunding issue is not sold early enough to provide such items 10 days prior to the date of defeasance) prior to the defeasance of Bonds by the Commission.

If a forward purchase or supply contract is employed in connection with the defeasance of any of the Bonds, the verification report relating to the defeasance of such Bonds will expressly state that the adequacy of the escrow to accomplish the defeasance relies solely on the initial escrowed investments and the maturing principal thereof and interest income thereon and does not assume performance under or compliance with the forward supply contract, and the applicable escrow agreement will provide that in the event of any discrepancy or difference between the terms of the forward supply contract and the escrow agreement, the terms of the escrow agreement will be controlling.

Notwithstanding anything in the Indenture to the contrary, in the event that the principal and/or interest due of the Bonds is paid by any Credit Provider in accordance with the terms of the Indenture, such Bonds will remain Outstanding for all purposes, not be defeased or otherwise satisfied and not be considered paid by the Commission, and the assignment and pledge of the Net Revenues and other assets under the Indenture and all covenants, agreements and other obligations of the Commission to the Owners so paid will continue to exist and will run to the benefit of the Credit Provider, and the Credit Provider will be subrogated to the rights of such Owners, as applicable.

**Discharge of Liability on Bonds.** Upon the deposit with the Trustee, an escrow agent or other fiduciary, in trust, at or before maturity, of Defeasance Obligations in the necessary amount to pay or redeem Outstanding Bonds (whether upon or prior to their maturity or the redemption date of such Bonds), provided that if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption has been given as provided in the Indenture or provision satisfactory to the Trustee has been made for the giving of such notice, then all liability of the Commission in respect of such Bonds will cease, determine and be completely discharged, except only that thereafter the Owners thereof will be entitled to payment of the principal of and interest on such Bonds by the Commission, and the Commission will remain liable for such payment, but only out of the Defeasance Obligations deposited in an escrow fund established for this purpose and held by the Trustee, an escrow agent, or other fiduciary, as aforesaid for their payment, subject, however, to the provisions of the Indenture.

**Payment of Bonds after Discharge of Indenture.** Notwithstanding any provisions of the Indenture, any moneys deposited in trust for the payment of the principal of, or interest or premium on, any Bonds and remaining unclaimed for two years after the principal of all the Outstanding Bonds has become due and payable (whether at maturity or upon call for redemption or by declaration as provided in the Indenture) will then be repaid to the Commission upon its Written Request, and the Owners of such Bonds will thereafter be entitled to look only to the Commission for payment thereof, and all liability of the Trustee or any other fiduciary with respect to such moneys will thereupon cease; provided, however, that before the repayment of such moneys to the Commission as aforesaid, the Trustee may (at the cost of the Commission) first publish at least once in a Financial Newspaper or Journal a notice, in such form as may be deemed appropriate by the Trustee, with respect to the Bonds so payable and not presented and with respect to the provisions relating to the repayment to the Commission of the moneys held for the payment thereof. In the event of the repayment of any such moneys to the Commission as aforesaid, the Owners of the Bonds in respect of which such moneys were deposited will thereafter be deemed to be general creditors of the Commission for amounts equivalent to the respective amounts deposited for the payment of such Bonds and so repaid to the Commission (without interest thereon).

## MISCELLANEOUS

### **Liability of Commission Limited to Net Revenues.**

(a) Notwithstanding anything contained in the Indenture, the Commission will not be required to advance any moneys derived from the proceeds of any taxes levied or collected by the City, or from any source of income other than the Net Revenues, for the payment of the principal of or interest on the Bonds, for the operation and maintenance of the Enterprise, for the performance of any covenants contained in the Indenture or for the payment of any obligations under the Indenture, including indemnification. The Commission may, however, advance funds for any such purpose, provided that such funds are derived from a source legally available for such purpose and may be used by the Commission for such purpose without incurring indebtedness.

(b) The Bonds will be revenue bonds, payable exclusively from the Net Revenues as provided in the Indenture. The general fund of the City is not liable, and the credit or taxing power of the City is not pledged, for the payment of the Bonds or their interest. The Owners of the Bonds will never have the right to compel the exercise of the taxing power of the City or the forfeiture of any property of the Commission or of the City. The principal of and interest on the Bonds and any premiums upon the redemption of any thereof will not be a debt of the Commission or the City, nor a legal or equitable pledge, charge, lien or encumbrance upon any property of the Commission or of the City or upon any of its income, receipts or revenues except the Net Revenues pledged to the payment thereof as provided in the Indenture.

**Successor Is Deemed Included in All References to Predecessor.** Whenever in the Indenture or any Supplemental Indenture either the Commission or the Trustee is named or referred to, such reference will be deemed to include the successors or assigns thereof, and all the covenants and agreements contained in the Indenture by or on behalf of the Commission or the Trustee will bind and inure to the benefit of the respective successors and assigns thereof whether so expressed or not.

**Limitation of Rights to Parties and Bondowners.** Nothing in the Indenture or in the Bonds expressed or implied is intended or will be construed to give to any person, other than the Commission, the Trustee, any Bond Reserve Fund Policy Provider, any Credit Provider and the Owners of the Bonds issued under the Indenture, any legal or equitable right, remedy or claim under or in respect of the Indenture or any covenant, condition or provision therein or contained in the Indenture; and all such covenants, conditions and provisions are and will be held to be for the sole and exclusive benefit of the Commission, the Trustee, the Bond Reserve Fund Policy Provider, the Credit Provider and the Owners of the Bonds issued under the Indenture.

**Waiver of Notice.** Whenever in the Indenture the giving of notice by mail or otherwise is required, the giving of such notice may be waived in writing by the person entitled to receive such notice and in any such case the giving or receipt of such notice will not be a condition precedent to the validity of any action taken in reliance upon such waiver.

**Destruction of Bonds.** Whenever in the Indenture provision is made for the cancellation by the Trustee and the delivery to the Commission of any Bonds, the Trustee may destroy such Bonds (in the presence of an officer of the Commission, if the Commission will so require), and deliver a certificate of such destruction to the Commission, unless the Commission will, by Written Request of the Commission, request the Trustee to instead cancel and deliver said Bonds to the Commission.

**Severability of Invalid Provisions.** If any one or more of the provisions contained in the Indenture or in the Bonds for any reason is held to be invalid, illegal or unenforceable in any respect, then such provision or provisions will be deemed severable from the remaining provisions contained in the Indenture and such invalidity, illegality or unenforceability will not affect any other provision of the Indenture, and the Indenture will be construed as if such invalid or illegal or unenforceable provision had never been contained in the Indenture. The Commission declares by the Indenture that it would have adopted the Indenture and each and every other section, paragraph, sentence, clause or phrase of the Indenture and authorized the issuance of the Bonds pursuant thereto irrespective of the fact that any one or more sections, paragraphs, sentences, clauses or phrases of the Indenture may be held illegal, invalid or unenforceable. If, by reason of the judgment of any court, the Trustee or any successor Trustee is rendered unable to

perform its duties under the Indenture, and if no successor Trustee be then appointed, all such duties and all of the rights and powers of the Trustee under the Indenture will be assumed by and vest in the Treasurer in trust for the benefit of the Bondowners.

**Evidence of Rights of Bondowners.** Any request, consent or other instrument required by the Indenture to be signed and executed by Bondowners may be in any number of concurrent writings of substantially similar tenor and may be signed or executed by such Bondowners in person or by an agent or agents duly appointed in writing. Proof of the execution of any such request, consent or other instrument or of a writing appointing any such agent, will be sufficient for any purpose of the Indenture and will be conclusive in favor of the Trustee and of the Commission if made in the manner provided in the Indenture.

The fact and date of the execution by any person of any such request, consent or other instrument or writing may be proved in any manner reasonably acceptable to the Trustee.

The ownership of Bonds will be proved by the bond registration books maintained pursuant to the Indenture.

Any request, consent, vote or declaration of the Owner of any Bond will bind every future Owner of the same Bond and the Owner of every Bond issued in exchange therefor or in lieu thereof, in respect of anything done or suffered to be done by the Trustee or the Commission in pursuance of such request, consent, vote or declaration.

**Credit Provider and Bond Reserve Fund Policy Provider Provisions.** Any provisions in the Indenture requiring consent from the Credit Providers will have no force or effect with respect to a Credit Provider or a Bond Reserve Fund Policy Provider during any period in which such Credit Provider or a Bond Reserve Fund Policy Provider is in default in its obligations under the related Letter of Credit, insurance policy or Bond Reserve Fund Policy. The provisions with respect to the Credit Provider and Bond Reserve Fund Policy Provider may be disregarded if no Credit Providers or Bond Reserve Fund Policy Providers are in existence with respect to the Outstanding Bonds.

**Funds and Accounts.** Any fund required by the Indenture to be established and maintained by the Commission or the Controller or the Treasurer or the City or the Trustee may be established and maintained in the accounting records of the Commission or the Controller or the Treasurer or the City or the Trustee either as a fund or an account, and may, for the purposes of such records, any audits thereof and any reports or statements with respect thereto, be treated either as a fund or as an account; but all such records with respect to all such funds will at all times be maintained in accordance with generally accepted accounting practices and with due regard for the protection of the security of the Bonds and the rights of every Owner thereof.

**Repeal of Inconsistent Resolution.** Any resolution of the Commission, and any part of any resolution, inconsistent with the Indenture, is repealed to the extent of such inconsistency by the Indenture.

**Waiver of Personal Liability.** No Commission member or officer, agent or employee of the Commission or of the City will be individually or personally liable for the payment of the principal of or interest on the Bonds; but nothing contained in the Indenture will relieve any such Commission member or officer, agent or employee from the performance of any official duty provided by law.

**Governing Law.** The Indenture will be construed and governed in accordance with the laws of the State of California.

**Business Day.** Except as specifically set forth in a Supplemental Indenture, any payments or transfers which would otherwise become due on any day which is not a Business Day will become due or will be made on the next succeeding Business Day.

## SEVENTEENTH SUPPLEMENTAL INDENTURE

### PROVISIONS RELATING TO THE 2024 SERIES A BONDS

**Authorization and Terms of the 2024 Series A Bonds.** The principal of and premium, if any, on the 2024 Series A Bonds will be payable by check or wire in lawful money of the United States of America to the Owner thereof, upon the surrender thereof at the corporate trust office of U.S. Bank Trust Company, National Association, in San Francisco, California, or such other office designated by the Trustee.

The interest on the 2024 Series A Bonds will be payable in like lawful money to the person whose name appears on the bond registration books of the Trustee as the Owner thereof as of the close of business on the 15th day of the calendar month immediately preceding an interest payment date, whether or not such day is a Business Day, such interest to be paid by check mailed to such Owner at such address as appears on such registration books or at such address as such Owner may have filed with the Trustee for that purpose, or at the request of an Owner of at least \$1,000,000 in aggregate principal amount of 2024 Series A Bonds filed with the Trustee by such 15th day, by wire transfer to such account designated in such request at a financial institution in the United States.

Each 2024 Series A Bond will bear interest from the interest payment date next preceding the date of authentication thereof unless it is authenticated as of a day during the period from the 16th day of the calendar month next preceding any interest payment date to the interest payment date, inclusive, in which event it will bear interest from such interest payment date, or unless it is authenticated on or before September 15, 2024, in which event it will bear interest from the Closing Date; provided, however, that if, at the time of authentication of any 2024 Series A Bond, interest is in default on Outstanding 2024 Series A Bonds, such 2024 Series A Bond will bear interest from the interest payment date to which interest has previously been paid or made available for payment on the Outstanding 2024 Series A Bonds and will be payable to the Owners thereof of record as of a special date as will be established by the Trustee following such default.

On January 30, 2013, certain amendments set forth in the First Amendment that govern the sizing of the Required Reserve for each Series of Bonds became effective in accordance with the terms of the Indenture. As a result, the Commission has determined not to fund the Required Reserve for the 2024 Series A Bonds.

The Commission has reviewed all proceedings previously taken relative to the authorization of the 2024 Series A Bonds and has found, as a result of such review, that all conditions, things and acts required by law to exist, happen or be performed precedent to and in the issuance of the 2024 Series A Bonds do exist, have happened and have been performed in due time, form and manner as required by law, and the Commission is authorized, pursuant to each and every requirement of law, including the Law, to issue the 2024 Series A Bonds in the manner and form provided in the Seventeenth Supplemental Indenture.

#### **Use of Depository.**

(a) The 2024 Series A Bonds will be initially registered as provided in the Seventeenth Supplemental Indenture. Registered ownership of the 2024 Series A Bonds, or any portions thereof, may not thereafter be transferred except: (i) to any successor of The Depository Trust Company or its nominee, or of any substitute depository designated pursuant to the Seventeenth Supplemental Indenture (a "Substitute Depository"); provided that any successor of The Depository Trust Company or Substitute Depository will be qualified under any applicable laws to provide the service proposed to be provided by it; (ii) to any Substitute Depository not objected to by the Trustee, upon (A) the resignation of The Depository Trust Company or its successor (or any Substitute Depository or its successor) from its functions as depository, or (B) a determination by the Commission that The Depository Trust Company (or its successor) is no longer able to carry out its functions as depository; provided that any such Substitute Depository will be qualified under any applicable laws to provide the services proposed to be provided by it; or (iii) to any person as provided below, upon (1) the resignation of The Depository Trust Company or its successor (or any Substitute Depository or its successor) from its functions as depository, or (2) a determination by the Commission to remove The Depository Trust Company or its successor (or Substitute Depository or its successor) from its functions as depository.

(b) In the case of any transfer described in clause (a)(i) or clause (a)(ii) above, upon receipt of all Outstanding 2024 Series A Bonds by the Trustee, together with a Written Request of the Commission to the Trustee designating the Substitute Depository, a single new 2024 Series A Bond, which the Commission will prepare or cause to be prepared, will be executed and delivered for each maturity of each series of the 2024 Series A Bonds then Outstanding, registered in the name of such successor or such Substitute Depository, or their nominees, as the case may be, all as specified in such Written Request of the Commission.

In the case of any transfer described in clause (a)(iii) above, upon receipt of all Outstanding 2024 Series A Bonds by the Trustee, together with a Written Request of the Commission to the Trustee, new 2024 Series A Bonds, which the Commission will prepare or cause to be prepared in definitive form, will be executed and delivered in such denominations and registered in the names of such persons as are requested in such Written Request of the Commission, subject to the limitations of the Seventeenth Supplemental Indenture, provided that the Trustee will not be required to deliver such new 2024 Series A Bonds within a period less than 60 days after the date of receipt of such Written Request from the Commission.

(c) In the case of a partial redemption or an advance refunding of any 2024 Series A Bonds evidencing a portion of the principal maturing in a particular year, The Depository Trust Company or its successor (or any Substitute Depository or its successor) will make an appropriate notation on such 2024 Series A Bonds indicating the date and amounts of such reduction in principal, in form acceptable to the Trustee. The Trustee will not be liable for such depository's failure to make such notations or errors in making such notations.

(d) The Commission and the Trustee will be entitled to treat the person in whose name any 2024 Series A Bond is registered as the Owner thereof for all purposes of the Indenture and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the Commission; and the Commission and the Trustee will not have responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with any beneficial owners of the 2024 Series A Bonds. Neither the Commission nor the Trustee will have any responsibility or obligation, legal or otherwise, to any such beneficial owners or to any other party, including The Depository Trust Company or its successor (or Substitute Depository or its successor), except to the Owner of any 2024 Series A Bonds, and the Trustee may rely conclusively on its records as to the identity of the Owners of the 2024 Series A Bonds.

(e) Notwithstanding any other provision of the Seventeenth Supplemental Indenture and so long as all Outstanding 2024 Series A Bonds are registered in the name of Cede & Co. or its registered assigns, the Commission and the Trustee will cooperate with Cede & Co., as sole registered Bondowner, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2024 Series A Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made available on the date they are due all in accordance with the Letter of Representations delivered by the Commission and the Trustee to The Depository Trust Company with respect to the 2024 Series A Bonds, the provisions of which the Trustee may rely upon to implement the foregoing procedures notwithstanding any inconsistent provisions in the Seventeenth Supplemental Indenture.

#### **Establishment and Application of the 2024 Series A Capital Project Account.**

**2024 Series A Capital Project Account.** The Commission covenants and agrees in the Seventeenth Supplemental Indenture to establish, maintain and hold thereunder within the Capital Project Fund, established under the Indenture, a separate account known as the "2024 Series A Capital Project Account." The Treasurer will hold the amounts on deposit in the 2024 Series A Capital Project Account, which will be maintained and accounted for by the Controller so long as any moneys are on deposit therein. Upon completion of the 2024 Series A Project, the Commission may direct the transfer of any remaining balance in the 2024 Series A Capital Project Account to any other lawfully available fund or account of the Commission.

The moneys in the 2024 Series A Capital Project Account will be held by the Treasurer in trust and applied to the costs of the 2024 Series A Project and the expenses incident thereto or connected therewith, including, if necessary, interest to the extent permitted by law, reimbursement to the Commission for expenses incurred prior to the issuance of the 2024 Series A Bonds or in connection with the Enterprise, architectural, engineering and inspection fees and expenses, apparatus, equipment and furnishings for the Enterprise, testing and inspection, surveys, insurance premiums, losses during construction not insured against because of deductible amounts, the fees and expenses of the

Trustee, legal, accounting and consultant fees and expenses, and similar expenses. The Treasurer will pay out moneys from the 2024 Series A Capital Project Account only upon warrants drawn by the Controller in the manner provided by law. No withdrawals will be made from the 2024 Series A Capital Project Account for any purpose not authorized by law.

All moneys held by the Treasurer in the 2024 Series A Capital Project Account may be invested in Legal Investments maturing not later than the date on which such moneys are required for payment by the Treasurer.

**Establishment and Application of the 2024 Series A Capitalized Interest Account.**

(a) The Trustee will establish and maintain within the Interest Fund an account separate from any other fund or account established and maintained hereunder to be known as the “2024 Series A Capitalized Interest Account.” Amounts on deposit in the 2024 Series A Capitalized Interest Account will be applied to the payment of interest on the 2024 Series A Bonds on each April 1 and October 1, commencing on October 1, 2024, in such amounts as specified in a written certificate of the Commission delivered to the Trustee not less than five Business Days prior to each April 1 and October 1, prior to amounts in the Interest Fund being so used.

(b) Amounts remaining on deposit in the 2024 Series A Capitalized Interest Account at such time as the Commission has informed the Trustee in a written certificate of the Commission that the 2024 Series A Capitalized Interest Account will be closed will be transferred by the Trustee to the Commission for deposit in the 2024 Series A Capital Project Account. All moneys held by the Trustee in the 2024 Series A Capitalized Interest Account may be invested in Legal Investments maturing not later than the date on which such moneys are required for payment by the Trustee.

For details on the amount deposited into the 2024 Series A Capitalized Interest Account, see “PLAN OF FINANCE – General” and “ESTIMATED SOURCES AND USES OF FUNDS” in the Official Statement.

**Continuing Disclosure.** The Commission covenants and agrees in the Seventeenth Supplemental Indenture that it will comply with and carry out all of the provisions of the 2024 Continuing Disclosure Certificate. Notwithstanding any other provision of the Indenture, failure of the Commission to comply with the 2024 Continuing Disclosure Certificate will not be considered an Event of Default; however, any Participating Underwriter (as such term is defined in the 2024 Continuing Disclosure Certificate) or any Bondowner or beneficial owner may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the Commission to comply with its obligations under this provision of the Seventeenth Supplemental Indenture, and the sole remedy in the event of any failure of the Commission to comply with the 2024 Continuing Disclosure Certificate will be an action to compel performance.

**No Senior State Loans.** No Senior State Loans are currently Outstanding. Notwithstanding anything contained in the Indenture, the Commission will not issue or enter into any additional Senior State Loans or pay any amounts with respect to any loan agreement with the State of California (or any board, department or agency thereof) prior to the payment of amounts described in the Indenture.

**Terms of 2024 Series A Bonds Subject to the Indenture.** Except as expressly provided in the Seventeenth Supplemental Indenture, every term and condition contained in the Indenture will apply to the Seventeenth Supplemental Indenture, and to the 2024 Series A Bonds, with the same force and effect as if the same were set forth at length in the Seventeenth Supplemental Indenture, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to the Seventeenth Supplemental Indenture.

The Seventeenth Supplemental Indenture and all the terms and provisions contained in the Seventeenth Supplemental Indenture will form part of the Indenture as fully and with the same effect as if all such terms and provisions had been set forth in the Indenture. The Indenture is ratified and confirmed by the Seventeenth Supplemental Indenture and will continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended by the Seventeenth Supplemental Indenture.

**EIGHTEENTH SUPPLEMENTAL INDENTURE**  
**PROVISIONS RELATING TO 2024BCD BONDS**

**Authorization and Terms of 2024BCD Bonds.** The principal of and premium, if any, on the 2024BCD Bonds will be payable by check or wire in lawful money of the United States of America to the Owner thereof, upon the surrender thereof at the corporate trust office of U.S. Bank Trust Company, National Association, in San Francisco, California, or such other office designated by the Trustee.

The 2024 Series C Bonds and the 2024 Series D Bonds are collectively referred to in this summary as the “2024 Tax-Exempt Bonds.”

The interest on the 2024BCD Bonds will be payable in like lawful money to the person whose name appears on the bond registration books of the Trustee as the Owner thereof as of the close of business on the 15th day of the calendar month immediately preceding an interest payment date, whether or not such day is a Business Day, such interest to be paid by check mailed to such Owner at such address as appears on such registration books or at such address as such Owner may have filed with the Trustee for that purpose, or at the request of an Owner of at least \$1,000,000 in aggregate principal amount of 2024BCD Bonds filed with the Trustee by such 15th day, by wire transfer to such account designated in such request at a financial institution in the United States.

Each 2024BCD Bond will bear interest from the interest payment date next preceding the date of authentication thereof unless it is authenticated as of a day during the period from the 16th day of the calendar month next preceding any interest payment date to the interest payment date, inclusive, in which event it will bear interest from such interest payment date, or unless it is authenticated on or before September 15, 2024, in which event it will bear interest from the Closing Date; provided, however, that if, at the time of authentication of any 2024BCD Bond, interest is in default on Outstanding 2024BCD Bonds, such 2024BCD Bond will bear interest from the interest payment date to which interest has previously been paid or made available for payment on the Outstanding 2024BCD Bonds and will be payable to the Owners thereof of record as of a special date as will be established by the Trustee following such default.

On January 30, 2013, certain amendments set forth in the First Amendment that govern the sizing of the Required Reserve for each Series of Bonds became effective in accordance with the terms of the Indenture. As a result, the Commission has determined not to fund the Required Reserve for the 2024BCD Bonds.

The Commission has reviewed all proceedings previously taken relative to the authorization of the 2024BCD Bonds and has found, as a result of such review, that all conditions, things and acts required by law to exist, happen or be performed precedent to and in the issuance of the 2024BCD Bonds do exist, have happened and have been performed in due time, form and manner as required by law, and the Commission is authorized, pursuant to each and every requirement of law, including the Law, to issue the 2024BCD Bonds in the manner and form provided in the Eighteenth Supplemental Indenture.

**Use of Depository.**

(c) The 2024BCD Bonds will be initially registered as provided in the Eighteenth Supplemental Indenture. Registered ownership of the 2024BCD Bonds, or any portions thereof, may not thereafter be transferred except: (i) to any successor of The Depository Trust Company or its nominee, or of any substitute depository designated pursuant to the Eighteenth Supplemental Indenture (a “Substitute Depository”); provided that any successor of The Depository Trust Company or Substitute Depository will be qualified under any applicable laws to provide the service proposed to be provided by it; (ii) to any Substitute Depository not objected to by the Trustee, upon (A) the resignation of The Depository Trust Company or its successor (or any Substitute Depository or its successor) from its functions as depository, or (B) a determination by the Commission that The Depository Trust Company (or its successor) is no longer able to carry out its functions as depository; provided that any such Substitute Depository will be qualified under any applicable laws to provide the services proposed to be provided by it; or (iii) to any person as provided below, upon (1) the resignation of The Depository Trust Company or its successor (or any Substitute Depository or its successor) from its functions as depository, or (2) a determination by the Commission to

remove The Depository Trust Company or its successor (or Substitute Depository or its successor) from its functions as depository.

(d) In the case of any transfer described in clause (a)(i) or clause (a)(ii) above, upon receipt of all Outstanding 2024BCD Bonds by the Trustee, together with a Written Request of the Commission to the Trustee designating the Substitute Depository, a single new 2024BCD Bond, which the Commission will prepare or cause to be prepared, will be executed and delivered for each maturity of each series of the 2024BCD Bonds then Outstanding, registered in the name of such successor or such Substitute Depository, or their nominees, as the case may be, all as specified in such Written Request of the Commission.

In the case of any transfer described in clause (a)(iii) above, upon receipt of all Outstanding 2024BCD Bonds by the Trustee, together with a Written Request of the Commission to the Trustee, new 2024BCD Bonds, which the Commission will prepare or cause to be prepared in definitive form, will be executed and delivered in such denominations and registered in the names of such persons as are requested in such Written Request of the Commission, subject to the limitations of the Eighteenth Supplemental Indenture, provided that the Trustee will not be required to deliver such new 2024BCD Bonds within a period less than 60 days after the date of receipt of such Written Request from the Commission.

(e) In the case of a partial redemption or an advance refunding of any 2024BCD Bonds evidencing a portion of the principal maturing in a particular year, The Depository Trust Company or its successor (or any Substitute Depository or its successor) will make an appropriate notation on such 2024BCD Bonds indicating the date and amounts of such reduction in principal, in form acceptable to the Trustee. The Trustee will not be liable for such depository's failure to make such notations or errors in making such notations.

(f) The Commission and the Trustee will be entitled to treat the person in whose name any 2024BCD Bond is registered as the Owner thereof for all purposes of the Indenture and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the Commission; and the Commission and the Trustee will not have responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with any beneficial owners of the 2024BCD Bonds. Neither the Commission nor the Trustee will have any responsibility or obligation, legal or otherwise, to any such beneficial owners or to any other party, including The Depository Trust Company or its successor (or Substitute Depository or its successor), except to the Owner of any 2024BCD Bonds, and the Trustee may rely conclusively on its records as to the identity of the Owners of the 2024BCD Bonds.

(g) Notwithstanding any other provision of the Eighteenth Supplemental Indenture and so long as all Outstanding 2024BCD Bonds are registered in the name of Cede & Co. or its registered assigns, the Commission and the Trustee will cooperate with Cede & Co., as sole registered Bondowner, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2024BCD Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made available on the date they are due all in accordance with the Letter of Representations delivered by the Commission and the Trustee to The Depository Trust Company with respect to the 2024BCD Bonds, the provisions of which the Trustee may rely upon to implement the foregoing procedures notwithstanding any inconsistent provisions in the Eighteenth Supplemental Indenture.

#### **Establishment and Application of the Rebate Funds for the 2024 Tax-Exempt Bonds.**

(a) The Trustee will establish and maintain funds separate from any other fund established and maintained under the Eighteenth Supplemental Indenture to be known as the "2024 Series C Rebate Fund" and the "2024 Series D Rebate Fund." Within each Rebate Fund, the Trustee will maintain such accounts as it is instructed by the Commission as necessary in order to comply with the terms and requirements of the Tax Certificate with respect to the 2024 Tax-Exempt Bonds, dated the date of issuance of the 2024 Tax-Exempt Bonds (for purposes hereof, the "2024 Series Tax Certificate").

Subject to the transfer provisions described in paragraph (e) below, all money at any time deposited in the applicable Rebate Fund will be held by the Trustee for the account of the Commission in trust, to the extent required to satisfy the requirements for rebate, as set forth in the 2024 Series Tax Certificate (for purposes hereof, the "2024 Series Rebate Requirement"), for payment to the federal government of the United States of America, and no other

person will have any rights in or claim to such money. All amounts deposited into or on deposit in the applicable Rebate Fund will be governed by the Eighteenth Supplemental Indenture and by the 2024 Series Tax Certificate. The Trustee will be deemed conclusively to have complied with such provisions and fulfilled its obligation with respect to rebate as long as it follows the written directions of the Commission, including supplying all necessary information in the manner provided in the 2024 Series Tax Certificate. The Trustee will not be required to take any actions under the Eighteenth Supplemental Indenture or the 2024 Series Tax Certificate in the absence of written directions by the Commission, and will have no liability or responsibility to enforce compliance by the Commission with the terms of the 2024 Series Tax Certificate nor make computations in connection therewith.

(b) Upon the Commission's written direction, an amount will be deposited to the applicable Rebate Fund by the Trustee from deposits by the Commission so that the balance of the amount on deposit thereto equals the 2024 Series Rebate Requirement. Computations of the 2024 Series Rebate Requirement will be furnished by or on behalf of the Commission in accordance with the 2024 Series Tax Certificate.

(c) The Trustee will have no obligation to rebate any amounts required to be rebated pursuant to the Eighteenth Supplemental Indenture, other than from moneys held in the funds and accounts created under the Indenture or from other moneys provided to it by or on behalf of the Commission.

(d) The Trustee will invest all amounts held in the Rebate Funds in Permitted Investments as instructed in writing by the Commission, subject to the restrictions set forth in the 2024 Series Tax Certificate. Moneys will not be transferred from the Rebate Funds except as described in paragraph (e) below.

(e) Upon receipt of the Commission's written directions, the Trustee will remit part or all of the balances in the applicable Rebate Fund to the United States, as so directed. In addition, if the Commission so directs, the Trustee will deposit moneys into or transfer moneys out of the applicable Rebate Fund from or into such accounts or funds as directed by the Commission's written directions. Any funds remaining in each Rebate Fund after redemption and payment of all of the 2024 Tax-Exempt Bonds, as the case may be, and payment and satisfaction of any 2024 Series Rebate Requirement will be withdrawn and remitted to the Commission upon the Commission's written request.

(f) Notwithstanding any other provision of the Indenture, the obligation to remit the 2024 Series Rebate Requirement to the United States and to comply with all other requirements of the Eighteenth Supplemental Indenture and the 2024 Series Tax Certificate will survive the defeasance or payment in full of the 2024 Tax-Exempt Bonds.

#### **Establishment and Application of the Capital Project Accounts.**

The Commission covenants and agrees in the Eighteenth Supplemental Indenture to establish, maintain and hold thereunder within the Capital Project Fund, established under the Indenture, a separate account with respect to each series of the 2024 Series C Bonds and the 2024 Series D Bonds known as the "2024 Series C Capital Project Account" and the "2024 Series D Project Account." The Treasurer will hold the amounts on deposit in the applicable Capital Project Account, which will be maintained and accounted for by the Controller so long as any moneys are on deposit therein. Upon completion of the 2024 Series C Project and the 2024 Series D Project, the Commission may direct the transfer of any remaining balance in the respective Capital Project Accounts to any other lawfully available fund or account of the Commission; provided such transfer is consistent with the Commission's covenants in the 2024 Series Tax Certificate with respect to the 2024 Tax-Exempt Bonds.

The moneys in the applicable Capital Project Account will be held by the Treasurer in trust and applied to the costs of the 2024 Series C Project and the 2024 Series D Project, respectively, and the expenses incident thereto or connected therewith, including, if necessary, interest to the extent permitted by law, reimbursement to the Commission for expenses incurred prior to the issuance of the 2024 Series C Bonds or the 2024 Series D Bonds, or in connection with the Enterprise, architectural, engineering and inspection fees and expenses, apparatus, equipment and furnishings for the Enterprise, testing and inspection, surveys, insurance premiums, losses during construction not insured against because of deductible amounts, the fees and expenses of the Trustee, legal, accounting and consultant fees and expenses, and similar expenses. The Treasurer will pay out moneys from the applicable Capital Project Account only upon warrants drawn by the Controller in the manner provided by law. No withdrawals will be made from the Capital Project Accounts for any purpose not authorized by law.

All moneys held by the Treasurer in the Capital Project Accounts may be invested in Legal Investments maturing not later than the date on which such moneys are required for payment by the Treasurer.

**Establishment and Application of the Reimbursement Accounts.**

The Commission covenants and agrees in the Eighteenth Supplemental Indenture to establish, maintain and hold thereunder within the Capital Project Fund, established under the Indenture, separate accounts with respect to the 2024 Tax-Exempt Bonds known as the “2024 Series C Reimbursement Account” and the “2024 Series D Reimbursement Account,” which will be maintained and accounted for by the Trustee so long as any moneys are on deposit therein. The moneys in the Reimbursement Accounts will be held by the Trustee in trust and transferred by the Trustee to U.S. Bank Trust Company, National Association, as issuing and paying agent or revolving line of credit provider under the Interim Funding Program, in connection with the reimbursement of certain capital costs previously paid with the proceeds of the Interim Funding Program.

Any balance remaining in the Reimbursement Accounts following such application of moneys will be transferred to the Treasurer for deposit in the corresponding Capital Project Account. All moneys held by the Trustee in the Reimbursement Accounts will be invested in Permitted Investments specified by the Commission or, if the Commission does not so specify, then in Permitted Investments of the type described in clause (f) of the definition thereof that are rated AAAM-G by S&P and Aaa by Moody’s.

**Establishment and Application of the Capitalized Interest Accounts.**

(a) The Trustee will establish and maintain within the Interest Fund accounts separate from any other fund or account established and maintained hereunder, with respect to the each series of the 2024 Series C Bonds and the 2024 Series D Bonds, to be known as the “2024 Series C Capitalized Interest Account” and the “2024 Series D Capitalized Interest Account.” Amounts on deposit in the applicable Capitalized Interest Account will be applied to the payment of interest on the 2024 Series C Bonds and the 2024 Series D Bonds, respectively, on each April 1 and October 1, commencing on October 1, 2024, in such amounts as specified in a written certificate of the Commission delivered to the Trustee not less than five Business Days prior to each April 1 and October 1, prior to amounts in the Interest Fund being so used.

(b) Amounts remaining on deposit in the Capitalized Interest Accounts at such time as the Commission has informed the Trustee in a written certificate of the Commission that the Capitalized Interest Accounts will be closed will be transferred by the Trustee to the Commission for deposit in the corresponding 2024 Series C Bonds or 2024 Series D Bonds Capital Project Accounts. All moneys held by the Trustee in the Capitalized Interest Accounts may be invested in Legal Investments maturing not later than the date on which such moneys are required for payment by the Trustee.

For details on the amounts deposited into the each Capitalized Interest Account, see “PLAN OF FINANCE – General” and “ESTIMATED SOURCES AND USES OF FUNDS” in the Official Statement.

**Sinking Fund Accounts for the 2024 Tax-Exempt Bonds.**

(a) The Trustee will establish and hold within the Principal Fund established under the Indenture, separate accounts with respect to the 2024 Tax-Exempt Bonds, to be known as the “2024 Series C Sinking Fund Account” and the “2024 Series D Sinking Fund Account,” which the Commission covenants and agrees to cause to be maintained, for payment of the Bond Obligation of the 2024 Series C Term Bonds and the 2024 Series D Term Bonds, respectively.

(b) The Trustee, on or before September 30 of each year, commencing on the date specified in the Eighteenth Supplemental Indenture, will deposit in the applicable Sinking Fund Account from the Principal Fund moneys in an amount sufficient to call and redeem or to pay at maturity, as the case may be, the principal of 2024 Series C Term Bonds or the 2024 Series D Term Bonds, in the principal amounts set forth in the Eighteenth

Supplemental Indenture on the next succeeding October 1 in each of the following years (each such deposit of moneys being referred to as a “2024 Series Minimum Sinking Fund Account Payment”).

(c) During the 12-month period immediately preceding each redemption from the applicable Sinking Fund Account, the Commission may satisfy, in whole or in part, the 2024 Series Minimum Sinking Fund Account Payment and the redemption therefrom by depositing with the Trustee 2024 Series C Term Bonds or 2024 Series D Term Bonds for cancellation prior to the Trustee’s selection of the 2024 Series C Term Bonds or the 2024 Series D Term Bonds for redemption.

(d) All moneys in the applicable Sinking Fund Account, at the Written Request of the Commission, will be used and withdrawn by the Trustee at any time for the purchase of 2024 Series C Term Bonds or 2024 Series D Term Bonds, as the case may be (except that no 2024 Series C Term Bonds or 2024 Series D Term Bonds maturing in any year will be purchased so long as any 2024 Series C Term Bonds or 2024 Series D Term Bonds maturing in any earlier year and being of like tenor are Outstanding) at public or private sale, as and when and at such prices (including brokerage and other charges, but excluding accrued interest, which is payable from the Interest Fund) as the Commission directs by Written Request, but not to exceed the principal thereof, and all 2024 Series C Term Bonds or 2024 Series D Term Bonds so purchased by the Trustee or deposited by the Commission, will be cancelled and delivered to the Commission; provided, however, that:

(i) all moneys in the applicable Sinking Fund Account on each September 15, beginning and ending on the dates specified in the Eighteenth Supplemental Indenture, together with any additional sums the Trustee expects to receive for deposit in the applicable Sinking Fund Account after such date and on or before the next succeeding October 1, will be used and withdrawn by the Trustee solely for the purpose of redeeming the 2024 Series C Term Bonds or the 2024 Series D Term Bonds, as the case may be, that are subject to redemption under this provision of the Eighteenth Supplemental Indenture; and

(ii) the Trustee will during each 12-month period beginning with the 12-month period ending on the date specified in the Eighteenth Supplemental Indenture, purchase or call and redeem an aggregate amount of 2024 Series C Term Bonds or the 2024 Series D Term Bonds equal to at least the amount of Bond Obligation of the 2024 Series C Term Bonds or the 2024 Series D Term Bonds identified in the Eighteenth Supplemental Indenture for such 12-month period reduced by the principal amount of 2024 Series C Term Bonds or 2024 Series D Term Bonds deposited by the Commission with the Trustee, except that if 2024 Series C Term Bonds or 2024 Series D Term Bonds of any Term Bond maturity have previously been redeemed or purchased by the Trustee or deposited by the Commission in excess of the amount of Bond Obligation of the 2024 Series C Term Bonds or the 2024 Series D Term Bonds identified in the Eighteenth Supplemental Indenture, there will be deemed to have been a reduction of the remaining amounts stated in the Eighteenth Supplemental Indenture on a Proportionate Basis, and further except that moneys in the applicable Sinking Fund Accounts will be used, to the extent necessary, to purchase or retire the Outstanding 2024 Series C Term Bonds or the Outstanding 2024 Series D Term Bonds, as the case may be, at the maturity thereof.

(e) The Commission covenants and agrees under the Eighteenth Supplemental Indenture with the Owners of the 2024 Series C Term Bonds and the 2024 Series D Term Bonds to call and redeem 2024 Series C Term Bonds from the 2024 Series C Sinking Fund Account and 2024 Series D Term Bonds from the 2024 Series D Sinking Fund Account pursuant to the Eighteenth Supplemental Indenture on October 1 in each of the years, and in the amounts, stated therein.

For details on the 2024 Series Minimum Sinking Fund Account Payments, see “THE 2024ABCD BONDS – Redemption – Redemption of 2024C Bonds” and “– Redemption of 2024D Bonds” in the Official Statement.

**Tax Covenants with respect to the 2024 Tax-Exempt Bonds.**

(a) The Commission covenants that it will not take any action, or fail to take any action, if any such action or failure to take action would adversely affect the exclusion from gross income of the interest on the 2024 Tax-Exempt Bonds under Section 103 of the Code.

(b) The Commission will not directly or indirectly use or permit the use of any proceeds of the 2024 Tax-Exempt Bonds or any other funds of the Commission, or take or omit to take any action that would cause the 2024 Tax-Exempt Bonds to be “arbitrage bonds” within the meaning of Section 148(a) of the Code. To that end, the Commission will comply with all requirements of Section 148 of the Code to the extent applicable to the 2024 Tax-Exempt Bonds. If at any time the Commission is of the opinion that for purposes of this provision of the Eighteenth Supplemental Indenture it is necessary to restrict or limit the yield on the investment of any moneys held by the Trustee under the Indenture or otherwise, the Commission will so instruct the Trustee in writing, and the Trustee will take such action as required by such instructions. Without limiting the generality of the foregoing, the Commission agrees that there will be paid from time to time all amounts required to be rebated to the United States pursuant to Section 148(f) of the Code and any temporary, proposed or final Treasury Regulations as may be applied to the 2024 Tax-Exempt Bonds from time to time. This covenant will survive payment in full or defeasance of the 2024 Tax-Exempt Bonds. The Commission specifically covenants to pay or cause to be paid to the United States, at the times and in the amounts determined, the 2024 Series Rebate Requirement. The Trustee agrees to comply with all written instructions of the Commission given in accordance with the 2024 Series Tax Certificate .

(c) Notwithstanding any provision of this provision of the Eighteenth Supplemental Indenture, if the Commission provides to the Trustee an opinion of nationally recognized bond counsel to the effect that any action required under this provision of the Eighteenth Supplemental Indenture or under the 2024 Series Tax Certificate is no longer required, or to the effect that some further action is required, to maintain the exclusion from gross income of the interest on the 2024 Tax-Exempt Bonds under Section 103 of the Code, the Commission and the Trustee may rely conclusively on such opinion in complying with the provisions hereof, and the covenants hereunder will be deemed to be modified to that extent.

(d) The Commission will assure that the proceeds of the 2024 Tax-Exempt Bonds are not so used as to cause the 2024 Tax-Exempt Bonds to satisfy the private business tests of Section 141(b) of the Code or the private loan financing test of Section 141(c) of the Code.

(e) The Commission will not take any action or permit or suffer any action to be taken if the result of the same would be to cause any of the 2024 Tax-Exempt Bonds to be “federally guaranteed” within the meaning of Section 149(b) of the Code.

**Continuing Disclosure.** The Commission covenants and agrees in the Eighteenth Supplemental Indenture that it will comply with and carry out all of the provisions of the 2024 Continuing Disclosure Certificate. Notwithstanding any other provision of the Indenture, failure of the Commission to comply with the 2024 Continuing Disclosure Certificate will not be considered an Event of Default; however, any Participating Underwriter (as such term is defined in the 2024 Continuing Disclosure Certificate) or any Bondowner or beneficial owner may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the Commission to comply with its obligations under this provision of the Eighteenth Supplemental Indenture, and the sole remedy in the event of any failure of the Commission to comply with the 2024 Continuing Disclosure Certificate will be an action to compel performance.

**No Senior State Loans.** No Senior State Loans are currently Outstanding. Notwithstanding anything contained in the Indenture, the Commission will not issue or enter into any additional Senior State Loans or pay any amounts with respect to any loan agreement with the State of California (or any board, department or agency thereof) prior to the payment of amounts described in the Indenture.

**Terms of 2024BCD Bonds Subject to the Indenture.** Except as expressly provided in the Eighteenth Supplemental Indenture, every term and condition contained in the Indenture will apply to the Eighteenth Supplemental Indenture, and to the 2024BCD Bonds, with the same force and effect as if the same were set forth at length in the Eighteenth Supplemental Indenture, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to the Eighteenth Supplemental Indenture.

The Eighteenth Supplemental Indenture and all the terms and provisions contained in the Eighteenth Supplemental Indenture will form part of the Indenture as fully and with the same effect as if all such terms and provisions had been set forth in the Indenture. The Indenture is ratified and confirmed by the Eighteenth Supplemental

Indenture and will continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended by the Eighteenth Supplemental Indenture.

**APPENDIX B**

**SFPUC WASTEWATER ENTERPRISE FINANCIAL STATEMENTS**

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Protecting Public Health  
and the Environment.



# Wastewater Enterprise

Basic Financial Statements June 30, 2023 And 2022  
(With Independent Auditors' Report Thereon)



# SAN FRANCISCO WASTEWATER ENTERPRISE

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## Independent Auditor's Report

Honorable Mayor and the Board of Supervisors  
City and County of San Francisco, California

### **Opinion**

We have audited the financial statements of the San Francisco Wastewater Enterprise (the Enterprise), an enterprise fund of the City and County of San Francisco (City), as of and for the year ended June 30, 2023, and the related notes to the financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Enterprise as of June 30, 2023, and the changes in financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### **Basis for Opinion**

We conducted our audit 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 (*Government Auditing Standards*). 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 Enterprise, 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.

### **Emphasis of Matters**

As discussed in Note 1, the financial statements present only the Enterprise and do not purport to, and do not, present fairly the financial position of the City, as of June 30, 2023 and 2022, the 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.

As discussed in Note 2 to the financial statements, effective July 1, 2021, the Enterprise adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 96, *Subscription-Based Information Technology Arrangements*. Our opinion is not modified with respect to this matter.

### **Other Matter**

The financial statements of the Enterprise as of and for the year ended June 30, 2022, were audited by another auditor, who expressed an unmodified opinion on those statements on January 27, 2023.

### **Responsibilities of Management for the Financial Statements**

The Enterprise's 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 Enterprise'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, as listed in the table of contents, be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated December 26, 2023 on our consideration of the Enterprise'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 Enterprise'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 Enterprise's internal control over financial reporting and compliance.

Macias Gini & O'Connell LLP

Walnut Creek, California  
December 26, 2023

## **SAN FRANCISCO WASTEWATER ENTERPRISE**

Management's Discussion and Analysis (Unaudited)

June 30, 2023 and 2022

(Dollars in thousands, unless otherwise stated)

This section presents management's analysis of the San Francisco Wastewater Enterprise's (the Enterprise) financial condition and activities as of and for the fiscal years ended June 30, 2023 and 2022. Management's Discussion and Analysis (MDA) is intended to serve as an introduction to the Enterprise's financial statements. This information should be read in conjunction with the audited financial statements that follow this section. All dollar amounts, unless otherwise noted, are expressed in thousands of dollars.

The information in this MDA is presented under the following headings:

- Organization and Business
- Overview of the Financial Statements
- Financial Analysis
- Capital Assets
- Debt Administration
- Rates and Charges
- Request for Information

### **Organization and Business**

The San Francisco Public Utilities Commission (SFPUC or the Commission) is a department of the City and County of San Francisco (the City) that is responsible for the maintenance, operation, and development of three utility enterprises: Water, Hetch Hetchy Water and Power and CleanPowerSF, and Wastewater (the Enterprise). The primary responsibility of the Enterprise is to protect the public health and the surrounding bay and ocean receiving waters by collecting, transmitting, treating, and discharging storm and sanitary flows generated in the service area. This includes 1,131 miles of combined, sanitary, and storm collection system pipes including: gravity mains, force mains, culverts, transport storage boxes, and tunnels. San Francisco is the only coastal city in California with a combined sewer system that collects both wastewater and stormwater in the same network of pipes and provides treatment to remove harmful pollutants before discharging into the San Francisco Bay and Pacific Ocean. In addition, the Enterprise serves on a contractual basis certain municipal customers located outside of the City limits, including the North San Mateo County Sanitation District No. 3, Bayshore Sanitary District, and the City of Brisbane. The Enterprise recovers costs of service through user fees based on the volume and strength of sanitary flow. As of June 30, 2023, the Enterprise serves 148,598 residential accounts, which discharge about 15.4 million units of sanitary flow per year (measured in hundreds of cubic feet, or ccf) and 27,082 non-residential accounts, which discharge about 5.6 million ccf per year. These reflected an increase of 0.3 million discharge units in non-residential accounts due to an increase of 292 accounts and a decrease of 0.3 million discharge units in residential accounts compared to prior year.

### **Overview of the Financial Statements**

The Enterprise's financial statements include the following:

Statements of Net Position present information on the Enterprise's assets, deferred outflows, liabilities, and deferred inflows as of year-end, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Enterprise is improving or worsening.

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While the *Statements of Net Position* provide information about the nature and amount of resources and obligations at year-end, the *Statements of Revenues, Expenses, and Changes in Net Position* present the results of the Enterprise's operations over the course of the fiscal year and information as to how the net position changed during the year. These statements can be used as an indicator of the extent to which the Enterprise has successfully recovered its costs through user fees and other charges. All changes in net position are reported during the period in which the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in these statements from some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expenses of employee earned but unused vacation leave.

The *Statements of Cash Flows* present changes in cash and cash equivalents resulting from operational, capital financing, non-capital financing, and investing activities. These statements summarize the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt and exclude non-cash accounting measures of depreciation or amortization of assets.

The *Notes to Financial Statements* provide information that is essential to a full understanding of the financial statements that is not displayed on the face of the financial statements.

### Financial Analysis

#### ***Financial Highlights for Fiscal Year 2023***

- Total assets of the Enterprise exceeded total liabilities by \$1,385,856.
- Net position increased by \$36,167 or 2.7% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$638,201 or 15.8% to \$4,684,652.
- Operating revenues decreased by \$4,946 or 1.3% to \$363,936.
- Operating expenses increased by \$4,192 or 1.6% to \$261,350.

#### ***Financial Highlights for Fiscal Year 2022***

- Total assets of the Enterprise exceeded total liabilities by \$1,447,677.
- Net position increased by \$60,119 or 4.6% during the year.
- Capital assets, net of accumulated depreciation and amortization, increased by \$439,601 or 12.2% to \$4,046,451.
- Operating revenues increased by \$41,217 or 12.6% to \$368,882.
- Operating expenses decreased by \$35,015 or 12.0% to \$257,158.

## SAN FRANCISCO WASTEWATER ENTERPRISE

### Management's Discussion and Analysis (Unaudited) June 30, 2023 and 2022 (Dollars in thousands, unless otherwise stated)

#### **Financial Position**

The following table summarizes the Enterprise's changes in net position.

**Table 1**  
**Comparative Condensed Net Position**  
**June 30, 2023, 2022, and 2021**

	2023	Restated 2022*	2021	2023-2022 Change	2022-2021 Change
Total assets:					
Current and other assets	\$ 576,140	629,325	360,711	(53,185)	268,614
Capital assets, net of accumulated depreciation and amortization	4,684,652	4,046,451	3,606,850	638,201	439,601
Total assets	<u>5,260,792</u>	<u>4,675,776</u>	<u>3,967,561</u>	<u>585,016</u>	<u>708,215</u>
Deferred outflows of resources:					
Unamortized loss on refunding of debt	8	33	91	(25)	(58)
Pensions	32,592	25,369	30,219	7,223	(4,850)
Other post-employment benefits	11,493	12,898	15,109	(1,405)	(2,211)
Total deferred outflows of resources	<u>44,093</u>	<u>38,300</u>	<u>45,419</u>	<u>5,793</u>	<u>(7,119)</u>
Liabilities:					
Current liabilities:					
Revenue bonds	28,070	34,345	22,880	(6,275)	11,465
Certificates of participation	864	830	785	34	45
Commercial paper	—	379,157	638,518	(379,157)	(259,361)
State revolving fund loans	2,526	2,481	2,483	45	(2)
Other liabilities	200,992	165,662	149,357	35,330	16,305
Subtotal current liabilities	<u>232,452</u>	<u>582,475</u>	<u>814,023</u>	<u>(350,023)</u>	<u>(231,548)</u>
Long-term liabilities:					
Arbitrage rebate payable	188	—	—	188	—
Revenue bonds	2,708,840	1,896,908	1,567,042	811,932	329,866
Revenue notes	349,556	350,356	—	(800)	350,356
Certificates of participation	23,594	24,458	25,302	(864)	(844)
State revolving fund loans	316,163	300,178	106,076	15,985	194,102
Water Infrastructure Finance and Innovation Act (WIFIA) loans	122,357	—	—	122,357	—
Other liabilities	121,786	73,724	188,576	48,062	(114,852)
Subtotal long-term liabilities	<u>3,642,484</u>	<u>2,645,624</u>	<u>1,886,996</u>	<u>996,860</u>	<u>758,628</u>
Total liabilities:					
Arbitrage rebate payable	188	—	—	188	—
Revenue bonds	2,736,910	1,931,253	1,589,922	805,657	341,331
Revenue notes	349,556	350,356	—	(800)	350,356
Certificates of participation	24,458	25,288	26,087	(830)	(799)
Commercial paper	—	379,157	638,518	(379,157)	(259,361)
State revolving fund loans	318,689	302,659	108,559	16,030	194,100
Water Infrastructure Finance and Innovation Act (WIFIA) loans	122,357	—	—	122,357	—
Other liabilities	322,778	239,386	337,933	83,392	(98,547)
Total liabilities	<u>3,874,936</u>	<u>3,228,099</u>	<u>2,701,019</u>	<u>646,837</u>	<u>527,080</u>
Deferred inflows of resources:					
Unamortized gain on refunding of debt	11,353	—	—	11,353	—
Leases	1,453	—	—	1,453	—
Related to pensions	10,023	114,670	2,148	(104,647)	112,522
Other post-employment benefits	8,286	8,640	7,265	(354)	1,375
Total deferred inflows of resources	<u>31,115</u>	<u>123,310</u>	<u>9,413</u>	<u>(92,195)</u>	<u>113,897</u>
Net position:					
Net investment in capital assets	1,235,215	1,092,710	1,253,789	142,505	(161,079)
Restricted for debt service	3,510	5,391	2,992	(1,881)	2,399
Restricted for capital projects	—	114,657	—	(114,657)	114,657
Restricted for other purposes	—	48,770	—	(48,770)	48,770
Unrestricted	160,109	101,139	45,767	58,970	55,372
Total net position	<u>\$ 1,398,834</u>	<u>1,362,667</u>	<u>1,302,548</u>	<u>36,167</u>	<u>60,119</u>

\*Restated due to the implementation of GASB 96 - *Subscription-Based Information Technology Arrangements (SBITAs)*

#### **Net Position, Fiscal Year 2023**

For the year ended June 30, 2023, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,398,834. The Enterprise's total net position increased by \$36,167 or 2.7% as a result of increases of \$142,505 in net investment in capital assets and \$58,970 in

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unrestricted net position offset by decreases of \$114,657 in restricted for capital projects, \$48,770 in restricted for other purposes, and \$1,881 in restricted for debt service (see Table 1).

During the fiscal year 2023, current and other assets decreased by \$53,185 or 8.5%. The decrease was mainly due to \$188,853 in receivables from the State Water Resources Control Board (SWRCB) attributed to \$207,364 cash receipts from reimbursement requests relating to the Southeast Water Pollution Control Plant (SEP) Biosolids Digester Project, the Southeast Water Pollution Control Plant New Headworks (Grit) Replacement Project, and the Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project, offset by \$18,511 aggregate new reimbursement requests for the SEP New Headworks (Grit) Replacement and OSP Digester Gas Utilization Upgrade projects. Other decreases included \$48,770 in restricted net pension asset based on actuarial report, \$2,325 in lease assets due to amortization, \$1,014 due from the Treasure Island Development Authority (TIDA) for capacity fees, \$535 in subscription asset due to implementation of GASB 96 *Subscriptions-Based Information Technology Arrangements (SBITAs)*, \$241 in capacity charges net of allowance for doubtful accounts as more collection than billings in current year, \$228 in receivables for charges for services due to \$5,787 increase in allowance for doubtful accounts attributed to increased sewer charges receivable aged over 120 days old offset by \$5,559 increase in charges for services due to higher billings, \$96 decrease in interfund receivable due to \$105 collection of prior year balance from the Academy of Sciences, offset by \$9 receivable from the Department of Public Works (DPW) for the Mission Bay South Project, \$28 decrease in Federal interest subsidy receivable, \$25 decrease in State grant receivable due to receipt of reimbursement for the Baker Beach project, and \$7 decrease in custom work receivable. These decreases in current and other assets were offset by increases of \$184,889 in restricted and unrestricted cash and investments largely from the issuance proceeds of 2023 Series ABC revenue bonds, \$1,682 in interest receivable due to higher interest earnings, \$1,457 in lease receivable due to additional GASB 87 leases, \$495 increase in prepaid charges due to \$1,004 prepaid expenses in the current year such as property rental, software license, and membership fees offset by \$471 prior year prepaid expenses recognized in current year and \$38 lease prepayments amortizations for the Civic Center Garage and the Mariposa Pump Station & Force, \$382 in inventory as there were more purchases than issuances during the year, \$27 in property rent receivable, and \$5 in other receivable.

Capital assets, net of accumulated depreciation and amortization, increased by \$638,201 or 15.8% reflecting an increase in construction and capital improvement activities. The largest portion of the Enterprise's net position of \$1,235,215 or 88.3%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources increased by \$5,793 mainly due to \$7,223 increase in pensions based on actuarial report offset by \$1,405 decrease in other post-employment benefits based on actuarial report, and \$25 amortization of the 2013 Series A bonds loss on refunding.

Total liabilities increased by \$646,837 or 20.0%. As of June 30, 2023, total outstanding balance of \$3,551,970 for revenue bonds, revenue notes, certificates of participation (COP), State Revolving Fund (SRF) loans, and Water Infrastructure Finance and Innovation Act (WIFIA) loans represented 91.7% of total liabilities, an increase of \$563,257 or 18.8%. The increase was mainly due to issuance of 2023 Series ABC and 2022 Series B revenue bonds with an aggregate par value of \$974,380 and \$137,080, an aggregate premiums of \$161,622 and \$16,852 from the 2023 Series ABC and 2022 Series B, respectively, to refund principal amount of and interest on commercial paper and portion of certain outstanding revenue bonds and to finance certain capital projects, \$177,564 from issuance of commercial paper, \$122,357 new WIFIA loan to fund for the Biosolids Digester Facilities Project, and \$18,511 additional SRF loans to fund for the SEP New Headworks (Grit) Replacement and OSP Digester Gas Utilization Upgrade projects. These increases were offset by \$556,721 refunding of commercial paper, \$419,505 refunded principal for

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revenue bonds series 2013AB and 2018C, debt principal repayments of \$34,345 in bonds, \$2,481 in SRF, and \$826 in COP, \$15,494 refunded premium for revenue bonds series 2013AB, and \$15,737 in premium amortization. Other liabilities of \$322,966, including arbitrage rebate payable, such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements, increased by \$83,580 or 34.9% due to increases of \$49,549 in net pension liability based on actuarial report, \$33,539 in restricted and unrestricted payable to vendors and contractors due to increased vouchers, \$6,450 in bond, loan, lease, and subscription interest payable mainly due to higher outstanding debt principal resulting from new debts relating to the issuance of revenue bonds 2023 Series ABC and 2022 Series B bonds, and new WIFIA loan, \$2,442 in employee related benefits including vacation, workers' compensation, and accrued payroll mainly due to actuarial estimates, and 5.25% increase cost of living adjustment (COLA), \$2,102 in payable to Municipal Transportation Agency (MTA), and \$320 in unearned revenues mainly due to \$402 in customer credit balances due to overpayments offset by decreases of \$80 in deposits from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project and \$2 in liens payable, and \$188 in arbitrage rebate payable. The increase in other liabilities was offset by decreases of \$7,695 in damage claims liability due to actuarial estimates, \$2,341 in lease liability due to lease payment, \$515 in subscription liability due to implementation of GASB 96 *Subscription-Based Information Technology Arrangements (SBITAs)*, \$260 in pollution remediation obligation, \$111 in payable to Hetch Hetchy Power related to the 525 Golden Gate Living Machine System, and \$88 in other post-employment benefits obligations based on actuarial report. Deferred inflows of resources decreased by \$92,195 mainly due to decreases in pensions and other post-employment benefits by \$104,647 and \$354, respectively, based on actuarial report, offset by increases in unamortized gain on refunding of debt and leases by \$11,353 and \$1,453, respectively.

### ***Net Position, Fiscal Year 2022***

For the year ended June 30, 2022, the Enterprise's assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,362,667. The Enterprise's total net position increased by \$60,119 or 4.6% as a result of increases of \$114,657 in restricted for capital projects, \$55,372 in unrestricted net position, \$48,770 in restricted for other purposes, and \$2,399 in restricted for debt service offset by a decrease of \$161,079 in net investment in capital assets (see Table 1).

During the fiscal year 2022, current and other assets increased by \$268,614 or 74.5%. The increase was mainly due to \$182,040 in receivables from the State Water Resources Control Board (SWRCB) attributed to \$202,795 aggregate new SRF reimbursement requests consisting of \$132,000 for the Southeast Water Pollution Control Plant (SEP) Biosolids Digester Project, \$64,678 for the SEP New Headworks (Grit) Replacement Project, and \$6,117 for the Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project, offset by \$20,755 cash receipts from prior year receivables relating to the OSP Digester Gas Utilization Upgrade Project, an increase of \$48,770 in restricted net pension asset based on actuarial report and \$32,650 increase in restricted and unrestricted cash and investments mainly from the issuance proceeds of tax-exempt 2021 Series AB (Green) revenue notes and 2021 Series AB revenue bonds. Other increases included \$7,241 in receivables for charges for services mainly due to increased billings of \$6,143, \$1,098 decrease in allowance for doubtful accounts due to utility arrearage relief payment received from the State as Federal pass-through from the California Water and Wastewater Arrearages Payment Program (CWWAPP), \$1,014 due from the Treasure Island Development Authority (TIDA) for capacity fees, \$957 in subscription asset due to implementation of GASB 96 SBITAs, \$301 in inventory as there were more purchases than issuances during the year, \$190 in capacity charges net of allowance for doubtful accounts, \$118 in interest receivable, and \$25 in State grant receivable for the Baker Beach reimbursement. These increases in current and other assets were offset by decreases of \$2,325 in lease assets net of

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accumulated amortization due to amortization, \$1,763 in Federal interest subsidy receivable (attributed to \$5,817 subsidy received offset by \$4,054 subsidy accrual during the year), \$324 decrease in rent receivable mainly due to \$304 collection of prior year balance from the San Francisco Community College, \$219 decrease in prepaid charges mainly due to \$652 prior year prepaid expenses recognized in current year and \$39 lease prepayments amortizations for the Civic Center Garage and the Mariposa Pump Station & Force, offset by \$472 prepaid expenses in the current year, \$56 decrease in interfund receivables and due from component unit consisting of \$118 from the Department of Public Works (DPW) for the Mission Bay South and Hunters View Development Projects, \$24 from the San Francisco Port Commission (Port), and \$20 from component unit for the TIDA Replacement & Repair Project, offset by an increase of \$106 in receivable from the Academy of Sciences and Office of Community Investment Infrastructure, and \$5 decrease in custom work receivable.

Capital assets, net of accumulated depreciation and amortization, increased by \$439,601 or 12.2% reflecting an increase in construction and capital improvement activities. The largest portion of the Enterprise's net position of \$1,092,710 or 80.2%, represents net investment in capital assets (see Capital Assets section of the MDA for more information). Deferred outflows of resources decreased by \$7,119 mainly due to decreases in pensions and other post-employment benefits by \$4,850 and \$2,211, respectively based on actuarial report and \$58 amortization of the 2013 Series A bonds loss on refunding.

Total liabilities increased by \$527,080 or 19.5%. As of June 30, 2022, total debt outstanding balance of \$2,988,713 for revenue bonds and notes payable, certificates of participation (COP), commercial paper, and SRF loans, represented 92.6% of total liabilities, an increase of \$625,627 or 26.5%. The increase was mainly due to \$373,700 issuance of 2021 Series AB revenue bonds, consisting of \$297,880 par amounts and \$75,820 premiums, \$350,823 issuance of 2021 Series AB revenue notes consisting of \$347,465 par amounts and \$3,358 premiums, \$200,702 new SRF loans to finance the SEP Biosolids Digester Facilities, the SEP New Headworks Replacement, and the OSP Digester Gas Utilization Upgrade projects, and \$80,639 issuance of commercial paper. These increases were offset by \$340,000 retirement of commercial paper, \$26,148 in debt principal repayments, \$9,970 in premium amortization during the year, and \$4,000 loan principal forgiveness for the SRF OSP Digester Gas Utilization Upgrade Project along with \$119 unreimbursed loan claim. Other liabilities of \$239,386 such as payables to vendors, contractors, and other government agencies for goods and services under contractual agreements and employees, decreased by \$98,547 or 29.2%, mainly due to decreases of \$103,746 in net pension liability based on actuarial report, \$4,668 in general liability based on actuarial estimates, \$2,314 in lease liability due to implementation of GASB 87 Leases, \$1,588 in other post-employment benefits obligations based on actuarial report, and \$110 in payable to Hetch Hetchy Power related to the 525 Golden Gate Living Machine System. These decreases were offset by increases of \$7,229 in restricted and unrestricted payable due to increased vouchers, \$4,192 in bond, loan, lease, and subscription interest payable due to higher outstanding debt principal, \$944 in subscription liability due to implementation of GASB 96 SBITAs, \$792 in unearned revenues mainly due to \$892 in customer credit balances mainly due to overpayments offset by decreases of \$81 in deposits from Pacific Gas & Electric due to expenses incurred for the Cross Bore Project and \$19 in liens payable, \$462 in employee related benefits including vacation, workers' compensation, accrued payroll mainly due to actuarial estimates, and 4% increase of cost of living adjustment (COLA), and \$260 in pollution remediation obligation. Deferred inflows of resources increased by \$113,897 due to increases in pensions and other post-employment benefits by \$112,522 and \$1,375, respectively based on actuarial report.

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### Results of Operations

The following table summarizes the Enterprise's revenues, expenses, and changes in net position.

**Table 2**  
**Comparative Condensed Revenues, Expenses, and Changes in Net Position**  
**Years ended June 30, 2023, 2022, 2021**

	2023	Restated 2022*	2021	2023-2022 Change	2022-2021 Change
Revenues:					
Charges for services	\$ 354,491	356,041	318,236	(1,550)	37,805
Rents and concessions	822	705	642	117	63
Other operating revenues	8,623	12,136	8,787	(3,513)	3,349
Interest and investment income/(loss)	2,556	(7,087)	(1,187)	9,643	(5,900)
Other non-operating revenues	9,910	25,454	4,911	(15,544)	20,543
Total revenues	<u>376,402</u>	<u>387,249</u>	<u>331,389</u>	<u>(10,847)</u>	<u>55,860</u>
Expenses:					
Operating expenses	261,350	257,158	292,173	4,192	(35,015)
Interest expenses	95,520	77,751	34,944	17,769	42,807
Amortization of premium, refunding loss, and issuance cost	(14,387)	(8,422)	(8,497)	(5,965)	75
Non-operating expenses	535	482	409	53	73
Total expenses	<u>343,018</u>	<u>326,969</u>	<u>319,029</u>	<u>16,049</u>	<u>7,940</u>
Change in net position before capital contributions and transfers	<u>33,384</u>	<u>60,280</u>	<u>12,360</u>	<u>(26,896)</u>	<u>47,920</u>
Capital Contributions	2,740	-	-	2,740	-
Transfers from the City and County of San Francisco	75	-	1,440	75	(1,440)
Transfers to the City and County of San Francisco	(32)	(161)	(4,188)	129	4,027
Capital contributions and net transfers	<u>2,783</u>	<u>(161)</u>	<u>(2,748)</u>	<u>2,944</u>	<u>2,587</u>
Change in net position	<u>36,167</u>	<u>60,119</u>	<u>9,612</u>	<u>(23,952)</u>	<u>50,507</u>
Net position at beginning of year as restated	<u>1,362,667</u>	<u>1,302,548</u>	<u>1,292,936</u>	<u>60,119</u>	<u>9,612</u>
Net position at end of year	<u>\$ 1,398,834</u>	<u>1,362,667</u>	<u>1,302,548</u>	<u>36,167</u>	<u>60,119</u>

\*Restated due to the implementation of GASB 96 - *Subscription-Based Information Technology Arrangements* (SBITAs)

### Results of Operations, Fiscal Year 2023

The Enterprise's total revenues were \$376,402, a decrease of \$10,847 or 2.8% from prior year (see Table 2). Charges for services decreased by \$1,550 or 0.4% mainly due to an increase in allowance for doubtful accounts by \$6,885 as there were more sewer charge receivables aging over 120 days, offset by a 5% drought surcharge and a sanitary flow increase of 47,124 ccf or 0.2% from residential and non-residential customers. Other non-operating revenues decreased by \$15,544 or 61.1% mainly due to Federal and State grants received in prior year consisting of \$9,302 for the customer utility arrearage relief, \$8,000 SRF loan principal forgiveness of the SEP Biosolids Digester Facilities and the OSP Digester Gas Handling Utilization Upgrade projects, and \$3,409 Baker Beach grant, a decrease of \$91 in Federal interest subsidy, and \$44 refunded federal grant relating to customer utility arrearage relief program, offset by \$5,000 Monsanto settlement related to water pollution, \$196 Baker Beach grant in current year, and increases of \$92 in gain from sale of assets and \$14 in miscellaneous revenue. Other operating revenues decreased by \$3,513 or 28.9% mainly due to decreases of \$3,203 in capacity fees resulting from \$3,985 decrease in permits issued offset by \$782 decrease in allowance for doubtful accounts, and \$310 in other operating revenues to other City departments such as the Recreation & Park, the San Francisco Municipal Transportation Agency, and the Zuckerberg San Francisco General Hospital and Trauma Center. Rents and concessions increased by \$117 or 16.6% mainly due to increases in rental income of \$162 from short-term conference room rentals at Southeast Community Center beginning December 2022, \$17 from tenants with 5.3%

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consumer price index average rate increase, offset by decreases of \$59 from three terminated leases in the current year and \$3 related to leases due to GASB 87 implementation. Interest and investment income increased by \$9,643 or 136.1% mainly due to \$4,436 decrease in unrealized loss in City Treasury pooled investments attributed to improved market value of investments and higher interest rates, an increase of \$3,697 in interest earned from pooled cash due to increase in cash balances and higher annualized interest rate, \$1,500 increase in interest earned from fiscal agent account due to increase in fiscal agent cash balances and rising interest rates, and \$10 interest earned from lease receivable.

Total expenses were \$343,018, an increase of \$16,049 or 4.9% due to increases of \$17,769 in interest expenses mainly due to higher bond principal, \$4,192 in operating expenses, and \$53 increase in City grants program expenses due to increased expenditures for community based organization services such as for the Youth Employment & Environment Project and the UC Wastewater Treatment Project, offset by an increase of \$5,965 in amortization of premium, refunding loss, and issuance cost. The increase of \$4,192 in operating expenses were mainly due to increases of \$26,270 in personnel services due to \$21,594 increase in expenses related to GASB 68 pension adjustment and 5.25% increase in cost of living adjustment (COLA), \$2,462 in materials and supplies due to water sewage treatment supplies for Bayside Operations, \$2,205 in contractual services mainly due to higher building and equipment maintenance for sludge removal, vehicle rental, and power utility, \$1,354 in services provided by other departments mainly for electricity from Hetch Hetchy Power, water from Water Enterprise, and for toxics waste & hazard materials services and cleanup charges related to the UC Wastewater Treatment Project, offset by decreases of \$28,033 in general and administrative and other operating expenses mainly due to increased capitalized expenditures to fixed assets and a decrease in judgements and claims offset by increased capital project expenses primarily related to SSIP Biosolids Digester Project, New Grit Removal/Influent Pump Project, and Westside Pump Station Reliability Improvement Project and \$66 in depreciation and amortization expenses.

Capital contributions of \$2,740 was for the Sunnydale HopeSF Developer Project. Net transfers of \$43 included transfer in of \$75 from the General Fund for the Wastewater Add-backs Master Project offset transfer out of \$32 to the Office of the City Administrator for the Surety Bond Program.

### ***Results of Operations, Fiscal Year 2022***

The Enterprise's total revenues were \$387,249, an increase of \$55,860 or 16.9% from prior year (see Table 2). Charges for services increased by \$37,805 or 11.9% mainly due to an average 8% adopted rate increase and a decrease in allowance for doubtful accounts by \$1,098 as there were less sewer charge receivables aging over 120 days due to utility arrearage relief payments received from the State, offset by a sanitary flow decrease of 257,472 ccf or 1.2% from residential and non-residential customers. Other non-operating revenues increased by \$20,543 mainly due to \$9,302 utility arrearage relief payment received from the State as Federal pass-through from the CWWAPP, \$8,000 SRF loan principal forgiveness component of the SEP Biosolids Digester Facilities Project and the OSP Digester Gas Handling Utilization Upgrade Project, \$3,409 Baker Beach grant, and \$4 gain from sale of assets offset by decreases of \$164 in miscellaneous revenue due to less overhead recovery, redemption penalty and stormwater control plan review fees, and \$8 in Federal interest subsidy. Other operating revenues increased by \$3,349 or 38.1% mainly due to increases of \$2,570 in capacity fees resulting from a 58.9% increase in average permit price and a 5.4% increase in permits issued attributed to new developments on Treasure Island and the City's re-opening and eliminating local restrictions on business operations, and \$779 in other operating revenues to other City departments such as the Recreation & Park, Academy of Sciences, and the San Francisco General Hospital. Rents and concessions increased by \$63 or 9.8% mainly due to increases in rental income of \$34 from the Sheriff Department, \$22 from tenants with 3.6% consumer price index average

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rate increase, and \$7 from a short-term tenant, Young Community Developers. Interest and investment income decreased by \$5,900 or 497.1% mainly due to \$5,618 increase in unrealized loss in City Treasury pooled investments attributed to the decline in market value of investments and rising interest rates and \$292 decrease in interest earned from pooled cash due to lower annualized interest rate offset by \$10 increase in interest earned from fiscal agent account due to increase in fiscal agent cash balances.

Total expenses were \$326,969, an increase of \$7,940 or 2.5% due to increases of \$42,807 in interest expenses mainly due to increased outstanding bond principal balance and the implementation of Governmental Accounting Standards Board (GASB) 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, which eliminated the capitalization of interest to capital assets beginning in fiscal year 2022, a decrease of \$75 in amortization, refunding loss, and issuance cost, and \$73 increase in City grants program expenses due to increased participation in the flood water management program for San Francisco properties offset by \$35,015 decrease in operating expenses. The decrease of \$35,015 in operating expenses was mainly due to decreases of \$26,993 in personnel services due to \$38,115 decrease in expenses related to GASB 68 pension adjustment offset by a 4% increase in cost of living adjustment (COLA) and \$17,952 in general and administrative and other operating expenses mainly due to lower capital project expenses particularly for the Biosolids/Digester Project and Southeast Community Center Project, offset by increases of \$3,762 in depreciation expense due to more capitalized assets put in service, \$2,753 in materials and supplies mainly due to water sewage treatment supplies for Bayside Operations, \$2,083 in contractual services mainly due to higher maintenance for building structures and professional and specialized services, and \$1,332 in services provided by other departments mainly for electricity from Hetch Hetchy Power, water from Water Enterprise, and for facilities management services from the General Services Agency (GSA).

Net transfers of \$161 included transfer out of \$129 in art enrichment fund to the San Francisco Art Commission for the Westside Reliability Improvement and \$32 to the Office of the City Administrator for the Surety Bond Program.

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### Capital Assets

The following table summarizes changes in the Enterprise's capital assets.

**Table 3**  
**Capital Assets, Net of Accumulated Depreciation and Amortization**  
**As of June 30, 2023, 2022, and 2021**

	2023	2022	2021	2023-2022 Change	2022-2021 Change
Facilities, improvements, machinery, and equipment	\$ 2,393,051	2,270,355	2,214,227	122,696	56,128
Intangible assets	7,333	7,107	7,407	226	(300)
Land and rights-of-way	44,572	44,572	44,572	—	—
Land Improvements	6,733	—	—	6,733	—
Construction work in progress	2,232,963	1,724,417	1,340,644	508,546	383,773
Total	\$ 4,684,652	4,046,451	3,606,850	638,201	439,601

### Capital Assets, Fiscal Year 2023

The Enterprise has capital assets of \$4,684,652, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2023 (see Table 3). This amount represents an increase of \$638,201 or 15.8% from prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. Construction work in progress increased by \$508,546 or 29.5%. Facilities, improvements, machinery, and equipment increased by \$122,696 or 5.4%. Land improvements increased by \$6,733 or 100% relating to improvements for the Southeast Community Center Project. Intangible assets increased by \$226 or 3.2% due to asset addition of \$1,212 for the Customer Billing System Project, offset by \$986 depreciation expense.

Major additions to construction work in progress during the year ended June 30, 2023 include the following:

Southeast Plant Biosolids and Digester Facilities Project	\$ 332,775
Southeast Plant New Headworks (Grit) Replacement	157,143
Westside Pump Station Reliability Improvements	14,226
Large Diameter Sewer Projects and Channel Force Main Intertie	13,125
As-Needed Spot Sewer Replacement Number 42 (WW-699)	11,231
Southeast Community Center at 1550 Evans	9,794
Southeast Plant Power Feed and Primary Switchgear Upgrades	9,711
Oceanside Plant Digester Gas Handling Utilization Upgrade	9,195
North Shore Pump Station Wet Weather Improvements	8,853
New Treasure Island Wastewater Treatment Plant Capital Improvements	8,851
Southeast Plant Facility-Wide Distributed Control System Upgrades	7,581
Wawona Area Stormwater Improvement Project	5,879
As-Needed Main Sewer Replacement Number 9 (WW-713)	5,618
Folsom Area Stormwater Improvement Project	5,403
As-Needed Spot Sewer Replacement Number 43 (WW-715)	4,959
Public Works Golden Gate Avenue and Laguna Street Project	4,612
Ocean Beach Climate Change Adaptation Project	4,585
Taraval Sewer Improvements	4,519
Lower Alemany Area Stormwater Improvement Project	4,425
16th Street Sewer Replacement (Segment 2)	4,262
Oceanside Plant Condition Assessment Improvements - Part 2	4,208
Other project additions individually below \$4,000	78,530
	<u>\$ 709,485</u>

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Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2023 include the following:

Southeast Community Center at 1550 Evans	\$ 111,510
Mariposa Pump Station & Force Main	35,852
As-Needed Spot Sewer Replacement Number 42 (WW-699)	12,531
Large Diameter Sewer Projects and Channel Force Main Intertie	9,182
Public Works 41st and 44th Avenue Infrastructure Improvements	7,042
Equipment Purchase, Repair & Replacement Project	6,076
Castro, 19th, 26th Street Water and Sewer Improvements - WD-2739	3,773
Other project additions individually below \$3,000	18,887
	<u>\$ 204,853 *</u>

\* Does not include \$1,573 equipment transfers from the Department of Public Works (DPW).

See Note 4 for additional information about capital assets.

### ***Sewer System Improvement Program***

The Sewer System Improvement Program (SSIP) is the SFPUC's wastewater capital improvement program which includes multiple projects to improve the existing wastewater system. The implementation of the SSIP projects were originally phased over 20 years to maintain ratepayer affordability and minimize impacts to communities throughout the City. On March 22, 2016, the refined program scope and budget for \$7.0 billion was endorsed by the Commission along with the baseline for scope, schedule, and budget for Phase 1 projects totaling \$2.9 billion. The revised program is referred to as the "2016 SSIP Baseline".

As of June 30, 2023, 43 projects or 61.4% totaling \$457 million were completed, 7 projects in pre-construction phase, 11 projects in construction phase, and 9 projects in close-out phase. The SEP Seismic Reliability and Condition Assessment Improvements Project was completed on March 31, 2023 with reported project expenditures of \$33.6 million. This project represents immediate improvements to the existing facilities at Southeast Plant (SEP) identified as part of the condition assessment effort that are not specifically included as part of another near-term SSIP Phase 1 project. This project includes items for rehabilitation such as concrete spalling repair and seismic retrofit of priority process buildings. The Westside Pump Station Reliability Improvements is on-going construction. The project is reported at 86.2% complete and forecasted final completion is on June 27, 2024. Program expenditures as of June 30, 2023 totaled \$2,469.3 million. Additional details regarding the SSIP are available at <https://sfpuc.org/construction-contracts/sewer-system-improvement-program>.

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### *Capital Assets, Fiscal Year 2022*

The Enterprise has capital assets of \$4,046,451, net of accumulated depreciation and amortization, invested in a broad range of utility capital assets as of June 30, 2022 (see Table 3). This amount represents an increase of \$439,601 or 12.2% from prior fiscal year. The investment in capital assets includes land, buildings, improvements, wastewater treatment plants, sewer pipes and mains, underground transport and storage boxes, pump stations, machinery, and equipment. Construction work in progress increased by \$383,773 or 28.6%. Facilities, improvements, machinery, and equipment increased by \$56,128 or 2.5%. Intangible assets decreased by \$300 or 4.1% due to \$872 depreciation expense and \$780 transfers out to non-capitalized repair and other expenses, offset by asset additions of \$1,352 for the Customer Billing System Project.

Major additions to construction work in progress during the year ended June 30, 2022 include the following:

Southeast Plant Biosolids and Digester Facilities Project	\$	133,997
Southeast Plant New Headworks Grit Replacement		131,458
Southeast Community Center		30,582
Southeast Plant Power Feed and Primary Switchgear Upgrades		26,911
Wawona Area Stormwater Improvement Project		15,644
Westside Pump Station Reliability Improvements		13,895
North Shore Pump Station Wet Weather Improvements		13,366
Large Sewer Condition Improvements		11,656
As-Needed Spot Sewer Replacement Number 41 (WW-698)		9,514
Public Works 19th Avenue Infrastructure Improvements		8,782
Oceanside Plant Digester Gas Handling Utilization Upgrade		8,175
As-Needed Spot Sewer Replacement Number 40 (WW-693)		5,007
Various Locations Sewer Replacement Number 8 (WW-679)		4,927
Folsom Area Stormwater Improvement Project		4,728
Public Works 41st and 44th Avenues Infrastructure Improvements		4,676
Mariposa Dry-Weather Pump Station & Force Main Improvements		4,527
Taraval Sewer Improvements		4,401
Ocean Beach Climate Change Adaptation Project		4,301
Southeast Plant Facility-Wide Distributed Control System Upgrades		4,275
Other project additions individually below \$4,000		73,857
	\$	<u>514,679</u>

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Major depreciable facilities, improvements, intangible assets, machinery, and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2022 include the following:

Southeast Plant Seismic Reliability and Condition Assessment Improvements	\$	23,679
Force Main Rehabilitation at Embarcadero and Jackson Streets		11,480
As-Needed Spot Sewer Replacement Number 41 (WW-698)		9,571
Combined Sewer Discharge Backflow Prevention and Monitoring		9,029
Cargo Way Sewer Box Odor Reduction		8,615
Mission Street, 16th to Cesar Chavez Streets, Brick Sewer Rehabilitation		7,783
Public Works Various Locations Number 40 Infrastructure Improvements		6,575
Various Locations Sewer Replacement Number 8 (WW-679)		5,553
Various Locations Sewer Replacement Number 6 (WW-677)		5,347
As-Needed Spot Sewer Replacement Number 40 (WW-693)		5,006
Taraval Sewer Improvements		4,401
Public Works Sunset Parkside Pavement Renovations		4,360
Oceanside Plant Egg Shaped Digester Interior Lining Rehabilitation (WW-706)		3,499
Other project additions individually below \$3,000		26,181
	\$	<u>131,079</u>

See Note 4 for additional information about capital assets.

### ***Sewer System Improvement Program***

The Sewer System Improvement Program (SSIP) is the SFPUC's wastewater capital improvement program which includes multiple projects to improve the existing wastewater system. The implementation of the SSIP projects and their associated expenditures will be phased over 20 years. In March 2016, the refined program scope and budget increased from \$6.9 billion to \$7.0 billion was endorsed by the Commission, referred to as the "2016 SSIP Baseline". In December 2020, the Commission approved the 2020 SSIP Baseline, increasing the budget for SSIP Phase 1 program to \$3,655 million from \$2,910.4 million in 2016. The SFPUC is transitioning away from the original intent of three distinct SSIP phases and instead implementing capital improvement projects as part of a rolling Ten-Year capital plan.

As of June 30, 2022, 38 projects or 54.3% totaling \$373 million were completed, 7 projects in pre-construction phase, 12 projects in construction phase, and 13 projects in close-out phase. The SEP 521/522 and Disinfection Upgrades Project was completed on June 30, 2021, with reported project expenditures of \$44.8 million. The major components of the project are modifications to the existing SEP 521 building to include a new Effluent Sampling Station, new DCS Control Station, and upgrade to the existing bathroom for ADA compliance, new building (SEP 522) to house electrical and hydraulic controls, among others. The Southeast Water Pollution Control Plant New Headworks Facility is on-going construction. The project is reported at 47.0% completion and forecasted final completion is on February 29, 2024. Program expenditures as of June 30, 2022, totaled \$1,943.8 million. Additional details regarding the SSIP are available at <https://sfpuc.org/construction-contracts/sewer-system-improvement-program>.

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### Debt Administration

As of June 30, 2023, 2022, and 2021, the Enterprise's debt from revenue bonds, revenue notes, commercial paper, certificates of participation, SRF, and WIFIA loans were \$3,551,970, \$2,988,713, and \$2,363,086, respectively, as shown in Table 4. More detailed information about the Enterprise's debt activity is presented in Notes 6, 7, and 8 to the financial statements.

**Table 4**  
**Outstanding Debt, Net of Unamortized Costs**  
**As of June 30, 2023, 2022, and 2021**

	2023	2022	2021	2023-2022 Change	2022-2021 Change
Revenue bonds	\$ 2,736,910	1,931,253	1,589,922	805,657	341,331
Revenue notes	349,556	350,356	—	(800)	350,356
Commercial paper	—	379,157	638,518	(379,157)	(259,361)
Certificates of participation	24,458	25,288	26,087	(830)	(799)
State revolving fund loans	318,689	302,659	108,559	16,030	194,100
Water Infrastructure Finance and Innovation Act (WIFIA) loans	122,357	—	—	122,357	—
Total	<u>\$ 3,551,970</u>	<u>2,988,713</u>	<u>2,363,086</u>	<u>563,257</u>	<u>625,627</u>

The increase of \$563,257 was mainly due to \$1,136,002 Revenue Bonds 2023 Series A (SSIP/Green), Series B (Non-SSIP), and Series C (Refunding – SSIP/Green) net of premium, \$153,932 Revenue Bonds 2022 Series B (Refunding) net of premium, \$177,564 issuance of commercial paper, \$122,357 new WIFIA loan for Biosolids Digester Facilities Project, and \$18,511 aggregate new SRF loans for the SEP New Headworks Replacement and OSP Digester Gas Utilization Upgrade projects, offset by \$556,721 refunding of commercial paper, \$419,505 aggregate refunded principal of revenue bond Series 2013AB and 2018C, \$37,652 repayment of outstanding debt, \$15,737 of premium amortizations, and \$15,494 refunded premium of revenue bond Series 2013AB.

**Credit Ratings and Bond Insurance** – As of June 30, 2023 and 2022, the Enterprise carried underlying ratings of “Aa2” and “AA” from Moody’s and Standard & Poor’s (S&P), respectively.

**Debt Service Coverage** – Pursuant to the Indenture for the Wastewater bonds, the Enterprise covenants to collect sufficient net revenues each fiscal year, together with any Enterprise funds (except Bond Reserve Funds) that are available for payment of debt service and are not budgeted to be expended, at least equal to 1.25 times annual debt service for said fiscal year. During fiscal years 2023 and 2022, the Enterprise's net revenues, together with fund balances available to pay debt service and not budgeted to be expended, were sufficient to meet the rate covenant requirements under the Indenture (see Note 8).

**Debt Authorization** – Pursuant to the Charter Section 8B.124, the Enterprise can incur indebtedness upon two-thirds vote of the Board of Supervisors. As of June 30, 2023, the Enterprise had \$4,709,491 in combined debt issuance authorization from the Board of Supervisors under Proposition E, with \$4,242,615 issued against this authorization. The Enterprise has a \$750,000 authorized commercial paper program, with \$0 in tax-exempt commercial paper outstanding as of June 30, 2023 and \$379,157 in tax-exempt commercial paper outstanding as of June 30, 2022.

**Cost of Debt Capital** – The coupon interest rates on the Enterprise's outstanding revenue bonds and revenue notes ranged from 1.0% to 5.8%, with a blended true interest cost of 3.0%, after factoring in federal interest subsidy receipts on Build America Bonds at June 30, 2023. The 2009 Series C certificates of participation carried coupon interest rates from 2.0% to 5.0% and 2009 Series D certificates of

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participation carried coupon interest rates from 6.4% to 6.5% in fiscal years 2023 and 2022, respectively. The interest rates on short-term debt ranged from 0.9% to 3.1% during fiscal year 2023 and from 0.1% to 1.4% during fiscal year 2022. The State revolving fund loans (CWSRF loans) carried original interest rates ranging from 0.8% to 1.8% for a weighted average of 1.3% during fiscal year 2023. The State has elected to apply administrative service and grant charges to certain agreement repayment schedules in lieu of receiving interest payments; these charges will not affect the installment payments or increase the repayment amounts. The WIFIA loan carried interest rate of 1.5% during fiscal year 2023 and capitalized interest added to the principal balance of the WIFIA loan on each Semi-Annual Payment Date occurring during the Capitalized Interest Period.

### Rates and Charges

#### *Rate Setting Process*

Proposition E, as approved by the voters in November 2002, amended the City Charter by adding the new Article VIII B, entitled "Public Utilities," which established the Commission's authority to issue new revenue bonds and set wastewater rates. The Commission is required to:

- Establish rates, fees, and charges based on cost of service;
- Retain an independent rate consultant to conduct cost of service studies at least every five years;
- Consider establishing new connection fees;
- Consider conservation incentives and lifeline rates;
- Adopt a rolling five-year forecast annually; and
- Establish a Rate Fairness Board.

Pursuant to the City and County of San Francisco Charter section 8B.125, an independent rate study is performed at least once every five years. In compliance with City Charter section 8B.125, a water and wastewater rate study were completed in May 2023. The Commission subsequently adopted three years of wastewater rate increases from July 1, 2023 through June 30, 2026. Other miscellaneous fees for service and charges were last approved in 2018, and generally increase annually by the by the Consumer Price Index from the Controller's Office of the City and County of San Francisco, or the 20-City Average Construction Index (CCI) published by Engineering News-Record (ENR) Magazine. All current SFPUC Rates Schedules and Fees are available at <https://sfpuc.org/accounts-services/water-power-sewer-rates/rates>.

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The following table is the Enterprise's ten-year approved average rate adjustments:

<b>Ten-year Average Rate Adjustments</b>	
<b>Effective Date</b>	<b>Adjustment</b>
July 1, 2016	7.0 <sup>1</sup>
July 1, 2017	11.0 <sup>1</sup>
July 1, 2018	7.0 <sup>2</sup>
July 1, 2019	7.0 <sup>2</sup>
July 1, 2020	8.0 <sup>2</sup>
July 1, 2021	8.0 <sup>2</sup>
July 1, 2022	— <sup>3</sup>
July 1, 2023	9.0 <sup>4</sup>
July 1, 2024	9.0 <sup>4</sup>
July 1, 2025	9.0 <sup>4</sup>

<sup>1</sup> Four-year rate increases adopted and effective July 1, 2014.

<sup>2</sup> Four-year rate increases adopted and effective July 1, 2018.

<sup>3</sup> No retail rate adjustment.

<sup>4</sup> Three-year rate increases adopted and effective July 1, 2023.

### Request for Information

This report is designed to provide our citizens, customers, investors, and creditors with an overview of the Enterprise's finances and to demonstrate the Enterprise's accountability for the money it receives. Questions regarding any of the information provided in this report or requests for additional financial information should be addressed to San Francisco Public Utilities Commission, Chief Financial Officer, Financial Services, 525 Golden Gate Avenue, 13th Floor, San Francisco, CA 94102.

This report is available at <https://sfpuc.org/about-us/reports/audited-financial-statements-reports>.

**SAN FRANCISCO WASTEWATER ENTERPRISE**  
**Statements of Net Position**  
**June 30, 2023 and 2022**  
(In thousands)

	<b>2023</b>	<b>Restated 2022*</b>
<b>Assets</b>		
Current assets:		
Cash and investments with City Treasury	\$ 355,770	285,029
Cash and investments outside City Treasury	173	397
Receivables:		
Charges for services (net of allowance for doubtful accounts of \$10,060 as of June 30, 2023 and \$4,273 as of June 30, 2022)	40,093	40,321
Due from other City departments	128	225
Due from other governments	—	25
Interest	2,178	314
Lease receivable, current portion	212	—
Restricted due from other governments	13,942	202,795
Restricted interest, other receivable, and prepaid (net of allowance for doubtful accounts of \$99 as of June 30, 2023 and \$385 as of June 30, 2022)	1,191	2,301
Total current receivables	57,744	245,981
Prepaid charges, advances, and other receivables, current portion	570	346
Inventory	3,340	2,958
Restricted cash and investments outside City Treasury	48,717	15,587
Total current assets	466,314	550,298
Non-current assets:		
Restricted net pension asset	—	48,770
Restricted cash and investments with City Treasury	38,574	—
Restricted cash and investments outside City Treasury	66,439	23,771
Restricted interest, other receivable, and prepaid (net of allowance for doubtful accounts of \$29 as of June 30, 2023 and \$29 as of June 30, 2022)	417	434
Charges for services, less current portion (net of allowance for doubtful accounts of \$566 as of June 30, 2023 and \$567 as of June 30, 2022)	342	342
Lease receivable, less current portion	1,245	—
Prepaid charges, advances, and other receivables, less current portion	1,115	1,156
Right-to-use lease assets, net of accumulated amortization	1,272	3,597
Right-to-use subscription assets, net of accumulated amortization	422	957
Capital assets, not being depreciated and amortized	2,280,581	1,772,035
Capital assets, net of accumulated depreciation and amortization	2,404,071	2,274,416
Total non-current assets	4,794,478	4,125,478
Total assets	5,260,792	4,675,776
Deferred outflows of resources		
Unamortized loss on refunding of debt	8	33
Pensions	32,592	25,369
Other post-employment benefits	11,493	12,898
Total deferred outflows of resources	\$ 44,093	38,300

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**Statements of Net Position**  
**June 30, 2023 and 2022**  
(In thousands)

	<u>2023</u>	<u>Restated 2022*</u>
Liabilities		
Current liabilities:		
Accounts payable	\$ 23,207	22,588
Accrued payroll	7,631	6,402
Accrued vacation and sick leave, current portion	6,040	5,479
Accrued workers' compensation, current portion	1,509	1,393
Due to other City departments, current portion	2,215	111
Damage claims liability, current portion	1,650	9,323
Unearned revenues, refunds, and other	6,457	6,137
Bond, loan, lease, and subscription interest payable	27,918	21,468
Revenue bonds, current portion	28,070	34,345
Certificates of participation, current portion	864	830
Commercial paper	—	379,157
State revolving fund loans payable, current portion	2,526	2,481
Lease liability, current portion	1,297	2,341
Subscription liability, current portion	243	515
Current liabilities payable from restricted assets	122,825	89,905
Total current liabilities	<u>232,452</u>	<u>582,475</u>
Long-term liabilities:		
Arbitrage rebate payable	188	—
Other post-employment benefits obligations	49,035	49,123
Net pension liability	49,549	—
Accrued vacation and sick leave, less current portion	5,622	5,422
Accrued workers' compensation, less current portion	6,489	6,153
Due to other City departments, less current portion	405	518
Damage claims liability, less current portion	2,700	2,722
Revenue bonds, less current portion	2,708,840	1,896,908
Revenue notes	349,556	350,356
Certificates of participation, less current portion	23,594	24,458
State revolving fund loans payable, less current portion	316,163	300,178
Water Infrastructure Finance and Innovation Act (WIFIA) loans	122,357	—
Lease liability, less current portion	—	1,297
Subscription liability, less current portion	186	429
Pollution remediation obligation	7,800	8,060
Total long-term liabilities	<u>3,642,484</u>	<u>2,645,624</u>
Total liabilities	<u>3,874,936</u>	<u>3,228,099</u>
Deferred inflows of resources		
Unamortized gain on refunding of debt	11,353	—
Leases	1,453	—
Related to pensions	10,023	114,670
Other post-employment benefits	8,286	8,640
Total deferred inflows of resources	<u>31,115</u>	<u>123,310</u>
Net position		
Net investment in capital assets	1,235,215	1,092,710
Restricted for debt service	3,510	5,391
Restricted for capital projects	—	114,657
Restricted for other purposes	—	48,770
Unrestricted	160,109	101,139
Total net position	<u>\$ 1,398,834</u>	<u>1,362,667</u>

\*Restated due to the implementation of GASB 96 - *Subscription-Based Information Technology Arrangements (SBITAs)*  
See accompanying notes to financial statements.

**SAN FRANCISCO WASTEWATER ENTERPRISE**  
**Statements of Revenues, Expenses, and Changes in Net Position**  
**Years ended June 30, 2023 and 2022**  
(In thousands)

	<u>2023</u>	<u>Restated 2022*</u>
Operating revenues:		
Charges for services	\$ 354,491	356,041
Rents and concessions	822	705
Capacity fees	3,077	6,280
Other revenues	5,546	5,856
Total operating revenues	<u>363,936</u>	<u>368,882</u>
Operating expenses:		
Personnel services	89,726	63,456
Contractual services	20,777	18,572
Materials and supplies	14,306	11,844
Depreciation and amortization	78,039	78,105
Services provided by other departments	40,999	39,645
General and administrative and other	17,503	45,536
Total operating expenses	<u>261,350</u>	<u>257,158</u>
Operating income	<u>102,586</u>	<u>111,724</u>
Non-operating revenues (expenses):		
Federal and state grants	152	20,711
Interest and investment income (loss)	2,556	(7,087)
Interest expenses	(95,520)	(77,751)
Amortization of premium, refunding loss, and issuance costs	14,387	8,422
Net gain from sale of assets	114	22
Other non-operating revenues	9,644	4,721
Other non-operating expenses	(535)	(482)
Net non-operating expenses	<u>(69,202)</u>	<u>(51,444)</u>
Change in net position before capital contributions and transfers	<u>33,384</u>	<u>60,280</u>
Capital Contributions	2,740	—
Transfers from the City and County of San Francisco	75	—
Transfers to the City and County of San Francisco	(32)	(161)
Capital contributions and net transfers	<u>2,783</u>	<u>(161)</u>
Change in net position	36,167	60,119
Net position at beginning of year	<u>1,362,667</u>	<u>1,302,548</u>
Net position at end of year	<u>\$ 1,398,834</u>	<u>1,362,667</u>

\*Restated due to the implementation of GASB 96 - *Subscription-Based Information Technology Arrangements (SBITAs)*  
See accompanying notes to financial statements.

**SAN FRANCISCO WASTEWATER ENTERPRISE**  
**Statements of Cash Flows**  
**Years ended June 30, 2023 and 2022**  
(In thousands)

	<b>2023</b>	<b>Restated 2022*</b>
<b>Cash flows from operating activities:</b>		
Cash received from customers, including cash deposits	\$ 364,180	360,654
Cash received from tenants for rent	3,126	1,035
Cash received from miscellaneous revenues	686	667
Cash paid to employees for services	(95,895)	(93,897)
Cash paid to suppliers for goods and services	(95,599)	(103,455)
Cash paid for judgments and claims	(5,500)	(10,795)
Net cash provided by operating activities	170,998	154,209
<b>Cash flows from non-capital financing activities:</b>		
Cash received from grants	177	12,686
Cash received from settlements	5,000	—
Cash paid for rebates and program incentives	(535)	(482)
Transfers from the City and County of San Francisco	75	—
Transfers to the City and County of San Francisco	(32)	(161)
Net cash provided by non-capital financing activities	4,685	12,043
<b>Cash flows from capital and related financing activities:</b>		
Proceeds from sale of capital assets	127	22
Proceeds from bond issuance, net of premium and refunding gain	1,287,593	373,700
Proceeds from revenue notes, net of premium	—	350,823
Proceeds from commercial paper borrowings	177,564	80,639
Proceeds from State revolving fund loans	207,364	22,544
Proceeds from WIFIA loans	122,357	—
Principal paid on long-term debt	(454,676)	(23,665)
Principal paid on commercial paper	(556,721)	(340,000)
Principal paid on State revolving fund loans	(2,481)	(2,483)
Lease payment	(2,371)	(2,371)
Subscription payment	(523)	(478)
Interest paid on long-term debt	(75,309)	(69,988)
Interest paid on commercial paper	(8,674)	(614)
Interest paid on State revolving fund loans	(1,523)	(1,522)
Interest paid on revenue notes	(3,475)	(1,168)
Interest paid on WIFIA loans	(74)	—
Issuance cost paid on long-term debt	(3,124)	(1,490)
Acquisition and construction of capital assets	(681,615)	(516,097)
Federal interest income subsidy for Build America Bonds	3,991	5,818
Net cash provided by (used in) capital and related financing activities	8,430	(126,330)
<b>Cash flows from investing activities:</b>		
Interest income received	4,948	1,335
Proceeds from sale of investments outside City Treasury	514,288	101,115
Purchase of investments outside City Treasury	(514,288)	(101,115)
Net cash provided by investing activities	4,948	1,335
Increase in cash and cash equivalents	189,061	41,257
<b>Cash and cash equivalents:</b>		
Beginning of year	333,163	291,906
End of year	\$ 522,224	333,163
<b>Reconciliation of cash and cash equivalents to the statements of net position:</b>		
<b>Cash and investments with City Treasury:</b>		
Unrestricted	\$ 355,770	285,029
Restricted	38,574	—
Add: Unrealized loss on investments with City Treasury	12,551	8,379
<b>Cash and investments outside City Treasury:</b>		
Unrestricted	173	397
Restricted	115,156	39,358
Cash and cash equivalents at the end of year on statements of cash flows	\$ 522,224	333,163

\*Restated due to the implementation of GASB 96 - *Subscription-Based Information Technology Arrangements (SBITAs)*

**SAN FRANCISCO WASTEWATER ENTERPRISE**  
**Statements of Cash Flows**  
**Years ended June 30, 2023 and 2022**  
(In thousands)

	<u>2023</u>	<u>Restated 2022*</u>
Reconciliation of operating income to net cash provided by operating activities:		
Operating income	\$ 102,586	111,724
Adjustment to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	78,039	78,105
Miscellaneous revenues	686	667
Provision for uncollectible accounts	5,500	(781)
Write-off of capital assets	911	993
Changes in operating assets and liabilities:		
Receivables:		
Charges for services	(5,558)	(6,143)
Prepaid charges, advances, and other	1	51
Due from other City departments	1,208	(901)
Inventory	(382)	(301)
Leases	2,321	—
Subscription	535	—
Accounts payable	830	7,095
Accrued payroll	1,229	255
Other post-employment benefits obligations	963	1,998
Pension obligations	(13,551)	(35,144)
Accrued vacation and sick leave	761	(757)
Accrued workers' compensation	452	964
Due to other City departments	2,102	—
Pollution remediation obligation	(260)	260
Damage claims liability	(7,695)	(4,668)
Unearned revenues, refunds, and other liabilities	320	792
Total adjustments	<u>68,412</u>	<u>42,485</u>
Net cash provided by operating activities	<u>\$ 170,998</u>	<u>154,209</u>
Noncash transactions:		
Accrued capital asset costs	\$ 122,825	89,905
Interfund payable	2,620	629
Unrealized loss on investments	12,551	8,379
Capital contribution	2,740	—

\*Restated due to the implementation of GASB 96 - *Subscription-Based Information Technology Arrangements (SBITAs)*  
See accompanying notes to financial statements.

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
June 30, 2023 and 2022  
(Dollars in thousands, unless otherwise stated)

### (1) Description of Reporting Entity

The San Francisco Wastewater Enterprise (the Enterprise), formerly known as the San Francisco Clean Water Program (the Program), was established in 1977 following the transfer of all sewage system-related assets and liabilities of the City and County of San Francisco (the City) to the Program.

In 1976, the electorate of the City approved a proposition authorizing the City to issue \$240,000 in revenue bonds pursuant to the Revenue Bond Law of 1941 of the State of California for the purpose of acquiring, constructing, improving, and financing improvements to the City's municipal sewage treatment and disposal system. Since then, the City's Board of Supervisors has adopted resolutions (Wastewater Resolutions) providing for the issuance of various sewer revenue and refunding bond series. The Wastewater Resolutions require the City to keep separate books of records and accounts of the Enterprise.

The Enterprise was placed under the jurisdiction of the San Francisco Public Utilities Commission (SFPUC or the Commission) in 1996. The Commission, established in 1932, is responsible for providing operational oversight of the public utility enterprises of the City, which includes the Enterprise along with the City's power and water utilities (i.e., Hetch Hetchy Water and Power and CleanPowerSF, of which the Power Enterprise is a component, and the San Francisco Water Enterprise). The Commission is responsible for determining such matters as the rates and charges for services, approval of contracts, and organizational policy.

Until August 1, 2008, the Commission consisted of five members, all appointed by the Mayor. Proposition E, a City Charter SEC. 4.112 amendment approved by the voters in the June 3, 2008 election, terminated the terms of all five existing members of the Commission, changed the process for appointing new members, and set qualifications for all members. Under the amended Charter, the Mayor continues to nominate candidates to the Commission, but nominees do not take office until the Board of Supervisors votes to approve their appointments by a majority (at least six members). The amended Charter provides for staggered four-year terms for the Commission members and requires them to meet the following qualifications:

- Seat 1 must have experience in environmental policy and an understanding of environmental justice issues.
- Seat 2 must have experience in ratepayer or consumer advocacy.
- Seat 3 must have experience in project finance.
- Seat 4 must have expertise in water systems, power systems, or public utility management.
- Seat 5 is an at-large member.

The SFPUC is a department of the City, and as such, the financial operations of the Enterprise, Hetch Hetchy Water and Power and CleanPowerSF, and the Water Enterprise are included in the Annual Comprehensive Financial Report of the City as enterprise funds. These financial statements are intended to present only the financial position, and the changes in financial position and cash flows of only that portion of the City that is attributable to the transactions of the Enterprise. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2023 and 2022, the changes in its financial position, or, where applicable, the cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles (GAAP).

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
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### (2) Significant Accounting Policies

#### (a) *Basis of Accounting and Measurement Focus*

The accounts of the Enterprise are organized on the basis of a proprietary fund type, specifically an enterprise fund of the City. The activities of this Enterprise are accounted for with a separate set of self-balancing accounts that comprise the Enterprise's assets, deferred outflows, liabilities, deferred inflows, net position, revenues, and expenses. Enterprise funds account for activities (i) that are financed with debt that is secured solely by a pledge of the net revenues from fees and charges of the activity; or (ii) that are required by laws or regulations that the activity's costs of providing services, including capital costs (such as depreciation or debt service), be recovered with fees and charges, rather than with taxes or similar revenues; or (iii) that the pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs (such as depreciation or debt service).

The financial activities of the Enterprise are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting in accordance with the U.S. GAAP. Under this method, all assets and liabilities associated with operations are included on the statements of net position; revenues are recognized when earned, and expenses are recognized when liabilities are incurred. Operating revenues are defined as charges to customers, rental income, and capacity fees.

The Enterprise applies all applicable Governmental Accounting Standards Board (GASB) pronouncements.

#### (b) *Cash and Cash Equivalents*

The Enterprise considers its pooled deposits and investments held with the City Treasury to be demand deposits and, therefore, cash and cash equivalents for financial reporting. The City Treasury also holds non-pooled cash and investments for the Enterprise. Non-pooled restricted deposits and restricted deposits and investments held outside the City Treasury with original maturities of three months or less are also considered to be cash equivalents.

#### (c) *Investments*

Money market funds are carried at cost, which approximates fair value. All other investments are stated at fair value based upon quoted market prices. Changes in fair value are recognized as investment gains or losses and are recorded as a component of non-operating revenues.

#### (d) *Inventory*

Inventory consists primarily of construction materials and maintenance supplies and is valued at average cost. Inventory is expensed as it is consumed.

#### (e) *Capital Assets*

Capital assets are defined as assets with an initial individual cost of more than \$5 and an estimated useful life in excess of one year. Capital assets with an original acquisition date prior to July 1, 1977 are recorded in the financial statements at estimated cost, as determined by an independent professional appraisal, or at cost, if known. All subsequent acquisitions have been recorded at cost. All donated capital assets at the time of donation and capital assets received in a service concession arrangement, are valued at acquisition value. Depreciation and amortization are

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
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computed using the straight-line method over the estimated useful lives of the assets, which range from 1 to 100 years for equipment and 1 to 200 years for building, structures, and improvements. No depreciation or amortization is recorded in the year of acquisition, and depreciation or amortization is recorded in the year of disposal.

### **(f) Intangible Assets**

Intangible assets are defined as identifiable, non-financial assets capable of being separated, sold, transferred, or licensed, and include contractual or legal rights. Examples of intangible assets include rights-of-way easements, land use rights, water rights, licenses, permits, and right-to-use capital assets for leases and SBITAs.

The Enterprise capitalizes purchased or internally developed intangible assets with a useful life extending beyond one reporting period. It has established a capitalization threshold of \$100. Intangible assets are amortized over the benefit period or the contract term for leases and SBITAs, except for certain assets having an indefinite useful life. Assets with an indefinite useful life generally provide a benefit that is not constrained by legal or contractual limitations or any other external factor, and therefore, are not amortized (see Note 4).

### **(g) Construction Work in Progress**

The cost of acquisition and construction of major plant and equipment is recorded as construction work in progress. Costs of construction projects that are discontinued are recorded as an expense in the year in which the decision is made to discontinue such projects.

### **(h) Bond Discount, Premium, and Issuance Costs**

Bond issuance costs related to prepaid insurance costs are capitalized and amortized using the effective interest method. Other bond issuance costs are expensed when incurred. Original issue bond discount or premium are offset against the related debt and are also amortized using the effective interest method.

### **(i) Accrued Vacation and Sick Leave**

Accrued vacation pay, which may be accumulated up to 10 weeks per employee, is charged to expense as earned. Sick leave earned subsequent to December 6, 1978 is non-vesting and may be accumulated up to six months per employee.

### **(j) Workers' Compensation**

The Enterprise is self-insured for workers' compensation claims and accrues the estimated cost of those claims, including the estimated cost of incurred but not reported claims (see Note 13(b)).

### **(k) General Liability**

The Enterprise is self-insured for general liability and uninsurable property damage claims. Commercially uninsurable property includes assets that are underground or provide transmission and distribution. Maintained commercial coverage does not cover claims attributed to loss from earthquake, contamination, pollution remediation efforts, and other specific naturally occurring contaminants such as mold. The liability represents an estimate of the cost of all outstanding claims, including adverse loss development and estimated incurred but not reported claims (see Note 13(a)).

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
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### **(l) Arbitrage Rebate Payable**

Certain bonds are subject to arbitrage rebate requirements in accordance with regulations issued by the U.S. Treasury Department. The requirements generally stipulate that earnings from the investment of the tax-exempt bond proceeds that exceed related interest costs on the bonds must be remitted to the federal government on every fifth anniversary of each bond issue. The arbitrage liability due as of June 30, 2023 and 2022 were \$188 and \$0, respectively (see Note 7).

### **(m) Refunding of Debt**

Gains or losses occurring from refunding of debt prior to maturity are reported as deferred outflows and deferred inflows of resources from refunding of debt. Deferred outflows and deferred inflows of resources are recognized as a component of interest expense using the effective interest method over the remaining life of the old debt or the life of the new debt, whichever is shorter.

### **(n) Income Taxes**

As a department of a government agency, the Enterprise is exempt from both federal income taxes and California State franchise taxes.

### **(o) Revenue Recognition**

Sewer service charges are based on water usage as determined by the San Francisco Water Enterprise. Effective July 1, 2013, the majority of residential and non-residential customers are billed on a monthly basis except for building and contractor customers which are billed on a bi-monthly basis. Revenues earned but unbilled are accrued as charges for services and reflected as a receivable on the statements of net position. The unbilled amount for the fiscal years ending June 30, 2023 and 2022 were \$14,919 and \$15,704, respectively.

### **(p) Use of Estimates**

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### **(q) Accounting and Financial Reporting for Pollution Remediation Obligations**

According to GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, a government would have to estimate its expected outlays for pollution remediation if it knows a site is polluted and any of the following recognition triggers occur:

- Pollution poses an imminent danger to the public or environment and a government has little or no discretion to avoid fixing the problem;
- A government has violated a pollution prevention-related permit or license;
- A regulator has identified (or evidence indicates it will identify) a government as responsible (or potentially responsible) for cleaning up pollution, or for paying all or some of the cost of the cleanup;
- A government is named (or evidence indicates that it will be named) in a lawsuit to compel it to address the pollution; or

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
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- A government begins or legally obligates itself to begin cleanup or post-cleanup activities (limited to amounts the government is legally required to complete).

As a part of ongoing operations, situations may occur requiring the removal of pollution or other hazardous material. These situations typically arise in the process of acquiring an asset, preparing an asset for its intended use, or during the design phase of projects under review by the project managers. Other times, pollution may arise during the implementation and construction of a major or minor capital project. Examples of pollution may include but are not limited to: asbestos or lead paint removal, leaking of sewage in underground pipes or neighboring areas, chemical spills, removal, and disposal of known toxic waste, harmful biological and chemical pollution of water, or contamination of surrounding soils by underground storage tanks (see Note 14(d)).

### **(r) Leases**

Leases are defined as a contract that conveys control of the right to use another entity's underlying asset for a specified period. The Enterprise is a lessee and a lessor for various noncancellable leases of land, building, equipment, vehicles, easements, etc.

#### *Short-term Leases*

For leases with a maximum possible term of 12 months or less at commencement, the Enterprise recognizes lease revenue if the Enterprise is the lessor of the lease or lease expense if the Enterprise is the lessee of the lease based on the provisions of the lease contract. Liabilities are only recognized if payments are received in advance, and receivables are only recognized if payments are received subsequent to the reporting period.

#### *Leases Other Than Short-term*

For all other leases (i.e., those that are not short-term) the Enterprise recognizes a lease liability and intangible right-to-use lease asset for the Enterprise as lessee leases, or lease receivable and deferred inflow of resources for the Enterprise as lessor leases.

#### *Measurement of Lease Amounts (Lessee)*

The Enterprise's lease liability is recorded at the present value of future minimum lease payments as of the date of commencement. Subsequently, the lease liability is reduced by the principal portion of lease of payments made. The lease asset is initially measured as the initial amount of the lease liability, less lease payments made at or before the lease commencement date, plus any initial direct costs ancillary to placing the underlying asset into service, less any lease incentives received at or before the lease commencement date. Subsequently, the lease asset is amortized into depreciation and amortization expense on a straight-line basis over the shorter of the lease term. If the Enterprise is reasonably certain of exercising a purchase option contained in a lease, the lease asset will be amortized over the useful life of the asset.

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
June 30, 2023 and 2022  
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### *Measurement of Lease Amounts (Lessor)*

The Enterprise's lease receivable is measured at the present value of payments expected to be received during the lease term, reduced by any provision of estimated uncollectible amounts. Subsequently, the lease receivable is reduced by the principal portion of lease payments collected. The deferred inflow or resources is initially measured as the initial amount of the lease receivable, less any lease incentives paid to, or on behalf of, the lessee at or before the commencement of the lease term, plus lease payments received from the lease at or before the commencement of the lease term that related to future periods. Subsequently, the deferred inflow of resources as lease revenue is on a straight-line basis over the lease term.

### *Key Estimates and Judgements*

Key estimates and judgements include how the Enterprise determines (a) the discount rate it uses to calculate the present value of the expected lease payments, (b) lease terms, (c) lease payments, and (d) materiality threshold for equipment.

- The Enterprise generally uses its estimated incremental borrowing rate as the discount rate for leases unless the rate is implicit in the lease. The City's incremental borrowing rate (IBR) is established using the average of Municipal Market Data (MMD) AAA benchmark interest rate index maturity date (year 1 to 30+), plus the average credit spread based on City's Aa/AA, COP, Tax-exempt to generate the yield curve and discount rate table. The City's incremental borrowing rate for leases is based on the rate of interest it would need to pay if it issued general obligation bonds to borrow an amount equal to the lease payments under similar terms at the commencement or remeasurement date.
- The lease term includes the noncancellable period of the lease, plus any additional periods covered by either lessee or lessor unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the lessee and lessor have an option to terminate (or if both parties have to agree to extend) are excluded from the lease term.
- Payments are evaluated by the Enterprise to determine if they should be included in the measurement of the lease receivables or lease liabilities, including those payments that require a determination of whether they are reasonably certain of being made, such as residual value guarantees, purchase options, payments for termination penalties, and other payments.
- Equipment and other leases have a capitalization threshold of \$100. 70% below market rent and/or ground leases are determined to be below market rent (BMR), excluded from lease capitalization.

### *Remeasurement of Lease*

The Enterprise monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease receivable or lease liability, the receivable or liability is remeasured and a corresponding adjustment is made to the deferred inflow of resources or lease asset, respectively.

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
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### *Presentation in Statement of Net Position*

Lease assets are reported with current and non-current assets, lease liabilities are reported with current and long-term liabilities and both lease assets and liabilities are reported under net investment in capital assets in the statement of net position (see Note 9).

### **(s) Subscription-Based Information Technology Arrangements**

Subscription-Based Information Technology Arrangements (SBITAs) are defined as a contract that conveys control of the right to use another entity's IT software, alone or in combination with tangible capital assets for a specific period. The Enterprise has noncancellable subscription arrangements (similar to a lease) for the right to use various information technology hardware and software SBITAs.

#### *Short-term SBITAs*

For SBITAs with a maximum possible term of 12 months or less at commencement, the Enterprise recognizes subscription expense if the Enterprise is subscriber of subscription based on the provisions of the SBITA. Liabilities are only recognized if payments are received in advance, and receivables are only recognized if payments are received subsequent to the reporting period.

#### *SBITAs Other Than Short-term*

For all other SBITAs (i.e., those that are not short-term) the Enterprise recognizes SBITA liability and intangible right-to-use subscription asset for the Enterprise.

#### *Measurement of Subscription Amounts (Subscriber)*

The Enterprise's subscription liability is recorded at the present value of future minimum subscription payments as of the date of commencement. Subsequently, the subscription liability is reduced by the principal portion of subscription payments made. The subscription asset is initially measured as the initial amount of the subscription liability, less payments made at or before the subscription commencement date, plus any initial direct costs ancillary to placing the underlying asset into service, less any subscription incentives received at or before the subscription commencement date. For SBITAs, subscription assets also include qualify software implementation costs. Subsequently, the subscription asset is amortized into depreciation and amortization expense on a straight-line basis over the subscription term.

#### *Key Estimates and Judgements*

Key estimates and judgements include how the Enterprise determines (a) the discount rate it uses to calculate the present value of the expected subscription payments, (b) subscription terms, (c) subscription payments, and (d) materiality threshold.

- The Enterprise generally uses its estimated incremental borrowing rate as the discount rate for SBITAs unless the rate is implicit in the agreement. The Enterprise incremental borrowing rate (IBR) is established using the average of Municipal Market Data (MMD) AAA benchmark interest rate index by maturity date (year 1 to 30+), plus the average credit spread based on Enterprise's Aa/AA, COP, Tax-exempt to generate the yield curve and discount rate table.

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
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- The subscription term includes the noncancellable period of the subscription, plus any additional periods covered by either subscriber or lessor unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the subscriber and lessor have an option to terminate (or if both parties have to agree to extend) are excluded from the subscription term.
- Payments are evaluated by the Enterprise to determine if they should be included in the measurement of the subscription liabilities, including those payments that require a determination of whether they are reasonably certain of being made, such as residual value guarantees, purchase options, payments for termination penalties, and other payments.
- SBITAs have a capitalization threshold of \$100.

### *Remeasurement of SBITAs*

The Enterprise monitors changes in circumstances that may require remeasurement of SBITA. When certain changes occur that are expected to significantly affect the amount of the subscription liability, the liability is remeasured, and a corresponding adjustment is made to the subscription asset.

### *Presentation in Statement of Net Position*

Subscription assets are reported with current and non-current assets, subscription liabilities are reported with current and long-term liabilities and both subscription assets and liabilities are reported under net investment in capital assets in the statement of net position (see Note 10).

### **(t) Other Post-Employment Benefits Other Than Pensions (OPEB)**

As prescribed under GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, net OPEB liability, deferred outflows/inflows of resources related to OPEB, and OPEB expense are actuarially determined on a citywide basis. Net OPEB liability is measured as the portion of the present value of projected benefit payments to be provided to current active and inactive employees attributed to those employees' past service, less the amount of the Retiree Healthcare Trust Fund investments measured at fair value (see Note 11(b)).

### **(u) New Accounting Standard Adopted in Fiscal Year 2023**

- 1) In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*. GASB Statement No. 91 enhances the compatibility and consistency of conduit debt obligation reporting and reporting of related transactions by state and local government issuers. The new standard is effective for periods beginning after December 15, 2021. The Enterprise adopted the provisions of Statement No. 91 in fiscal year 2023, which did not have a significant effect on its financial statements.
- 2) In March 2020, the GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). The Enterprise adopted the provisions of Statement No. 94 in fiscal year 2023, which did not have a significant effect on its financial statements.

## SAN FRANCISCO WASTEWATER ENTERPRISE

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- 3) In May 2020, the GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) by a government. The new standard is effective for periods beginning after June 15, 2022. The Enterprise adopted the provisions of Statement No. 96 in fiscal year 2023 (see Note 10 for more details). As a result of adoption, the cumulative effect of applying this Statement is recorded as adjustments to beginning balance for the following accounts as of July 1, 2021:

	FY 2022 Beginning Balance	FY2022 Activities	FY 2022 Ending Balance
Subscription Assets	\$ 1,422	\$ 65	\$ 1,487
Accumulated Amortization	—	(530)	(530)
Accrued Interest Payable - Current	—	(8)	(8)
Subscription Liability - Current	(993)	478	(515)
Subscription Liability - Long -Term	(429)	—	(429)
Expenses	—	(5)	(5)
Change to Net Position	\$ —	\$ (5)	\$ (5)

### (v) GASB Statement Implemented in Fiscal Year 2022

- 1) In June 2017, the GASB issued Statement No. 87, *Leases*. GASB Statement No. 87 establishes a single model for lease accounting and requires reporting of certain lease liabilities that currently are not reported. The new standard is effective for periods beginning after June 15, 2021. The beginning balances as of July 1, 2020 were restated as a result of adopting this standard.
- 2) In June 2018, the GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. GASB Statement No. 89 establishes accounting requirements for interest cost incurred before the end of construction period. The new standard is effective for periods beginning after December 15, 2020. The Enterprise adopted the provisions of Statement No. 89 in fiscal year 2022.
- 3) In January 2020, the GASB issued Statement No. 92, *Omnibus 2020*. GASB Statement No. 92 addresses practice issues that have been identified during implementation and application of certain GASB Statements. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 92 in fiscal year 2022, which did not have significant effect on its financial statements.
- 4) In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates (IBOR)*. The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of an IBOR. The new standard is effective for periods beginning after June 15, 2021. The Enterprise adopted the provisions of Statement No. 93 in fiscal year 2022, which did not have a significant effect on its financial statements.

### (w) Future Implementation of New Accounting Standards

- 1) In April 2022, the GASB issued Statement No. 99, *Omnibus 2022*. GASB Statement No. 99 addresses a variety of topics. The requirements related to extension of the use of the London

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Interbank Offered Rate, accounting for Supplemental Nutrition Assistance Program distributions, disclosures of nonmonetary transactions, pledges of future revenues by pledging governments, clarification of certain provisions in Statement No. 34, and terminology updates related to Statement No. 53 and Statement No. 63 are effective upon issuance and did not have a significant impact on the Enterprise for the year ended June 30, 2022. The requirements related to leases, public-public and public-private partnerships, and subscription-based information technology arrangements are effective for fiscal years beginning after June 15, 2022, and effective for the Enterprise's year ending June 30, 2023. The requirements related to financial guarantees and the classification and reporting of derivative instruments within the scope of Statement No. 53 are effective for fiscal years beginning after June 15, 2023, and effective for the Enterprise's year ending June 30, 2024. The Enterprise is currently analyzing its accounting practices to determine the potential impact of the provisions of Statement No. 99 applicable in future years.

- 2) In June 2022, the GASB issued Statement No. 100, *Accounting Changes and Error Corrections*. This Statement enhances accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. The new standard is effective for periods beginning after June 15, 2023. The Enterprise will implement the provisions of Statement No. 100 in fiscal year 2024.
- 3) In June 2022, the GASB issued Statement No. 101, *Compensated Absences*. This Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. The new standard is effective for periods beginning after December 15, 2023. The Enterprise will implement the provisions of Statement No. 101 in fiscal year 2025.

### **(x) Reclassifications**

For fiscal year 2022, net pension assets in the amount of \$48,770 was reclassified from unrestricted to restricted for other purposes in the statement of net position.

### **(3) Cash, Cash Equivalents, and Investments**

The Enterprise's cash, cash equivalents, and investments with the City Treasury are invested in an unrated City pool pursuant to investment policy guidelines established by the City Treasurer. The objectives of the policy guidelines are, in order of priority, preservation of capital, liquidity, and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio that may be invested in certain instruments with longer terms to maturity. The City Treasurer allocates income from the investment of pooled cash at month-end in proportion to the Enterprise's average daily cash balances. The primary objectives of the Enterprise's investment policy are consistent with the City's policy.

The restricted cash and investments for bond reserves is held by an independent trustee outside the City investment pool. The balances as of June 30, 2023 and 2022 were \$115,156 and \$39,358, respectively. Funds held by the trustee established under the 2003 Indenture are invested in "Permitted Investments" as defined in the Indenture. "Permitted Investments" include money market funds registered under the Federal Investment Company Act of 1940 and whose shares are registered under

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the Federal Securities Act of 1933 and having a rating by S&P of “AAAm-G,” “AAAm,” or “AAm” and a rating by Moody’s of “Aaa,” “Aa1,” or “Aa2.”

The Enterprise categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure fair value of the assets. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. The inputs and techniques used for valuing securities are not necessarily an indication of risk associated with investing in those securities.

The following is a summary of the restricted and unrestricted cash and investments outside City Treasury and the fair value hierarchy as of June 30, 2023 and 2022.

Cash and Investments outside City Treasury					Fair Value Measurements Using		
June 30, 2023					Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
Investments	Credit Ratings (S&P/Moody's)	Maturities	Fair Value	Investments exempt from fair value			
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	\$ 115,082	115,082	—	—	—
Money Market Funds	A-1/P-1	< 90 days	50	50	—	—	—
Cash and Cash Equivalents	N/A		24	24	—	—	—
<b>Total Restricted Cash and Investments outside City Treasury</b>			<b>\$ 115,156</b>	<b>115,156</b>	<b>—</b>	<b>—</b>	<b>—</b>
Cash and Cash Equivalents	N/A		173	173	—	—	—
<b>Total Unrestricted Cash and Investments outside City Treasury</b>			<b>\$ 173</b>	<b>173</b>	<b>—</b>	<b>—</b>	<b>—</b>

Cash and Investments outside City Treasury					Fair Value Measurements Using		
June 30, 2022					Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Unobservable Inputs (Level 3)
Investments	Credit Ratings (S&P/Moody's)	Maturities	Fair Value	Investments exempt from fair value			
U.S. Treasury Money Market Funds	AAAm/Aaa-mf	< 90 days	\$ 39,296	39,296	—	—	—
Money Market Funds	A-1+/P-1	< 90 days	44	44	—	—	—
Cash and Cash Equivalents	N/A		18	18	—	—	—
<b>Total Restricted Cash and Investments outside City Treasury</b>			<b>\$ 39,358</b>	<b>39,358</b>	<b>—</b>	<b>—</b>	<b>—</b>
Cash and Cash Equivalents	N/A		397	397	—	—	—
<b>Total Unrestricted Cash and Investments outside City Treasury</b>			<b>\$ 397</b>	<b>397</b>	<b>—</b>	<b>—</b>	<b>—</b>

Commercial paper is valued using a variety of techniques such as matrix pricing; market corroborated pricing inputs such as yield curve, indices, and other market related data. Commercial paper, money market investments, and cash and cash equivalents are exempt from fair value treatment under GASB Statement No. 72.

The restricted cash and investments outside City Treasury as of June 30, 2023 and 2022 included a \$0 unrealized gain due to changes in fair values on Commercial Paper.

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The Enterprise's cash, cash equivalents, and investments are shown on the accompanying statements of net position as follows:

	<u>2023</u>	<u>2022</u>
Current assets:		
Cash and investments with City Treasury	\$ 355,770	285,029
Cash and investments outside City Treasury	173	397
Restricted cash and investments outside City Treasury	48,717	15,587
Non-current assets:		
Restricted cash and investments with City Treasury	38,574	—
Restricted cash and investments outside City Treasury	66,439	23,771
Total cash, cash equivalents, and investments	<u>\$ 509,673</u>	<u>324,784</u>

The following table shows the percentage distribution of the City's pooled investments by maturity:

<u>Fiscal years ended June 30</u>	<u>Investment maturities (in months)</u>			
	<u>Under 1</u>	<u>1 to less than 6</u>	<u>6 to less than 12</u>	<u>12 to 60</u>
2023	21.5%	18.0%	14.5%	46.0%
2022	20.2%	14.0%	14.9%	50.9%

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### Notes to Financial Statements June 30, 2023 and 2022 (Dollars in thousands, unless otherwise stated)

#### (4) Capital Assets

Capital assets as of June 30, 2023 and 2022 consisted of the following:

	2022	Increases	Decreases	2023
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 44,572	—	—	44,572
Intangible assets	3,046	—	—	3,046
Construction work in progress	1,724,417	709,485	(200,939) *	2,232,963
Total capital assets not being depreciated and amortized	1,772,035	709,485	(200,939)	2,280,581
Capital assets being depreciated and amortized:				
Facilities and improvements	3,729,320	194,590	—	3,923,910
Land Improvements	—	6,965	—	6,965
Intangible assets**	9,548	1,212	—	10,760
Machinery and equipment	103,274	3,659	(1,272)	105,661
Total capital assets being depreciated and amortized	3,842,142	206,426 *	(1,272)	4,047,296
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,481,988)	(69,779)	—	(1,551,767)
Land Improvements	—	(232)	—	(232)
Intangible assets**	(5,487)	(986)	—	(6,473)
Machinery and equipment	(80,251)	(5,754)	1,252	(84,753)
Total accumulated depreciation and amortization	(1,567,726)	(76,751)	1,252	(1,643,225)
Total capital assets being depreciated and amortized, net	2,274,416	129,675	(20)	2,404,071
Total capital assets, net	\$ 4,046,451	839,160	(200,959)	4,684,652

\* Decrease in construction work in progress is less than increase in capital assets being depreciated is due to direct additions to machinery and equipment and buildings structures by \$3,659 and \$2,739, respectively, offset by \$911 in capital project write-offs, mainly related to the Islais Creek Green Infrastructure Project.

\*\* Right-to-use lease and subscription assets are reported separately from intangible assets in note 9 and note 10, respectively.

	2021	Increases	Decreases	2022
Capital assets not being depreciated and amortized:				
Land and rights-of-way	\$ 44,572	—	—	44,572
Intangible assets	3,046	—	—	3,046
Construction work in progress	1,340,644	514,679	(130,906) *	1,724,417
Total capital assets not being depreciated and amortized	1,388,262	514,679	(130,906)	1,772,035
Capital assets being depreciated and amortized:				
Facilities and improvements	3,599,978	129,342	—	3,729,320
Intangible assets**	8,976	572	—	9,548
Machinery and equipment	102,397	1,165	(288)	103,274
Total capital assets being depreciated and amortized	3,711,351	131,079 *	(288)	3,842,142
Less accumulated depreciation and amortization for:				
Facilities and improvements	(1,412,109)	(69,879)	—	(1,481,988)
Intangible assets**	(4,615)	(872)	—	(5,487)
Machinery and equipment	(76,039)	(4,500)	288	(80,251)
Total accumulated depreciation and amortization	(1,492,763)	(75,251)	288	(1,567,726)
Total capital assets being depreciated and amortized, net	2,218,588	55,828	—	2,274,416
Total capital assets, net	\$ 3,606,850	570,507	(130,906)	4,046,451

\* Decrease in construction work in progress is less than increase in capital assets being depreciated is explained by \$1,165 direct additions to machinery and equipment offset by \$993 in capital project write-offs, mainly related to the Public Works various locations infrastructure improvement projects.

\*\* Right-to-use lease and subscription assets are reported separately from intangible assets in note 9 and note 10, respectively.

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### (5) Restricted Assets

The Master Bond Resolution was discharged upon the issuance of the 2003 Series A Refunding Bonds. Pursuant to the Indenture, which became effective with the issuance of the 2003 Series A Refunding Bonds, all net revenues of the Enterprise (except amounts on deposit in the rebate fund) are irrevocably pledged to the punctual payment of debt service on the Wastewater revenue bonds. Accordingly, the net revenues of the Enterprise shall not be used for any other purpose while any of its revenue bonds are outstanding except as expressly permitted by the Indenture. Further, all net revenues shall be deposited by the City Treasurer, by instruction of the Enterprise, in special funds designated as the Revenue Fund, which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statements of net position of the Enterprise as cash and investments. Deposits in the Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes and only in accordance with the following priority:

1. The payment of operation and maintenance costs of the Enterprise;
2. The payment of bonds, parity State revolving and Federal fund loans, policy costs, and amounts due as reimbursement under any letter of credit agreement; and
3. Any other lawful purpose of the Enterprise.

In accordance with the Indenture, the Enterprise maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consisted of the following as of June 30, 2023 and 2022:

	2023	2022
Cash and investments with City Treasury:		
Wastewater revenue bond construction fund	\$ 38,574	—
Cash and investments outside City Treasury:		
2009 Series C Certificates of Participation - 525 Golden Gate	449	433
2009 Series D Certificates of Participation - 525 Golden Gate	1,523	1,472
2010 Series A Wastewater revenue bond fund	137	—
2010 Series B Wastewater revenue bond fund	7,153	8,826
2013 Series B Wastewater revenue bond fund	5	—
2016 Series A Wastewater revenue bond fund	6	—
2016 Series B Wastewater revenue bond fund	2	—
2018 Series A Wastewater revenue bond fund	6	—
2018 Series B Wastewater revenue bond fund	5	—
2018 Series C Wastewater revenue bond fund	2	—
2021 Series A Wastewater revenue bond fund	13,298	24,396
2021 Series B Wastewater revenue bond fund	2,163	3,937
2022 Series B Wastewater revenue bond fund	86	—
2023 Series A Wastewater revenue bond fund	65,673	—
2023 Series B Wastewater revenue bond fund	24,313	—
2023 Series C Wastewater revenue bond fund	19	—
2021 Series A Wastewater revenue note fund	152	145
2021 Series B Wastewater revenue note fund	89	86
Commercial Paper - Tax Exempt	75	63
Total cash and investments outside City Treasury	115,156	39,358
Interest and other receivables:		
Wastewater revenue bond construction fund including interest, prepaid, and other receivables	1,608	2,735
Due from other government for State Revolving Fund	13,942	202,795
	15,550	205,530
Total restricted assets	\$ 169,280	244,888

Restricted assets listed above as cash and investments with City Treasury are held in fund accounts within the Sewer Revenue Fund of the City Treasury.

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### (6) Short-Term Debt

Under the voter approved 2002 Proposition E, the Commission and Board of Supervisors authorized the issuance of up to \$750,000 in commercial paper for the purpose of reconstructing, expanding, repairing, or improving the Enterprise's facilities. The Enterprise had \$0 and \$379,157 in commercial paper outstanding as of June 30, 2023 and 2022, respectively.

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, the Enterprise had \$750,000 and \$370,843 in unused authorization as of June 30, 2023 and 2022, respectively. Significant Events of default as specified in the Reimbursement Agreements, Revolving Credit and Term Loan Agreements, or Revolving Credit Agreements include 1) payment defaults 2) material breach of warranty, representation, or other non-remedied breach of covenants as specified in the respective agreements (not cured within applicable grace periods), and 3) bankruptcy and insolvency events, which may result in all outstanding obligations to be immediately due and payable (unless waived by the respective Bank, if applicable); or issuance of a No-Issuance Notice, reduction in credit to outstanding amount plus interest coverage, and/or termination of the respective agreement. As of June 30, 2023, there were no such events described herein.

### (7) Changes in Long-Term Liabilities

Long-term liability activities for the years ended June 30, 2023 and 2022 are as follows:

	Interest rate	Maturity (Calendar Year)	Restated 2022*	Additions	Reductions	2023	Due within one year
Revenue Bonds:							
2010 Series B (Build America)	4.65% - 5.82%	2040	\$ 192,515	—	(7,280)	185,235	7,505
2013 Series A	1.00 - 5.00	2025	15,535	—	(14,960)	575	575
2013 Series B	4.00 - 5.00	2042	331,585	—	(238,490)	93,095	—
2016 Series A	4.00 - 5.00	2046	240,580	—	—	240,580	5,475
2016 Series B	4.00 - 5.00	2046	67,820	—	—	67,820	1,545
2018 Series A	4.00 - 5.00	2043	229,050	—	(7,715)	221,335	7,160
2018 Series B	5.00	2043	185,950	—	(6,260)	179,690	5,810
2018 Series C	2.13	2048	179,145	—	(179,145)	—	—
2021 Series A	4.00 - 5.00	2051	260,835	—	—	260,835	—
2021 Series B	5.00	2051	37,045	—	—	37,045	—
2022 Series B	5.00	2034	—	137,080	—	137,080	—
2023 Series A	5.00 - 5.25	2042	—	530,565	—	530,565	—
2023 Series B	4.00 - 5.00	2042	—	278,155	—	278,155	—
2023 Series C	4.00	2048	—	165,660	—	165,660	—
For issuance premiums			191,193	178,474	(30,427)	339,240	—
Revenue Notes:							
2021 Series A - Biosolids	1.00	2025	218,355	—	—	218,355	—
2021 Series B - SEP Headworks	1.00	2026	129,110	—	—	129,110	—
For issuance premiums			2,891	—	(800)	2,091	—
Total revenue bonds & notes payable			2,281,609	1,289,934	(485,077)	3,086,466	28,070
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	826	—	(826)	—	—
2009 Series C COPs issuance premiums			4	—	(4)	—	—
2009 Series D COPs (Build America)	6.36 - 6.49	2041	24,458	—	—	24,458	864
State Revolving Fund Loans (CWSRF loans)	0.80 - 1.80	2056	302,659	18,511	(2,481)	318,689	2,526
Water Infrastructure Finance and Innovation Act (WIFIA) Loans	1.45	2059	—	122,357	—	122,357	—
Arbitrage rebate payable			—	188	—	188	—
Other post-employment benefits obligations			49,123	—	(88)	49,035	—
Net pension liability			—	49,549	—	49,549	—
Accrued vacation and sick leave			10,901	4,729	(3,968)	11,662	6,040
Accrued workers' compensation			7,546	2,976	(2,524)	7,998	1,509
Due to other City departments			629	2,102	(111)	2,620	2,215
Lease liability			3,638	—	(2,341)	1,297	1,297
Subscription liability			944	—	(515)	429	243
Damage claims liability			12,045	2,716	(10,411)	4,350	1,650
Pollution remediation obligation			8,060	—	(260)	7,800	—
Total			\$ 2,702,442	1,493,062	(508,606)	3,686,898	44,414

\*Restated due to the implementation of GASB 96 - *Subscription-Based Information Technology Arrangements (SBITAs)*

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### Notes to Financial Statements June 30, 2023 and 2022 (Dollars in thousands, unless otherwise stated)

	Interest rate	Maturity (Calendar Year)	2021	Additions	Reductions	Restated 2022*	Due within one year
Revenue Bonds:							
2010 Series A	4.00% - 5.00%	2021	\$ 8,820	—	(8,820)	—	—
2010 Series B (Build America)	4.65 - 5.82	2040	192,515	—	—	192,515	7,280
2013 Series A	1.00 - 5.00	2025	29,595	—	(14,060)	15,535	13,090
2013 Series B	4.00 - 5.00	2042	331,585	—	—	331,585	—
2016 Series A	4.00 - 5.00	2046	240,580	—	—	240,580	—
2016 Series B	4.00 - 5.00	2046	67,820	—	—	67,820	—
2018 Series A	4.00 - 5.00	2043	229,050	—	—	229,050	7,715
2018 Series B	5.00	2043	185,950	—	—	185,950	6,260
2018 Series C	2.13	2048	179,145	—	—	179,145	—
2021 Series A	4.00 - 5.00	2051	—	260,835	—	260,835	—
2021 Series B	5.00	2051	—	37,045	—	37,045	—
For issuance premiums			124,862	75,820	(9,489)	191,193	—
Revenue Notes:							
2021 Series A - Biosolids	1.00	2025	—	218,355	—	218,355	—
2021 Series B - SEP Headworks	1.00	2026	—	129,110	—	129,110	—
For issuance premiums			—	3,358	(467)	2,891	—
Total revenue bonds & notes payable			1,589,922	724,523	(32,836)	2,281,609	34,345
2009 Series C Certificates of Participation (COPs)	2.00 - 5.00	2022	1,611	—	(785)	826	826
2009 Series C COPs issuance premiums			18	—	(14)	4	4
2009 Series D COPs (Build America)	6.36 - 6.49	2041	24,458	—	—	24,458	—
State Revolving Fund Loans (CWSRF loans)	0.80 - 1.80	2056	108,559	196,583	(2,483)	302,659	2,481
Other post-employment benefits obligations			50,711	5,466	(7,054)	49,123	—
Net pension liability			103,746	—	(103,746)	—	—
Accrued vacation and sick leave			11,658	2,895	(3,652)	10,901	5,479
Accrued workers' compensation			6,582	3,207	(2,243)	7,546	1,393
Due to other City departments			739	—	(110)	629	111
Lease liability			5,952	27	(2,341)	3,638	2,341
Subscription liability			—	1,422	(478)	944	515
Damage claims liability			16,713	8,812	(13,480)	12,045	9,323
Pollution remediation obligation			7,800	260	—	8,060	—
Total			\$ 1,928,469	943,195	(169,222)	2,702,442	56,818

\*Restated due to the implementation of GASB 96 - *Subscription-Based Information Technology Arrangements (SBITAs)*

The payments of principal and interest amounts on various bonds and notes are secured by net revenues of the Enterprise.

#### (a) Wastewater Revenue Bonds 2010 Series A

During fiscal year 2010, the Enterprise issued revenue bonds 2010 Series A in the amount of \$47,050 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used to redeem \$50,000 in outstanding commercial paper notes, fund a cash debt service reserve fund, and pay the costs of issuing the bonds. The bonds were rated "Aa3" and "AA-" by Moody's and S&P, respectively, at the time of issuance. Bonds mature through October 1, 2021. The true interest cost is 2.9%. As of June 30, 2023 and 2022, the 2010 Series A bonds' principal amount outstanding was \$0.

#### (b) Wastewater Revenue Bonds 2010 Series B

During fiscal year 2010, the Enterprise issued revenue bonds 2010 Series B (Federally Taxable – Build America Bonds – Direct Payment) in the amount of \$192,515 with interest rates ranging from 4.7% to 5.8%. Proceeds from the bonds were used to redeem \$53,500 in outstanding commercial paper notes, provide funding for capital projects in the amount of \$112,429, fund a cash debt service reserve fund, and pay financing costs for the bonds. The bonds were rated "Aa3" and "AA-" by Moody's and S&P, respectively, at the time of issuance. Bonds mature through October 1, 2040. The true interest cost is 3.7%. As of June 30, 2023 and 2022, the 2010 Series B bonds' principal amount outstanding was \$185,235 and \$192,515, respectively.

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### **(c) Wastewater Revenue Bonds 2013 Series A**

In January 2013, the Enterprise issued tax-exempt revenue bonds 2013 Series A in the amount of \$193,400 for the purpose of refunding the remaining portion of the outstanding 2003 Series A bonds maturing on and after October 1, 2013. The bonds carried “Aa3” and “AA-” ratings from Moody’s and S&P, respectively, at the time of issuance. The 2013 Series A refunding bonds include serial bonds with interest rates varying from 1.0% to 5.0% and have a final maturity in October 2025. The Series A bonds had a true interest cost of 1.2% at issuance. The 2013 Series A bonds also refunded the remaining portion of the outstanding state revolving fund loans. The refunding resulted in the recognition of a deferred accounting loss of \$2,986, gross debt service savings of \$35,107 over the next 13 years, and an economic gain of \$32,783 or 15.4% of the refunded principal.

A portion of the proceeds of the 2022 Series B refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, dated July 1, 2022 to refund and legally defease a portion of the outstanding 2013 Series A bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2013 Series A bonds starting on October 1, 2024 and thereafter. As of June 30, 2023 and 2022, the principal amount outstanding of the 2013 Series A bonds was \$575 and \$15,535, respectively.

### **(d) Wastewater Revenue Bonds 2013 Series B**

In February 2013, the Enterprise issued revenue bonds 2013 Series B in the amount of \$331,585 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, pay off all outstanding Wastewater commercial paper notes, and pay the costs of issuing the bonds. The bonds were rated “Aa3” and “AA-” by Moody’s and S&P, respectively, at the time of issuance. Bonds mature through October 1, 2042. The true interest cost was 3.6% at issuance.

A portion of the proceeds of the 2022 Series B and 2023 Series B refunding bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreements, date July 1, 2022 and April 1, 2023, respectively to refund and legally defease a portion of the outstanding 2013 Series B bonds. This deposit, together with certain other available monies was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities. The principal and interest on monies held by the escrow agent will be sufficient to redeem the maturities of the 2013 Series A bonds starting on October 1, 2024 through October 1, 2039. The remaining bonds mature through October 1, 2042. As of June 30, 2023 and 2022, the principal amount outstanding of the 2013 Series B bonds was \$93,095 and \$331,585, respectively.

### **(e) Wastewater Revenue Bonds 2016 Series A**

In May 2016, the Enterprise issued tax-exempt revenue bonds 2016 Series A (Green Bonds) in the amount of \$240,580 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, to pay off \$53,439 of outstanding commercial paper notes, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively, at the time of issuance. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2023 and 2022, the principal amount outstanding of the 2016 Series A bonds was \$240,580.

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### **(f) Wastewater Revenue Bonds 2016 Series B**

In May 2016, the Enterprise issued tax-exempt revenue bonds 2016 Series B in the amount of \$67,820 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects, to pay off \$20,560 of outstanding commercial paper notes, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively, at the time of issuance. Bonds mature through October 1, 2046. The bonds have a true interest cost of 3.2%. As of June 30, 2023 and 2022, the principal amount outstanding of the 2016 Series B bonds was \$67,820.

### **(g) Wastewater Revenue Bonds 2018 Series A**

In August 2018, the Enterprise issued tax-exempt revenue bonds 2018 Series A (SSIP) (Green Bonds) in the amount of \$229,050 with interest rates ranging from 4.0% to 5.0%. Proceeds from the bonds were used for Wastewater capital projects in furtherance of the SFPUC’s Sewer System Improvement Program (“SSIP”), to pay off \$25,000 of outstanding commercial paper notes, to fund capitalized interest, and to pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively, at the time of issuance. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.4%. As of June 30, 2023 and 2022, the principal amount outstanding of the 2018 Series A bonds was \$221,335 and \$229,050, respectively.

### **(h) Wastewater Revenue Bonds 2018 Series B**

In August 2018, the Enterprise issued tax-exempt revenue bonds 2018 Series B (Non-SSIP) in the amount of \$185,950 with 5.0% interest rate. Proceeds from the bonds were used for Wastewater capital projects, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively, at the time of issuance. Bonds mature through October 1, 2043. The bonds have a true interest cost of 3.5%. As of June 30, 2023 and 2022, the principal amount outstanding of the 2018 Series B bonds was \$179,690 and \$185,950, respectively.

### **(i) Wastewater Revenue Bonds 2018 Series C**

In August 2018, the Enterprise issued tax-exempt revenue bonds 2018 Series C (SSIP) (Green Bonds) in the amount of \$179,145 with 2.1% interest rate. Proceeds from the bonds were used for Wastewater capital projects, to fund capitalized interest, and pay the costs of issuing the bonds. The bonds carried ratings of “AA” and “Aa3” from S&P and Moody’s, respectively, at the time of issuance. The 2018 Series C bonds was fully refunded by the 2023 Series C bonds. The Initial Mandatory Tender date of the 2018 Series C bonds is October 1, 2023. The bonds have a true interest cost of 3.5%. As of June 30, 2023 and 2022, the principal amount outstanding of the 2018 Series C bonds was \$0 and \$179,145, respectively.

### **(j) Wastewater Revenue Bonds 2021 Series AB**

In November 2021, the Enterprise issued tax-exempt revenue bonds, 2021 Series AB in the aggregate amount of \$297,880. The purpose of the 2021 Series AB Bonds was to refund approximately \$340,000 aggregate principal amount of commercial paper notes which funded various capital projects of the Wastewater Enterprise. The bonds carried “Aa2” and “AA” ratings from Moody’s and S&P, respectively.

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The \$260,835 2021 Series A Bonds were issued as tax-exempt Green Bonds to refund approximately \$296,000 of commercial paper notes for SSIP capital projects. The Series A bonds were issued as serial bonds with coupons of 4.0% and 5.0% and a final maturity of 2051. The 2021 Series A bonds have a true interest cost of 3.0%. As of June 30, 2023 and 2022, the principal amount of the 2021 Series A bonds outstanding was \$260,835.

The \$37,045 2021 Series B bonds were issued as tax-exempt bonds to refund approximately \$44,000 of commercial paper notes for Wastewater capital projects. The Series B bonds were issued as serial bonds with coupons of 5.0% and have a final maturity of 2051. The Series B bonds have a true interest cost of 3.2%. As of June 30, 2023 and 2022, the principal amount of the 2021 Series B bonds outstanding was \$37,045.

### **(k) Wastewater Revenue Notes 2021 Series AB**

In November 2021, the Enterprise issued tax-exempt revenue (Green) notes, 2021 Sub-Series A and Sub-Series B together with an aggregate principal of \$347,465 to finance a portion of the design, acquisition and construction of the Biosolids Digester Facility Project and Southeast Water Pollution Control Plant improvements. The SFPUC intends to pay principal of the 2021A Notes and 2021B Notes from the proceeds of one or more draws under WIFIA Loan Agreements for the Biosolids Digester Facility Project and Southeast Treatment Plant Improvements, respectively, or from the proceeds of future obligations.

The \$218,355 2021 Series A Notes were issued as tax-exempt Green Notes to fund a portion of the Biosolids Digester Facilities Project. The Series A Notes were issued with 1.0% coupons and a final maturity of 2025. The 2021 Series A Notes have a true interest cost of 0.8%. As of June 30, 2023 and 2022, the principal amount of 2021 Series A Notes outstanding was \$218,355.

The \$129,110 2021 Series B Notes were issued as tax-exempt Green Notes to fund a portion of Southeast Water Pollution Control Plant improvements. The Series B Notes were issued with 1.0% coupons and a final maturity of 2026. The 2021 Series B Notes have a true interest cost of 0.8%. As of June 30, 2023 and 2022, the principal amount of 2021 Series B Notes outstanding was \$129,110.

### **(l) Wastewater Revenue Refunding Bonds 2022 Series B**

In July 2022, the Enterprise issued tax-exempt revenue bonds, 2022 Series B in the aggregate principal amount of \$137,080 on a forward delivery basis. The 2022 Series B bonds were issued for the purpose of refunding a portion of the outstanding 2013 Series A bonds maturing on October 1, 2024 and October 1, 2025 and a portion of the outstanding 2013 Series B bonds maturing on October 1, 2024 through October 1, 2034. The bonds carried "Aa2" and "AA" ratings from Moody's and S&P, respectively.

The 2022 Series B bonds include serial bonds, each with an interest rate of 5% and have a final maturity in 2034. The Series B bonds have a true interest cost of 3.2%. The refunding resulted in the recognition of a deferred accounting gain of \$6,868, gross debt service savings of \$12,446, and an economic gain of \$12,012 or 8.0% of refunded bonds. As of June 30, 2023, the principal amount of the 2022 Series B bonds outstanding was \$137,080.

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### ***(m) Wastewater Revenue Refunding Bonds 2023 Series ABC***

In April 2023, the Enterprise issued tax-exempt revenue bonds, 2023 Series ABC in the aggregate principal amount of \$974,380. The purpose of the 2023 Series ABC bonds was to refund approximately \$557,845 aggregate principal amount of commercial paper notes, finance various capital projects of the Enterprise, and refund certain outstanding revenue bonds. The bonds carried “Aa2” and “AA” ratings from Moody’s and S&P, respectively.

The \$530,565 2023 Series A bonds were issued as tax-exempt Green Bonds to refund approximately \$400,900 of commercial paper notes for SSIP capital projects and finance certain capital projects benefitting the Enterprise. The Series A bonds were issued as serial bonds with coupons of 5.0% and 5.3% and a final maturity of 2042. The 2023 Series A bonds have a true interest cost of 2.9%. As of June 30, 2023, the principal amount of the 2023 Series A bonds outstanding was \$530,565.

The \$278,155 2023 Series B bonds were issued as tax-exempt bonds to refund a portion of the outstanding 2013 Series B bonds maturing on October 1, 2035 through October 1, 2039, refund approximately \$156,900 of commercial paper notes for certain capital projects benefitting the Enterprise and finance certain capital projects benefitting the Enterprise. The Series B bonds were issued as serial bonds with coupons of 4.0% and 5.0% and a final maturity of 2042. The Series B bonds have a true interest cost of 3.0%. The refunding resulted in the recognition of a deferred accounting gain of \$5,316 and gross debt service savings of \$10,626. As of June 30, 2023, the principal amount of the 2023 Series B bonds outstanding was \$278,155.

The \$165,660 2023 Series C bonds were issued as tax-exempt Green Bonds to refund all of the outstanding 2018 Series C bonds. The Series C bonds were issued as serial bonds with a coupon of 4.0% and a final maturity of 2048. The 2023 Series C bonds have a true interest cost of 3.5%. The refunding resulted in the recognition of a deferred accounting gain of \$963, gross debt service savings of \$24,606, and an economic gain of \$15,785 or 8.8% of refunded bonds. As of June 30, 2023, the principal amount of the 2023 Series C bonds outstanding was \$165,660.

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### **(n) Future Annual Debt Services of Revenue Bonds, Notes, and Refunding Bonds**

The following table presents the future annual debt service relating to the revenue and refunding bonds and revenue notes outstanding as of June 30, 2023. The interest before subsidy amounts includes the interest for 2010 Series B, 2013 Series A and B, 2016 Series A and B, 2018 Series A and B, 2021 Series A and B bonds, 2021 Series A and B notes, 2022 Series B, and 2023 Series A, B, and C bonds. The federal interest subsidy amounts represent 35.0% of the interest, excluding sequestration, for the 2010 Series B revenue bonds.

	<u>Principal</u>	<u>Interest before subsidy</u>	<u>Federal interest subsidy*</u>	<u>Interest net of subsidy</u>
Fiscal years ending June 30:				
2024	\$ 28,070	114,379	(3,356)	111,023
2025	35,370	115,140	(3,235)	111,905
2026	256,815	112,242	(3,105)	109,137
2027	199,405	107,815	(2,968)	104,847
2028	77,225	103,460	(2,822)	100,638
2029-2033	540,075	438,987	(11,623)	427,364
2034-2038	520,935	303,416	(6,675)	296,741
2039-2043	526,905	179,593	(1,173)	178,420
2044-2048	378,985	77,465	—	77,465
2049-2052	181,350	13,138	—	13,138
	<u>2,745,135</u>	<u>1,565,635</u>	<u>(34,957)</u>	<u>1,530,678</u>
Less: Current portion	(28,070)			
Add: Unamortized bond premiums	341,331			
Long-term portion as of June 30, 2023	\$ <u>3,058,396</u>			

\*The SFPUC received an IRS notice, dated May 25, 2023, that the federal interest subsidy on the 2010 Series B bonds is reduced by 5.7% through fiscal year 2030, or a total reduction of \$2,113, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

As defined in the Indenture, the principal and interest of the Enterprise's refunding bonds are payable from its corresponding revenue as well as monies deposited in certain funds and accounts pledged thereto (see Note 5).

### **(o) Certificates of Participation Issued for the 525 Golden Gate Avenue Headquarters Building**

In October 2009, the City issued \$167,670 in certificates of participation to fund the headquarters building of the SFPUC at 525 Golden Gate Avenue. The 2009 Series C were issued for \$38,120 and 2009 Series D for \$129,550 as "Build America Bonds" on a taxable basis under the 2009 American Recovery and Reinvestment Act. The 2009 Series C certificates carry interest rates ranging from 2.0% to 5.0% and matured on November 1, 2022. The 2009 Series D certificates carry interest rates ranging from 6.4% to 6.5% and mature on November 1, 2041. After adjusting for the federal interest subsidy, the true interest cost averages 3.4% and 4.3% for Series C and Series D, respectively.

Under the terms of a memorandum of understanding (MOU) between the City and the SFPUC dated October 1, 2009, the City conveyed the real property to the Trustee, the Bank of New York Mellon Trust Company, N.A., which was replaced by U.S. Bank in March 2014 under a property lease in exchange for the proceeds of the sale of the certificates. The Trustee has leased the property back

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to the City for the City's use under a project lease. The City is obligated under the project lease to pay base rental payments and other payments to the Trustee each year during the 32-year term of the project lease. The Commission makes annual base rental payments to the City for the building equal to annual debt service on the certificates. There are no events of default stated in this MOU.

Each of the three Enterprises has an ownership interest in the building equal to their projected usage of space as follows: Water (73%), Wastewater (15%), and Power (12%). Similarly, each Enterprise is responsible for a portion of the annual base rental payment based on their ownership percentages less contributed equity. The percentage share of base rental payments for the Enterprises is as follows: Water (71.4%), Wastewater (18.9%), and Power (9.7%).

The future annual debt services relating to the certificates of participation 2009 Series D outstanding as of June 30, 2023 are as follows:

<b>Certificates of Participation 2009 Series D (Taxable)</b>	<b>Principal</b>	<b>Interest before subsidy</b>	<b>Federal interest subsidy*</b>	<b>Interest net of subsidy</b>
Fiscal years ending June 30:				
2024	\$ 864	1,551	(512)	1,039
2025	900	1,494	(493)	1,001
2026	937	1,436	(474)	962
2027	977	1,375	(454)	921
2028	1,019	1,312	(433)	879
2029-2033	5,773	5,502	(1,816)	3,686
2034-2038	7,117	3,421	(1,129)	2,292
2039-2042	6,871	915	(302)	613
Total	24,458	17,006	(5,613)	11,393
Less: Current portion	(864)			
Long-term portion as of June 30, 2023	\$ 23,594			

\*The SFPUC received an IRS notice dated May 25, 2023, that the federal interest subsidy on the 2009 Series D bonds is reduced by 5.7% through fiscal year 2030, or a total reduction of \$339, due to sequestration over the remaining life of the bonds assuming the sequestration rate will remain the same after fiscal year 2023.

**(p) Lake Merced Green Infrastructure Project CWSRF Loan**

In January 2016, then amended in May 2016, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund ("CWSRF") Loan to fund the Lake Merced Green Infrastructure Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is \$7,435. The loan bears an interest rate of 1.6% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; completion was in October 2020. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received loan disbursements to date totaling \$6,116 and a construction period interest of \$166 transferred to principal. As of June 30, 2023 and 2022, the principal amount outstanding of the loan was \$5,945 and \$6,112, respectively.

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### **(g) Southeast Plant (SEP) 521/522 and Disinfection Upgrade Project CWSRF Loan**

In September 2017, then amended in December 2017 and May 2018, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP 521/522 and Disinfection Upgrade Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is \$40,007. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in July 2019. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling \$39,741. As of June 30, 2023 and 2022, the principal amount outstanding of the loan was \$36,409 and \$37,450, respectively.

### **(r) North Point Facility Outfall Rehabilitation Project CWSRF Loan**

In September 2017, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the North Point Facility Outfall Rehabilitation Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is \$20,199. The loan bears an interest rate of 1.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in February 2018. The CWSRF loans is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling \$17,706. As of June 30, 2023 and 2022, the principal amount outstanding of the loan was \$15,231 and \$15,710, respectively.

### **(s) Southeast Plant (SEP) Primary/Secondary Clarifier Upgrade Project CWSRF Loan**

In September 2017, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP Primary/Secondary Clarifier Upgrade Project of the Sewer System Improvement Program. The aggregate amount of the CWSRF loans is \$34,446. The loan bears an interest rate of 0.8% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion occurred in June 2018. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling \$29,197. As of June 30, 2023 and 2022, the principal amount outstanding of the loan was \$25,254 and \$26,048, respectively.

### **(t) Oceanside Plant (OSP) Digester Gas Utilization Upgrade Project**

In May 2020, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the OSP Digester Gas Utilization Upgrade Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of \$54,388, which includes \$4,000 of principal forgiveness, or a grant. The loan bears an interest rate of 1.4% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term,

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with loan repayment beginning one year after substantial completion of each project's construction. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling \$33,230, which included a loan forgiveness grant of \$4,000. As of June 30, 2023 and 2022, the principal amount outstanding of the loan was \$29,230 and \$24,661, respectively.

**(u) Southeast Plant (SEP) Biosolids Digester Facilities Project**

In May 2020, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP Biosolids Digester Facilities Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of \$132,000, which includes \$4,000 of principal forgiveness, or a grant. The loan bears an interest rate of 1.4% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected in May 2026. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling \$132,000, which includes a \$4,000 loan forgiveness grant. As of June 30, 2023 and 2022, the principal amount outstanding of the loan was \$128,000.

**(v) Southeast Plant (SEP) New Headworks (Grit) Replacement Project**

In May 2021, the SFPUC entered into an Installment Sale Agreement with the State Water Resources Control Board for a CWSRF Loan to fund the SEP New Headworks (Grit) Replacement Project of the Sewer System Improvement Program. The CWSRF loan is in the amount of \$112,036. The loan bears an interest rate of 1.1% which was equal to one-half of the State of California's most recent 30-year General Obligation Bond true interest cost at the time the agreement was executed. The CWSRF loan will have a 30-year term, with loan repayment beginning one year after substantial completion of each project's construction; substantial completion is expected in March 2024. The CWSRF loan is secured on a parity lien basis with the Enterprise's outstanding revenue bonds. The SFPUC has received proceeds from loan disbursements to date totaling \$64,678 and a receivable for reimbursement of \$13,942. As of June 30, 2023 and 2022, the principal amount outstanding of the loan was \$78,620 and \$64,678, respectively.

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### (w) *Future Annual Debt Services of State Revolving Fund Loans (CWSRF Loans)*

The future annual debt services relating to the SRF Loan to fund the Lake Merced Green Infrastructure Project, the North Point Facility Outfall Rehabilitation Project, the SEP Primary/Secondary Clarifier Upgrade Project, the SEP 521/522 and Disinfection Upgrade Project, the OSP Digester Gas Utilization Upgrade Project, the SEP Biosolids Digester Facilities Project, and the SEP New Headworks (Grit) Replacement Project outstanding as of June 30, 2023 are as follows:

<u>California Clean Water State Revolving Fund Loans</u>	<u>Principal</u>	<u>Interest and Fees*</u>	<u>Total</u>
Fiscal years ending June 30:			
2024	\$ 2,526	1,479	4,005
2025	5,588	2,708	8,296
2026	5,669	2,627	8,296
2027	9,215	4,336	13,551
2028	9,347	4,204	13,551
2029-2033	48,792	18,960	67,752
2034-2038	52,411	15,341	67,752
2039-2043	56,308	11,444	67,752
2044-2048	60,505	7,247	67,752
2049-2053	48,755	3,197	51,952
2054-2056	19,573	481	20,054
	<u>318,689</u>	<u>72,024</u>	<u>390,713</u>
Less: Current portion	(2,526)		
Long-term portion as of June 30, 2023	<u>\$ 316,163</u>		

\* Interest and Fees included debt admin fees for the North Point Facility and SEP Clarifier Upgrade SRF loans.

### (x) *WIFIA Loan Agreement-Biosolids Digester Facility Project*

In July 2018, the SFPUC entered into a “Water Infrastructure Finance and Innovation Act (WIFIA)” Loan Agreement (“WIFIA Loan”) with the United States Environmental Protection Agency in the amount of \$699,242. The WIFIA Loan was entered into pursuant to the WIFIA statute authorized by Congress in 2014. The WIFIA Loan will fund 49% of the costs of the Wastewater Enterprise’s Biosolids Digester Facility Project plus certain eligible expenses. Payment of the WIFIA Loan will be secured by a senior lien pledge of the Wastewater Enterprise’s net revenues and is on a parity lien basis with the SFPUC’s outstanding Wastewater Revenue Bonds and Clean Water State Revolving Fund (“SRF”) Loans entered into with the California State Water Resources Control Board.

The original 2018 loan bore a fixed interest rate of 3.09% for a 35-year term, with loan repayment expected to begin in fiscal year 2026, after substantial completion of project construction. In June 2020 the SFPUC re-executed the WIFIA Loan Agreement to have a fixed interest rate of 1.45% for a 35-year term. All other terms of WIFIA Loan Agreement are unchanged.

In March of 2023, the SFPUC received disbursement of \$122,283 in respect to eligible project costs and a capitalized interest of \$74 added to principal. As of June 30, 2023, the principal amount of the loan outstanding was \$122,357.

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### **(y) WIFIA Loan Agreement-Southeast Treatment Plant Improvements**

In June 2020, the San Francisco Public Utilities Commission (“SFPUC”) entered into a “Water Infrastructure Finance and Innovation Act (WIFIA)” Loan Agreement (“WIFIA Loan”) with the United States Environmental Protection Agency in the amount of \$513,862. The WIFIA Loan was entered into pursuant to the WIFIA statute authorized by Congress in 2014. The WIFIA Loan will fund 49% of the costs of the Wastewater Enterprise’s SEP New Headworks Replacement Project and additional costs of the revised Biosolids Digester Facility Project plus certain eligible expenses. Payment of the WIFIA Loan will be secured by a senior lien pledge of the Wastewater Enterprise’s net revenues and is on a parity lien basis with the SFPUC’s outstanding Wastewater Revenue Bonds and Clean Water State Revolving Fund (“SRF”) Loans entered into with the California State Water Resources Control Board. The loan will bear a fixed interest rate of 1.45% for a 35-year term, with loan repayment expected to begin in fiscal year 2025, after substantial completion of project construction. The SFPUC has not submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2023.

### **(z) WIFIA Master Loan Agreement and Project 1 Loan Agreement**

In April 2023, the SFPUC entered into a “Water Infrastructure Finance and Innovation Act (WIFIA)” Master Agreement and Project 1 Loan Agreement with the United States Environmental Protection Agency. The WIFIA Master Agreement and Project 1 Loan was entered into pursuant to the “Water Infrastructure Finance and Innovation Act (WIFIA)” authorized by Congress in 2014. The SFPUC entered the WIFIA Master Loan Agreement with the EPA in an amount not to exceed \$791,337 to provide partial funding for projects in the Wastewater Enterprise Capital Plan. The Master Agreement defines the general terms for funding a series of WIFIA loans, the first of which is the “Project 1 Loan Agreement”. The incurrence of the Project 1 Loan Agreement, in an aggregate initial principal amount not to exceed \$369,335, will provide partial funding for six Wastewater Enterprise capital improvement projects. Those projects are Westside Pump Station Reliability Improvements, North Shore Pump Station Wet Weather Improvements, Wawona Area Stormwater Improvement, New Treasure Island Wastewater Treatment Plant, Folsom Area Stormwater Improvement, and Yosemite Creek Daylighting. Proceeds of the loan will fund 49% of project costs plus eligible expenses. The Project 1 Loan is on a parity lien basis with the SFPUC’s outstanding Wastewater Revenue Bonds and Clean Water State Revolving Fund (“SRF”) Loans entered into with the California State Water Resources Control Board. The loan will bear a fixed interest rate of 3.65% for a 32-year term, with loan repayment expected to begin in fiscal year 2033. The SFPUC has not yet submitted any requests for loan disbursements to date and there is no outstanding loan principal as of June 30, 2023.

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### (aa) Future Annual Debt Services of WIFIA Loans

The future annual debt services relating to the WIFIA Loan to fund the Biosolids Digester Facility Project outstanding as of June 30, 2023 are as follows:

<u>Water Infrastructure Finance and Innovation Act (WIFIA) Loans</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Fiscal years ending June 30:			
2024	\$ —	—	—
2025	—	—	—
2026	—	886	886
2027	—	1,773	1,773
2028	—	1,773	1,773
2029-2033	—	8,866	8,866
2034-2038	—	8,866	8,866
2039-2043	—	8,866	8,866
2044-2048	20,166	8,328	28,494
2049-2053	41,698	6,108	47,806
2054-2058	49,610	2,813	52,423
2059	10,883	119	11,002
	<u>122,357</u>	<u>48,398</u>	<u>170,755</u>
Less: Current portion	—		
Long-term portion as of June 30, 2023	<u>\$ 122,357</u>		

### (bb) Events of Default and Remedies

In accordance with GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, significant events of default as specified in the Wastewater Enterprise Indenture (applicable to Wastewater Revenue Bonds, SRF Loans, and WIFIA Loan include 1) Non-payment 2) material breach of warranty, representation, or indenture covenants (not cured within applicable grace periods), and 3) bankruptcy and insolvency events, which may result in the Trustee (upon written request by the majority of the owners (by aggregate amount of the bond obligations or of a credit provider), declaring the principal and the interest accrued thereon, to be due and payable immediately. As of June 30, 2023 and 2022, there were no such events described herein.

### (8) Revenue Pledge

The Enterprise has pledged future revenues to repay various revenue bonds, notes, SRF, and WIFIA loans. Proceeds from the revenue bonds, revenue notes, SRF, and WIFIA loans provided financing for various capital construction projects, and to refund previously issued bonds. The bonds, notes, SRF, and WIFIA loans are payable through fiscal years 2052, 2027, 2056, and 2059, respectively, and are solely from revenues of the Enterprise.

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The original amount of revenue bonds issued, revenue notes issued, SRF loans, and WIFIA loans, total principal and interest remaining, principal and interest paid during fiscal years 2023 and 2022, applicable net revenues, and funds available for debt service are as follows:

	2023	2022
Bonds issued with revenue pledge	\$ 3,029,385	1,964,975
Notes issued with revenue pledge	347,465	347,465
Clean Water State Revolving Fund (CWSRF) loans with revenue pledge	328,776	310,265
WIFIA loans with revenue pledge	122,357	—
Principal and interest remaining due at the end of the year	4,872,238	3,730,462
Principal and interest paid during the year	98,811	86,619
Net revenues for the year ended June 30	178,850	155,504
Funds available for debt service	313,443	310,835

### (9) Leases

The Enterprise as a lessee has entered into long-term leases for land, office space, communication site, data processing, machinery, and other equipment. The terms and conditions for these leases vary, which range between 1-75 years.

A summary of intangible right-to-use leases during the year ended June 30, 2023 and 2022 is as follows:

	Balance July 1, 2022	Increases	Decreases	Remeasurements	Balance June 30, 2023
Right-to-use assets:					
Building/Facility	\$ 8,247	—	—	—	8,247
Total lease assets	8,247	—	—	—	8,247
Less accumulated amortization:					
Right-to-use assets:					
Building/Facility	(4,650)	(2,325)	—	—	(6,975)
Total accumulated amortization	(4,650)	(2,325)	—	—	(6,975)
Total lease assets, net	\$ 3,597	(2,325)	—	—	1,272

	Balance July 1, 2021	Increases	Decreases	Remeasurements	Balance June 30, 2022
Right-to-use assets:					
Building/Facility	\$ 8,247	—	—	—	8,247
Total lease assets	8,247	—	—	—	8,247
Less accumulated amortization:					
Right-to-use assets:					
Building/Facility	(2,325)	(2,325)	—	—	(4,650)
Total accumulated amortization	(2,325)	(2,325)	—	—	(4,650)
Total lease assets, net	\$ 5,922	(2,325)	—	—	3,597

## SAN FRANCISCO WASTEWATER ENTERPRISE

### Notes to Financial Statements June 30, 2023 and 2022 (Dollars in thousands, unless otherwise stated)

A summary of changes in the related lease liabilities during the year ended June 30, 2023 and 2022 is as follows:

	Balance July 1, 2022	Additions	Remeasurements	Deductions	Balance June 30, 2023	Amounts Due Within One Year
Lease liabilities	\$ 3,638	—	—	(2,341)	1,297	1,297
Total	\$ 3,638	—	—	(2,341)	1,297	1,297

	Balance July 1, 2021	Additions	Remeasurements	Deductions	Balance June 30, 2022	Amounts Due Within One Year
Lease liabilities	\$ 5,952	—	—	(2,314)	3,638	2,341
Total	\$ 5,952	—	—	(2,314)	3,638	2,341

Future annual lease payments as of June 30, 2023 and 2022 are as follows:

	Principal amount	Interest amount	Total
Year ending June 30:			
2024	\$ 1,297	6	1,303
	1,297	6	1,303
Less: Current portion	(1,297)		
Long-term portion as of June 30, 2023	\$ —		
Year ending June 30:			
2023	\$ 2,341	30	2,371
2024	1,297	6	1,303
	3,638	36	3,674
Less: Current portion	(2,341)		
Long-term portion as of June 30, 2022	\$ 1,297		

#### Variable Lease Payments

Variable lease payments, other than those payments that depend on an index or rate or are fixed in substance, are excluded for the measurement of the lease liability. Such amounts are recognized as lease expenses in the period in which the obligation for those payments is incurred.

Certain equipment or facility rental leases require the Enterprise to make variable lease payments that based on usage, related to the property taxes levied on the lessor, and insurance payments made by the lessor, these amounts are generally determined annually. The amounts recognized as expense for variable lease payments not included in the measurement of the lease liability were \$673 and \$207 during the year ended June 30, 2023 and 2022, respectively.

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### *Wastewater Enterprise as Lessor*

The Enterprise has leased facilities, easements, communication site and equipment to various tenants. The terms and conditions for these leases varies, which ranges between 1–65 years.

Variable payments include percentage of sales, or payments depended on an index made by the lessee; these amounts are generally determined periodically. The Enterprise did not incur revenue related to residual value guarantees or lease termination penalties. The total amounts for lease revenue, interest revenue, and other lease-related revenues recognized during the year June 30, 2023 and 2022 were \$7 and \$0, respectively.

Principal and interest requirements to maturity for the lease receivable at June 30, 2023 are as follows:

Year ending June 30:	Principal	Interest	Total
2024	\$ 212	38	250
2025	226	32	258
2026	241	26	267
2027	257	19	276
2028	215	12	227
2029-2033	306	13	319
	<u>\$ 1,457</u>	<u>140</u>	<u>1,597</u>

### **(10) Subscription-Based Information Technology Arrangements**

#### *Wastewater Enterprise as Subscriber*

The Enterprise has noncancellable subscription arrangements (similar to a lease) for the right to use various information technology hardware and software (SBITAs). The terms and conditions for these subscriptions varies, which ranges between 1-5 years.

A summary of intangible right-to-use subscription IT assets during the year ended June 30, 2023 and June 30, 2022 is as follows:

	Balance July 1, 2022	Increases	Decreases	Remeasurements	Balance June 30, 2023
Subscription assets	\$ 1,487	–	–	–	1,487
Less accumulated amortization:	(530)	(535)	–	–	(1,065)
Total subscription IT assets, net	<u>\$ 957</u>	<u>(535)</u>	<u>–</u>	<u>–</u>	<u>422</u>

	Balance July 1, 2021	Increases	Decreases	Remeasurements	Balance June 30, 2022 as restated*
Subscription assets	\$ 1,422	65	–	–	1,487
Less accumulated amortization:	–	(530)	–	–	(530)
Total subscription IT assets, net	<u>\$ 1,422</u>	<u>(465)</u>	<u>–</u>	<u>–</u>	<u>957</u>

\*GASB 96 implementation - restatement for subscription assets

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### Notes to Financial Statements June 30, 2023 and 2022 (Dollars in thousands, unless otherwise stated)

A summary of changes in the related subscription liabilities during the year ended June 30, 2023 and June 30, 2022 is as follows:

	Balance July 1, 2022	Additions	Remeasurements	Deductions	Balance June 30, 2023	Amounts Due Within One Year
SBITA IT liabilities	\$ 944	–	–	(515)	429	243
Total	\$ 944	–	–	(515)	429	243

	Balance July 1, 2021,	Additions	Remeasurements	Deductions	Balance June 30, 2022 as restated*	Amounts Due Within One Year
SBITA IT liabilities	\$ 1,422	–	–	(478)	944	515
Total	\$ 1,422	–	–	(478)	944	515

\*GASB 96 implementation - restatement for subscription liabilities

Future annual subscription payments as of June 30, 2023 and 2022 are as follows:

Year ending June 30:	Principal amount	Interest amount	Total
2024	\$ 243	4	247
2025	93	2	95
2026	93	1	94
	429	7	436
Less: Current portion	(243)		
Long-term portion as of June 30, 2023	\$ 186		

Year ending June 30:	Principal amount	Interest amount	Total
2023	\$ 515	8	523
2024	243	4	247
2025	93	2	95
2026	93	1	94
	944	15	959
Less: Current portion	(515)		
Long-term portion as of June 30, 2022	\$ 429		

## (11) Employee Benefits

### (a) Pension Plan

The Enterprise participates in a cost-sharing multiple-employer defined benefit pension Plan (SFERS Plan). The SFERS Plan is administered by the San Francisco City and County Employees' Retirement System (SFERS). Contributions are recognized in the period in which they are due pursuant to legal requirements. For purposes of measuring the net pension liability, deferred outflows/inflows of resources related to pensions, pension expense, information about the fiduciary net position of the SFERS Plan, and additions to/deductions from the SFERS Plan's fiduciary net position have been

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determined on the same basis as they are reported by the SFERS Plan. Benefit payments (including refunds of employee contributions) are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

GASB Statement No. 68 requires that the SFERS Plan reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

### Fiscal Year 2023

Valuation Date (VD)	June 30, 2021 updated to June 30, 2022
Measurement Date (MD)	June 30, 2022
Measurement Period (MP)	July 1, 2021 to June 30, 2022

### Fiscal Year 2022

Valuation Date (VD)	June 30, 2020 updated to June 30, 2021
Measurement Date (MD)	June 30, 2021
Measurement Period (MP)	July 1, 2020 to June 30, 2021

*SFERS Plan* – The City is an employer of the SFERS Plan with a proportionate share of 94.87% as of June 30, 2022 (measurement date), and 94.64% as of June 30, 2021 (measurement date). The Enterprise's allocation percentage was determined based on the Enterprise's employer contributions divided by the City's total employer contributions for fiscal years 2022 and 2021. The Enterprise's net pension liability/(asset), deferred outflows/inflows of resources related to pensions, amortization of deferred outflows/inflows, and pension expense is based on its allocated percentage. The Enterprise's allocation of the City's proportionate share was 1.99% as of June 30, 2022 and as of June 30, 2021 (measurement dates).

*Plan Description* – The SFERS Plan provides basic service retirement, disability, and death benefits based on specified percentages of defined final average monthly salary and provides annual cost of living adjustments (COLA) after retirement. The SFERS Plan also provides pension continuation benefits to qualified survivors. The San Francisco City and County Charter and the Administrative Code are the authorities which establish and amend the benefit provisions and employer obligations of the SFERS Plan. The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the SFERS Plan. That report may be obtained on the Retirement System's website <http://mysfers.org> or by writing to the San Francisco City and County Employees' Retirement System, 1145 Market Street, 5th Floor, San Francisco, CA 94103 or by calling (415) 487-7000.

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*Benefits* – The Retirement System provides service retirement, disability, and death benefits based on specified percentages of defined final average monthly salary and annual COLA after retirement. Benefits and refunds are recognized when due and payable in accordance with the terms of the SFERS Plan. The Retirement System pays benefits according to the category of employment and the type of benefit coverage provided by the City and County. The four main categories of SFERS Plan members are:

- a) Miscellaneous Non-Safety Members – staff, operational, supervisory, and all other eligible employees who are not in special membership categories.
- b) Sheriff’s Department and Miscellaneous Safety Members – Sheriffs assuming office on and after January 7, 2012, and undersheriffs, deputized personnel of the Sheriff’s Department, and miscellaneous safety employees hired on and after January 7, 2012.
- c) Firefighter Members – firefighters and other employees whose principal duties are in fire prevention and suppression work or who occupy positions designated by law as firefighter member positions.
- d) Police Members – police officers and other employees whose principal duties are in active law enforcement or who occupy positions designated by law as police member positions.

The membership groups and the related service retirement benefits are included in the Notes to the Basic Financial Statements of San Francisco Employees’ Retirement System.

All members are eligible to apply for a disability retirement benefit, regardless of age, when they have 10 or more years of credited service, and they sustain an injury or illness that prevents them from performing their duties. Safety members are eligible to apply for an industrial disability retirement benefit from their first day on the job if their disability is caused by an illness or injury that they receive while performing their duties.

All retired members receive a benefit adjustment each July 1, which is the Basic COLA. The majority of adjustments are determined by changes in Consumer Price Index with increases capped at 2%. The SFERS Plan provides for a Supplemental COLA in years when there are sufficient “excess” investment earnings in the SFERS Plan. The maximum benefit adjustment each July 1 is 3.5% including the Basic COLA. Effective July 1, 2012, voters approved changes in the criteria for payment of the Supplemental COLA benefit, so that Supplemental COLAs would only be paid when the SFERS Plan is also fully funded on a market value of assets basis. Certain provisions of this voter-approved proposition were challenged in the Courts. A decision by the California Courts modified the interpretation of the proposition. Effective July 1, 2012, members who retired before November 6, 1996 will receive a Supplemental COLA only when the SFERS Plan is also fully funded on a market value of assets basis. However, the “full funding” requirement does not apply to members who retired on or after November 6, 1996 and were hired before January 7, 2012. For all members hired before January 7, 2012, all Supplemental COLAs paid to them in retirement benefits will continue into the future even where an additional Supplemental COLA is not payable in any given year. For members hired on and after January 7, 2012, a Supplemental COLA will only be paid to retirees when the SFERS Plan is fully funded on a market value of asset basis and in addition for these members, Supplemental COLAs will not be permanent adjustments to retirement benefits. That is, in years when a Supplemental COLA is not paid, all previously paid Supplemental COLAs will expire.

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### *Funding & Contribution Policy*

*SFERS Plans* – Contributions are made by both the City and the participating employees. Employee contributions are mandatory as required by the Charter. Employee contribution rates varied from 7.5% to 12.0% and 7.5% to 13.0% as a percentage of gross covered salary in fiscal years 2023 and 2022. Most employee groups agreed through collective bargaining for employees to contribute the full amount of the employee contributions on a pretax basis. The Enterprise is required to contribute at an actuarially determined rate. Based on the July 1, 2021 actuarial report, the required employer contribution rate for fiscal year 2023 was 17.85% to 21.35%. Based on the July 1, 2020 actuarial report, the required employer contribution rate for fiscal year 2022 was 19.91% to 24.41%.

Employer contributions and employee contributions made by the employer to the SFERS Plan are recognized when due and the employer has made a formal commitment to provide the contributions. The City's proportionate share of employer contributions recognized by the Retirement System in fiscal years ended June 30, 2022 and 2021 (measurement periods) were \$729,578 and \$791,736, respectively. The Enterprise's allocation of employer contributions for fiscal year 2022 and 2021 were \$14,543 and \$16,083, respectively.

*Pension Liabilities/(Assets), Pension Expenses, Deferred Outflows, and Inflows of Resources Related to Pensions*

### **Fiscal Year 2023**

As of June 30, 2023, the City reported net pension liability (NPL) for its proportionate share of the net pension liability of the SFERS Plan of \$2,552,996. The City's NPL/net pension assets (NPA) for each of its cost-sharing plans is measured as a proportionate share of the plans' NPL/(NPA). The net pension liability of the SFERS Plan is measured as of June 30, 2022 (measurement date), and the total pension liability for the SFERS Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2021 rolled forward to June 30, 2022 using standard update procedures. The City's proportion of the net pension liability for the SFERS Plan was based on a projection of the City's long-term share of contributions of the pension plan relative to the projected contributions of all participating employers, actuarially determined. The Enterprise's allocation of the City's proportionate share of the net pension liability for the SFERS Plan as of June 30, 2023 was \$49,549.

For the year ended June 30, 2023, the City's recognized pension expense was \$1,771, which includes Retirement Benefit Plan pension expense of \$14,967. The Enterprise's allocation of pension expense including amortization of deferred outflows/inflows related pension items was (\$1,167).

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As of June 30, 2023, the Enterprise reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<b>Fiscal Year 2023 Schedule of Deferred Outflows and Inflows of Resources</b>		
	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Pension contributions subsequent to measurement date	\$ 12,383	–
Differences between expected and actual experience	4,523	–
Changes in assumptions	12,874	3,864
Net difference between projected and actual earnings on pension plan investments	–	6,159
Change in employer's proportion	2,812	–
<b>Total</b>	<b>\$ 32,592</b>	<b>10,023</b>

Amounts reported as deferred outflows, exclusive of contributions made after the measurement date, and deferred inflows of resources will be amortized annually and recognized in pension expense as follows:

<b>Fiscal years</b>	<b>Deferred Outflows/(Inflows) of Resources</b>
2024	\$ (1,574)
2025	(2,830)
2026	(6,905)
2027	21,495
Total	\$ 10,186

### Fiscal Year 2022

As of June 30, 2022, the City reported net pension assets (NPA) for its proportionate share of the net pension (asset) of the SFERS Plan of \$2,446,564. The City's net pension asset for the SFERS Plan is measured as the proportionate share of the net pension asset. The net pension asset of the SFERS Plan is measured as of June 30, 2021 (measurement date), and the total pension (asset) for the SFERS Plan used to calculate the net pension (asset) was determined by an actuarial valuation as of June 30, 2020 rolled forward to June 30, 2021 using standard update procedures. The City's proportion of the net pension (asset) for the SFERS Plan 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 employers, actuarially determined. The Enterprise's allocation of the City's proportionate share of the net pension (asset) for the SFERS Plan as of June 30, 2022 was (\$48,770).

For the year ended June 30, 2022, the City's recognized pension (benefit) was (\$922,979), which includes Retirement Benefit Plan pension expense of \$28,735. The Enterprise's allocation of pension (benefit) including amortization of deferred outflows/inflows related pension items was (\$20,601).

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As of June 30, 2022, the Enterprise reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<b>Fiscal Year 2022 Schedule of Deferred Outflows and Inflows of Resources</b>		
	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Pension contributions subsequent to measurement date	\$ 14,543	—
Differences between expected and actual experience	4,479	160
Changes in assumptions	3,300	8,562
Net difference between projected and actual earnings on pension plan investments	—	105,948
Change in employer's proportion	3,047	—
<b>Total</b>	<b>\$ 25,369</b>	<b>114,670</b>

Amounts reported as deferred outflows, exclusive of contributions made after the measurement date, and deferred inflows of resources will be amortized annually and recognized in pension expense as follows:

<b>Fiscal years</b>	<b>Deferred Outflows/(Inflows) of Resources</b>
2023	\$ (26,134)
2024	(23,662)
2025	(24,937)
2026	(29,111)
<b>Total</b>	<b>\$ (103,844)</b>

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### Actuarial Assumptions

#### Fiscal Year 2023

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2022 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2021 actuarial valuation. Refer to July 1, 2021 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website <http://mysfers.org>.

<u>Key Actuarial Assumptions</u>	<u>SFERS Plan</u>				
Valuation Date	June 30, 2021 updated to June 30, 2022				
Measurement Date	June 30, 2022				
Actuarial Cost Method	Entry-Age Normal Cost				
Expected Rate of Return	7.20% net of investment expenses				
Municipal Bond Yield	2.16% as of June 30, 2021 3.54% as of June 30, 2022 Bond Buyer 20-Bond GO Index, June 24, 2021 and June 30, 2022				
Inflation	2.50%				
Projected Salary Increases	3.25% plus merit component based on employee classification and years of service				
Discount Rate	7.40% as of June 30, 2021 7.20% as of June 30, 2022				
Administrative Expenses	0.60% of payroll as of June 30, 2021 0.60% of payroll as of June 30, 2022				
		Old Miscellaneous and All New Plans	Old Police & Fire, pre 7/1/75	Old Police & Fire Charters A8.595 and A8.596	Old Police & Fire Charters A8.559 and A8.585
Basic COLA	June 30, 2021	2.00%	1.90%	2.50%	3.60%
	June 30, 2022	2.00%	1.90%	2.50%	3.60%

Mortality rates for health Miscellaneous members were based upon adjusted PubG-2010 Employee and Retiree tables for non-annuitants and retirees, respectively. Mortality rates were then projected generationally from the base year using the MP-2019 projection scale.

The actuarial assumptions used at the June 30, 2022 measurement date was based upon the result of a demographic experience study for the period July 1, 2014 through June 30, 2019 and an economic experience as of July 1, 2021.

#### Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability/(Asset) as of June 30, 2021 (measurement period) is provided below, including any assumptions that differ from those used in the July 1, 2020 actuarial valuation. Refer to the July 1, 2020 actuarial valuation report for a complete description of all other assumptions, which can be found on the Retirement System's website <http://mysfers.org>.

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### Notes to Financial Statements June 30, 2023 and 2022 (Dollars in thousands, unless otherwise stated)

<u>Key Actuarial Assumptions</u>	<u>SFERS Plan</u>				
Valuation Date	June 30, 2020 updated to June 30, 2021				
Measurement Date	June 30, 2021				
Actuarial Cost Method	Entry-Age Normal Cost				
Expected Rate of Return	7.40% net of investment expenses				
Municipal Bond Yield	2.21% as of June 30, 2020				
	2.16% as of June 30, 2021				
	Bond Buyer 20-Bond GO Index, June 25, 2020 and June 24, 2021				
Inflation	2.50%				
Projected Salary Increases	3.25% plus merit component based on employee classification and years of service				
Discount Rate	7.40% as of June 30, 2020				
	7.40% as of June 30, 2021				
Administrative Expenses	0.60% of payroll as of June 30, 2020				
	0.60% of payroll as of June 30, 2021				
		Old Miscellaneous and	Old Police & Fire,	Old Police & Fire	Old Police & Fire
		<u>All New Plans</u>	<u>pre 7/1/75</u>	<u>Charters A8.595</u>	<u>Charters A8.559</u>
Basic COLA				and A8.596	and A8.585
	June 30, 2020	2.00%	2.50%	3.10%	4.20%
	June 30, 2021	2.00%	1.90%	2.50%	3.60%

Mortality rates for health Miscellaneous members were based upon adjusted PubG-2010 Employee and Retiree tables for non-annuitants and retirees, respectively. Mortality rates were then projected generationally from the base year using the MP-2019 projection scale.

The actuarial assumptions used at the June 30, 2021 measurement date was based upon the result of a demographic experience study for the period July 1, 2014 through June 30, 2019 and an economic experience as of July 1, 2020.

#### *Discount Rate*

#### **Fiscal Year 2023**

*SFERS Plan* – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.20% as of the June 30, 2022 (measurement date) and 7.40% as of June 30, 2021 (measurement date).

The discount rate used to measure the total pension liability as of June 30, 2022 was 7.20%. The projection of cash flows used to determine the discount rate assumed that SFERS plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2021 actuarial valuation. That policy includes contributions equal to the employer portion of the Entry Age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining

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unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years, respectively. All amortization schedules are established as a level percentage of payroll, so payments increase 3.25% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 97 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2022 for the probability and amount of Supplemental COLA for each future year. A full Supplement COLA will be paid to all retired members, and their beneficiaries, who were retired effective July 1, 2022. The table below shows the net assumed Supplemental COLA for members with a 2.00% Basic COLA for sample years.

### Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2024	0.75 %	0.70 %
2025	0.75	0.60
2026	0.75	0.60
2027+	0.75	0.50

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

Based on these assumptions, the Retirement System's fiduciary net position was projected to be available to make projected future benefit payments for current members for all future years. Projected benefit payments are discounted at the long-term expected return on assets of 7.20% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 3.54% to the extent they are not available. The single equivalent rate used to determine the total pension liability as of June 30, 2022 was 7.20%.

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The long-term expected rate of return on pension plan investments was 7.20%. It was set by the Retirement Board after consideration of both expected future returns and historical returns experienced by the Retirement System. Expected future returns were determined by using a building-block method in which best-estimate ranges of expected future real rates of return were developed for each major asset class. These ranges were 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. Target allocation and best estimates of geometric long-term expected real rates of return (net of pension plan investment expense and inflation) for each major asset class are summarized in the following table.

### Long-Term Expected Real Rates of Return

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Global Equity	37.0 %	4.8 %
Private Equity	23.0	7.9
Private Credit	10.0	5.8
Real Assets	10.0	4.7
Hedge Funds/Absolute Returns	10.0	3.4
Treasuries	8.0	0.6
Liquid Credit	5.0	3.5
Leverage	-3.0	0.6
Total	<u>100.0</u>	

### Fiscal Year 2022

*SFERS Plan* – The beginning and end of year measurements are based on different assumptions and contribution methods that may result in different discount rates. The discount rate was 7.40% as of the June 30, 2021 (measurement date) and June 30, 2020 (measurement date).

The discount rate used to measure the total pension liability as of June 30, 2021 was 7.40%. The projection of cash flows used to determine the discount rate assumed that SFERS plan member contributions will continue to be made at the rates specified in the Charter. Employer contributions were assumed to be made in accordance with the contribution policy in effect for July 1, 2020 actuarial valuation. That policy includes contributions equal to the employer portion of the Entry Age normal costs for members as of the valuation date, a payment for the expected administrative expenses, and an amortization payment on the unfunded actuarial liability.

The amortization payment is based on closed periods that vary in length depending on the source. Charter amendments prior to July 1, 2014 are amortized over 20 years. After July 1, 2014, any Charter changes to active member benefits are amortized over 15 years and changes to inactive member benefits, including Supplemental COLAs, are amortized over 5 years. The remaining unfunded actuarial liability not attributable to Charter amendments as of July 1, 2013 is amortized over a 19-year period commencing July 1, 2014. Experience gains and losses and assumption or method changes on or after July 1, 2014 are amortized over 20 years. The full amortization payment for the 2015 assumption changes is phased in over a period of 5 years. For the July 1, 2016 valuation, the increase in the unfunded actuarial liability attributable to the Supplemental COLAs granted on July 1, 2013 and July 1, 2014 are amortized over 17-years and 5-years, respectively. All

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amortization schedules are established as a level percentage of payroll so payments increase 3.25% each year. The unfunded actuarial liability is based on an actuarial value of assets that smooths investment gains and losses over five years and a measurement of the actuarial liability that excludes the value of any future Supplemental COLAs.

While the contributions and measure of actuarial liability in the funding valuation do not anticipate any future Supplemental COLAs, the projected contributions for the determination of the discount rate include the anticipated future amortization payments on future Supplemental COLAs for current members when they are expected to be granted. For members who worked after November 6, 1996 and before Proposition C passed (Post 97 Retirees), a Supplemental COLA is granted if the actual investment earnings during the year exceed the expected investment earnings on the actuarial value of assets. For members who did not work after November 6, 1996 and before Proposition C passed, the market value of assets must also exceed the actuarial liability at the beginning of the year for a Supplemental COLA to be granted. When a Supplemental COLA is granted, the amount depends on the amount of excess earnings and the basic COLA amount for each membership group. The large majority of members receive a 1.50% Supplemental COLA when granted.

Because the probability of a Supplemental COLA depends on the current funded level of the Retirement System for certain members, an assumption was developed as of June 30, 2021 for the probability and amount of Supplemental COLA for each future year. A full Supplemental COLA will be paid to all retired members, and their beneficiaries, who were retired effective July 1, 2021. The table below shows the net assumed Supplemental COLA for members with a 2.00% basic COLA for sample years.

### Assumed Supplemental COLA for Members with a 2.00% Basic COLA

Fiscal years	96 - Prop C	Before 11/6/96 or After Prop C
2023	0.75 %	0.70 %
2025	0.75	0.70
2027	0.75	0.60
2029	0.75	0.60
2031	0.75	0.60
2033+	0.75	0.50

The projection of benefit payments to current members for determining the discount rate includes the payment of anticipated future Supplemental COLAs.

Based on these assumptions, the Retirement System's fiduciary net position was projected to be available to make projected future benefit payments for current members for all future years. Projected benefit payments are discounted at the long-term expected return on assets of 7.40% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.16% to the extent they are not available. The single equivalent rate used to determine the total pension liability as of June 30, 2021 was 7.40%.

The long-term expected rate of return on pension plan investments was 7.40%. It was set by the Retirement Board after consideration of both expected future returns and historical returns experienced by the Retirement System. Expected future returns were determined by using a

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building-block method in which best-estimate ranges of expected future real rates of return were developed for each major asset class. These ranges were 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. Target allocation and best estimates of geometric long-term expected real rates of return (net of pension plan investment expense and inflation) for each major asset class are summarized in the following table.

### Long-Term Expected Real Rates of Return

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	37.0 %	4.2 %
Private Equity	23.0	7.9
Private Credit	10.0	5.1
Real Assets	10.0	5.1
Hedge Funds/Absolute Returns	10.0	2.9
Treasuries	8.0	0.0
Liquid Credit	5.0	2.3
Leverage	-3.0	0.1
Total	100.0	

*Sensitivity of Proportionate Share of the Net Pension Liability (NPL)/Net Pension Asset (NPA) to Changes in the Discount Rate* – The following presents the Enterprise’s allocation of the employer’s proportionate share of the net pension liability/(asset) for the SFERS Plan, calculated using the discount rate, as well as what the Enterprise’s allocation of the employer’s proportionate share of the net pension liability/(asset) would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate.

### Fiscal Year 2023

Employer	June 30, 2022 (measurement period)		
	1% Decrease Share of NPL @ 6.20%	Share of NPL @ 7.20%	1% Increase Share of NPL @ 8.20%
Wastewater	\$ 135,684	49,549	(21,459)

### Fiscal Year 2022

Employer	June 30, 2021 (measurement period)		
	1% Decrease Share of NPL @ 6.40%	Share of NPA @ 7.40%	1% Increase Share of NPA @ 8.40%
Wastewater	\$ 32,504	(48,770)	(115,868)

### (b) Other Post-Employment Benefits

The Enterprise participates in the City’s single employer defined benefit other postemployment benefits plan (the Plan). The Plan is maintained by the City and is administered through the City’s Health Service System. The plan provides postemployment medical, dental and vision insurance benefits to eligible employees, retired employees, surviving spouses, and domestic partners. Health benefit provisions are established and may be amended through negotiations between the City and the respective bargaining units. The City does not issue a separate report on its other post-employment benefit plan.

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GASB Statement No. 75 requires that reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used.

### San Francisco Health Service System Retiree Plan - Single Employer

Fiscal Year 2023	
Valuation Date (VD)	June 30, 2022
Measurement Date (MD)	June 30, 2022
Measurement Period (MP)	July 1, 2021 to June 30, 2022
Fiscal Year 2022	
Valuation Date (VD)	June 30, 2020, updated to June 30, 2021
Measurement Date (MD)	June 30, 2021
Measurement Period (MP)	July 1, 2020 to June 30, 2021

The Enterprise's proportionate share percentage of the Plan was determined based on its percentage of citywide "pay-as-you-go" contributions for the year ended June 30, 2022. The Enterprise's net OPEB liability, deferred outflows/inflows of resources related to OPEB, amortization of deferred outflows/inflows and OPEB expense to each department is based on the Enterprise's allocated percentage. The Enterprise's proportionate share of the City's OPEB elements as of June 30, 2022 and 2021 was 1.31% and 1.33%, respectively.

### Benefits

Permanent full-time and elected employees are eligible to retire and receive postretirement health insurance benefits when they are eligible for retirement benefits from the City and County of San Francisco's Retirement System. The eligibility requirements are as follows:

Normal Retirement	Miscellaneous	Age 50 with 20 years of credited service <sup>1</sup> Age 60 with 10 years of credited service
	Safety	Age 50 with 5 years of credited service
Disabled Retirement <sup>2</sup>	Any age with 10 years of credited service	
Terminated Vested	5 years of credited service at separation	

<sup>1</sup> Age 53 with 20 years of credited service, age 60 with 10 years of credited service, or age 65 for Miscellaneous members hired on or after January 7, 2012, under charter Section 8.603.

<sup>2</sup> No service requirement for Safety members retiring under the industrial disability benefit or for surviving spouses/domestic partners of those killed in the line of duty.

Retiree healthcare benefits are administered by the San Francisco Health Service System and include the following:

Medical:	PPO – Blue Shield (self-insured) and UHC Medicare Advantage (fully insured) HMO – Kaiser (fully-insured) and Blue Shield (flex-funded) and Health Net (flex-funded)
Dental:	Delta Dental, DeltaCare USA, and UnitedHealthcare Dental
Vision:	Vision benefits are provided under the medical insurance plans and are administered by Vision Service Plan.

Projections of the sharing of benefit related costs are based on an established pattern of practice.

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### Contributions

Benefits provided under the Plan are currently paid through “pay-as-you-go” funding. Additionally, under the City Charter, active officers and employees of the City who commenced employment on or after January 10, 2009, shall contribute to the Retiree Health Care Trust Fund (Trust Fund) a percentage of compensation not to exceed 2% of pre-tax compensation. The City shall contribute 1% of compensation for officers and employees who commenced employment on or after January 10, 2009 until the City’s GASB Actuary has determined that the City’s portion of the Trust Fund is fully funded. At that time, the City’s 1% contribution shall cease, and officers and employees will each contribute 50% of the maximum 2% of pre-tax compensation.

Starting July 1, 2016, active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute 0.25% of pre-tax compensation into the Trust Fund. Beginning on July 1<sup>st</sup> of each subsequent year, the active officers and employees of the City who commenced employment on or before January 9, 2009, shall contribute an additional 0.25% of pre-tax compensation up to a maximum of 1%. Starting July 1, 2016, the City shall contribute 0.25% of compensation into the Trust Fund for each officer and employee who commenced employment on or before January 9, 2009. Beginning on July 1<sup>st</sup> of each subsequent year, the City shall contribute an additional 0.25% of compensation, up to a maximum of 1% for each officer and employee who commenced employment on or before January 9, 2009. When the City’s actuary has determined that the City’s portion of the Trust Fund is fully funded, the City’s 1% contribution shall cease, and officers and employees will each contribute 50% of the maximum 1% of pre-tax compensation.

Additional or existing contribution requirements may be established or modified by amendment to the City’s Charter.

For the fiscal years ending June 30, 2023 and 2022, the City’s funding was based on “pay-as-you-go” plus a contribution of \$45,241 and \$41,841 to the Retiree Healthcare Trust Fund, respectively. The “pay-as-you-go” portion paid by the City was \$215,408 for a total contribution of \$260,649 for the fiscal year ending June 30, 2023, and \$211,025 for a total contribution of \$252,866 for the fiscal year ending June 30, 2022. The Enterprise’s proportionate share of the City’s contributions for fiscal year 2023 was \$3,412, and for fiscal year 2022 was \$3,365.

### OPEB Liabilities, OPEB Expenses and Deferred Outflows/Inflows of Resources Related to OPEB

#### Fiscal Year 2023

As of June 30, 2023, the City reported net OPEB liabilities related to the Plan of \$3,746,270. The Enterprise’s proportionate share of the City’s net OPEB liability as of June 30, 2023 was \$49,035.

For the year ended June 30, 2023, the City’s recognized OPEB expense was \$256,974. Amortization of the City’s deferred outflows and inflows is included as a component of OPEB expense. The Enterprise’s proportionate share of the City’s OPEB expense was \$4,374.

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As of June 30, 2023, the Enterprise reported its proportionate share of the City's deferred outflows and inflows of resources related to OPEB from the following sources:

<b>Wastewater</b>	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Contributions subsequent to measurement date	\$ 3,412	\$ -
Differences between expected and actual experience	1,089	8,164
Changes in assumptions	2,093	-
Net difference between projected and actual earnings on plan investments	789	-
Change in proportion	4,110	122
<b>Total</b>	<b>\$ 11,493</b>	<b>\$ 8,286</b>

Amounts reported as deferred outflows, exclusive of contributions made after the measurement date, and deferred inflows of resources will be amortized annually and recognized in OPEB expense as follows:

**Year ended June 30:**

2024	\$ (137)
2025	(124)
2026	369
2027	236
Thereafter	(549)
<b>Total</b>	<b>\$ (205)</b>

**Fiscal Year 2022**

As of June 30, 2022, the City reported net OPEB liabilities related to the Plan of \$3,691,122. The Enterprise's proportionate share of the City's net OPEB liability as of June 30, 2022 was \$49,123.

For the year ended June 30, 2022, the City's recognized OPEB expense was \$272,001. Amortization of the City's deferred outflows and inflows is included as a component of OPEB expense. The Enterprise's proportionate share of the City's OPEB expense was \$5,364.

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As of June 30, 2022, the Enterprise reported its proportionate share of the City's deferred outflows and inflows of resources related to OPEB from the following sources:

<b>Wastewater</b>	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Contributions subsequent to measurement date	\$ 3,365	\$ -
Differences between expected and actual experience	1,476	7,564
Changes in assumptions	2,076	-
Net difference between projected and actual earnings on plan investments	-	930
Change in proportion	5,981	146
	<u>5,981</u>	<u>146</u>
<b>Total</b>	<b><u>\$ 12,898</u></b>	<b><u>\$ 8,640</u></b>

Amounts reported as deferred outflows, exclusive of contributions made after the measurement date, and deferred inflows of resources will be amortized annually and recognized in OPEB expense as follows:

<b>Year ended June 30:</b>		
2023	\$	291
2024		288
2025		301
2026		231
2027		95
Thereafter		<u>(313)</u>
<b>Total</b>	<b>\$</b>	<b><u>893</u></b>

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## Actuarial Assumptions

### Fiscal Year 2023

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2022 (measurement date) is provided below:

#### Key Actuarial Assumptions

<b>Valuation Date</b>	June 30, 2022
<b>Measurement Date</b>	June 30, 2022
<b>Actuarial Cost Method</b>	The Entry Age Actuarial Cost Method is used to measure the Plan's Total OPEB Liability
<b>Healthcare Cost Trend Rates</b>	Pre-Medicare trend starts at 7.74% trending down to ultimate rate of 3.93% in 2076 Medicare trend starts at 7.74% trending down to ultimate rate of 3.94% in 2076 10-County average trend starts at 5.00% trending down to ultimate rate of 3.94% in 2076 Vision and expenses trend remains a flat 3.0% for all years
<b>Expected Rate of Return on Plan Assets</b>	7.00%
<b>Salary Increase Rate</b>	Wage Inflation Component: 3.25% Additional Merit Component (dependent on years of service): Police: 0.50% - 7.50% Fire: 0.50% - 14.00% Muni Drivers: 0.00% - 16.00% Craft: 0.50% - 3.75% Misc.: 0.30% - 5.50%
<b>Inflation Rate</b>	Wage Inflation: 3.25% compounded annually Consumer Price Inflation: 2.50% compounded annually
<b>Mortality Tables</b>	Base mortality tables are developed by multiplying a published table by an adjustment factor developed in SFERS experience study for the period ending June 30, 2019.

#### Non-Annuitants

	Published Table	Adjustment Factor	
		Male	Female
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

#### Healthy Retirees

	Published Table	Adjustment Factor	
		Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

#### Disabled Retirees

	Published Table	Adjustment Factor	
		Male	Female
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

#### Beneficiaries

	Published Table	Adjustment Factor	
		Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP-2019 projection scale.

# SAN FRANCISCO WASTEWATER ENTERPRISE

## Notes to Financial Statements June 30, 2023 and 2022 (Dollars in thousands, unless otherwise stated)

### Fiscal Year 2022

A summary of the actuarial assumptions and methods used to calculate the Total OPEB Liability as of June 30, 2021 (measurement date) is provided below:

#### Key Actuarial Assumptions

<b>Valuation Date</b>	June 30, 2020, updated to June 30, 2021
<b>Measurement Date</b>	June 30, 2021
<b>Actuarial Cost Method</b>	The Entry Age Actuarial Cost Method is used to measure the Plan's Total OPEB Liability
<b>Healthcare Cost Trend Rates</b>	Pre-Medicare trend starts at 6.74% trending down to ultimate rate of 4.04% in 2075 Medicare trend starts at 7.24% trending down to ultimate rate of 4.04% in 2075 10-County average trend starts at 5.50% trending down to ultimate rate of 4.04% in 2075 Vision and expenses trend remains a flat 3.0% for all years
<b>Expected Rate of Return on Plan Assets</b>	7.00%
<b>Salary Increase Rate</b>	Wage Inflation Component: 3.25% Additional Merit Component (dependent on years of service): Police: 0.50% - 7.50% Fire: 0.50% - 14.00% Muni Drivers: 0.00% - 16.00% Craft: 0.50% - 3.75% Misc.: 0.30% - 5.50%
<b>Inflation Rate</b>	Wage Inflation: 3.25% compounded annually Consumer Price Inflation: 2.50% compounded annually
<b>Mortality Tables</b>	Base mortality tables are developed by multiplying a published table by an adjustment factor developed in SFERS experience study for the period ending June 30, 2019.

#### Non-Annuityants

	Published Table	Adjustment Factor	
		Male	Female
Miscellaneous	PubG-2010 Employee	0.834	0.866
Safety	PubS-2010 Employee	1.011	0.979

#### Healthy Retirees

	Published Table	Adjustment Factor	
		Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubS-2010 Employee	0.947	1.044

#### Disabled Retirees

	Published Table	Adjustment Factor	
		Male	Female
Miscellaneous	PubG-2010 Employee	1.045	1.003
Safety	PubS-2010 Employee	0.916	0.995

#### Beneficiaries

	Published Table	Adjustment Factor	
		Male	Female
Miscellaneous	PubG-2010 Employee	1.031	0.977
Safety	PubG-2010 Employee	1.031	0.977

The mortality rates in the base tables are projected generationally from the base year using the MP-2019 projection scale.

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**Sensitivity of Liabilities to Changes in the Healthcare Cost Trend Rate and Discount Rate**

The following presents the Enterprise’s proportionate share of the City’s net OPEB liability calculated using the healthcare cost trend rate, as well as what the Enterprise’s allocation of the City’s net OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1% lower or 1% higher than the current rate:

**Fiscal Year 2023**

<b>Employer</b>	<b>-1.00%</b>	<b>Healthcare Trend</b>	<b>1.00%</b>
Wastewater	\$ 41,948	\$ 49,035	\$ 57,824

**Fiscal Year 2022**

<b>Employer</b>	<b>-1.00%</b>	<b>Healthcare Trend</b>	<b>1.00%</b>
Wastewater	\$ 41,812	\$ 49,123	\$ 58,236

**Discount Rate**

**Fiscal Year 2023**

The discount rate used to measure the Total OPEB Liability as of June 30, 2022 was 7.0%. Based on the assumption that plan member contributions will continue to be made at the rates specified in the Charter, it was determined that the Plan’s projected fiduciary net position will be greater than or equal to the benefit payments projected for each future period. As such, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

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The long-term expected rate of return on OPEB plan investments was 7.0% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation. Target allocation for each major asset class and best estimates of geometric real rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
<b>Equities</b>		
U.S. Large Cap	28.0%	6.8%
U.S. Small Cap	3.0%	7.4%
Developed Market Equity (non-U.S.)	15.0%	7.5%
Emerging Market Equity	13.0%	8.4%
<b>Credit</b>		
Bank Loans	3.0%	4.0%
High Yield Bonds	3.0%	4.4%
Emerging Market Bonds	3.0%	4.2%
<b>Rate Securities</b>		
Investment Grade Bonds	9.0%	2.4%
Long-term Government Bonds	4.0%	2.8%
Short-term Treasury Inflation Protected Securities	4.0%	1.9%
<b>Private Markets</b>		
Private Equity	5.0%	10.0%
Core Private Real Estate	5.0%	6.1%
<b>Risk Mitigating Strategies</b>		
Global Macro	5.0%	5.0%
<b>Total</b>	<u>100.0%</u>	

The following presents the Enterprise's proportionate share of the City's net OPEB liability calculated using the discount rate, as well as what the Enterprise's proportionate share of the City's net OPEB liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

Employer	June 30, 2022 (measurement period)		
	1% Decrease Share of NOL @ 6.00%	Discount Rate @ 7.00%	1% Increase Share of NOL @ 8.00%
Wastewater	\$ 57,086	\$ 49,035	\$ 42,429

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
June 30, 2023 and 2022  
(Dollars in thousands, unless otherwise stated)

### Fiscal Year 2022

The discount rate used to measure the Total OPEB Liability as of June 30, 2021 was 7.0%. Based on the assumption that plan member contributions will continue to be made at the rates specified in the Charter, it was determined that the Plan's projected fiduciary net position will be greater than or equal to the benefit payments projected for each future period. As such, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

The long-term expected rate of return on OPEB plan investments was 7.0% based on expected future returns and historical returns experienced by the Trust Fund. Expected future returns were determined based on 10-year and 20-year capital market assumptions for the Trust Fund's asset allocation. Target allocation for each major asset class and best estimates of geometric real rates of return are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
<b>Equities</b>		
U.S. Large Cap	28.0%	8.2%
U.S. Small Cap	3.0%	9.5%
Developed Market Equity (non-U.S.)	15.0%	8.9%
Emerging Market Equity	13.0%	11.0%
<b>Credit</b>		
Bank Loans	3.0%	4.4%
High Yield Bonds	3.0%	4.4%
Emerging Market Bonds	3.0%	4.3%
<b>Rate Securities</b>		
Investment Grade Bonds	9.0%	1.9%
Long-term Government Bonds	4.0%	3.2%
Short-term Treasury Inflation Protected Securities	4.0%	1.5%
<b>Private Markets</b>		
Private Equity	5.0%	13.0%
Core Private Real Estate	5.0%	6.2%
<b>Risk Mitigating Strategies</b>		
Global Macro	5.0%	4.4%
<b>Total</b>	<u>100.0%</u>	

The following presents the Enterprise's proportionate share of the City's net OPEB liability calculated using the discount rate, as well as what the Enterprise's proportionate share of the City's net OPEB liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

	June 30, 2021 (measurement period)		
	1% Decrease Share of NOL @ 6.00%	Discount Rate @ 7.00%	1% Increase Share of NOL @ 8.00%
<b>Employer</b>			
Wastewater	\$ 57,442	\$ 49,123	\$ 42,328

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
June 30, 2023 and 2022  
(Dollars in thousands, unless otherwise stated)

The City issues a publicly available financial report that includes the complete note disclosures and required supplementary information related to the City's postemployment health care obligations. The report may be obtained by writing to the City and County of San Francisco, Office of the Controller, 1 Dr. Carlton B. Goodlett Place, Room 316, San Francisco, California 94102, or by calling (415) 554-7500.

### (12) Related Parties

Various common costs incurred by the Commission are allocated among the Enterprise, Hetch Hetchy Water and Power and CleanPowerSF, and the Water Enterprise. The allocations are based on the Commission management's best estimate and may change from year to year depending on the activities incurred by each Enterprise and the information available. The administrative costs of \$32,909 or 28.8%, which included COVID-19 Project expenses, and \$32,212 or 30.0% were allocated to the Enterprise for the years ended June 30, 2023 and 2022, respectively.

The City performs certain administrative services such as maintenance of accounting records and investment of cash for all fund groups within the City. The various funds are charged for these services based on the City's indirect cost allocation plan.

The Enterprise purchases electricity from Hetch Hetchy Power at market rates. This amount, totaling \$14,876 and \$11,887 for the years ended June 30, 2023 and 2022, respectively, has been included in services provided by other departments in the accompanying financial statements.

The Enterprise purchases water from Water Enterprise at retail rates. This amount, totaling \$1,552 and \$1,819 for the years ended June 30, 2023 and 2022, respectively, has been included in services provided by other departments in the accompanying financial statements.

The Enterprise provides sewer services to other City departments at non-residential rates established by the Commission, and through the Customer Services Bureau, bills and collects sewer service charges on behalf of the Enterprise.

The City's Department of Public Works provides certain engineering and other services to the Enterprise and charges amounts designed to recover its costs. These services are primarily related to street cleaning, engineering, building repair, and sewer repair. These amounts totaling approximately \$9,156 and \$13,099 for the years ended June 30, 2023 and 2022, respectively, have been included in services provided by other departments in the accompanying financial statements.

A variety of other City departments provide services such as purchasing, legal, data processing, telecommunications, and human resources to the Enterprise and charge amounts designed to recover those departments' costs. These charges totaling approximately \$15,414 and \$12,840 for the years ended June 30, 2023 and 2022, respectively, have been included in services provided by other departments in the accompanying financial statements.

As of June 30, 2023 and 2022, the Enterprise has payables in the amount of \$2,102 and \$0, respectively, to MTA related to Walsh settlement and \$518 and \$629, respectively, which is associated with the SFPUC Headquarters Living Machine system. As of June 30, 2023 and 2022, the Enterprise has payable of \$0 to the City Attorney's Office for legal services provided.

As of June 30, 2023, the Enterprise has interfund receivable of \$128 from DPW for the Mission Bay South custom work project. In fiscal year 2022, the Enterprise has interfund receivable of \$224,

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
June 30, 2023 and 2022  
(Dollars in thousands, unless otherwise stated)

consisting of \$118 from the DPW for custom work projects and \$106 from the Academy of Sciences for sewer charges.

As of June 30, 2023, the Enterprise has no receivable due from the City's component unit. In fiscal year 2022, the Enterprise has receivables due from the City's component unit consisting of \$1,014 from the Treasure Island Development Authority for capacity charges and \$1 from the Office of Community Investment and Infrastructure (OCII) for the Candlestick Point Project.

SFPUC's 75-year lease agreement with the San Francisco Recreation and Parks Department, for the use of parking spaces for its fleet of vehicles at the Civic Center Garage, commenced on February 1, 2011. Total payment under this agreement is \$6,274, which was fully made as of fiscal year 2015. The expenses and prepayments among the three SFPUC Enterprises are based on 525 Golden Gate occupancy. As of June 30, 2023, the Enterprise's allocable shares of expenses and prepayment were \$21 and \$1,124, respectively, and as of June 30, 2022 were \$22 and \$1,145, respectively.

SFPUC's 30-year lease agreement with the San Francisco Port Commission, for the use of approximately 4,833 square feet of land located within Seawall Lot 345 and within the public right-of-way on Terry A. Francois Boulevard and on Illinois Street, commenced on September 1, 2018. SFPUC intends to use the premises for the reconstruction of the Mariposa Pump Station and Force Main Improvements. Total payment under this agreement is \$502, which was fully made as of fiscal year 2019. As of June 30, 2023, the Enterprise's expenses and prepayment were \$17 and \$421, respectively, and as of June 30, 2022 were \$17 and \$438, respectively.

### **(13) Risk Management**

The Enterprise's Risk Management program includes both self-insured (i.e., self-retention) and insured exposures at risk. Risk assessments and purchasing of insurance coverage are collaboratively coordinated by SFPUC Risk Management and the City's Office of Risk Management. With certain exceptions, the City and the Enterprise's general approach is to first evaluate the exposure at risk for self-insurance. Based on this analysis, internal mitigation strategies and financing through a self-retention mechanism is generally more economical as the SFPUC in coordination with the City Attorney's Office, administers, adjusts, settles, defends, and pays claims from budgeted resources (i.e., pay-as-you-go fund). When economically more viable or when required by debt financing covenants, the Enterprise obtains commercial insurance. At least annually, the City actuarially determines general liability and workers' compensation risk exposures. The Enterprise does not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the SFPUC Property Insurance program. In the past three years, there was no settlements that exceeded insurance coverage.

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
June 30, 2023 and 2022  
(Dollars in thousands, unless otherwise stated)

Risk Types	Coverage Approach
(a) General Liability	Self-Insured
(b) Workers' Compensation	Self-Insured Through City-wide Pool
(c) Property	Purchased Insurance and Self-Insured
(d) Public Officials Liability	Purchased Insurance
(e) Employment Practices Liability	Purchased Insurance
(f) Cyber Liability	Purchased Insurance
(g) Crime	Purchased Insurance
(h) Electronic Data Processing	Purchased Insurance and Self-Insured
(i) Surety Bonds	Purchased and Contractual Risk Transfer
(j) Errors and Omissions	Purchased and Contractual Risk Transfer
(k) Builders' Risk	Contractual Risk Transfer

**(a) General Liability**

Through coordination with the Controller's Office and the City Attorney's Office, the general liability risk exposure is actuarially determined and is addressed through pay-as-you-go funding as part of the budgetary process. Associated costs and estimates are recorded as expenses as required under GAAP for financial statement purposes for both the Enterprise and the City and County of San Francisco's Annual Comprehensive Financial Report. The claim expense allocations are determined based on actuarially determined anticipated claim payments and the projected timing of disbursement.

The changes for the general liability (damage claims) for the years ended June 30, 2023 and 2022 were as follows:

Fiscal years	Beginning of year	Claims	Claims paid and changes in estimates	End of year
2023	\$ 12,045	2,716	(10,411)	4,350
2022	16,713	8,812	(13,480)	12,045

**(b) Workers' Compensation**

The City actuarially determines and allocates workers' compensation costs to the Enterprise according to a formula based on the following: (i) the dollar amount of claims; (ii) yearly projections of payments based on historical experience; and (iii) the size of the Enterprise's payroll. The administration of workers' compensation claims and payouts are handled by the Workers' Compensation Division of the City's Department of Human Resources. Statewide workers' compensation reforms have resulted in budgetary savings in recent years. The City continues to develop and implement improved programs, such as return-to-work programs, to lower or mitigate the growth of workers' compensation costs. Programs include accident prevention, investigation, and duty modification for injured employees with medical restrictions so return to work can occur as soon as possible.

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
June 30, 2023 and 2022  
(Dollars in thousands, unless otherwise stated)

The changes in the liabilities for workers' compensation for the years ended June 30, 2023 and 2022 were as follows:

Fiscal years	Beginning of year	Claims and changes in estimates	Claims paid	End of year
2023	\$ 7,546	2,976	(2,524)	7,998
2022	6,582	3,207	(2,243)	7,546

**(c) Property**

The Enterprise's property risk management approach varies depending on whether the facility is currently under construction, the property is part of revenue-generating operations, the property is of high value, or is mission-critical in nature. During the course of construction, the Enterprise requires each contractor to provide its own insurance, while ensuring the full scope of work be covered with satisfactory levels to limit the Enterprise's risk exposure. Once construction is complete, the Enterprise performs an assessment to determine whether liability/loss coverage will be obtained through the commercial property policy or self-insurance. The majority of property scheduled in the insurance program is for either: (1) revenue generating facilities, (2) debt-financed facilities, (3) mandated coverage to meet statutory requirements for bonding of various public officials, or (4) high-value, mission-critical property or equipment.

**(d) Public Officials Liability**

All Enterprise public officials with financial oversight responsibilities are provided coverage through a commercial Public Officials Liability Policy.

**(e) Employment Practices Liability**

A Policy is retained to protect against employment-related claims and liabilities.

**(f) Cyber Liability**

A Policy is retained to protect against cyber-related claims and liabilities.

**(g) Crime**

The Enterprise also retains a Commercial Crime Policy, in lieu of bonding its employees, to provide coverage against liabilities or losses due to third-party crime or employee fraud.

**(h) Electronic Data Processing**

The Electronic Data Processing policy protects selected high-value electronic property in case of damage or loss.

**(i) Surety Bonds**

Bonds are required in most phases of the public utilities construction contracting process for such phases as bid, performance, and payment or maintenance. Additionally, bonds may be required in other contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty.

## SAN FRANCISCO WASTEWATER ENTERPRISE

Notes to Financial Statements  
June 30, 2023 and 2022  
(Dollars in thousands, unless otherwise stated)

### **(j) Errors and Omissions**

Errors and omissions, also known as Professional Liability, are commonly transferred through contract to the contracted professional, or retained through self-insurance on a case-by-case basis depending on the size, complexity, or scope of construction or professional service contracts. Examples of such contracts are inclusive of services provided by engineers, architects, design professionals, and other licensed or certified professional service providers.

### **(k) Builders' Risk**

Builders' risk policies of insurance are required to be provided by the contractor on all construction projects for the full value of construction.

## **(14) Commitments and Litigation**

### **(a) Commitments**

As of June 30, 2023 and 2022, the Enterprise has outstanding commitments with third parties of \$762,085 and \$1,037,607, respectively, for various capital projects and other purchase agreements for materials and services.

### **(b) Grants**

Grants that the Enterprise received are subject to audit and final acceptance by the granting agency. Current and prior year costs of such grants are subject to adjustment upon audit.

### **(c) Litigation**

The Enterprise is a defendant in various legal actions and claims that arise during the normal course of business. The final disposition of these legal actions and claims is not determinable. However, in the opinion of management, the outcome of any litigation of these matters will not have a material effect on the financial position or changes in net position of the Enterprise.

### **(d) Environmental Issue**

As of June 30, 2023, and 2022, the Enterprise recorded \$7,800 and \$8,060 in pollution remediation liability, respectively. The decrease of \$260 in pollution remediation liability in fiscal year 2023 is due to payments of violation penalties of \$240 at the Southeast Plant for the discharge of secondary treated and disinfected wastewater and \$20 at the Oceanside Plant for failure to meet the District permit condition-imposed standards relating to gas released into the atmosphere from digesters. As of June 30, 2023, the pollution remediation liability of \$7,800 was for the Yosemite Creek toxic sediments. In fiscal year 2022, the pollution remediation liability of \$8,060 consisted of \$7,800 for the Yosemite Creek toxic sediments and \$260 aggregate violation fines at the Southeast Plant and Oceanside Plant.

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

Honorable Mayor and the Board of Supervisors  
City and County of San Francisco, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*), the financial statements of the San Francisco Wastewater Enterprise (the Enterprise), an enterprise fund of the City and County of San Francisco (City), as of and for the year ended June 30, 2023, and the related notes to the financial statements, and have issued our report thereon dated December 26, 2023.

***Report on Internal Control Over Financial Reporting***

In planning and performing our audit of the financial statements, we considered the Enterprise's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Enterprise's internal control. Accordingly, we do not express an opinion on the effectiveness of the Enterprise's internal control.

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

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

***Report on Compliance and Other Matters***

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

***Purpose of This Report***

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

*Macias Gini & O'Connell LLP*

Walnut Creek, California  
December 26, 2023



San Francisco Public Utilities Commission  
An Enterprise Department of the City and  
County of San Francisco, California

Cover photo: SEP Headworks  
Facility Project, Garden for the  
Environment-SFPUC Land

Back cover photo: Biosolids  
Digester Facilities Project, Garden  
for the Environment-SFPUC Land

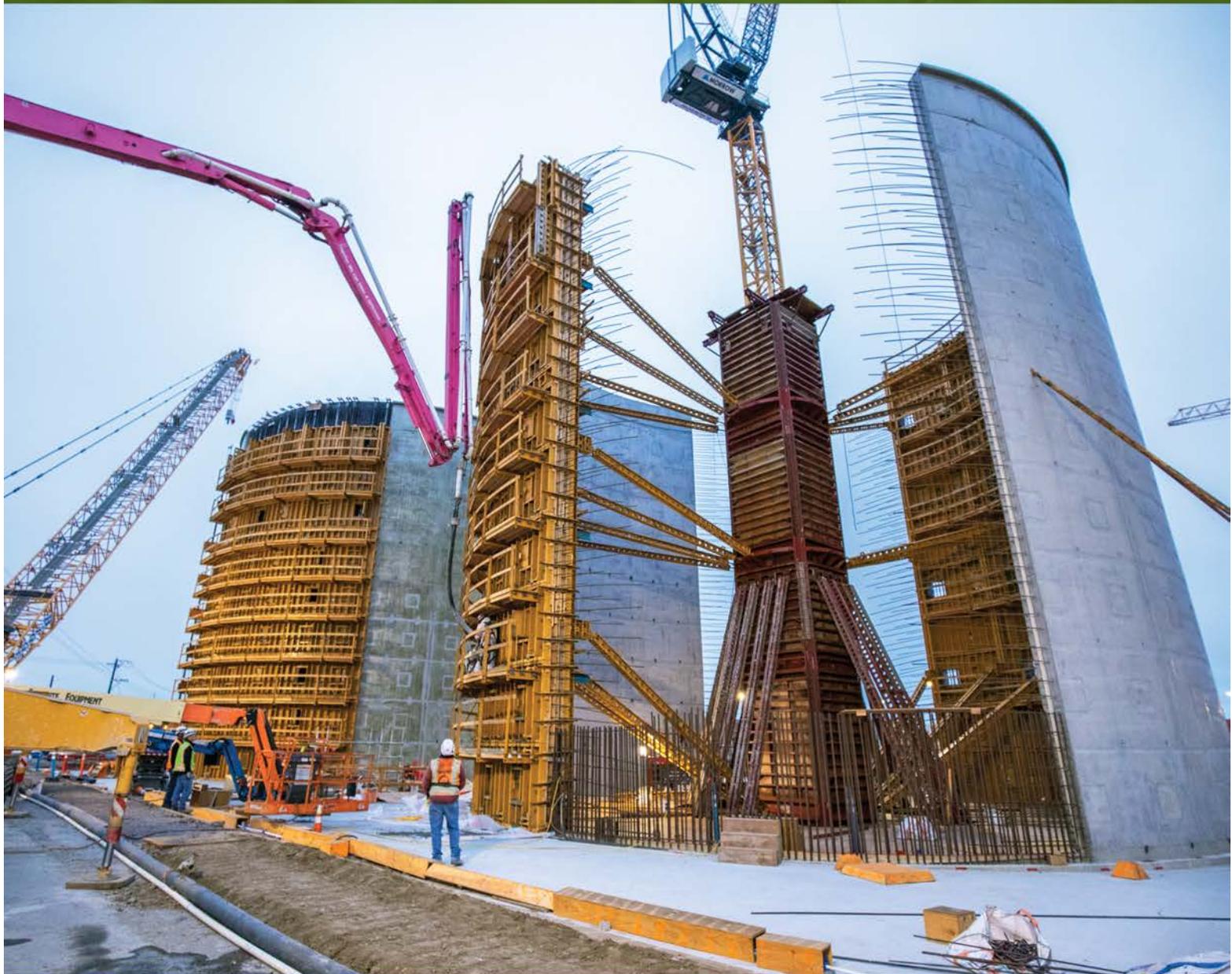
Photos by: Robin Scheswohl,  
Carmen Magana

Date of Publication: December 2023

# Our mission

To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.

SFPUC Financial Services  
525 Golden Gate Avenue, 4th Floor  
San Francisco, CA 94102-3220  
sfpuc.org



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**APPENDIX C**

**PROPOSED FORM OF OPINION OF BOND COUNSEL**

[Delivery Date]

Public Utilities Commission of the  
City and County of San Francisco  
San Francisco, California

Board of Supervisors of the  
City and County of San Francisco  
San Francisco, California

**Public Utilities Commission of the  
City and County of San Francisco  
Wastewater Revenue Bonds**

<b>\$431,110,000</b> <b>2024 Series A</b> <b>(SSIP) (Green Bonds)</b> <b>(Federally Taxable)</b>	<b>\$87,250,000</b> <b>2024 Series B</b> <b>(Non-SSIP)</b> <b>(Federally Taxable)</b>	<b>\$539,720,000</b> <b>2024 Series C</b> <b>(SSIP) (Green Bonds)</b>	<b>\$84,895,000</b> <b>2024 Series D</b> <b>(Non-SSIP)</b>
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Ladies and Gentlemen:

We have acted as bond counsel to the Public Utilities Commission of the City and County of San Francisco (the “Commission”), a commission duly constituted under the Charter (the “Charter”) of the City and County of San Francisco (the “City”), in connection with the issuance by the Commission of its Wastewater Revenue Bonds, 2024 Series A (SSIP) (Green Bonds) (Federally Taxable), in the aggregate principal amount of \$431,110,000 (the “2024 Series A Bonds”), Wastewater Revenue Bonds, 2024 Series B (Non-SSIP) (Federally Taxable), in the aggregate principal amount of \$87,250,000 (the “2024 Series B Bonds”), Wastewater Revenue Bonds, 2024 Series C (SSIP) (Green Bonds), in the aggregate principal amount of \$539,720,000 (the “2024 Series C Bonds”) and Wastewater Revenue Bonds, 2024 Series D (Non-SSIP), in the aggregate principal amount of \$84,895,000 (the “2024 Series D Bonds” and, together with the 2024 Series A Bonds, the 2024 Series B Bonds and the 2024 Series C Bonds, the “Bonds”). The 2024 Series C Bonds and the 2024 Series D Bonds are collectively referred to herein as the “Tax-Exempt Bonds.”

The Bonds are being issued pursuant to authority granted by the Charter of the City, Resolution No. 24-0160, adopted by the Commission on June 25, 2024 (the “Resolution”) and an Indenture, dated as of January 1, 2003, by and between the Commission and U.S. Bank Trust Company, National Association, as successor trustee (the “Trustee”), as previously amended and supplemented (the “Original Indenture”), and as further supplemented by a Seventeenth Supplemental Indenture (the “Seventeenth Supplemental Indenture”), with respect to the 2024 Series A Bonds, an Eighteenth Supplemental Indenture (the “Eighteenth Supplemental Indenture”) with respect to the 2024 Series B Bonds, the 2024 Series C Bonds and the 2024 Series D Bonds. The Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, each dated as of July 1, 2024, together with the Original Indenture are referred to herein as the “Indenture.”

Capitalized terms not otherwise defined herein shall have the respective meanings ascribed thereto in the Indenture.

In our capacity as bond counsel, we have reviewed the Indenture, certifications of the Commission, the Trustee and others, opinions of counsel to the Commission and the Trustee, and such other documents, opinions and instruments as we have deemed necessary to render the opinions set forth herein. We have assumed, but have not verified, that the signatures on all documents, certificates and opinions that we have reviewed are genuine. In our examination, we have assumed, but have not verified, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as

certified or photostatic copies or by facsimile or other means of electronic transmission or which we obtained from sites on the internet, and the authenticity of the originals of such latter documents. As to facts and certain other matters and the consequences thereof relevant to the opinions expressed herein and the other statements made herein, we have relied without investigation or verification upon, and have assumed the accuracy and completeness of, certificates and letters (including opinion letters), and oral and written statements and representations of public officials, officers and other representatives of the Commission and the City, counsel for the Commission, the City and others.

Our services as bond counsel were limited to such examination and to rendering the opinions set forth below. Furthermore, we have assumed compliance with all covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause the interest on the Bonds to be included in gross income for federal tax purposes. With respect to the opinions expressed herein, we call attention to the fact that the enforceability of the rights and obligations under the Bonds and the Indenture are subject to bankruptcy, insolvency, reorganization, arrangement, moratorium and other similar laws affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against cities and counties in the State of California. In addition, the imposition of certain fees and charges by the Commission relating to the Enterprise is subject to the provisions of Articles XIII C and XIII D of the California Constitution.

Based upon the foregoing and subject to the limitations and qualifications herein specified, as of the date hereof, we are of the opinion, under existing law, that:

(1) The Bonds have been duly authorized, executed and delivered by, and constitute the valid and binding special limited obligations of, the Commission.

(2) The Indenture has been duly authorized, executed and delivered by, and constitutes the valid and binding obligation of, the Commission. The Indenture creates a valid pledge of the Net Revenues of the Enterprise and certain other amounts held by the Trustee under the Indenture to secure the payment of the principal of and interest on the Bonds, as and to the extent set forth in the Indenture and subject to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth therein.

(3) The Bonds are special limited obligations of the Commission and are payable exclusively from and are secured by a pledge of the Net Revenues of the Enterprise and certain amounts held under the Indenture. The general fund of the City is not liable, and the credit or taxing power of the City is not pledged, for the payment of the Bonds or the interest thereon. The Commission has no taxing power. The Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any of the property of the City or of the Commission or any of its income or receipts, except the Net Revenues.

(4) Bonds and other parity debt of the Commission have been, and from time to time hereafter may be, issued under the Indenture which are payable from Net Revenues of the Enterprise on a parity basis with the Bonds.

(5) Assuming continuing compliance by the Commission with certain covenants in the Indenture, the Tax Certificate (hereafter described) and other documents pertaining to the Tax-Exempt Bonds and requirements of the Internal Revenue Code of 1986 regarding the use, expenditure and investment of proceeds of the Tax-Exempt Bonds and the timely payment of certain investment earnings to the United States, interest on the Tax-Exempt Bonds is not included in the gross income of the owners of the Tax-Exempt Bonds for purposes of federal income taxation.

(6) Interest on the Tax-Exempt Bonds is not treated as an item of tax preference for purposes of computing the federal alternative minimum tax on individuals. We express no opinion regarding the applicability of the corporate alternative minimum tax to the adjusted financial statement income of any owner of the Tax-Exempt Bonds.

(7) Interest on the Bonds is exempt from personal income tax imposed by the State of California.

Our opinion in paragraph 5 above is rendered in reliance on representations and certifications of the Commission made in a Tax Certificate dated the date hereof pertaining to the use, expenditure and investment of the proceeds of the Tax-Exempt Bonds. Except as stated in paragraphs 5, 6 and 7 above, we express no opinion as to any federal or state tax consequences of the ownership or disposition of, or the receipt or accrual of interest on, the Bonds. Further, certain requirements and procedures contained or referred to in the Indenture, the Tax Certificate or in other documents pertaining to the Tax-Exempt Bonds may be changed, and certain actions may be taken, under the circumstances and subject to the terms and conditions set forth in such documents, upon the advice or with the approving opinion of counsel nationally recognized in the area of tax-exempt obligations. We express no opinion as to the effect of any change to any document pertaining to the Tax-Exempt Bonds or of any action taken or not taken where such change is made or action is taken or not taken without our approval or in reliance upon the advice of counsel other than ourselves with respect to the exclusion from gross income of the interest on the Tax-Exempt Bonds for federal income tax purposes.

The opinions expressed and the statements made herein are based on an analysis of existing laws, regulations, rulings and court decisions. Such opinions and statements may be adversely affected by actions taken or events occurring, including a change in law, regulation or ruling (or in the application or official interpretation of any law, regulation or ruling) after the date hereof. We have not undertaken to determine, or to inform any person, whether such actions are taken or such events occur, and we have no obligation to update this letter in light of such actions or events or for any other reason.

No opinion is expressed herein on the accuracy, completeness or sufficiency of the Official Statement or other offering material relating to the Bonds.

The opinions in this letter are limited to the laws of the State of California and the federal laws of the United States. The opinions in this letter are expressed solely as of the date hereof for your benefit and may not be relied upon in any manner for any purposes by any other person.

Respectfully submitted,

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**APPENDIX D**

**FORM OF CONTINUING DISCLOSURE CERTIFICATE**

**\$1,142,975,000**

**Public Utilities Commission of the  
City and County of San Francisco  
Wastewater Revenue Bonds**

<b>\$431,110,000</b> <b>2024 Series A</b> <b>(SSIP) (Green Bonds)</b> <b>(Federally Taxable)</b>	<b>\$87,250,000</b> <b>2024 Series B</b> <b>(Non-SSIP)</b> <b>(Federally Taxable)</b>	<b>\$539,720,000</b> <b>2024 Series C</b> <b>(SSIP) (Green Bonds)</b>	<b>\$84,895,000</b> <b>2024 Series D</b> <b>(Non-SSIP)</b>
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[Closing Date]

This Continuing Disclosure Certificate (the “Disclosure Certificate”) is executed and delivered by the Public Utilities Commission of the City and County of San Francisco (the “SFPUC”) in connection with the issuance of its Wastewater Revenue Bonds, 2024 Series A (SSIP) (Green Bonds) (Federally Taxable) (the “2024A Bonds”), 2024 Series B (Non-SSIP) (Federally Taxable) (the “2024B Bonds”), 2024 Series C (SSIP) (Green Bonds) (the “2024C Bonds”), and 2024 Series D (Non-SSIP) (the “2024D Bonds” and, together with the 2024A Bonds, the 2024B Bonds and the 2024C Bonds, the “2024ABCD Bonds”).

The 2024A Bonds are being issued pursuant to a Seventeenth Supplemental Indenture, dated as of July 1, 2024 (the “Seventeenth Supplemental Indenture”), by and between the SFPUC and U.S. Bank Trust Company, National Association, as successor to U.S. Bank National Association, as trustee (the “Trustee”). The 2024B Bonds, 2024C Bonds and 2024D Bonds are being issued pursuant to an Eighteenth Supplemental Indenture, dated as of July 1, 2024 (the “Eighteenth Supplemental Indenture”), by and between the SFPUC and the Trustee. The Seventeenth Supplemental Indenture and Eighteenth Supplemental Indenture supplement the Indenture, dated as of January 1, 2003 (as amended and supplemented, including as supplemented by the Seventeenth Supplemental Indenture and Eighteenth Supplemental Indenture, the “Indenture”), by and between the SFPUC and the Trustee. The SFPUC covenants and agrees as follows:

**SECTION 1.** Purpose of the Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the SFPUC for the benefit of the Holders and Beneficial Owners of the 2024ABCD Bonds and in order to assist the Participating Underwriters in complying with Securities and Exchange Commission (the “S.E.C.”) Rule 15c2-12(b)(5).

**SECTION 2.** Definitions. In addition to the definitions set forth in the Indenture, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

“Annual Report” shall mean any Annual Report provided by the SFPUC pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

“Beneficial Owner” shall mean any person that: (a) has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2024ABCD Bonds (including persons holding 2024ABCD Bonds through nominees, depositories or other intermediaries) including, but not limited to, the power to vote or consent with respect to any 2024ABCD Bonds or to dispose of ownership of any 2024ABCD Bonds; or (b) is treated as the owner of any 2024ABCD Bonds for federal income tax purposes.

“Dissemination Agent” shall mean the SFPUC, acting in its capacity as Dissemination Agent under this Disclosure Certificate, or any successor Dissemination Agent designated in writing by the SFPUC and which has filed with the SFPUC a written acceptance of such designation.

“Financial Obligation” means, for purposes of the Listed Events set out in Section 5(a)(15) and Section 5(a)(16), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“Holder” shall mean either the registered owners of the 2024ABCD Bonds, or, if the 2024ABCD Bonds are registered in the name of The Depository Trust Company or another recognized depository, any applicable participant in such depository system.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Certificate.

“MSRB” shall mean the Municipal Securities Rulemaking Board or any other entity designated or authorized by the Securities and Exchange Commission to receive continuing disclosure filings pursuant to the Rule. Until otherwise designated by the MSRB or the Securities and Exchange Commission, filings with the MSRB are to be made through the Electronic Municipal Market Access (EMMA) website of the MSRB currently located at <http://emma.msrb.org>.

“Official Statement” shall mean the final Official Statement, dated July 18, 2024, prepared in connection with the sale and offering of the 2024ABCD Bonds.

“Participating Underwriters” shall mean any of the original underwriters or purchasers of the 2024ABCD Bonds required to comply with the Rule in connection with the offering of the 2024ABCD Bonds.

“Rule” shall mean Rule 15c2-12(b)(5) adopted by the S.E.C. under the Securities Exchange Act of 1934, as the same may be amended from time to time.

**SECTION 3. Provision of Annual Reports.**

(a) The SFPUC shall, or shall cause the Dissemination Agent to, not later than March 31 of each year, commencing with the report for Fiscal Year 2023-24 (which is due not later than March 31, 2025), provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Certificate. If the Dissemination Agent is not the SFPUC, the SFPUC shall provide the Annual Report to the Dissemination Agent not later than 15 days prior to said date. The Annual Report must be submitted in electronic format and accompanied by such identifying information as is prescribed by the MSRB, and may cross-reference other information as provided in Section 4 of this Disclosure Certificate. However, if the audited financial statements of the SFPUC are not available by the date required above for the filing of the Annual Report, the SFPUC shall submit unaudited financial statements and submit the audited financial statements as soon as they are available. If the SFPUC’s Fiscal Year changes, it shall give notice of such change in the same manner as for a Listed Event under Section 5(b).

(b) If the SFPUC is unable to provide to the MSRB an Annual Report by the date required in subsection (a), the SFPUC shall send a notice to the MSRB in substantially the form attached as Exhibit A.

(c) The Dissemination Agent shall (if the Dissemination Agent is other than the SFPUC) file a report with the SFPUC certifying the date that the Annual Report was provided to the MSRB pursuant to this Disclosure Certificate.

**SECTION 4. Content of Annual Reports.** The SFPUC’s Annual Report shall contain or incorporate by reference the following information:

(a) Audited financial statements of the Wastewater Enterprise for the prior Fiscal Year, prepared in accordance with generally accepted accounting principles applicable to the SFPUC from time to time. If the SFPUC’s audited financial statements are not available by the date the Annual Report is

required to be filed, the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available;

(b) An update for the prior Fiscal Year of the table in the Official Statement entitled “TABLE 6 – SUMMARY OF ACTIVE SEWER ACCOUNTS BY USER TYPE;”

(c) An update for the prior Fiscal Year of the table in the Official Statement entitled “TABLE 15 – ADOPTED SINGLE-FAMILY AND MULTI-FAMILY RESIDENTIAL MONTHLY SEWER SERVICE CHARGES”;

(d) An update for the prior Fiscal Year of the table in the Official Statement entitled “TABLE 16 – ADOPTED SIMPLIFIED RESIDENTIAL MONTHLY STORMWATER RUNOFF COMPONENT OF THE SEWER SERVICE CHARGE BY TIER”;

(e) An update for the prior Fiscal Year of the table in the Official Statement entitled “TABLE 18 – ADOPTED NON-RESIDENTIAL MONTHLY SEWER SERVICE CHARGES”;

(f) An update for the prior Fiscal Year of the table in the Official Statement entitled “TABLE 19 – ADOPTED STANDARD STORMWATER MONTHLY STORMWATER RUNOFF COMPONENT OF THE SEWER SERVICE CHARGE”;

(g) An update for the prior Fiscal Year of the tables in the Official Statement in the sections entitled “OBLIGATIONS PAYABLE FROM NET REVENUES – Outstanding Parity Revenue Bonds” and “– Parity Loans” showing all bonds and other obligations of the SFPUC secured by Net Revenues; and

(h) An update for the prior Fiscal Year of the table in the Official Statement entitled “TABLE 25 – HISTORICAL REVENUE, OPERATING & MAINTENANCE EXPENSE AND DEBT SERVICE COVERAGE FOR FISCAL YEARS ENDED JUNE 30.”

Any or all of the items listed above may be set forth in a document or set of documents, or may be included by specific reference to other documents, including official statements of debt issues of the SFPUC or related public entities, which are available to the public on the MSRB website. If the document included by reference is a final official statement, it must be available from the MSRB. The SFPUC shall clearly identify each such other document so included by reference.

**SECTION 5. Reporting of Significant Events.**

(a) The SFPUC shall give, or cause to be given, notice of the occurrence of any of the following Listed Events with respect to the 2024ABCD 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, Notices of Proposed Issue (IRS Form 5701-TEB), other material notices or determinations with respect to the tax status of the 2024ABCD Bonds, or other material events affecting the tax status of the 2024ABCD Bonds;

7. Modifications to rights of Holders, if material;
8. Optional, unscheduled or contingent 2024ABCD Bond calls, if material, and tender offers;
9. Defeasances;
10. Release, substitution, or sale of property securing repayment of the 2024ABCD Bonds, if material;
11. Rating changes;
12. Bankruptcy, insolvency, receivership or similar event of the SFPUC;
13. The consummation of a merger, consolidation, or acquisition involving the SFPUC or the sale of all or substantially all of the assets of the SFPUC, 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 SFPUC, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the SFPUC, any of which affect Holders, if material; and
16. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the SFPUC, any of which reflect financial difficulties.

Note: for the purposes of the event identified in subparagraph (12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the SFPUC in a proceeding under the United States Bankruptcy Code or in any other proceeding under State or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the SFPUC, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the SFPUC.

(b) Whenever the SFPUC obtains knowledge of the occurrence of a Listed Event in Section 5(a), the SFPUC shall, or shall cause the Dissemination Agent (if not the SFPUC) to, file a notice of such occurrence with the MSRB, in an electronic format as prescribed by the MSRB, in a timely manner not in excess of 10 business days after the occurrence of the Listed Event. Notwithstanding the foregoing, notice of a Listed Event described in subsection (a)(8) above need not be given under this subsection any earlier than the notice (if any) of the underlying event is given to holders of affected 2024ABCD Bonds under the Indenture.

(c) The SFPUC intends to comply with the Listed Events described in Section 5(a)(15) and Section 5(a)(16) and the definition of “Financial Obligation” in Section 2, with reference to the Rule, any other applicable federal securities laws and the guidance provided by the S.E.C. in Release No. 34-83885 dated August 20, 2018 (the “2018 Release”), and any further amendments or written guidance provided by the S.E.C. or its staff with respect to the amendments to the Rule effected by the 2018 Release.

**SECTION 6. Termination of Reporting Obligation.** The SFPUC's obligations under this Disclosure Certificate shall terminate upon the legal defeasance, prior redemption or payment in full of all of the 2024ABCD Bonds. If such termination occurs prior to the final maturity of the 2024ABCD Bonds, the SFPUC shall give notice of such termination in the same manner as for a Listed Event under Section 5(b).

**SECTION 7. Dissemination Agent.** The SFPUC may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Certificate, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Certificate.

**SECTION 8. Amendment; Waiver.** Notwithstanding any other provision of this Disclosure Certificate, the SFPUC may amend or waive this Disclosure Certificate or any provision of this Disclosure Certificate, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4 or 5(a), it 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 an obligated person with respect to the 2024ABCD Bonds or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of the City Attorney of the City and County of San Francisco or nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the 2024ABCD Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (i) is approved by the owners of a majority in aggregate principal amount of the 2024ABCD Bonds or (ii) does not, in the opinion of the City Attorney or nationally recognized bond counsel, materially impair the interests of the Holders.

In the event of any amendment or waiver of a provision of this Disclosure Certificate, the SFPUC shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the SFPUC. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements: (i) notice of such change shall be given in the same manner as for a Listed Event under Section 5; and (ii) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

**SECTION 9. Additional Information.** Nothing in this Disclosure Certificate shall be deemed to prevent the SFPUC from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Certificate. If the SFPUC chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the SFPUC shall have no obligation under this Disclosure Certificate to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

**SECTION 10. Default.** In the event of a failure of the SFPUC to comply with any provision of this Disclosure Certificate, any Participating Underwriters, Holder or Beneficial Owner of the 2024ABCD Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the SFPUC to comply with its obligations under this Disclosure Certificate; provided that any such action may be instituted only in a federal or State court located in the City and County of San Francisco, State of California. Failure by the SFPUC to comply with any provision of this Disclosure Certificate shall not be deemed an Event of Default under the Indenture and the sole remedy under this Disclosure Certificate in the event of any failure of the SFPUC to comply with this Disclosure Certificate shall be an action to compel performance.

**SECTION 11. Beneficiaries.** This Disclosure Certificate shall inure solely to the benefit of the SFPUC, the Dissemination Agent, the Participating Underwriters and Holders and Beneficial Owners from time to time of the 2024ABCD Bonds, and shall create no rights in any other person or entity.

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Dated as of the date first written above.

PUBLIC UTILITIES COMMISSION OF THE  
CITY AND COUNTY OF SAN FRANCISCO

By: \_\_\_\_\_  
Deputy General Manager  
and Chief Operating Officer

Approved as to form:

DAVID CHIU  
CITY ATTORNEY

By: \_\_\_\_\_  
Deputy City Attorney

**CONTINUING DISCLOSURE CERTIFICATE**

**EXHIBIT A**

**FORM OF NOTICE TO THE  
MUNICIPAL SECURITIES RULEMAKING BOARD  
OF FAILURE TO FILE ANNUAL REPORT**

Name of Issuer: Public Utilities Commission of the City and County of San Francisco

Name of Issue: Wastewater Revenue Bonds, 2024 Series A (SSIP) (Green Bonds) (Federally Taxable),  
Wastewater Revenue Bonds, 2024 Series B (Non-SSIP) (Federally Taxable),  
Wastewater Revenue Bonds, 2024 Series C (SSIP) (Green Bonds) and  
Wastewater Revenue Bonds, 2024 Series D (Non-SSIP)

Date of Issuance: July 31, 2024

NOTICE IS HEREBY GIVEN that the SFPUC has not provided an Annual Report with respect to the above-named Bonds as required by Section 3 of the Continuing Disclosure Certificate of the Public Utilities Commission of the City and County of San Francisco, dated July 31, 2024. The SFPUC anticipates that the Annual Report will be filed by \_\_\_\_\_.

Dated: \_\_\_\_\_

PUBLIC UTILITIES COMMISSION OF  
THE CITY AND COUNTY OF SAN FRANCISCO

By: \_\_\_\_\_ [to be signed only if filed]  
Title \_\_\_\_\_

## APPENDIX E

### SECURITIES DEPOSITORY AND THE BOOK-ENTRY SYSTEM

The information in this Appendix E has been obtained from DTC for use in securities offering documents, and the SFPUC takes no responsibility for the accuracy or completeness thereof. The SFPUC cannot and does not give any assurances that DTC, DTC Participants or Indirect Participants will distribute to the beneficial owners either (a) payments of interest, principal or premium, if any, with respect to the 2024ABCD Bonds or (b) certificates representing ownership interest in or other confirmation of ownership interest in the 2024ABCD Bonds, or that they will so do on a timely basis or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Official Statement. The current “Rules” applicable to DTC are on file with the Securities and Exchange Commission and the current “Procedures” of DTC to be followed in dealing with DTC Participants are on file with DTC.

As used in this Appendix E, “Securities” means the 2024ABCD Bonds, “Issuer” means the SFPUC, and “Agent” means the Trustee.

1. The Depository Trust Company (“DTC”), New York, NY, will act as securities depository for the securities (the “Securities”). The Securities will be issued as fully-registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Security certificate will be issued for each issue of the Securities, each in the aggregate principal amount of such issue, and will be deposited with DTC. If, however, the aggregate principal amount of any issue exceeds \$500 million, one certificate will be issued with respect to each \$500 million of principal amount, and an additional certificate will be issued with respect to any remaining principal amount of such issue.

2. DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has a Standard & Poor’s rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com). The information contained on this Internet site is not incorporated herein by reference.

3. Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC’s records. The ownership interest of each actual purchaser of each Security (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Securities are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Securities, except in the event that use of the book-entry system for the Securities is discontinued.

4. To facilitate subsequent transfers, all Securities deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Securities with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Securities; DTC's records reflect only the identity of the Direct Participants to whose accounts such Securities are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

5. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Securities may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

6. Redemption notices shall be sent to DTC. If less than all of the Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

7. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Securities unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).

8. Redemption proceeds, distributions, and dividend payments on the Securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from Issuer or Agent, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, Agent, or Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of Issuer or Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

9. DTC may discontinue providing its services as depository with respect to the Securities at any time by giving reasonable notice to Issuer or Agent. Under such circumstances, in the event that a successor depository is not obtained, Security certificates are required to be printed and delivered.

10. Issuer may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that SFPUC believes to be reliable, but the SFPUC takes no responsibility for the accuracy thereof.





Services of the San Francisco Public Utilities Commission



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